

stethos JetCAPS Print Solutions

JetScribe®

Forms management solution and
Prescribe® emulation



User's manual
and
programming guide

version 1.0

DIMM version: For all HP LaserJet 4050, 4100, 4550, 8000, 8000 MFP, 8100, 8100 MFP, 8150 und 8150 MFP

Server version: For all HP LaserJet series 4 and higher (PCL5 mode)



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Introduction

JetScribe extends the functionalities of the supported HP Printers for printing Kyocera Prescribe forms.

JetScribe DIMM complies with the CE - and low power norms.

Scope of supply

JetScribe consists of the following components:

- Choice between JetScribe DIMM or JetScribe Server
- CD with forms and font manager, drivers, examples and white papers

Order options

Here the currently order numbers are listed:

Order no.	product
JSR04050	JetScribe DIMM without flash memory for HP LaserJet 4050
JSR44050	JetScribe DIMM with 2,5 MB flash memory for HP LaserJet 4050
JSR04100	JetScribe DIMM without flash memory for HP LaserJet 4100
JSR44100	JetScribe DIMM with 2,5 MB flash memory for HP LaserJet 4100
JSR04550	JetScribe DIMM without flash memory for HP LaserJet 4550
JSR44550	JetScribe DIMM with 2,5 MB flash memory for HP LaserJet 4550
JSR08000	JetScribe DIMM without flash memory for HP LaserJet 8100, 8100 MFP, 8000* und 8000 MFP* *Firmware date code >= 4.48
JSR48000	JetScribe DIMM with 2,5 MB flash memory for HP LaserJet 8100, 8100 MFP, 8000* und 8000 MFP* *Firmware date code >= 4.48
JSR08150	JetScribe DIMM without flash memory for HP LaserJet 8150
JSR48150	JetScribe DIMM with 2,5 MB flash memory for HP LaserJet 8150
JSRMS003	JetScribe Server for Windows/NT for 1 Server and up to 3 Printers
JSRMS01+	Additional license for one printer
JSRMS02+	Additional license for two printers
JSRMS04+	Additional license for four printers
JSRMS08+	Additional license for eight printers

JetScribe notes

Notes for print margins and page sizes

Kyocera printers have a bigger print area than other printers. Many forms created with Prescribe use this bigger print area up to the allowed margin.

During the conversion from Prescribe to PCL problems can occur if the print area of the destination printer has smaller margins. In this case the destination printer would generate a line feed and continue printing on the next page. There are 3 possibilities to solve that problem:

1. Move the whole printout so that it fits on one page
2. Decrease the size of the print

Both possibilities can comfortably be configured with the software JetScribe Admin. You can also choose whether the settings should be saved permanently or only for the current document. You can get further information on the program in chapter 6 "JetScribe Admin".

3. Increase the logical page size in JetScribe

The print area should only be resized in JetScribe if you have a wrong page break and the possibilities 1 and 2 did not bring any success. The print area on Kyocera printers can be changed with the FRPO L parameter. Thus, individual print area settings are possible for every Kyocera printer. The FRPO parameters differ from model to model. In JetScribe the logical print area can also be manipulated by FRPO parameters. The data L5/L6 and L7/L8 are used. The data L1/L2, L3/L4 is shown on the status page but is not used (at present).

The data L5/L6, L7/L8 are set on every Kyocera printer on the following default data:

L5 = 10: value of the page height before the decimal point,

L6 = 61: value of the page height after the decimal point

L7 = 8 : value of the page width before the decimal point

L8 = 11: value of the page width after the decimal point/100

The default page height is now 10,61 inch, the default page width is 8,11 inch. This data is used in JetScribe in the same way.

For increasing the logical page height 1mm the L5/L6 values have to be increased at 0.03937 inch. (1 mm is 0.03937inch). The new data is $(10,61 + 0,03937) = 10,64937$. So L5 is 10, L6 is 65 (

For decreasing the logical page width 2 mm, the L7/L8 values have to be minimized $2*0.03937$ Inch (1 mm is 0.03937inch). The new value is $(8,11 - 2*0,03937) = 8,03126$. So L7 is 8, L8 is 3 (rounded, the part after the decimal point is ignored).

Note: It's not important which paper format is used or if you print in landscape or portrait. JetScribe always only uses the **difference** to the default data.

For initializing the new data, the following test has to be sent to JetScribe:

!R!

FRPO R3,1;

FRPO L5, 10;

FRPO L6,65;

FRPO L7, 8;

FRPO L8,3;

EXIT;

The parameter R3 must be set on 1, otherwise the margins for the HP emulation will be used and the FRPO L parameter will be ignored.

The text can be copied in any text editor and be printed with a printer driver to JetScribe.

Note: The FRPO L parameters are only to be changed carefully. With the wrong input it is possible that JetScribe is unable to print the Prescribe data.

With sending the following text to JetScribe, the default settings will be reset.

!R!

FRPO R3,0;

FRPO L5,10;

FRPO L6,61;

FRPO L7,8;

FRPO L8,11;

EXIT;

For resetting JetScribe, the status page can be launched. With the button "reset software" and clicking on the button "Configure" JetScribe will be reset. All FRPO parameter, font metrics and font mapping files will be reset and new written.

Notes considering the fonts

Kyocera printers have a couple of fonts, which are not present in PCL printers. In addition to this, fonts as soft fonts can be uploaded into the printer or can be installed as memory hardware into the printer. For Prescribe forms which use Kyocera fonts a font mapping from the Kyocera font to a fittingly printer font has to be used. The font-mapping table for Kyocera standard fonts is already available. Of course, the emulation doesn't know additional fonts from e.g. Flash memory or soft fonts. So in this case the printout via the emulation can deviate in the typeface from the original.

The supplied software JetScribe Admin allows adding font-mapping tables. With that, additional Kyocera fonts can be assigned to fonts the printer is in charge of. You will get further information in the chapter "JetScribe Admin".

Notes to emulations

Kyocera printers possess a couple of emulations. In JetScribe exclusively the HP LaserJet emulation is used. This cannot be changed.

Notes to character set

Only the character set of the HP LaserJet emulation is used:

Bitmap Fonts	Scalable Fonts
ISO 60 Norway	ISO 60 Norway
Roman Extension	ISO 61 Roman Extension
ISO 25 French	ISO 25 French
HP German	ISO 25 German
ISO 15 Italian	ISO 15 Italian
ISO 14 JIS ASCII	ISO 14 JIS ASCII
ECMA-94 Latin	ECMA-94 Latin
ISO 11 Swedish	ISO 11 Swedish
ISO 6 ASCII	ISO 6 ASCII
ISO 61 Norwegian	ISO 61 Norwegian
ISO 4 U.K	ISO 4 U. K.
ISO 69 French	ISO 69 French
ISO 21 German	ISO 21 German
HP Spanish	ISO 15 Spanish
US Legal	Legal 1U
ISO 57 Chinese	ISO 57 Chinese
ISO 17 Spain	ISO Latin 2
ISO 2 International Reference Version	ISO 17 Spanish
ISO 10 Swedish	ISO 2 IRV
51 ISO 16 Portuguese	ISO 10 Swedish
ISO 84 Portuguese	ISO 16 Portuguese
ISO 85 Spanish	PS Math
52 PC Set 1 IBM	ISO Latin
HP Roman-8 8U	ISO 84 Portuguese
PC Extension	ISO Windows Latin
53 IBM PC-8	Microsoft Publishing
IBM PC-8 (D/N)	Ventura Math
IBM PC-8 (Multilingual)	ISO 85 Spanish
	Desktop
	Math-8
	8U Roman-8
	Windows Latin

If a character set cannot be selected, then the character set used before will be selected. As far as no changes on the FRPO settings of JetScribe were made the character set **Roman 8** will be used. In the DIMM version one of the 3 character sets **IBM PC 8**, **Roman 8** or **ECMA 94 Latin 1** can be selected over the JetScribe menu. These menu settings have priority over the FRPO settings.

Notes to the character set pre-adjustments

If a certain preset character set should be used, this character set can be set by the FRPO parameter U6 / U7. To calculate the character value – ID from the character set data you have to multiply the number with 32. Than the data of the letter (A=1, B=2...) have to be add to the result. You have got to add 5000. The first two digits of this sum supply the settings for the U7- Parameter and the last two digits supply the settings for the U 6 parameter.

Example:

Character set-ID: 5M

$5 * 32 = 160$

M (13. letter)

Character set - data: $5 * 32 + 13 = 173$

$173 + 5000 = 5173$

U6: 73

U7: 51

Command example:

Permanent setting of the character set ISO 21 GERMAN (1G):

1G -> $1 * 32 + 7 = 39$ -> 5039

!R!

CMNT symbol set ISO 21 German, 1G=39 -> 39 50;

FRPO U6, 39;

FRPO U7, 50;

EXIT;

The character set pre-adjustments can also be set with the help of JetScribe Admin.

Notes to tray selection

Starting with 1.018 we did some enhancements in the paper tray selection. In order to help people address the correct paper tray, JetScribe now supports the CASS 0 up to 4 and PSRC 0 up to 6 commands in the following way:

1. If you have only one slot or one type of paper, do nothing!
2. The JetScribe configuration menu lets you configure any paper type for the tray 0 to 6. By default JetScribe uses Plain (Normal).
3. If you configure a media type, then switch to the printers paper-handling menu and set any tray to the media type.

This avoids the tray confusion settings. Now JetScribe will pass instead of a tray your media request to the printer engine, and you can enter the media into the HP printer as you need, without the need of changing any settings.

All other requests PSRC larger then 6 will be converted to PLAIN.

Notes to FRPO settings

With Kyocera printers many permanent settings (page margins, character sets etc.) can be set with the FRPO (**F**irmware**R**e**P**rogram) – command. JetScribe support most of this commands, too. The Firmware settings are saved in the file *Frp.dat* and read at the start of the first print job. In many cases, specific settings for special customer documents were adjust. These FRPO settings are to be sent (exactly like on Kyocera printers) to the JetScribe emulation. The new settings are saved and are available the next time you start.

Notes to ESC sequences

A dataflow within the prescribe commands must not contain emulation specific ESC-sequences, e.g.:

```
ESC&a72HCALL LOGO;ESC&a72HEXIT;
```

A Kyocera Prescribe interpreter tries to interpret the HP ESC sequence as a prescribe command. For a semicolon separates Prescribe commands, the following modification can help:

```
ESC&a72H;CALL LOGO;ESC&a72H;EXIT;
```

Because of the added semicolons, the printer identifies the commands CALL LOGO and EXIT.

If you have ESC-sequences, which do not end with a capital letter in the **HP Emulation** (e.g. ESC9), you have to add an arbitrary capital letter in front of the semicolon!

This strategy is only a hint, because – regarding the specification – it is principally not allowed to merge command sequences.

If there are unknown commands and ESC- sequences there will be read up to the next semicolon. Therefore the following EXIT will be ignored:

```
!R!;(ESC)*p465X(ESC)*p5291YEXIT;
```

Known limitations, not supported commands

If there are unknown commands in a prescribe document, then those commands will be registered in the file Logfile.log. All unknown commands, macros and fonts will be classified (in order of their ERRORCODELEVEL) and indexed in the log file. The Jet Scribe Admin software can print these log files.

SIMG

The image modes - SIMG – are not realized correctly, if fill patterns and bitmaps are overlaid.

CPTH

The prescribe command CPTH is only restricted supported. If only text is given out to a path, JetScribe will directly give it out without being transformed into a path. This is the case with 90% of all CPTH commands.

If additional elements are selected to the path, the CPTH command will be ignored.

List of the commands, which are not supported until now:

Command	Description	Notes
ALTB	Assign code alternation table	Only the character sets of the Kyocera HP LaserJet emulation are supported
ASFN	Assign external font	
ASTK	Assign bin groups to the sorter	This command needs an additional accessory of the printer. So it is not supported
CCPY	Create carbon copies	
CLIP	Define current path as	The clipping of paths is not supported

	clipping path	
CLPR	Cut rectangular area	The clipping of rectangular areas is not supported
CPTH	Drawing path	The CPTH command is only supported restricted. With the right tools – e.g. FormMaker – a CPTH path can be converted into a Bezier curve.
DXSD	Select duplex sequence	
ENDD	Stop Hex-Dump	
EPRM	read/display optional EPROM-data	This command is not supported by every Kyocera printer
FLAT	Define weight for the output of curves	Output always with maximal weight.
JOG	Activate skew output for job separation	
LDFN C,F,S	Generate a bitmap sign for the load if a font	Use LDFC for this old command Instead of generating bitmap signs you can create arbitrary logos with tools like FormMaker. They will be stored as curves. That saves RAM.
MID	Multi-Bin ID	
MSTK	Choose mailbox- mode	This command needs an additional accessory of the printer. So it is not supported
PELP	Draw an ellipse inside of a path	Not supported with all 7 parameters
PXPL	Pixel placement of pixel	
RDMP	Start Hex-Dump	
RESL	Select resolution	That resolution will be used which is activated on the target- printer
SEM	Select emulation mode	JetScribe only works with HP emulation mode. A change is not possible
SIR	Select KIR-settings (optimization of printing quality in the 300dpi mode with fonts preliminary drawings)	
SPLT	Side-splitting- mode	
SROP	Select raster mode	
SSTK	Select Sort- mode	This command needs an additional accessory of the printer. So it is not supported
STPL	Bind printjob	
TPRS	Method to check syntax	

FAQ (FAQ)

Error message „Port 515 could not be reserved...“

By launching JetScribe Server the following error occurred: "port 515 can not be reserved. The port is probably used by another application."

JetScribe Server can only be active on one computer. If the JetScribe Server is launched more than one time it is not able to reserve the port 515 after the 2nd session.

If the Error occurs and JetScribe has been started only once it could be that another print service uses the port. Close the application or the service, which uses the port 515, and restart JetScribe Server.

What is a Queue?

A queue is comparably to tube in which print jobs are put. The jobs in the tube are processed one after another in the same order in which they arrived at the queue. Normally a queue sends the data to an interface (e.g.LPT1) so that you can compare the queue with a printer. JetScribe can manage up to 64queues at the same time. Every queue gets an individual name.

Advices to the test version

JetScribe is available as a free test version on the Internet or on CD ROM. For the DIMM Solution a so-called non-volatile FSA memory is required. (A hard disk or a Flash-DIMM).

On every page www.stethos.com will appear. Additionally the letters a and e will be exchanged.

Notes to underline

The fonts Symbol and Wingdings can not be underlined. Also the following font types: PCL- Download fonts which were downloaded to the printer, additional fonts from ROM cards.

Jet Scribe Admin

JetScribe Admin is a help program to configure the stethos outputmanagement software JetScribe via printer drivers. With this software many settings of the JetScribe emulation can be changed. This software lists all printer drivers, that are known to the system and send specific commands to them, which can only be interpreted by JetScribe. In order to use this software, a windows printer driver must be installed, which prints to the printer with the JetScribe DIMM version, or which prints on the JetScribe Server version.

If JetScribe Admin has to configure a JetScribe DIMM version, the machine to which the printer is attached, must provide a Windows printer driver. If the printer is in a network, it must be shared. Please read the manual of your OS how such a printer must be installed.

If JetScribe Admin has to configure a JetScribe Server version, a printer driver must be provided which can print on JetScribe Server. How to install such a printer driver is explained in chapter "Using JetScribe with a Windows 2000 printer driver" in this manual.

The user interface

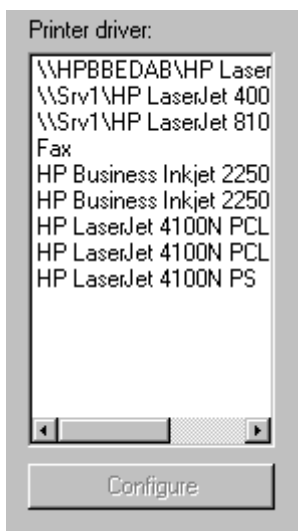
The user interface of JetScribe Admin is divided into two parts:

Printer driver and

Options folder



Additionally, there is the button *Close*. Clicking on it will terminate the program session.

Printer driver

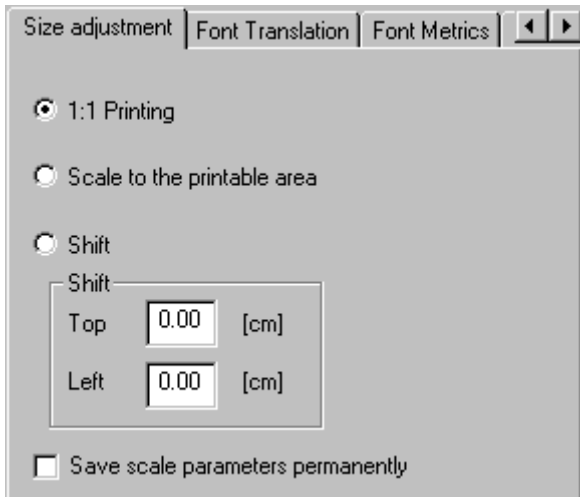


Here you can choose one ore more printer drivers for configuration. With the button "Configure" the individual adjustments are sent to the selected printer drivers and therefore to the target software – e.g. JetScribe Server.

Options folder

JetScribe Admin offers five option folders for configuration. By clicking on the title of a folder (or by selecting the buttons  and ) you can switch between the offered options. The single folders are described below.

Size adjustments



This folder allows you to adjust size and position of a document at the printout.

If the button **1:1 printing** is active, the document is printed in its original size.

If the button **scale to the printable area** is active, the document is proportionally enlarged or minimized to the printable area.

If the button **Shift** is active, the top and the left margin of the document can be changed, so that the document is shifted right and down:

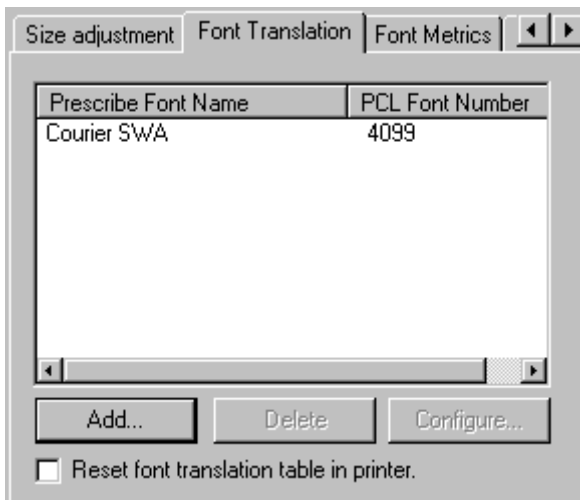
The numeric input field **Top** serves to the change of a vertical skew.

The numeric input field **Left** serves to the change of a

horizontal skew.

If the box **Save scale parameters permanently** is checked, the parameters are saved in the target software, like e.g. JetScribe Server. Thus, they are also available within a new session. If this box is not checked, the parameters get lost at the shut down of JetScribe.

Font translation

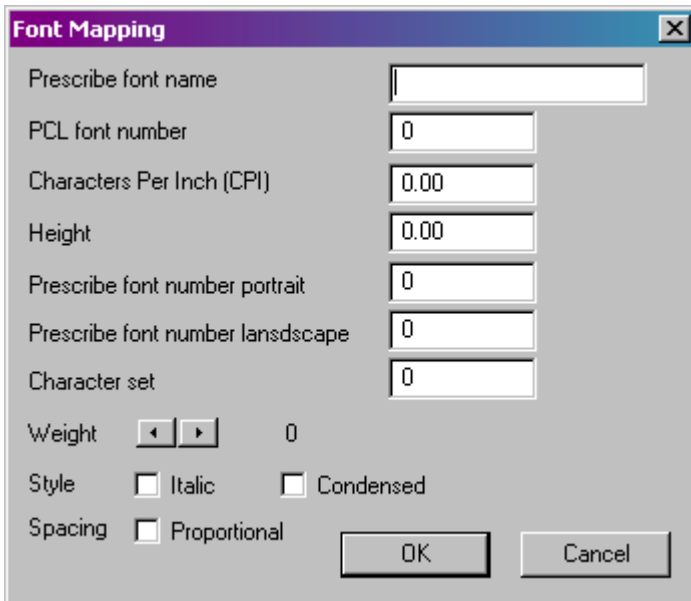


This folder gives you the possibility to configure individual font-mappings.

In the translation-list the Prescribe fonts – Prescribe font name – are shown, for which an individual mapping to a PCL font – PCL Font number – (which is known by the printer) was made.

If the box **Reset font translation table printer** is checked, the font-mapping table in the printer (i.e. the target software – e.g. JetScribe Server) is reset to the default values.

Add... / Configure...



By clicking on the button **Add...** or **Configure...** the dialogue box **Font Mapping** appears. This dialogue box gives you the possibility to create a new font mapping for the font translation or to configure an already existing mapping.

The editable text field **Prescribe font name** contains the name of the font, which is used on the Prescribe compatible printer.

The numeric input field **PCL font number** sets the number over which the font can be addressed on the PCL compatible printer.

The numeric input field **Characters per Inch (CPI)** lets you configure the pitch, which is necessary for using fixed fonts – font with constant character spacing.

The numeric input field **Height** serves to set the height of the characters per inch using proportional fonts.

The numeric input field **Prescribe font number portrait** serves to, if you work with bitmap-fonts, set the number, over which the font can be responded to on Prescribe compatible printers, if you print portrait format.

The numeric input field **Prescribe font number landscape** serves to, if you work with bitmap-fonts, set the number, over which the font can be responded to on Prescribe compatible printers, if you print landscape format.

The numeric input field **Character set** determines which symbol set is to be used.

Weight sets the weighting of the currently selected font. The weighting degree is separated into 15 parts: from **Ultra Thin** (value -7) to **Ultra Bold** (value +7), whereas **Medium** corresponds to the weighting **Normal** (value 0).

Style is an area with to checkboxes:

If **Italic** is active, the currently selected font will be flagged as italic font.

If **Condensed** is active, the currently selected font will be flagged as minimized font.

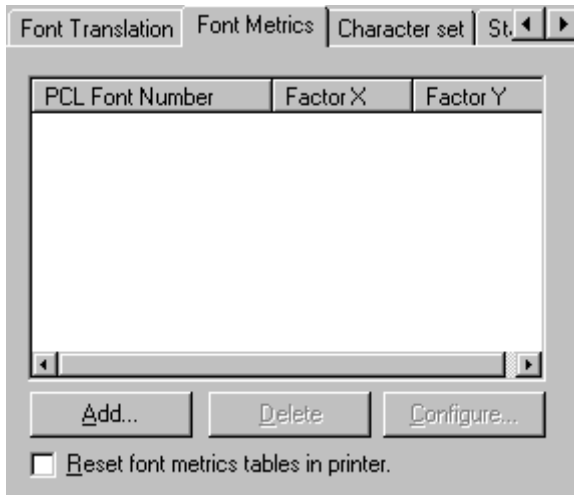
Spacing: If **proportional** is active, the currently selected font will be flagged as proportional font, e.g. Audrey Two SWA. If it is not active, the currently selected font will be flagged as fixed font, e.g. Courier New SWA.

By clicking on **OK** the dialogue box will be closed and all settings will be entered into the font translation table.

By clicking **cancel** the dialogue box will be closed and all changes will be rejected.

To send the new settings to JetScribe choose in the left list a printer driver and click on **Configure**.

Font metrics

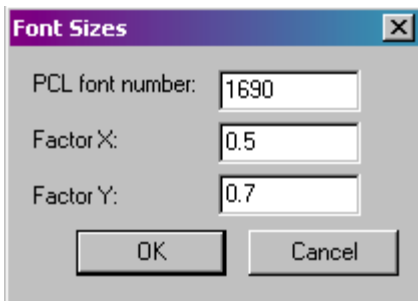


This folder gives you the possibility to change the metrics of PCL fonts individually on the target printer.

In the list, all **PCL Font Numbers** and the individual enlargement factors in X- and in Y- direction are shown. Thus, a PCL font, which seems to be too large on the target printer, can be adjusted.

If the checkbox **Reset font metrics tables in printer** is active, this table will be reset to its default values.

Add.../Configure...



By clicking on the button **Add...** or **Configure...** the dialog box **Font Sizes** appears. This dialog box gives you the possibility to create a new font size mapping or to configure an already existing mapping.

The numeric input field **PCL font number** fixes the number over which the font can be responded to in the printer.

The numeric input field **Factor X** sets the horizontal enlargement factor. Standard Prescribe fonts have the value 0.5 (except for Courier with 0.83).

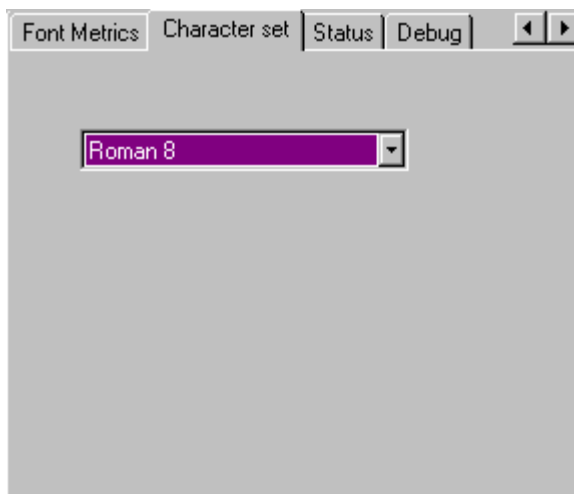
The numeric input field **Factor Y** sets the vertical enlargement factor. Standard Prescribe fonts have the value 0.7.

By clicking **OK** the dialog box will be closed and all changes will be saved in the font metrics table.

By clicking **cancel** the dialog box will be closed and all changes will be rejected.

To send the new settings to JetScribe choose in the left list a printer driver and click on **Configure**.

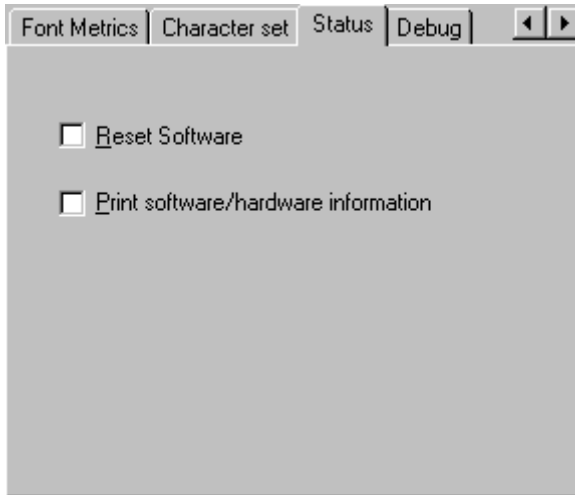
Character Set



This folder offers you the possibility to set the default character set. The following character sets can be chosen:

- Roman 8
- PC 850
- ECMA 94 L1
- Iso French
- Iso German
- Iso Italian
- Iso Spain
- Iso Norway
- Iso UK
- PC 8

Status



This folder offers you the possibility to change the status of your JetScribe Software.

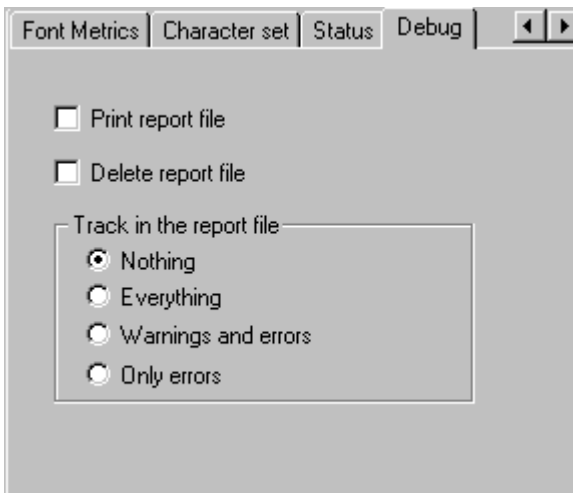
If the checkbox **Reset Software** is active, the target Software – e.g. JetScribe Server – will be reset to the default values. All FRPO-parameters, font metrics and font-mapping data will be reset and new written. JetScribe will be in the same status like before the first start of the software.

If the checkbox **Print software/hardware information** is active, the target Software – e.g. JetScribe Server – will print a status page with information about version and number of found hard disks.

To send the new settings to JetScribe choose in the left

list a printer driver and click on **Configure**.

Debug



This folder enables you to gather problems, which appeared during the run of JetScribe. They will be saved in the file Logfile.log. Problems, that can appear can be: missing fonts, unknown macros or - to the emulation - unknown Prescribe commands.

Notes

While using JetScribe DIMM, a lot of files are read and written in the printer. Many Prescribe forms are using the possibility of Kyocera printers to save Macros, fonts or executable Prescribe Code on Jeida-cards. For HP printers not having Jeida-cards, the data is stored on hard disk or – in the flash-version – in the file system of the flash. The included software JetScribe Admin, which can be used to configure the JetScribe Emulation, also sends data that is to be stored to the printer by JetScribe. Error messages and warnings – like missing fonts, unknown macros, too less memory and so on – are stored in the printer in a file called logfile.log, and can be printed via JetScribe Admin. Thus, a limitless operation of JetScribe can only be guaranteed, if a writeable file system (flash or hard disk) is installed in the printer.

JetScribe DIMM is available as ROM or as FSA-Flash version. The FSA-Flash version is able to save data in its own file system, whereas the ROM version is depending on an installed hard disk. JetScribe uses always the fastest file system to save. If there is a flash version installed in a printer with a hard disk, the data is stored preferably on the hard disk. For saving larger amounts of data a hard disk is recommended because flash memory has – as a file system – less performance.

Restrictions of a JetScribe DIMM without a file system

JetScribe DIMM as ROM version without a file system is submitted to a series of restrictions:

The complete support of Kyocera Jeida-cards resp. hard disks is omitted. Among other things are these:

No download fonts

No executable Prescribe Code at the start

No auto start macros

The Log file cannot be written and you cannot print with JetScribe Admin.

Settings, which are signed as “permanent” via JetScribe Admin, are only valid until the next power cycle of the printer.

The warnings level cannot be set permanently via JetScribe Admin.

Font mapping and font-metrics-tables, which are sent by JetScribe Admin to the printer, are only valid until the next power cycle of the printer.

Kyocera FRPO parameters, which are changing permanent settings of the JetScribe Emulation, are only valid until the next power cycle of the printer.

Kyocera printer have a so-called "time-out" value, which ejects a Prescribe document after a certain time if it has no "Page;"-command at its end. Also, a text like "This is a text", which is edited by an ASCII-editor and printed without a printer driver directly on the printer, is ejected after a certain time automatically.

Instead of this, hp printers are waiting until the next print job arrives or until the start-button is pushed.

Thus, you have to care for that every document has a "PAGE;"-command before the as "EXIT;".

If you print via a host system you have the possibility to attach to the end of every print job the following Prescribe sequence:

!R!

PAGE;

EXIT;

This will ensure that page is ejected automatically.

The new JetScribe menu:

JetScribe adds an additional menu to the printer's menu. Executing the following steps can print the whole menu structure:

Change to the *Information menu* by printing the menu button of the printer. Choose the first option *print menu map*.

In the table below, the column *PJL filename* lists the references to the corresponding files for the extension of the PJL instruction set of the printer.

The print menu JetScribe has the following options (The bold printed values are the default values)

Menu	Value	PJL filename	Advices
JS Emulation	ON	JETSCRIBE_ON	Turns the complete emulation ON and OFF. Turned off, no data parsing is done. The printer behaves nearly like if there is no module plugged in.
	OFF	JETSCRIBE_OFF	
HEX EMULATION	OFF	JS_HEX_OFF	Can be turned ON and OFF. Once turned on, JetScribe is inactive.
	ON	JS_HEX_ON	
HEX EMULATION OUTPUT TO	PAPER	JS_HEX_PAPER	Incoming data will be printed in HEX and ASCII if an FSA Flash or Hard disk is installed, all incoming data is written to the Device 0. Once the printer is powered on, the capture file is deleted. So in order to upload the captured information, turn the hex emulation to off, and load the IO_* files out of the 0:\JETSCRIBE directory. Do not reboot the printer! With BOTH Paper and Disk Mode is performed
	DISK	JS_HEX_DISK	
	BOTH	JS_HEX_BOTH	
JS PRINT MODE	PRINT 1:1	JS_MODE_11	PRINT 1:1
	SCALE TO FIT	JS_MODE_SCALE	No scaling is performed. Data printed up to 6mm close to the paper borders is lost
	USE OFFSETS	JS_MODE_OFFSET	SCALE TO FIT The

JS OFFSET X JS OFFSET Y	Numeric values from – 99 up to +99	JS_OFFSET_X JS_OFFSET_Y	print is down sized in order to fit a full page within the LaserJet printable area. USE OFFSETS A New origin can be entered. The origin will adjust the top left printing position on the paper. Only shown, when USE OFFSETS is active.
JS SYMBOLSET	PC850 ROMAN 8 ECMA 94L1 ISO 69 FRENCH ISO 21 GERMAN ISO 15 ITALIAN ISO 17 SPAIN ISO 61 NORWAY	JS_SYM_PC JS_SYM_R8 JS_SYM_E94L1	Use the default symbol set for the JetScribe Emulation
JS IGNORE PAGE FORMAT	OFF ON	JS_PG_OFF JS_PG_ON	Default OFF. All PRESCRIBE page format commands will be converted. It is possible, that the printer may ask to insert a special paper size. ON: The page size commands are ignored. You may use the tray commands, in order to select a special type of media.
Menu	Value	PJL filename	Advices

JS CR LF FF SETTINGS	NO CHANGE CR-LF LF FF CR CR-LF FF CR-LF CR-LF CR-FF	JS_CLF_NORMAL JS_CLF_CR JS_CLF_LF JS_CLF_ALL	Sets the behaviour of the Carriage Return (ASCII 13), Line Feed (ASCII 19) and Form Feed (ASCII 12) character handling NO CHANGE: Does nothing, all three characters are passed through. CR-LF LF FF: The Carriage Return is converted to Carriage Return plus an additional Line Feed. The other two are unchanged. CR CR-LF FF: The Line Feed is converted to an additional Carriage Return followed by the Line Feed. The other two are unchanged. CR-LF CR-LF CR-FF: Before Line Feed and Form Feed, an Carriage Return is entered. A Line Feed follows the Carriage Return itself.
CASS/PSRL X Set. (X=0...4) bzw. PSRL X Set. (X=5,6)	PLAIN BOND COLOR LABELS RECYCLED LETTERHEAD CARDSTOCK PREPUNCHED PREPRINTED TRANSPARENCY	JS_X_PLAIN JS_X_BOND JS_X_COLOR JS_X_LABELS JS_X_RECYCLED JS_X_LETTERHEAD JS_X_CARDSTOCK JS_X_PREPUNCHED JS_X_PREPRINTED JS_X_TRANSPARENCY	Any of this PreScribe Commands will be converted to a Paper Media request. The options are PLAIN, BOND...

NEW PJL COMMANDS

PJL command	Notes
JS_MENU_OFF	Turns the whole JetScribe menu OFF. Menu settings are be still active
JS_MENU_ON	Turns the JetScribe menu on again.
JS_DEBUG_OFF	The is an internal command for debugging
JS_DEBUG_ON	The is an internal command for debugging
JS_ELOG_OFF	JS_ELOG_ON:
JS_ELOG_ON	Prescribe is able to protocol some data to a log file in volume 0. In order to influence the importance of data, the value can be set from 0 to 3. The higher, the more data is written. In order to use this function, an FSA Device must be installed
JS_ELOG_PRINT	JS_ELOG_PRINT: Prints the content of the log file. JS_ELOG_CLEAR: Deletes the content of the log file. JS_ELOG_OFF: Sets the logging back to 0: no logging.

CONFIGURATION

The most important functions can be adjusted in the printer's menu.

With the provided program JetScribe Admin you can configure both the JetScribe DIMM version and the JetScribe Server version. JetScribe Admin offers a lot of setting possibilities like printing status pages, assigning fonts and the setting of the recorded error messages and warnings.

JetScribe Server

Installation and uninstall

Preconditions

JetScribe Server is only to be installed on Windows NT machines. There are two possibilities to work with JetScribe Server:

The machine on which JetScribe Server is installed provides the JetScribe Server services via one or more shared printers. Thus, JetScribe Server can be used by any programs, which are able to print over a Windows printer driver.

JetScribe Server is used like a normal line printer daemon. This provides the possibility of running JetScribe Server on any desired host system and the connection to, e.g. UNIX.

Starting the installation software

Installation with autostart

Insert the Installation-CD into your CD-ROM-drive. As far as you did not uncheck the option "Autostart", the installation program comes up automatically. If you turned off the option "Autostart", install JetScribe Server just like explained below.

Installation without autostart

Insert the Installation-CD into your CD-ROM-drive. Launch the Windows Explorer or "My Computer" and open a window for your CD-ROM-drive. Double-click on start.exe and the setup-program will start.

Uninstall

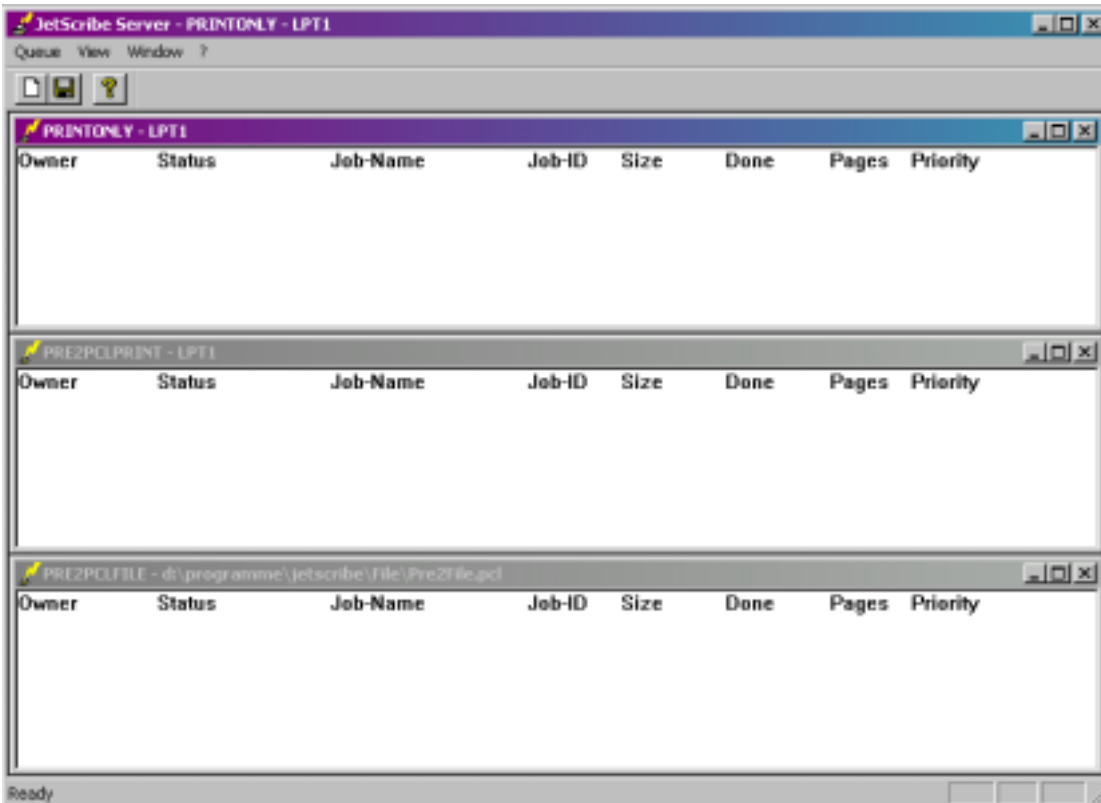
Open the folder "Settings" in the "Start"-menu. Select the control panel and open the item "Add/remove programs" or "Software". Mark the software, which is to be uninstalled and choose add/remove. The software will be uninstalled automatically.

Basic functions of JetScribe Server

JetScribe Server is an application, which accepts print jobs via TCP/IP on Windows NT, and delivers them to an output interface (usually a printer). Additionally, filters can be put in front of the output data flow, in order to modify the print data.

For now, a conversion filter is supported, which converts Kyocera PreScribe® print data into PCL 5. Therefore, you can print PreScribe forms on any PCL5 capable printer.

Starting the program



During the installation a link from JetScribe to the folder "Autostart" is made. Therefore, JetScribe Server is started automatically with every Windows session.

In addition to this, a folder called (JetScribe) is made in the program folder of the start menu. Here you can find the online documentation, the help file and the help program JetScribe Admin.

Pre-defined Queues

JetScribe Server comes along with 3 pre-defined Queues. Every Queue is attached to one printer or interface, on which the data is to be output:

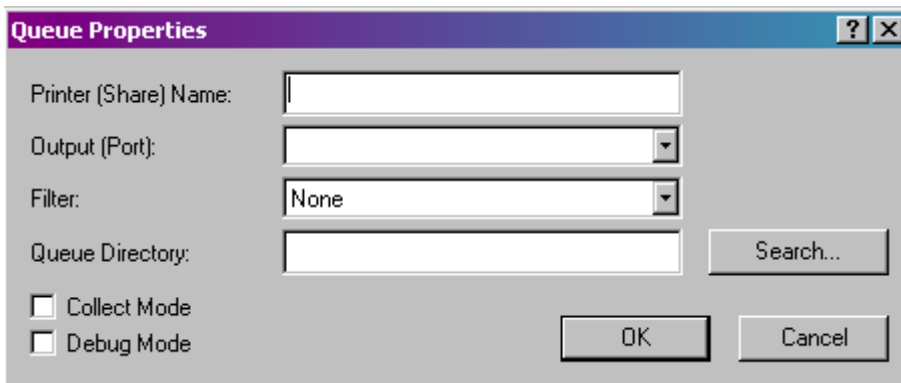
PRE2PCLPRINT: Translates PreScribe print data to PCL 5 and puts it to the lpt1 interface.

PRE2PCLFILE: Translates PreScribe print data to PCL 5 and saves it in a file.

PRINTONLY: Accepts incoming prints jobs without modifying them at all and passes them to the lpt1 interface of the printer.

JetScribe Server menu commands

The menu QUEUE



By selecting "Queue...New" the window "Queue properties" appears. There you can create new Queues, which can be addressed from several computers at the same time. The input data is, depending on the individual settings, modified by a filter, printed, stored or passed without modifying.

The command "new..." is also available as a tool in the JetScribe Server symbol bar.



Printer (share) name:

Printer (share) name is the name to which files / jobs can be printed. On Windows NT this is the share name.

Output (Port):

To the Output (Port) the data is sent. Usually, this is an local printer port (lpt1); but it is also possible to use filenames or other device types.

Filter:

In Filter, there are two settings:

PreScribe → PCL and None

If "None" is set, the data is passed unfiltered to the output.

If "PCL" is set, the data flow is searched for PreScribe data and if PreScribe data is found, it will be converted to PCL 5.

Queue Directory:

This is an input field where the folder is set, in which data is (temporarily) stored, if the port (defined in Output(port)) is busy or the collect mode (see below) is turned on.

Collect mode:

In the collect mode, all print data is collected in the Queue directory, even if the *Output (port)* is free. The generated filename of a print job has the following print format:

xxxxxxx_queueName_hostname_username.

xxxxxxx is a number with 8 digits, which is generated by a counter and which is therefore unique.

Queuename is the name from the input field Printer (share) name.

Hostname is the name of the computer, which sent the print job.

Username is the name of the user, who sent the print job.

If the switch "Collect mode" isn't activated, temporarily generated files will be deleted.

Attention: JetScribe Server is able to receive data from different clients at the same time, but the output succeeds as a single data flow to the printer interface.


Properties

With *Properties* the properties of the current Queue can be set. The same window appears like by selecting *New...*

Delete

Delete deletes the current queue. By clicking on the X of the document window the current queue can also be deleted.

Save all

With *Save all* the properties of all queues can be saved. This command can also be executed by clicking . The properties will be saved in the file **print cap** (compatible with the UNIX print cap files). This file is in the folder of JetScribe (if it was a Standard installation); This location can be changed by changing the file JetScribeServer.ini .

Exit

Exit closes the current application.

The menu VIEW

The **Toolbar** fades the toolbar in or out.

The **Status bar** fades the help information in the status bar in or out.

The menu Window

New Window creates a copy of the currently active Queue window.

Overlapping arranges all windows, so that the title bar of all windows is visible.


Tiled arranges the windows, so that from all windows the largest possible area is visible.

Arrange Symbols lines up the minimized windows at the bottom of the JetScribe Server main window.

Active Window. At the bottom of the menu *View* all available Queue windows are listed, whereas the active Queue window is marked with a hook. By clicking on a name of a non-active window, this window will be activated.

The menu HELP (?)

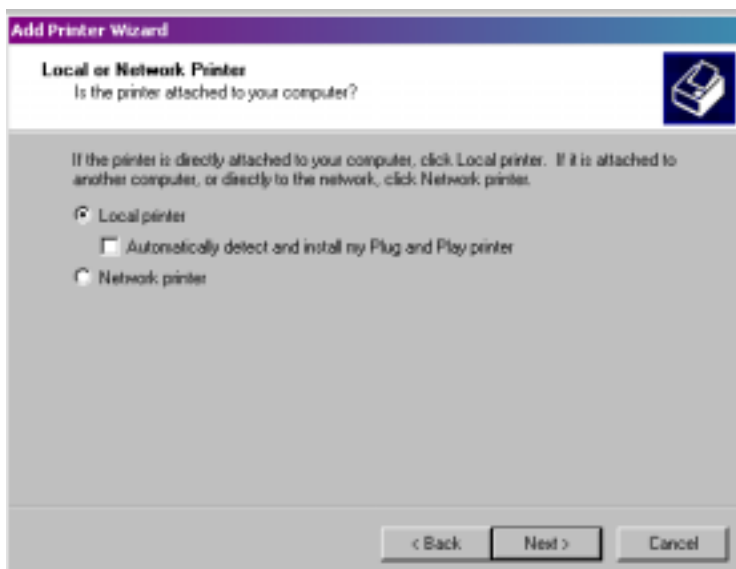
Contents calls the help for JetScribe Server in the help-contents-mode.

About JetScribe Server calls the dialogue *Information about JetScribe Server*. This command is also available by clicking on .

Using JetScribe with a Windows 2000 printer driver

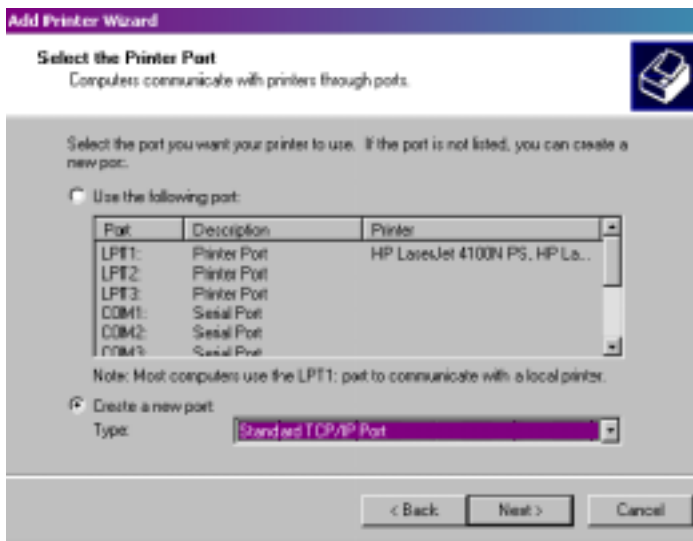
JetScribe Server can be used with Windows printer drivers or as a line printer daemon. If JetScribe Server is run with Windows printer drivers, every Windows application is able to send its printing data via a shared printer to JetScribe.

If JetScribe Server shall be used as a line printer daemon, any desired number of host systems can print over JetScribe. In both cases, it is required that the TCP/IP protocol is installed.



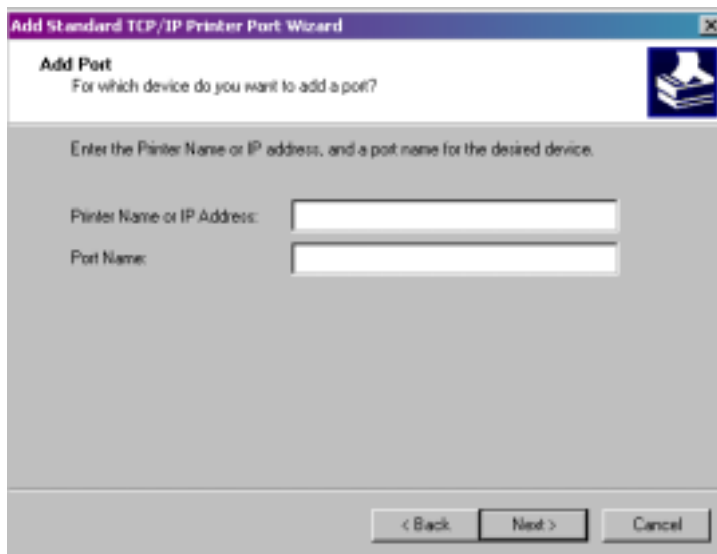
To install a new printer, you have to press the „Start“-Button. Then open the folder „Settings“ and choose printers. Select „Add printer“ and click „next“. Choose „Local Printer“ and „next“.

New printer port



By choosing the option „Create a new port“ with the type „Standard TCP/IP port“ and clicking on next, you'll see a window called „Add port“

Add port

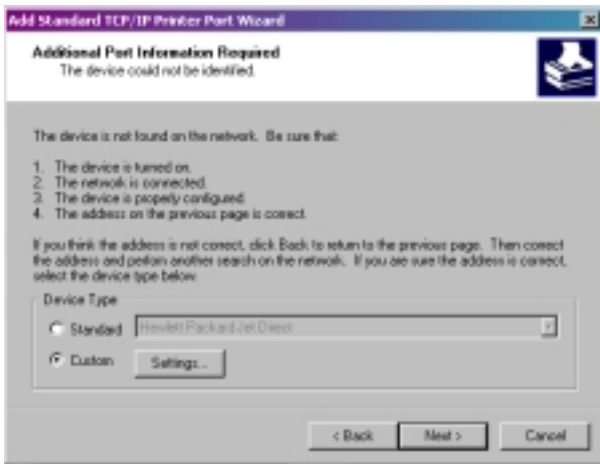


Printer Name or IP Address: This is the IP-Address of the computer, on which JetScribe is running and which is, if necessary, collecting and modifying the data flow. A fast way to look up the IP Address of the Computer running JetScribe is typing **IPCONFIG** in a DOS-Box.

Port Name: this is the name of the queue you want address on the JetScribe Server.

You can get this name if you (within a current JetScribe Server session) choose the command „Settings“ in the „Queue“ menu. You can find the name of the Queue in the first input field called „Share name“.

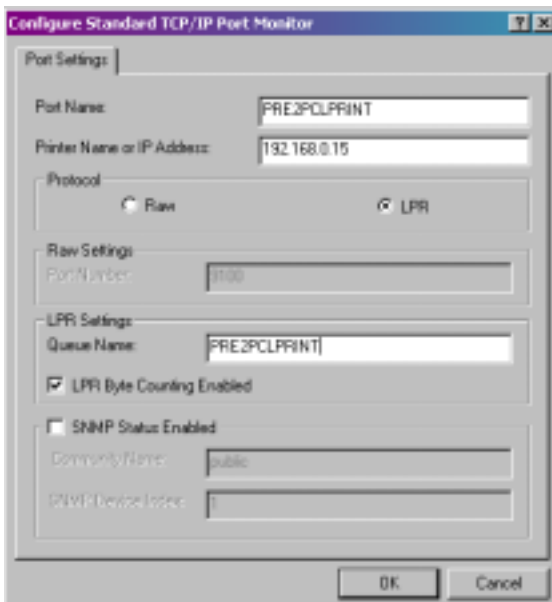
Attention: This step can only be done within a current session of JetScribe Server on the computer with the previously named IP Address. At the same time a queue with the previously named port name must exist. Otherwise you'll get an error message.



By clicking „Next“ the window „Additional port information required“ appears.

As Device Type choose “Custom” and click “Settings”.

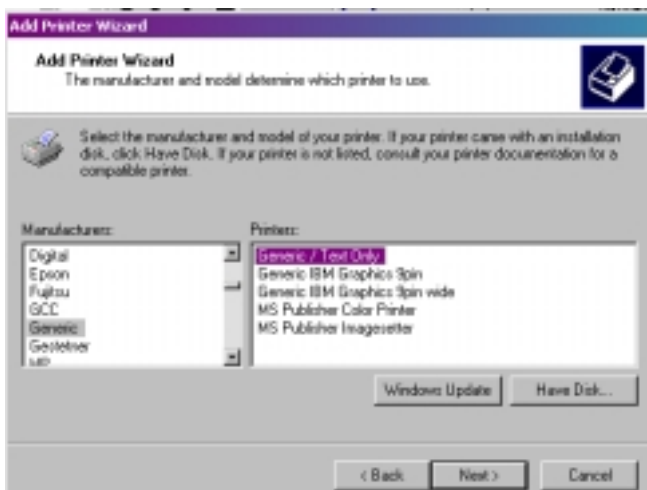
Port Settings



Choose LPR as Protocol type. In „LPR Settings“ chose as Queue Name the name of the previously chosen JetScribe Server queue. Activate the option “LPR Byte Counting Enabled”. Then click OK.

By clicking “Next” and „Finish“ you can choose the appropriate printer driver:

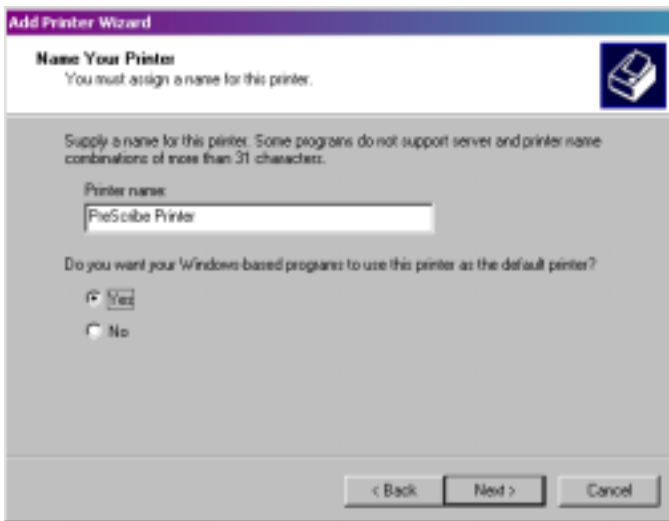
Printer Driver



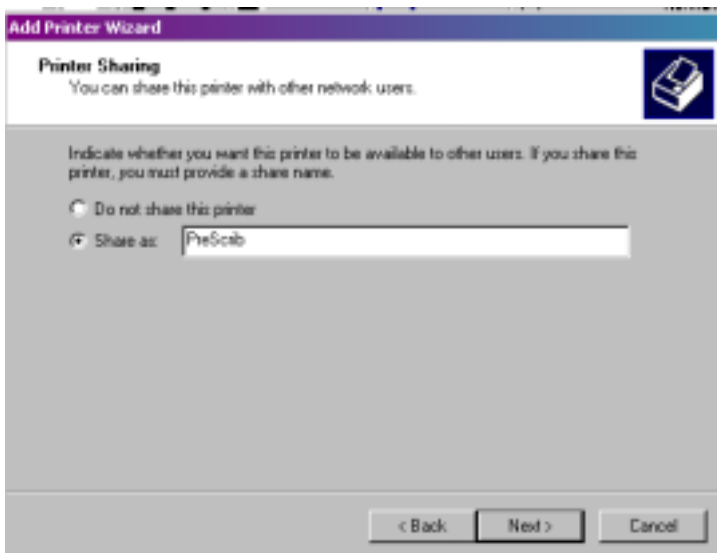
After you defined the port you have to choose the right printer driver. For the data flow not being modified you have to choose Generic / Text Only.

Printer name

You can choose a name for your printer.



Printer Sharing



If other computers (like Win9x clients) need to use the TCP/IP print service, the printer can be shared. Then the Win9x clients print on the printer shared by the Win2000 computer, which in turn sends its data to the JetScribe Server at the given IP-Address. Programs which use a shared printer driver can send their data to the computer on which JetScribe Server is running. JetScribe Server can edit, modify, save and print the data. That depends on the settings which are made for the queue you are printing on. To share the installed printer driver, click on „Share as“ and choose a share name. Chose “Next” to finish the installation.

Running JetScribe Server as LPD

With this possibility you can use JetScribe Server as a normal Line Printer Daemon. Thus, its possible to print from any desired Host System, e.g. Unix. Herefore the JetScribe Server uses the **BSD** protocol. While using this protocol, the print data ist transferred first, then the control file. Optionally, the control file can be transfered first or omitted at all. For the configuration of the host system please contact your system administrator. To contact the JetScribe Server, you need to specify the IP-Address of the computer on which JetScribe is running and the name of the Queue.

Technical support

For questions, problems and other suggestions please contact us:

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The latest drivers and instruction guides can be found on our permanently updated Internet homepage. In addition to this, our web pages contain further information about printing hp printers.