

Enhanced Laser Printing *ELP*

Questions and answers

Revision 8.31

For

MS Windows NT based platforms
HP Unix, True64, Linux, Solaris, VMS,
AS/400 and AIX

As firmware extension for various laser printer
As appliance box for Lan2Lan and Lan2USB

Please check put the ELP manual for quite a nice number of examples, they are listed by categories in the chapter ELP examples. There are even more examples listed in the Tutorial (Click on ? button within the PPAdmin software) or in the startup menu of ELP option Examples.

The following questions are answered in this document:

- Q1** Dedicating a fixed ELP functionality to a Printer/Queue
- Q2** Distribute print jobs to specific printers
- Q3** Mail merge and stapling
- Q4:** How big server do you need to run MyPrintArchive if it's 2.000 users...? Do you have any idea?
- Q5:** Does W-ELP work together with Novell? I want to add here Banyan Vines as well.
- Q6:** Printing a fixed form on every page, but..
- Q7:** How can I print from a pure DOS Application using the W-ELP Software?
- Q8:** Printing Username, Document name, page numbers etc, automatically on the page
- Q9:** Sort spool files
- Q10:** How can ELP automatically download special fonts used by the application?
- Q11:** What is the difference between a DIMM/MFC/USB firmware or appliance and the software version?
- Q12:** Security: Physically add and remove Signatures Forms from ELP
- Q13:** Archiving tricks with ELP
- Q14:** Print on the first page a full letter head and only the logo on the following pages.
Insert terms and conditions as a duplex job on the first page
Insert Form Feeds in plane ASCII data streams
- Q15:** I need help, what shall I do.
- Q16:** Perform some actions like paper tray settings on the last [or on a specific] page
- Q17:** How can I use 2 print job monitoring applications simultaneously, if they both are replacing the PrintProcessor and one of them is ELP?
- Q18:** Can W-ELP let printing only word files or pdf files?
- Q19:** As you can see in this file there is two rows in the beginning of each page. I would like to remove them, or move the text with PL command... If I remove the two rows manually it works fine, but when I use the PL command it doesn't work. Any idea?
- Q20:** Print on the first page a full letter head and only the logo on the following pages. Adding FormFeeds and insert pages
- Q21:** Text triggering or searching with new Windows Drivers
- Q22:** User based job distribution of SAP print jobs
- Q23:** How to read/create from ELP data base searchable variables
- Q24:** Addressing SecureJet with host data streams (incl. Splitting a job)
- Q25:** Automatic storing private jobs on the printer hard disk (incl. Splitting a job)
- Q26:** Use a Counter and perform tasks based upon counter value
- Q27:** Using printer specific forms, but with data stream specific copy factors
- Q28:** Combining different rules based upon data stream entries
- Q29:** More about setting up rules
- Q30:** Split a job to different out-trays and perform rules upon used input trays
- Q31:** ASCII-files, How to initialize, insert page breaks and position first print position
- Q32:** Triggering one of 2 functions with hierarchy
- Q33:** Printing a Job X times and personalizes it with a continuous counter
- Q34:** Triggering invoice / delivery notes etc. forms for different companies
- Q35:** Page counter on back side of the page
- Q36:** 2 page mail merge document printing at full speed
- Q37:** Getting the correct user name for data stream send by hosts
- Q38:** Converting print files to macros and update them
- Q39:** Printing 2 A5 pages on one A4 page
- Q40:** Collection jobs for eliminate the printers job setup time

- Q41:** How can I print alternating from different paper trays
- Q42:** Stapling every X Pages together, X maybe the copies of each page
- Q43:** Inserting another (colour) page every X Job.
- Q44:** PJL and PCL settings for toggling colour and grey scale
- Q45:** Print 2 or 4 print pages on one piece of paper
- Q46:** Stapling a duplicated Job
- Q47:** Printing coloured forms and watermarks underneath black text
- Q48:** First page is printed with the form but no data
- Q49:** First page is an invoice, the following pages in duplex with different macros on front and back pages
- Q50:** Depending upon the data stream content, I want to add X pages, and all must be OMRed with the envelop insertion sign on last page.
- Q51:** Depending upon the paper tray used, print specific forms on every page
- Q52:** Delete the Job name in PJL section due to security reasons
- Q53:** Print every 250th page a separation page from another tray.
- Q54:** We need to split big mail merge jobs into its single invoice files and then reprint each job twice from different trays.
- Q55:** Can ELP change Postscript streams like PCL streams
- Q56:** Split a big job into 50 pages peaces, as this is maximum amount of pages being stapled.
- Q57:** Print Job Duplex, but starting with a specific page change to simplex.

Examples in the main manual

Description
Adding forms at the end of the data stream
Call any external Software and read back its printing data
Change Input Tray settings
Collection data streams and print them in one shot
Counter within a job and between jobs
Distribute Jobs to users named in the data stream
Distribute Jobs upon file size or page numbers
<i>ELP</i> C command basic handling (Page definition prints)
<i>ELP</i> command for printing logos on each front page in duplex mode
<i>ELP</i> commands
Email print data as PDF document
FollowMe printing, collect data streams, release and print to a printer
Generate Professional Archive Index file
How to generate forms and how to use them
How to put forms or logos on a page
Initializing the data stream or adding forms before printing
Initializing your unformatted data stream in a proper way
Invoice printing
Listing of demo files and what they do
OMR Barcode
Merging PDF documents into the data stream
Print on every printed page a fixed form
Print document name, user name, date, page count automatically
Print actual date and time on a page, or merge variables in document
Splitting and archiving a job, using filenames based upon data stream values
Printing a nice invoice with forms etc
Printing barcodes
Printing simplex and duplex on preprinted or prepunched paper
Search in the data stream for an information and perform a command
Search/replace in the data stream for a specific information
Send one copy to another printer
Sending jobs to any IPAddress or handing jobs over to any software
Split Job into several print jobs
Unix Program calls (Windows: <i>PPADMIN</i> Arguments)
Accounting including a project name to track printing costs
Creating an counter and perform tasks upon the counter value
Drawing specific pages from a different paper tray.
Send user a message that his job starts printing

Q1: How can we perform a fixed rule when printed to a special paper tray.

But I have added some more stuff in the answer:

Answer: This is very easy: Here are the steps:

1. As the printer seem to have a special sort of paper in this tray, please select a special paper media type for this tray, using the printer menu.
2. Install the new queue/driver on that PC, maybe rename it to AlwaysTray3 or whatever.
3. Open PPDMIN
4. Install-TAB: Install the new queue (Make sure you set the Queue settings, when the installer tells you to do)
5. Mark the installed printer, click on "Mark printer to print demo file" and use for example a BarDIMM demo print Barcode_overview.pcl. If barcodes are printed, the installation is ok
6. Select the IniFile-TAB:
"Add section", double click on the queue name -> ok -> ok to return to the main program
Mark the new section in the section window
Add Key -> open ELP Commands -> select ELP_COMMAND -> OK
Click on generator and select in the paper tray pull down menu the proper Media type. Now you will see in the bottom line the ELP_COMMAND. The OK is still gray, so you have now 2 possibilities:
A) Mark the command, copy it, click cancel and insert it in the remaining window
B) Enter 2 copies (first option) press OK and erase K2; in the entry field
7. You can go back to the install menu and test if the barcode test comes now from this tray.

Notes:

You can skip 6.1 and select instead in 6.2 the GLOBAL section and add the ELP_COMMAND to this section. The result would be the same, but if you may need to run other queues with other function through ELP the queue way is better.

You can add form, and other commands, simply as you like.

Also any other key command can be used like archiving, accounting, sending eMails etc.

Q2: I have a client who wants to print a few copy for users which he write/choose in copyright note. When he send this document to print then - document must print in 3 copy: 1 copy when in header will be address data owner 2'nd copy when in header will be address data user John Travolta 3'rd copy when in header will be address data user Greta Garbo

I suppose that all documents with different user in header must be print on printer which owner choose for print.

A: As simply as you may use any variables in the port name of the OUTPORT key. The port name itself can be stored in the print data stream or in the ini-File, both methods are described below:

So the data stream might look like this:

.....regular letter...

A copy was sent to:

1. ELPPORT LJ_Greta ELPDOIT Greta Gabo
2. ELPPORTLJ_John ELPDOIT John Travolta

The ini-File for the first method looks like this:

```
[Read Port]
; This section reads the port name out of the data stream
Search_Binary=ELPPORT
; into the variable #MY_OUTPORT#
StoreNextWordToVariable=#MY_OUTPORT#
; Trigger and port name will be erased
ERASE_BINARY=1
```

```
[send to port]
; On the second trigger the outgoing Data stream is
Search_Binary=ELPDOIT
; erased
ERASE_BINARY=1
; And send to that port
OutPort=#PCNAME#\#MY_OUTPORT#
```

The print result due to the erase_binary statements is:

.....regular letter...

A copy was sent to:

1. Greta Gabo
2. John Travolta

but 2 copies are sent. For MS Word it is strongly advised to put the "ELPPORT LJ_Greta ELPDOIT" text into a print field. The ELP text information can be maintained on a server in a ASCII list and inserted by a macro. So no spelling mistakes are assured.

A second method could be to search for the name itself, and the port selection will be defined in the ini-file.

```
[send to Greta]
Search_Binary=cc Greata Gabo
OutPort=#PCNAME#\LJ_Greta
```

```
[send to John]
Search_Binary=cc John Travolta
OutPort=#PCNAME#\LJ_John
```

Q3: How can we staple a mail merge document?

Answer: Pretty easy: Here is way :

1. Install the Software on a NT based server NT, 2000, 2003 or XP
2. Activate a queue (PPAdmin -> Install tab -> move one printer form left to right) It is important to Turn the extended functions button off (You will get a notice about this)

Test now the installation by marking the queue and click "Mark printer to print demo file" select the Barcode_Overview.pcl file (BarDIMM emulation). If you see a lot of barcodes on the printout, the system is running fine. (Do not forget to press the demo OK button)

3. Go into the ini-file Tab

select the global section

Add Sections, double click on the queue and exit

Mark the new queue name in the ini file

Add keys -> open ELP -> Double click on ELP_Command

no normally you would click on Generator, but this functionality is special and not offered by the generator. To enter the following command: T#:#; The first # defines the method how the clip is pressed into the paper:

Value Description

- 1 One staple is stacked top left of paper with an angle
- 0 Do not staple job
- 1 One staple is stuck on top left of paper
- 2 Two staples are stuck into the paper
- 3 Three staples are stuck into the paper
- 6 Six staples are stuck into the paper

4. The second one is how many pages should be clipped. So if your mail merge contains 3 pages, say 3.
5. So a valid command is T1:3; (Don't forget the semicolon)
6. Press OK and close all open windows (Not PPAdmin, this may remain open) and start a test job.

If you have problems, we can make a WebEx session to trouble shoot. Hope to see SA second WELP sale soon. Please check the manual for further informations, search for T#[:#] and you will be leaded directly to the command description.

Notes:

- A) This is not the only way how to solve this problem with ELP, but the fastest in terms of implementation and testing. The second one is to split the job first and then staple it.
- B) You may run the printer with full speed, if you use the static part of the mail merge document as a form!

Q4: How big server do you need to run MyPrintArchive if it's 2.000 users...? Do you have any idea?

Answer: For each job running through the ELP Windows processor the server needs the power of about copying the print file 4 times. When you archive the print file there is one more copy time on top. But for the MyPrintArchive function also 1 less because you don't read the print data back. So the processor is used as like the print data is copied 4 times into another file.

I think it is very view power needed. But we can even reduce it by 50%, so it is possible to limit it to 2 copies, but then the archived files need to be stored under the user logon name or any other name ELP gets form the print processor. See log_file.txt first 2 rows.

For getting the archived files back, it is like copy them 2 times. Plus 0.2 seconds.

So in general if the server has less power, only what can happen is that the user waits instead of one additional second maybe 2 or 3 additional seconds, but I think he needs more time to walk to the printer then that.

What we have seen, is that the windows overhead of controlling queues needs more time... ;-)

For unix and other operating systems, you may subtract 2 to 3 copy times, if you work with STDIN and STDOUT piped commands

Q5: Does W-ELP works together with Novell? I want to add here Banyan Vines as well.

Preamble:

I assume, that ELP should trace data streams within a certain queue.

Answer is YES and NO!

The problem:

Both network systems take the print data stream before the Windows spooler (Print Processor) which makes sense, because why to spool it twice. Unfortunately but then, the data stream will never reach the ELP process.

The current solution:

Do not connect the PC direct to the Novell Server, just let the Windows print queue, where ELP is installed, print to lpt1, 2 or 3. Then use the Novell capture command to reroute lpt1 to your Novell Server Queue.

In conclusion:

A) If the ELP is installed on a client PC, then you have no problems.

B) Direct on a server is unfortunately not possible.

We may have some expertise to look even behind the curtain on a Novell Server, but then we need first to know which release the client uses.

If you know a way how to call within a Novell Server Queue an external Software, please let me know.

Q6: One our costumers wants to put one form into a flash, and everything that is printed has to be printed with the form in the flash. He does not want to modify the files to be printed, so here is the question: do you know how we can make that anything printed on this printer gets the form in the flash? Every single job sent to the printer has to be printed with the form in the flash.

Answer:

So far I know, there is no way to do it with a standard FLASH product. But our ELP product is able to handle this!

Notes:

1. ELP only supports PCL 5e or c print jobs! But you can tell ELP not to print any other jobs in another printer language! So you can assure this.

2. Also it quite good, if the print pages do end with a FormFeed. If not please let me know, then I need to help you to setup the ini-file.

I do not know what kind of form your customer wants to print, but keep in mind, that a A3 and A4 or A5 as well as portrait or landscape document or 300 and 600 dpi printing may need different forms. ELP is able to handle that all. See around page 106 in the ELP documentation for further details, if this is needed.

The form can really be always the same, then it is so easy like this:

1. Generate the form and print to a file using a PCL 5 driver
2. Use PPADmin to convert it to a macro, maybe 1000
3. Add to the ini-file in the section GLOBAL the following key: ELP_COMMAND and set the content to C1F1000;

If you only want to print it on a special data stream, use a trigger or search key in a separated section to apply the same key. If only a specific printer for a specific user should print like this, put the command into their sections.

Then you are done!

If there are exceptions to make, put them into a searched section, for example each job going to the printer named INVOICE should print the letter head form 1000, except for the print job of the delivery note:

```
[Invocie]
; this section becomes always true, as it is the name of the printere
ELP_COMMAND=C1F1000;
[DeliveryNote]
SEARCH_WINDOWS=Delivery Note:
ELP_COMMAND=C1F1001;
```

Therefor the Section "Delivery Note" has a higher priority as the queue name section.

Tipp: If the "Delivery Note" section should not perform any ELP command, so the default command is erased, then simply use a macro number, which doesn't exist.

Q7 : How can I print from a pure DOS Application using the W-ELP Software?

Answer:

1st case: The DOS application runs in a DOS Box under MS Windows using a network printer

Redirect the data stream from LPT1 to any MS Windows queue, like

```
NET USE LPT1 \\server\Shareame
```

The queue can be on the same PC or any other PC/Server. Of course it needs to be an NT, Windows 2000 or XP windows system on. Then install ELP and activate ELP in this queue. The queue itself will be connected to the printer.

2nd case: The DOS application runs in a DOS Box under MS Windows, the printer is connected via LPT1.

If the DOS application is able to print to LPT2, then set it to LPT2, redirect LPT2 using the same method as above to the queue, which prints to LPT1.

3rd case: The DOS application runs in a DOS Box under MS Windows, and it could not print to lpt2.

Add a second Centronix card to the PC and connect the printer via LPT2. Redirect as mentioned above lpt1 to the queue which is printing to lpt1.

4th case: It is a pure DOS PC, and the printer is connected to LPT1

3.1) Use ELP as a DIMM

3.2) Some software can print to a file fist, and then the file could be copied copy /b .. to lpt1, or the software use the DOS print command.

In this case, you are maybe able to generate and a batch file like this:

```
convert infile outfile -s.... -c.... -p...
print outfile
del outfile
del infile
```

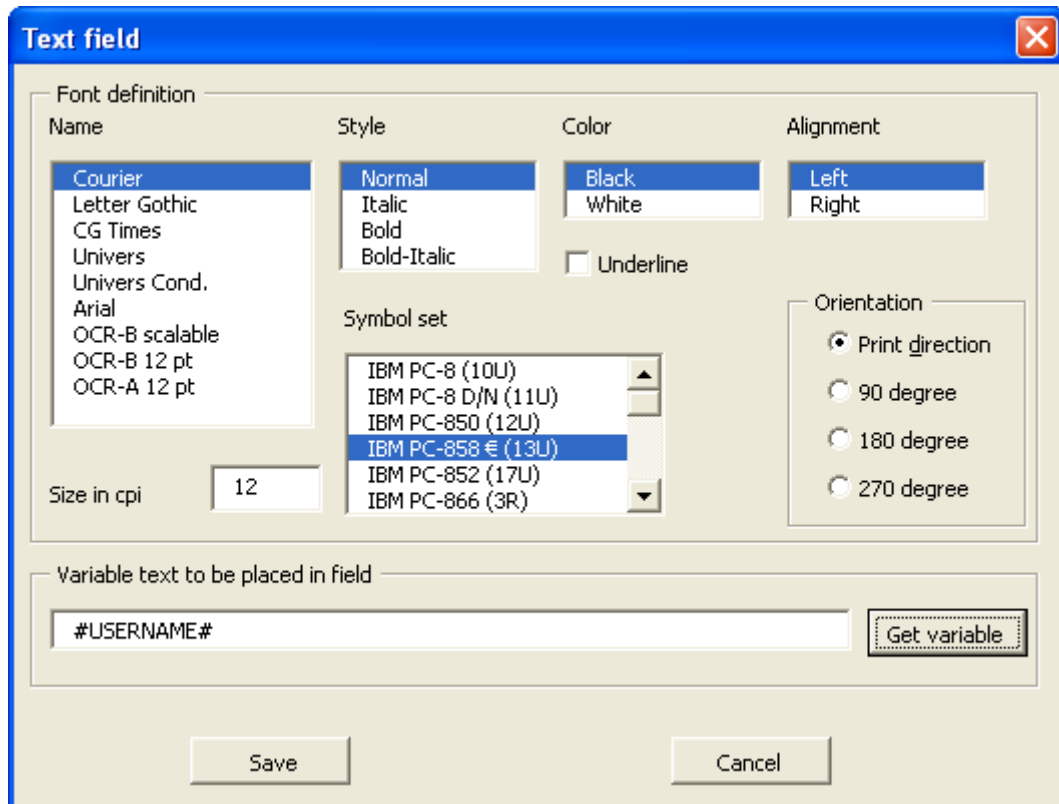
Q8: The general question from an APS partner was, can [W]ELP automatically print the document name on the page.

ELP does store the queue information "document name" into an ELP value called #PRINTDOCNAME#. The software does automatically search for this term. If the string is found in the data stream ELP replaces it by the variable value. Now this term can be used direct in the printing data of the application, but more interesting is of course, to let ELP automatically add this information at any print position on any selectable print page.

Answers:

1st method:

Open from the start menu the MS Word document Form Field Installer with enabled Macros and follow the explanation in that document. When you already know how to place the forms on the pages, you are nearly done. The following methods do actually the same, but explain it very PCL technical. Here a screen shot of the provided forms generation .MS Word macro:



2nd method:

Answer: Using the ELP standard trigger methods, to activate the form. The intension of this example is: All documents going through this queue will have the information printed on.

Go into the Inifile register of the PPAdmin control center.

Mark the section GLOBAL

"ADD KEY" -> and choose "ELP_Command" from the "Forms and Printer ..." Section

Mark the macro 23000 and move it over

Press OK - Apply - Close

For testing open the Install register, mark the activated printer, click the button "Print demo file on selected printer" select best the first test file as before and see the stamp on each page.

For printing the stamp only only on the first page, the ELP_Command needs to be changed to C1:1F23000; (Copy 1 Page 1 Use Form 2000)

Now, every PCL 5e print job going through this queue will have fully automatically and user un-changeable on the first page the names of the document and the application. The file 2000.mac will also print the user name and time.

For UNIX use the -p4 command line parameter.

This method may(!) have 3 disadvantages:

- A) Windows may not know the name of the document, for example queuing LPR jobs
- B) In most cases the application name is listed as well
- C) It is always printed, unless the command is not put in a triggered section using a Search_.. or Trigger_.. key.

Here is the way to create a macro using the variable name in any printer internal font at any place in any size (Best with a LJ 4 driver). I have attached an example: 2000.mac (only on the eRoom) which can be stored into the forms directory, or modified with an HEX Editor

On Microsoft Word, you may insert a print filed and add there:

```
PRINT 27 "&fS" 27 "&a7000v300H" 27 "&a90P" 14 27 ")s1p8vsb4148T#ACTTIME#...." 15 27 "&a0P" 27 "&f1S"
Push position ---|          |          |          |          |          |          |
Position of the stamp-----|-----|          |          |          |          |
Rotate print direction bay 90 degrees -----|          |          |          |
Use font Universe (See printers PCL font list for all available fonts use )! -----|          |
Rotate back to default print direction-----|          |
Pop cursor, so the printer cursor returns to the place where the sequence did start -----|
```

Print the document using a PCL 5 driver into a file, but very IMPORTANT: Do not print through an ELP enabled queue!
Use PPAAdmin macro register to turn the print file into a macro, and change your ELP command.

And 3rd method, for getting the document name, if not provided through the queue or Unix based ELP command line:

Using new drivers for example, the document name is part of the data stream initialization.

Add the search section to the ini-file and use the 3 keys in the section.

```
[search]
search_binary="Microsoft Word - "
StoreNextWordToVariable=#DOCUMENT_NAME#
ELP_COMMAND=C1:1F2001;
```

Basically when the text "Microsoft Word - " is found, usually in a PJI command, then the next word, which is the document name, is stored into the variable #DOCUMENT_NAME#. This variable is then used the macro 2001.mac.

Possible enhancements are:

A) Using this method, you can add any other application to the same section.

```
[search]
; MS Word
search_binary="Microsoft Word - "
; MS Excel
search_binary="App Filename: "
StoreNextWordToVariable=#DOCUMENT_NAME#
ELP_COMMAND=C1:1F2001;
```

B) If you only want this functionality for invoice documents :

```
[search]
search_binary="Microsoft Word - "
StoreNextWordToVariable=#DOCUMENT_NAME#
```

```
[trigger invoice]
Trigger_text="Invoice No."
ELP_COMMAND=C1:1F2001;
```

The second solution works of course as well for Unix and Linux ELP, once the document name stands in the PJI section.

You may add in the same way the username using the predefined variable #USERNAME#, time values, page numbering etc.

Q9: We have a customer that wants to use ELP with electronics forms but they need to sort and merge 3 different spool files in only one file before print. For example, they have a delivery notes spool file with 100 pages and an invoices spool file with 100 pages, in each page appears the customer number and they want to sort the spools files and merge it in only one file (invoice1, delivery note1, invoice2, delivery note2,... invoice100, delivery note100).

Can WELP do it or do you know any solution?

A: Yes this is possible with the new MyArchivePrint function. The only question is, can we get the invoice number form the print file. (Download the latest version)

This is the way to set ELPs ini-file up:

```
[delivery note]
Search_Windows=Delivery No.:
StoreNextWordToVariable=#Delivery#
OutArchiveDir=d:\archive;#Delivery#_11_#ACTTIME#
NoPrinting=ON
```

```
[invoice note]
Search_Windows=Invoice No.:
StoreNextWordToVariable=#Invoice#
OutArchiveDir=d:\archive;#Invoice#_22_#ACTTIME#
NoPrinting=ON
```

Etc.....

So the jobs are not printed but stored in the archive directory d:\archive and the file name will be invoice number_11_date. Usually the Windows system will sort the file names.

So you will have

```
4711_11_12.39
4711_22_12.30
```

In this example the invoice job was sent earlier, but will be printed at second position, because of the _11_ and _22_ trick in the file name.

Now, if you want to print all collected jobs: Generate a print file with a special trigger, like !PrintMyArchive!

The ini-file entry could look like this:

```
[Print MyArchive]
Search_binary=!PrintMyArchive!
KillJob=ON
InsertPrintFilesAtJobEnd=D:\archive\*.*
```

Notes:

1. You can send this release job with the !PrintMyArchive! trigger to any ELP monitored printer, and all jobs will be send to this printer
2. You can print the release job to a file, and use a Desktop Icon and a batch file to send it to the proper queue
3. If the Invoice trigger does not work, send me a copy of the data stream, and I will check it. The problem is, that in newer windows drivers you can't read the text anymore. But we have a fix for that, which is not yet released, but ready.

Q10: How can ELP automatically download special fonts used by the application

A: We easily can do this, even always using one of the following methods

Prework: The fonts are needed in the downloadable soft font format, either as bitmaps, intellifont, postscript or truetype. In most cases we can convert any Postscript / TrueType font pretty easily into the download format.

Each font file needs to start with the soft font ID sequence and end with the soft font permanent sequence.

To download the file(s) there are quite some ways to go:

1. Store the single download file in the forms directory (Working directory) using the filename: job_init.mac. This file then is automatically downloaded for every job.
2. The same can be done also with the basic ELP system, assuming all job starts with a special sequence like Escape%-12345X and the font download file is named in our example case 2000.mac

```
[Add Font file to each job]
; Add those 2 keys
; search key for the escape sequence
SEARCH_BINARY=\x1B%-12345X
; Adds the form 2000 which is the font file in the forms directory named 2000.mac
INSERT_BINARY=\x1B&f2000Y
; Speed up process
READONLYSEARCHKEYS=ON
; only once per job needed
Search_Only_Once=ON
```

3. The exact same result, but independent from the initialization of the data stream is using an ELP_COMMAND and also the fonts in one single mac file: ELP_COMMAND=C1:1G###; where ### is replaced by the macro number. Activating the ELP_Command in the section GLOBAL or any automatically executed sections like printer-, driver- or user named sections will lead to the same result as the job_init.mac method, but at least user or driver restricted.

```
[GLOBAL]
;.....
; Add fonts to each job
; search key for the escape sequence
ELP_Command=C1:1G1000;
```

4. The most elegant way of course is to load the fonts dynamically when they are addressed.

Let us assume, the special font is addressed first time in the data stream using this Escape Sequence:

```
Esc(10UEsc(s1p11vsb1001T
```

Then open PPAdmin ini-file Tab and add those three lines to the convert.ini, starting with the creation of a new rule.:

```
[Add Font]
SEARCH_BINARY=\x1B(10U\x1B(s1p11vsb1001T
INSERT_BINARY=\x1B&f2000Y
READONLYSEARCHKEYS=ON
Read_Only_Once=ON
```

Notes:

The font will be only sent once per job to the printer, even the escape sequence is found more often.

Another way could also be, that you add a trigger in the beginning of the data stream, indicating ELP to download some special fonts or macros.

```
[Add Font 2]
; Add those 2 keys
; search key for the trigger
SEARCH_BINARY=GreekFontsNeeded
; Replace the trigger with the font mac file[s]
REPLACE_BINARY=\x1B&f2000Y\x1B&f2001Y\x1B&f2002Y
READONLYSEARCHKEYS=ON
```

Using this method allows to download only the fonts needed, as you may generate a second rule for a needed bold font, etc.. If

the Insert_Binary key is replaced with the ELP_COMMAND lead into a combination of described methods 2 and 3

By the way, in this application the following 3 ELP commands lead to the exact same result, loading at the beginning of the job a file:

```
ELP_COMMAND=C1:1G1000;  
ELP_COMMAND=EB1000;  
ELP_COMMAND=EAF1000;
```

5. The benefit of the EA key is the possibility of being repeatable within the ELP_COMMAND syntax

Example: EAF1000F1100; is the same as EAF1000;EAF1100; With the ELP_COMMAND_ADD you can add new statements to an existing ELP command:

```
[Send greek courier font normal]  
Search_Binary=\x1B(2G\x1B(s0p10h0s0b4099T  
ELP_COMMAND_ADD=EAF1000;  
Search_Only_Once=ON
```

```
[Send greek courier font bold]  
Search_Binary=\x1B(2G\x1B(s0p10h0s3b4099T  
ELP_COMMAND_ADD=EAF1100;  
Search_Only_Once=ON
```

6. Using trigger, but trigger for example on the symbol set and only on the type face number:

```
[Send greek courier font]  
Trigger_Binary=\x1B(2G  
Trigger_Binary=b4099T  
; If both triggers are found  
ELP_COMMAND_ADD=EAF1000;
```

```
[Send greek universe font]  
Trigger_Binary=\x1B(2G  
Trigger_Binary=b4148T  
ELP_COMMAND_ADD=EAF1200;
```

So in this case the final ELP_Command for both fonts will be this: EAF1000;EAF1200;

Q11: What is the difference between a DIMM/MFC/USB firmware or appliance and the Software

A: Before answering this in detail, please note that there is a way in W-ELP to set it to the DIMM mode, meaning only the DIMM functions will work. Simply add in the Arguments field on the ADMIN Tab in the PPAAdmin software a key -p71 (Before the minus sign needs to be a blank)

1. Once PPAAdmin is set to the DIMM Mode, it enables the 2 buttons, which loads the forms and generated setup ini-file(s) to the printer, like the macro loader from HP or Euroform F&FM.
2. In DIMM Mode the automatic downloading of Micr and OCR-A and B fonts is disabled, as if needed, fonts can be installed on the FSA Dimm
3. Some variables are not available in the DIMM, like in and out file names and time functions.
4. For PDF direct printing, please use the Oberon DIMM.

The following table lists all currently available functions, where all of them are available in the Windows version.

See ELP manual

Q12: Security: Physically add and remove Signatures forms from ELP

Q: For check printing a potential customer doesn't want his signature form to be loaded permanently on the PC. Does ELP handle removable forms?

A: Yes! Generate using the standard mechanisms the forms, Logos etc., but store them maybe on an external and therefore removable USB stick.

Delete the original forms in the ELP forms directory.

Generate a Trigger or search section for example like this, where the forms are searched:

```
[Search for check printing data stream]
; Activate only after the font OCR-A1 is used
Trigger_windows=OCR-A1
Trigger_windows= MyCompanyName
; If found then set the forms directory to the USB device
WKDIR=F:\USBForms
ELP_COMMAND=C1F1000F5000;
```

Whenever LP finds the texts in a data stream: OCT-A1 and MyCompanyName the Working directory is moved from ..\welp\forms to f:\USBForms and the forms 5000 and 100 are used. 5000 could be the signature for example.

Q13: Archiving tricks with ELP

Here find some information how you can use variables in order to sort your archive directory.

1. Example: Sorting different spool files maybe form different systems and print them in the correct order

A: Answered in Q9.

2. Example: We would like to generate archive with the filename containing a invoice number

A: Search in the data stream for the word or position escape sequence before the invoice number or any other item you want to use. Then read the following word into a variable, which is e.g. the invoice number and use this variable in the OutArchiveDir key.

```
[invoice]
; define what stands in front of the item you need to store
SEARCH_WINOWS="Invoice No."
; if found the next word is stored into the provided variable
STORENEXTWORDTOVARIABLE=#InvoiceNo#
; ELP will generate in the path d:\archive a file with the invoice number extension .prn
OUTARCHIVEDIR=d:\archive;#InvoiceNo#.prn
```

3. Example: Q: Can I also store the data using the USER Name as a file name

A: Yes, ELP does have a quite number of predefined variables. One of them is #USERNAME#. It hold the printing user of the data stream. This name can be found in the job properties in the windows queue.

```
[HP LJ 4200 PCL5e]
; Whatever is printed through this driver is stored in an archive
OUTARCHIVEDIR=d:\archive;#USERNAME#_#DATENUM#_#ACTTIME#.prn
; In order to get a filename for each job ELP adds the actual date
```

4. Example: Q: I know, I can make for every printer an own archive directory, I also can make a section for every user and archive the data in a user dedicated directory, even on his PC, but isn't there a simpler way so I don't need to add N user sections

A: Yes there is. The following example will store every job (Section Global) in a dedicated user directory. As a filename the example below even uses the Document name.

```
[GLOBAL]
OUTARCHIVEDIR=d:\archive;#USERNAME#\#PRINTDOCNAME#_#DATENUM#_#ACTTIME#.prn
; In order to get a filename for each job ELP adds the actual date
```

Notes:

1. The diretcory must be available for all users. We think of making an automatisation into ELP to automatically create the directory.
2. The PPAdmin Archive Tool does currently only support the command up to the first semicolon. So subdirectories merged in with variable contents is not yet supported. The routine will not find them.
3. You may of course combine Example 2 and 4.

TIPP:

If you print in an MS Windows environment using HP drivers, you can also get some nice information out of the print data file. So example 2+3+4 can also be implemented like this:

```
[invoice]
; define what stands infront of the item you need to store
SEARCH_WINOWS="Invoice No."
; if found the next word is stored into the provided variable
STORENEXTWORDTOVARIABLE=#InvoiceNo#
READONLYSEARCHKEYS=ON
```

```
[Search myUserName]
SEARCH_BINARY=JobACCUsername:
STORENEXTWORDTOVARIABLE=#MyUserName#
; ELP will generate in the path d:\archive a file with the invoice number extension .prn
OUTARCHIVEDIR=d:\archive;#MyUserName#\#InvoiceNo#.prn
```

Note: As the username in the print file ends with an illegal file name character the ", ELP Replaces this character with an _. So the directory name for example will be d:\archive\thomas_\4711.prn

Q14: Print on the first page a full letter head and only the logo on the following pages.

Insert terms and conditions as a duplex job on the first page

Insert Form Feeds in plane ASCII data streams

A. Very easily, proceed like this:

1. Develop the Letterhead with any [MS Windows] application and finally print the document page to a file, using any PCL 5[e]c driver. If the Logo on the first and next pages have the same size and sit at the same position, print the letter head without the logo.
2. Do the same with the logo.
3. Start PPAdmin and choose ADD in the Macros Tab. Select the first print file and in the next step enter a unique number e.g. 5000 and as the description text "Letterhead company ABC"
4. Process similar the with Logo print file, maybe use 5001 as form number.
5. In the last step enable an ELP command, using PPADMIN ini-file tab.

5.1 We assume here, that the data stream is processed through a special named queue, and all jobs coming through this queue are processed the same way (See also Q1 n this document). Otherwise generate a section where you search_... for a special trigger text, or where you trigger the function using the several AND combined trigger_... keys. In the queue linked case click on "ADD SECTON" and double click on the queue name. (At least one queue need to be activated) ->OK -> CLOSE

5.2 On ELP startup the GLOBAL section AND if the job arrives through that queue the this queue named section are always executed. In order to add the function to the section, mark it in the left windows and then click on "ADD KEY" -> open ELP keys -> double click on "ELP_COMMAND" and the basic windows for editing the filed entry appears. Click on "GENERATOR". The new opened windows allows to enter any basic ELP command. Additional commands can be listed by clicking on "?", the macro names through "MACRO DESCRIPTION". If there is the text "string" in the command line, please delete it.

To define the command please follow those final steps:

- Select "PAGE #" One.
- Mark your letter head form number and click ">>" -> C1:1F5000;
- If the logo is in a separate form, add also this form to your first page -> C1:1F5000F5001;
- Select "PAGE #" "All Pages"
- Activate form 5001 -> C1:1F5000F5001;C1F5001;

Close all windows and send the job.

If nothing happens, then check if your data stream contains FormFeeds. ELP needs them for processing any ELP command. If they are missing, then add them automatically with ELP:

The table below lists the additional section for adding FormFeeds to a selected Row Number

```
[Add FormFeeds]
; Set a section trigger to print line 64
Search_RowNo=64
; Add the FormFeed
ADD_BINARY=\x0C
; Speed up processing and prevent ELP to check for other keys then search and replace
ReadOnlySearchKeys=ON
```

You may extend this example to print the first age duplex and insert a second page with terms and conditions on the back side:

1. Mark the ELP_COMMAND -> "MODIFY" -> "GENERATR"
2. Select "Page #" One.
3. Open "Paper Handling" and select "Duplex Long Side", And S1 is inserted in the C1:1 command.
4. Click on "ADD FORM FEED" -> C1:1F5000F5001S1FF;
5. Select "Page #" Two.
6. Add to that page the form 501 -> C1:2F501;
7. Finally the remaining pages need to be printed simplex. Select "Page #" "All Pages" and Set "Paper Handling" to "Simplex" -> C1:F5001S0;

Q15: I need help, what shall I do.

In order to report a problem, please proceed the following steps:

1. Set ELP into the debug Mode: Start PPAdmin -> ini-File -> Rule Asisstent -> turn Debugging on by setting the hook.
2. Reprint the job one time.
3. Generate an eMail and describe briefly the problem.
4. Attach the following files out of the WELP\forms directory:
 - in_data.prn (Incoming data)
 - out_data.prn (Outgoing data)
 - log_file.txt (Debug file)
 - all used ini-Files (Your settings)
 - All used macros and Forms (Your forms, signatures etc.)
5. Send the eMail to the listed Adress at PPAdmin -> License Tab -> About.

Q16: Perform some actions like paper tray settings on the last [or on a specific] page

Q: We do need to print the last page of the document a special paper, How can ELP draw the paper from another paper tray.

The easy way to find the last page of an incoming job is to use the key `PREPARSING=ON` in the global, user-, printer-, driver or port named section. If the data stream is PCL 5 compatible then the result of the amount of pages is stored in the variable `#PREPARSEPAGECOUNT#`. This variable can later be used for example to draw the last page of a data stream out of a different tray.

```
[GLOBAL]
REM=This section is executed for every data stream
; all the other original commands
PreParsing=ON
```

```
[Do Invoice]
Trigger_Binary=Invoice No.:
; all paper are drawn from plain paper tray, the last page from the preprinted tray.
ELP_COMMAND=K2;C1I1;C1:#PREPARSEPAGECOUNT#I9;
```

Tip: If somewhere for example a terms and conditions page is inserted, use in the triggered section the Counter key in order to increase the content of the key `#PREPARSEPAGECOUNT#`. See also Q47

```
Counter=#PREPARSEPAGECOUNT#
```

The second by far more complex way can not only find the last page, it can find any page and perform a specific `ELP_Command` on that page.

The theoretical problem is, that a paper tray command needs to be issued right at the beginning of the page. If this command is inserted somewhere on that specific page, the printer will feed the already printed page and print the rest from the other tray.

The 2 possible possible solutions are:

Solution 1: Probably not applicable

The idea is to search (if possible insert a trigger into the data stream) on top of that specific page. Search for it and replace it with the proper paper tray selection:

```
Convert.ini
[Search Trigger Word]
; search for the word on top of that page
Search_Binary="TopForm"
; Replace it or maybe use Insert_Binary then add the command.
Replace_Binary="\x1B&n11WdLetterhead
```

Solution 2: Will work every time

This solution needs two queues. The data stream arrives at queue A. This queue is only used to evaluate the command, which needs to be performed, and inserts it as an `ELP_Command` right into the data stream.

This is needed, as ELP does not cache any data which are already processed. SO it is not possible to perform some actions in the data stream before the actual trigger word is found. But with the idea of 2 queues, the first queue does set the command, and the second queue performs the command.

The performance on Queue B will be absolutely standard, and we don't need any ELP configuration, as the `ELP_Command` in the data stream will be detected, erased and of course used.

The port of QueueA can be directed to any port (not file) as there will be nothing printed. However, if the driver of that queue is used, it must be a PCL 5 driver.

The port of QueueB must be directed to the printers port. As the driver itself is not used, it even can be a generic text driver.

Convert.ini

```
[Name of QUEUE A]
; The section is added through Add_Section, double click on the driver/queue name
```

; where the data stream arrives.
; This queue uses a different ini-file called QueueA.ini located at the forms directory
IniFile=c:\programme\welp\forms\QueueA.ini

QueueA.ini

[GLOBAL]

; Send data stream to my second Queue

OUTPORT=#PCNAME#\ShareNameOfQueueB

; and of course do not print, as this is done in the second Queue.

NoPrinting=ON

[Search for a phrase on the specific / last page]

; Use OutSearch as the page counter is only existing while processing the data and not
; during reading the data

OutSearch_Binary="Search for any phrase on the specific page"

; Add an ELP_Command into the data stream

Add_Binary=<<C1I1;C1:#PAGECOUNT#I9;>>

If for example this example the searched information is detected on page 5, ELP will insert "<<C1I1;C1:5I9>>". C1I1; defines to draw every paper form the media tray plain except the page 5: C1:5I9; This page is drawn form media tray named PrePrinted paper.

Notes:

1. You can add any additional forms or valid ELP_Commands in that command
2. As this command is located in the data stream, it has the highest priority. All other possible commands will be ignored
3. With this method the can be only one page treated special
4. ELP Command for first page form tray normal, last page from tray preprinted and all in between form tray color:
<<C1:1I1;C1:#PAGECOUNT#I9;C1I3;>>
Even if the document will have only 2 pages, then the last page (2) will be printed on "preprinted" paper.

See also Q57 for additional solutions

Q17: How can I use 2 print job monitoring applications simultaneously, if they both are replacing the PrintProcessor and one of them is ELP?

A: Well in most cases, (I assume 99%) it is pretty straight forward:

1. Install both applications
2. Install 2 printer queues.
3. Activate the ELP Software in the first queue, where the data comes in.
4. Generate your ELP Ini-File processes, but also add to section GLOBAL:

```
[GLOBAL]
```

```
...  
; In this case the section is always triggered, because of the printer name.  
; do not print anything but fully process the stream  
NoPrinting=ON  
; but send the out stream to the second Queue with the second Print Processor  
OUTPORT=#PCNAME#\ShareNameOfTheSecondQueue  
.....
```

done.

A little more complex is it, if the PrintProcessor of the second application does some data encryption (not DE). So ELP must be behind the second queue. In this case the term of first and second is exchanged:

1. Install 2 Queues and activate ELP in the second queue
2. This second queue (ELP) needs to be shared, don't use a name with more than 8 characters.
3. install the UNIX Printing Services (LPR Daemon support), it is described in the manual or installer readme file
4. Open the first queue driver settings, where the Print Processor of the other application is installed
5. Open the port register
6. Add a new TCP/IP port
7. Set the port protocol to LPR, the queue to your sharename of the ELP Queue and turn the byte count on.
8. Setup your ELP Ini-File.

done.

Tip:

Set both queues to hold, print and see how the data is processed from one queue to the other.
The owner of the data stream (User name) could be lost on the way from Queue 1 to Queue 2.

Q18: can welp let printing only word files or pdf files?

A: yes.

use such an convert.ini:

```
[GLOBAL]
; by default never print
NoPrinting=ON

[Search for MS Word Documents]
; The command next line is subject to change. Please print with your driver
; into a file, read back the file and check the initializing PjL COmmands
; for the proper search item. You may also add additional searches for other
; drivers etc.
SEARCH_BINARY=Microsoft Windows XP 5.1.2600.1
; Allow printing
NoPrinting=OFF
```

```
[Search for PDF Documents]
; Search for the PDF header, here for version 1.3 and 1.2
Search_Binary=%PDF-1.2
Search_Binary=%PDF-1.3
; Allow printing
NoPrinting=OFF
```

Notes:

If you need to use older dirvers, which don't integrate the application name, then you can use the same technology as describes some days ago in the SAP job distribution sample.

As ELP converts PDF to Postscript by default, you may need to turn this function off, in case you print to a printer which is able to print direct PDF data streams.

Q19: As you can see in this file there is two rows in the beginning of each page. I would like to remove them, or move the text with PL command... If I remove the two rows manually it works fine, but when I use the PL command it doesn't work. Any idea?

A: Well, add those lines to the ini-file at the right position:

```
[Move the 3rd line up]
; Select the thord row
Search_RowNo=3
; insert in the thirdline at the beginning
; the escape sequeze to movethe cursor relative up
Add_binary=\x1B&a-240V
; Speed up the processing
ReadOnlySearchKeys= ON
```

Instead of moving the cursor up, you can also postion it.

Q20: Print on the first page a full letter head and only the logo on the following pages. Adding FormFeeds and insert pages

A. Very easily, proceed like this:

1. Develop the Letterhead with any [MS Windows] application and finally print the document page to a file, using any PCL 5[e]c driver. If the Logo on the first and next pages have the same size and sit at the same position, print the letter head without the logo.

2. Do the same with the logo.

3. Start PPAdmin and choose ADD in the Macros Tab. Select the first print file and in the next step enter a unique number e.g. 5000 and as the description text "Letterhead company ABC"

4. Process similar the with Logo print file, maybe use 5001 as form number.

5. In the last step enable an ELP command, using PPADMIN ini-file tab.

5.1 We assume here, that the data stream is processed through a special named queue, and all jobs coming through this queue are processed the same way (See also Q1 n this document). Otherwise generate a section where you search_... for a special trigger text, or where you trigger the function using the several AND combined trigger_... keys. In the queue linked case click on "ADD SECTON" and double click on the queue name. (At least one queue need to be activated) ->OK -> CLOSE

5.2 On ELP startup the GLOBAL section AND if the job arrives through that queue the this queue named section are always executed. In order to add the function to the section, mark it in the left windows and then click on "ADD KEY" -> open ELP keys -> double click on "ELP_COMMAND" and the basic windows for editing the filed entry appears. Click on "GENERATOR". The new opened windows allows to enter any basic ELP command. Additional commands can be listed by clicking on "?", the macro names through "MACRO DESCRIPTION". If there is the text "string" in the command line, please delete it.

To define the command please follow those final steps:

- Select "PAGE #" One.
- Mark your letter head form number and click ">>" -> C1:1F5000;
- If the logo is in a separate form, add also this form to your first page -> C1:1F5000F5001;
- Select "PAGE #" "All Pages"
- Activate form 5001 -> C1:1F5000F5001;C1F5001;

Close all windows and send the job.

If nothing happens, then check if your data stream contains FormFeeds. ELP needs them for processing any ELP command. If they are missing, then add them automatically with ELP:

The table below lists the additional section for adding FormFeeds to a selected Row Number

```
[Add FormFeeds]
; Set a section trigger to print line 64
Search_RowNo=64
; Add the FormFeed
ADD_BINARY=\x0C
; Speed up processing and prevent ELP to check for other keys then search and replace
ReadOnlySearchKeys=ON
```

You may extend this example to print the first page duplex and insert a second page with terms and conditions on the back side:

1. Mark the ELP_COMMAND -> "MODIFY" -> "GENERATR"
2. Select "Page #" One.
3. Open "Paper Handling" and select "Duplex Long Side", And S1 is inserted in the C1:1 command.
4. Click on "ADD FORM FEED" -> C1:1F5000F5001S1FF;
5. Select "Page #" Two.
6. Add to that page the form 501 -> C1:2F501;
7. Finally the remaining pages need to be printed simplex. Select "Page #" "All Pages" and Set "Paper Handling" to "Simplex" -> C1F5001S0;

Q21: Text triggering or searching with new Windows Drivers

This chapter explains, why some rules are not executed, even the searched text is printed.

Please read until the end, in order to see who a file can be created which holds all searchable text.

Use always the keys TRIGGER_WINDOWS_NEW or TRIGGER_TEXT_NEW! If Search keys are used, then use also SEARCH_WINDOWS_NEW or SEARCH_TEXT_NEW. There is a big difference to the standard old trigger_windows and trigger_text keys. But note, those search_..._new can currently only perform the ADD_Binary command.

If none of the provided key arguments succeed and you print from your own developed application or document, you may be able to use the following tricks:

1. Most drivers do send down the name of the application and normally the name of the document in the initialisation of the data stream down to the printer. In order to check this, print the document to file, and reload it into an editor. Right in the beginning of the stream you may find a statement like @PJL SET JOB="xxx". Check if you can use the string xxx or some information around this statement for triggering the data stream.
2. The way how MS Windows prints text is unfortunately a mess. It depends upon the application, the driver and the operating system. For the ..._NEW keys and especially Windows XP we had good results with the LaserJet 8150 driver, downloaded from www.hp.com(!). For Trigger_Windows and _Text as well as Search_Windows and _Text the LaserJet 4Plus driver can be tested. As all tray and output settings are done by ELP, there are no disadvantages using those driver.
3. Newer printer drivers from HP like LaserJet 9000 PCL5 do again use for Courier and most likely for Arial printer internal fonts. So try them and write your Trigger information using those fonts. You may later erase the trigger using a search_windows and erase_binary rule.
4. Even newer PCL 5 driver (4250/4350) do have currently a setting to tell the driver to use for a special font (Courier) the printer internal fonts. You may later erase the trigger using a search_windows and erase_binary rule.

If those tips to not apply, then here is your second last chance:

What may happen:

As the latest windows versions download all fonts and characters starting in their row of appliance beginning with Ascii 32. The A is addressed as ASCII 32, 1 -> 33, 2 -> 34 and 3 -> 35. So the total string is the search binary argument.

If you need to search for several arguments, vary the numbers after the second A. So A123A1323 will be Search_binary=" !"# !"#"

1. Use a driver which generates TrueType downloads, i.e: LJ 4200.
2. Add to the document somewhere the text A123A1233, mark this text and choose for it a new not jet used font typeface.
3. Add to the ELP ini-file:

```
[search section]
Search_binary=" !"# !"#"
```

```
ERASE_BINARY=1
Elp_command= . . . .
```

Note you need set the search argument into "" because the leading blank needs to be searched.

If this does not help, please send the data stream by eMail to your local distributor (PPADMIN info box), and let us know what key you are searching. We will be glad to let you know, how to implement this function.

Last Possibility and even maybe most elegant, but only for mini-drivers and for experienced users only: However this one may damage your driver settings:

1. Open the windows driver properties and check in the Info box if and which GPD file the driver uses (Only mini-driver architecture)
2. Open the ASCII file located in Windows\system32\spool\drivers\w....
3. Add a new paper tray, or a new Mediatype by copying an existing
4. Rename it like "Invoice Tray"

5. Add to the try selection sequence any additional trigger text.
6. Now you can even Search_Binary for that text.

Beside searching for any items binary, ELP offers the possibility to generate an ASCII file, which holds all searchable text. Here is the way for the WINDOWS version only:

1. Add the key ShowSearchableText in the global section of your convert.ini.
2. be sure you have the PrintSearchText.ini file located in your forms directory

Print your job and open this file: ...\\welp\forms\out_data.prn, in any ASCII Editor, such as Notepad. You will see then with which search / trigger key you can search for which items.

Notes:

- a) Bitmapped font characters may still be not searchable. They might never be.
- b) Adding the ShowSearchableText will result in NO(!) print out, only the out_data.prn file is generated.

Q22: User based job distribution of SAP print jobs

Q: When SAP prints, the user of the job is always administrartor, but I have recognized, that the user name is listed in the document titel of the job. How can I redirect now all jobs for a specific user to another printer.

A: Well pretty easy, but like always with a little trick.

I have attached a small file wich needs to be stored into the ELP\FORMS diretcory. Because of its file name, this file is inserted at the beginning of the job. The file content is:

```
Esc%-12345X@PJL
@PJL COMMENT "#PRINTDOCNAME#"
Esc%-12345X
```

For those fo you, who are familiar with PJL, you can see, that the file makes in terms of printing absolutely nothing!

But when the file is inserted, ELP replaces automatically the variable term #PRINTDOCNAME# with the real document name, provided from windows through the queue, which the welpprint.dll print processor always automatically passes over to the ELP software.

In the second and last step. add a search section to ELP's ini-file and perform your actions, like:

```
[Distribute USER A]
; the name "UserA" is part of the document name in windows spooler
SEARCH_BINARY=UserA
; Ok Distribut the job
OUTPORT=#PCNAME#\QueueReleaseName
; and finally don't print through the standard port.
NOPRINTING=ON
```

Q23: How to read/create from ELP data base searchable variables

Original question: This data base functionality would open up new possibilities. For example, a client wanted to have a way where he could force all users to use private jobs on their LaserJets. This could be achieved by encapsulating the jobs with the required PJJ statements. The PIN code for each user could be retrieved from a database and be freely changed by users on the intranet.

Answer:

1. Create a DBASE database with minimum 2 fields. Let us name them here USERNAME and PIN_FIELD. Both fields are of type string, the PIN_FIELD is length 4 and the USERNAME what ever you need. The file could be located in the forms directory named PIN.DBF

Add several user logon names in to the field on and any pin number into field 2.

2. Setup the following items in the convert.ini command file.

```
[GLOBAL]
; As every job is subject to be private, we put the database function into the
; section global
DB_Open=c:\programme\welp\forms\PIN.DBF

; if the data base is accessible then search for the record with the user logon name
; The first USERNAME is the name of the data base field. ELP will search all records
; for the content of the general available ELP variable #USERNAME#. This term has to
; be in double quotes, because ELP will replace the variable before the data base
; search starts. So actually the data base search term will be: USERNAME="THOMASXP"
DB_Locate= USERNAME="#USERNAME#"

; If the record is found, then read the content from the field PIN_FIELD and store
; the term into the searchable ELP variable #UserPinVariable#
DB_Variable=PIN_FIELD: #UserPinVariable#
; as those commands are in the section global, ELP does evaluate that all, even before
; the first byte of the data stream is read. So search and insert can be used

[Insert the pin into the data stream]
; well the best place to put that pin information in to the data stream is right
; before the enter language PJJ command
Search_Binary=@PJJ ENTER LANGUAGE
; if found, enter the PJJ commands for storing the data stream as a private job on the
; Harddisk
; NOTE the next 3 lines should be all in one line, for better reading, I spread them!!!
Insert_Binary=@PJJ SET HOLD=ON\x0A@PJJ SET HOLDTYPE=PRIVATE\x0A@PJJ SET
HOLDKEY="#UserPinVariable#\x0A@PJJ SET USERNAME="#USERNAME#\x0A
@PJJ SET JOBNAME="ELP_JOB"\x0A
```

Several notes

- Another solution is also ELP's MyPrintArchive function
- If the data base search information can't be evaluated at the beginning of the job, OUT_Search commands have to be used to insert the additional data
- If the data base text contains any other information which need to be printed, then you may put the variable direct into the data stream or into a macro/form

Q24: Addressing SecurJet with host data streams (incl. Splitting a job)

Sales report of a very nice solution:

1. A PreScribe (Kyocera) data stream contains hundreds of unsorted delivery notes.
Each note can have 1 to X pages and
Each note contains a Tour number
NOTE: You may also use the same mechanism with any PCL / ASCII job.
2. The goal was to split the big jobs and store the single jobs with SecureJet PS, but instead of the username the jobs are stored using the tour number.
When a driver picks his tour, he can release the jobs with his smart card, assigned to his tour number.

The solution is an ELP + JetScribe installation serving only one queue.

In the second step, ELP is searching for the text before the tour number and then stores the number itself into the variable #TOURNUMBER#. In the same shot, ELP is told to set the SecureJet specific data stream initialisations before and after the stored data stream.

```
[GLOBAL]
ELP=ON
; don't add anything after the job.
ERASEMACROS=OFF

[Add SJ]
Search_Windows=Tour number:
; if found, store next word into the variable. On ASCII based data streams you
; can also use the function Search_RowNo to get a specific text fragment out of
; the data stream id no specific trigger can be found before the variable.
StoreNextWordToVariable=#TOURNUMMER#
; To speed up, only search once for that Search key.
Search_Only_Once=ON
; When the "Tour number:" is found, then activate the SecureJet handling
; 1. As the job itself is surrounded by UEL's we don't need to insert them,
; The job needs to end with this command
ELP_EXIT_PCL=\x1B\x1B\x1BE\x1B%-12345X
; 2. The next command put the SecureJet handling stuff in front of the data stream.
; Actually everything is in one command line. THER are 3 ELP variables used:
; #TOURNUMBER# collected right in this section form the data stream
; #RANDOM# a random Job number, which is actually the random file number
; generated by the print processor.
; #DATESERIAL# As ELP's dat numberis only 14 bytes, there are 2 additional 0's

ELP_INIT_JOB =\x1B%-12345X@PJL ENTER LANGUAGE=SJLLIGHT\x0D\x0A@PJL
SCOMMAND=STORE\x0D\x0A@PJL USERNAME=#TOURNUMMER#\x0D\x0A@PJL SJOB NAME=Welp-
Job\x0D\x0A@PJL SJOB ID=#RANDOM#\x0D\x0A@PJL SJOB DATE=#DATESERIAL#00\x0D\x0A@PJL SJOB
EXPIRYDATE=200907031930000
; 3. The next command is a dummy command, as there is no form 1000 needed in our case
; but without any ELP_Command, the ELP_INIT_JOB and ELP_EXIT_PCL keys are not
; performed
ELP_Command=C1F1000;
```

Notes:

- You may need to search for the information which is direct before the searched item. It could be that you may need to search even for PCL position sequences, or in our JetScribe case even within HP GL2 statements
- The port from the ELP queue is connected to the SecureJet Server port.
- As our client has two different companies, and the tour number is listed on both forms, we have 2 Search_ keys in the same section.

In step one we needed to split the jobs and sent them to the JetScribe Process.

```
[SPLIT job]
search_binary=Any Term which is only on the last page
; Insert the command to split the file right after the next form feed
Add_binary=\x1B)s-997Z
; We don't want to print in this case that data stream
```

NoPrinting=ON

; but it is send to the JetScribe port, using the split file functionality

OutPort=#PCNAME#\jetscrib

Note: The split command \x1B)s-997Z tells ELP to close the OutPort communication after the next found form feed and reopen it again. The results are several print job in the JetScribe queue. This is the easiest ways to split files. This method may fail for windows based jobs, unless you don't print TrueType fonts as graphics.

Q25: Automatic storing private jobs on the printer hard disk (incl. Splitting a job)

This is pretty the same mechanism as the SecureJet solution.

You need to insert the following PJI commands at the beginning of the job:

```
@PJI SET HOLD=ON
@PJI SET HOLDTYPE=PRIVATE
@PJI SET HOLDKEY="#PIN#"
@PJI SET USERNAME="#USERNAME#"
@PJI SET JOBNAME="#PRINTDOCNAME#"
```

This could be achieved easily like this:

```
[Section with UserName 1]
variable=PIN:9876
; of course you can go into the ELP datab base to get the Pin from there
```

```
[Section with UserName 2]
variable=PIN:2345
```

```
[Add the PJI commands]
; Then the file does have already some PJI commands
Search_binary=@PJI ENTER LANGUAGE
Insert_Binary=@PJI SET HOLD=ON\x0A@PJI SET HOLDTYPE=PRIVATE\x0A@PJI SET
HOLDKEY="#PIN#\x0A@PJI SET USERNAME="#USERNAME#\x0A@PJI SET JOBNAME="#PRINTDOCNAME#\x0A
```

Alternative for example for ASCII data stream:

```
[GLOBAL]
; Then the file does have already some PJI commands
ELP_INIT_JOB=\x1B%-12345X @PJI SET HOLD=ON\x0A@PJI SET HOLDTYPE=PRIVATE\x0A@PJI SET
HOLDKEY="#PIN#\x0A@PJI SET USERNAME="#USERNAME#\x0A@PJI SET JOBNAME="#PRINTDOCNAME#\x0A
ELP_Exit_PCL=\x1B%-12345X
```

Rgds
Thomas

Q26: Use a Counter and perform tasks based upon counter value

Q: We have an ASCII data stream with 55 lines per page, but without FormFeeds. We need to insert

- on the first always the Letterhead
- on the last page a special Terms and Condition form and a logo.
- on all the pages between only the logo

Here is the ini-file, but please before reading check the manual for further details upon counters, like job numbering etc.:

```
[GLOBAL]
; Whatever you need...

[Insert FormFeed @ page 55]
Search_RowNo=55
; \x0C -> ASCII 12 -> FormFeed
ADD_Binary=\x0C

[Count FormFeed]
; This second section is needed, as As the key Search_RowNo does only perform the key
; Add_binray.
; Search \x0C -> ASCII 12 -> FormFeed (Which is inserted above)
search_binary=\x0C
; Increase the counter
counter=#FFcounter#

[one Page]
; This section is true, if the FFCounter is 1 (one Page)
; Make sure that this section is always true, so the optional trigger keys are evaluated
trigger_binary=\x0C
; If FFcounter is 1
trigger_variable=#FFcounter#:1
; Put LetterHead F1 and Terms And Condition Information on the page F2.
elp_command=C1F1F2;

[two Pages]
trigger_binary=\x0C
; If FFcounter is 1
trigger_variable=#counter#:2
; Put LetterHead F1 on page 1 and
; the Logo F3 and Terms And Condition Information on the second page F2.
elp_command=C1:1F1;C1:2F2F3;

[three Pages]
trigger_binary=\x0C
trigger_variable=#counter#:3
; Put LetterHead F1 on page 1 and
; On the middle page 2 only the Logo and
; the Logo F3 and Terms And Condition Information on the third page F2.
elp_command=C1:1F1;C1F3;C1:3F2F3;

[four Pages]
trigger_binary=\x0C
trigger_variable=#counter#:4
; Like 3 pages, but Terms and Conditions on page 4
elp_command=C1:1F1;C1F3;C1:4F2F3;
```

Another way is to print the terms and condition on the first page, Then no counter is needed

```
[GLOBAL]
; As there is no counter needed, we put the ELP command in the default section
; First page duplex, T&C on the back page and the remaining pages with logo in simplex
elp_command=C1:1S1F1FF;C1:2F3;C1S0F2;

[Insert FormFeed @ page 55]
Search_RowNo=55
; \x0C -> ASCII 12 -> FormFeed
```

ADD_Binary=\x0C

Maybe an improved example, where the counter is again needed, is to put on the back page on the last pages the full terms and condition, instead of only a note on that page:

[GLOBAL]

[Insert FormFeed @ page 55]
Search_RowNo=55
ADD_Binary=\x0C

[Count FormFeed]
search_binary=\x0C
counter=#FFcounter#

[one Page]
trigger_binary=\x0C
trigger_variable=#FFcounter#:1
elp_command=C1:1S1F1FF;C1:2F2;

[two Pages]
trigger_binary=\x0C
trigger_variable=#counter#:2
elp_command=C1:1S0F1FF;C1:2S1F3FF;C1:3F2;

[three Pages]
trigger_binary=\x0C
trigger_variable=#counter#:3
elp_command=C1:1S0F1FF;C1F3;C1:3S1F3FF;C1:4F2;

[four Pages]
trigger_binary=\x0C
trigger_variable=#counter#:4
elp_command=C1:1S0F1FF;C1F3;C1:4S1F3FF;C1:5F2;

Q27: Using printer specific forms, but with data stream specific copy factors

Q: I was at xxx yesterday and they will setup W-ELP as following:

They have for example 10 printers, one printer for each brand. (they sell cars). So far so good, I've create an INI file which are printerbased. (see attached INI file). Now to the problem...

They print both " FÖLJESEDEL " and "KONTANTNOTA" through this printer and the "FÖLJESEDEL" will be two copies and the " KONTANTNOTA " needs only one copy.

How can I handle it?

A: Here is the ini-file:

```
[GLOBAL]
ELP=ON

[STHAELP001]
; The default forms handling for printer STHAELP001
ELP_COMMAND=C1:RPS250S1F1002I1FF;C1:LF1005;D1;

[STHAELP002]
; The default forms handling for printer STHAELP002
ELP_COMMAND=C1:RPS250S1F1002I1FF;C1:LF1005;D1;

[Trigger FÖLJESEDEL]
; If FÖLJESEDEL is found in the data stream, make 3 copies
Trigger_Binary=FÖLJESEDEL
ELP_COMMAND_Add=K3;

[Trigger KONTANTNOTA]
; If KONTANTNOTA is found in the data stream, make 3 copies
Trigger_Binary=KONTANTNOTA
ELP_COMMAND_Add=K2;
```

another way, could be this one:

```
[GLOBAL]
Variable=TextFound:NO
ELP=ON

[STHAELP001]
; The default forms handling for printer STHAELP001
ELP_COMMAND=C1:RPS250S1F1002I1FF;C1:LF1005;D1;

[STHAELP002]
; The default forms handling for printer STHAELP002
ELP_COMMAND=C1:RPS250S1F1002I1FF;C1:LF1005;D1;

[Search FÖLJESEDEL]
Search_Binary=FÖLJESEDEL
; If FÖLJESEDEL is found in the data stream, make 3 copies
ELP_COMMAND_Add=K3;
; Set variable to found
Variable=TextFound:YES
; Speed up processment
Search_Only_Once=ON

[Trigger if not found]
; This is a must, Trigger_Binary is always on!
Trigger_Binary=1
; Then evaluate also the variable content
Trigger_Variable=#TextFound#:NO
; If still NO, then we make 2 copies.
ELP_COMMAND_Add=K2;
```

Q28: Combining different rules based upon data stream entries

Q: I have to make by default certain forms on a left and right handed page. One exception is the document ARBETSDORDER. There I have to differentiate 2 cases:

Only the word ARBETSDORDER and the same word together with the text 975-LINVÄVAREN. The customer wants to add another ELP-Command:

Solution 1: Open another ini-file after the first rule is applied. This ini-file is most likely absolutely empty. On opening new ini files, all searches and triggers are erased and the new ones from the ini-file are used. As the new file is empty, ELP stops the rule evaluation and starts to execute the up to this point applied rules. In the example below, the empty file is located in the forms directory called end.ini. Maybe the only content of the file is the next line.

; do not erase that file

Then the convert.ini looks like that:

```
[GLOBAL]
.....
ELP=ON
; default command for left and right pages of most jobs.
ELP_COMMAND=C1:RPL-100S1F1101I1FF;C1:LF2101;D1;

[1. analysed rule: ARBETSDORDER with 975-LINVÄVAREN]
; This rule triggers both phrases
Trigger_Binary=A R B E T S O R D E R
Trigger_Binary=975-LINVÄVAREN
; if they are found make the command, In this case the provided
; EMO:COMMAND is extended using the ADD version of the command.
ELP_COMMAND_Add=K2;C1:1F1107;C2:1F1105F1106;
; and finally change to a new ini file (which is empty
; and does nothing. On the switch all searched and all
; Triggers are erased. In other words, ELP stops
, all analyses and freezes the current rule state.
; The following triggers are not analyzed!
EXIT=ON

[2. analysed rule: ARBETSDORDER]
; This one is only performed if the last rule is FALSE,
; this is why it is located after the previous rule
Trigger_Binary=A R B E T S O R D E R
ELP_COMMAND_Add=K2;C1:1F1105;C2:1F1105F1106;
```

Solution 2: The same problem could be solved without an additional file using an ELP variable, which holds the information if both phrases are found or not:

```
[GLOBAL]
....
ELP=ON
ELP_COMMAND=C1:RPL-100S1F1101I1FF;C1:LF2101;D1;
; Predefine an ELP variable named # VAR_LINVÄVAREN_FOUND # and set it to false.
VARIABLE= VAR_LINVÄVAREN_FOUND:FALSE

[1. analysed rule: ARBETSDORDER with 975-LINVÄVAREN]
Trigger_Binary=A R B E T S O R D E R
Trigger_Binary=975-LINVÄVAREN
ELP_COMMAND_Add=K2;C1:1F1107;C2:1F1105F1106;
; ok now set the variable to TRUE, because this rule was found
VARIABLE=VAR_LINVÄVAREN_FOUND:TRUE

[2. analysed rule: ARBETSDORDER]
Trigger_Binary=A R B E T S O R D E R
; and if the variable is still FALSE
Trigger_Variable=#VAR_LINVÄVAREN_FOUND#:FALSE
; Then perform this rule.
ELP_COMMAND_Add=K2;C1:1F1105;C2:1F1105F1106;
```

Q29: More about setting up rules

You have several methods to make some settings:

1. Put the commands into the section GLOBAL, and they are always performed
2. Put the commands into a section, named like the printer queue (Add Section and double click on the queue name) then the commands are only set, if the data stream comes through that queue, you may also reset commands from the GLOBAL section.
3. The name of the section is like the user logon name (you may see it in the windows queue) then you can do user specific settings
4. You defined a free named section and trigger the defined rules using one search-key. This search is performed during reading the data. So as soon as the item is found, the section is performed.
5. Sections using Trigger-keys. Those trigger arguments are also searched during reading the print data, but they are analyzed after all data is read or ELP_HEAP_MAX bytes are read. The benefit of Trigger is, that you can combine several triggers with an AND operator, and that you can even trigger on variable contents, page size, orientations etc. and you have also an ELSE constructor.

Unless you do not exit the ini-file by using a new one, ELP process's like this:

1. reads all commands from section GLOBAL
2. then section with the queue name, if defined
3. then section with the user name, if defined
4. start reading the print data stream and search for arguments of the SEARCH_ keys
5. Analyzed at the end of the reading the TRIGGER Sections.

For your questions I simply generated an inifile with explanation. I hope this full fills your needs, but please note, that the standard settings are not displayed.

- 1.- How to setup the ini file to allow to print in color only to one user (e.g. Administrator) and to print the other jobs in B/W.

```
[GLOBAL]
; Set PjL Command for B/W printing, even when print data is color
; This commands set all color jobs to be printed in grey.
PlanesInUse=1
```

```
[Administrator]
; case 3 from above, this section is only used, when the job was
; produced by user Administrator
; As ELP only interprets the key PlanesInUse with argument 1 you
; can set any other argument (not 0) and the BW command from the
; section GLOBAL will be set to 0 and the job remains in color
PlanesInUse=100
```

Remarks: I changed the software, in the next version you can also use 0.

The same result would be possible with Trigger keys (only theoretical approach):

```
[Trigger for User Administration]
; the next main trigger is always TRUE and needed for the real trigger
Trigger_Binary=1
; The real secondary trigger (this is case sensitive!!!)
User_Names=;Administrator;
; Note: TRIGGER_ keys must all be true before ELP continues with the
; Search and evaluation for secondary triggers.
; Setting 0 is ok, as it is ignored in teh actual version and color is kept
PlanesInUse=0
ElseTriggerActivateSection=Print all in grey
[Print all in grey]
PlanesInUse=1
```

Remarks: The last 3 lines could be erased, if the key PlanesInUse=1 is set in the global section

- 2.- How to setup the ini file to print in B/W all the jobs received from a specific application (e.g. MS Word or e-mail application).

```
[GLOBAL]
```

```
[MS Word data streams print always grey]
; Here a search key is used to trigger the section. Using HP drivers,
; the application name is always documented in the PjL section of the
; data stream, like e.g. my HP LJ 9500c driver:
; @PjL COMMENT "Username: THOMAS; App Filename: Microsoft Word - Dokument2; ...
; You can get this line by printing to a file and open that file with
; e.g. with MSWord. So:
Search_Binary=App Filename: Microsoft Word -
; Set grey printing if found
PlanesInUse=1
```

Remarks:

A) If several PCL 5 drivers/ printer type are used, you can set all the different search keys into the same section, as they are treated as an OR combination.

B) Instead of Search_ you may also use TRIGGER_Binary (in this case it is the same result)

3.- How to setup the ini file to print in economode all the jobs received from a group of users.

```
[GLOBAL]
```

```
[User 1]
EconoMode=1
[User 2]
EconoMode=1
```

If more needs to be done then only economode, then this is maybe a nicer method:

```
[GLOBAL]
```

```
[User 1]
ActivateSection=EconoMode and More
[User 2]
ActivateSection=EconoMode and More
[EconoMode and More]
EconoMode=1
PlanesInUse=1
```

Or with a methode shown above:

```
[Trigger for User prints only in Economode]
; the next trigger is always TRUE and needed for the real trigger
Trigger_Binary=1
; The real trigger (this is case sensitive!!!)
User_Names=;User1;User2;User3;User4;...
EconoMode=1
```

4.- How to setup the ini file to print in duplex and economode all the jobs received by a queue.

```
[GLOBAL]
```

```
[HP LJ 9500 PC15c]
; Like question 1 but this time you use a queue name section
EconoMode=1
; Those commands can easily be done by the GENERATOR.
ELP_Command=S2;
```

Q30: Split a job to different out-trays and perform rules upon used input trays

Q: My clients requirements are:

When the input Tray is printer tray 2 then

1-100 sheets from must stuff on output 1

101-200 sheets from input 1 must stuff on output 3

When the input Tray is printer tray 1 then

1-100 sheets from input 2 must stuff on output 2

101-200 sheets from input 2 must stuff on output 4 etc.

Here is the ini-file for this one. Hopefully self explaining

```
[GLOBAL]
```

```
ELP_HEAP_MAX=3000000
```

```
[Rule 1 from Tray 1 to Out-bin 1 / 3]
```

```
; primary rule selection is always true, as a 1 can be found in any print file
```

```
Trigger_Binary=1
```

```
; Secondary trigger is input Tray 1 (Esc&l4H)
```

```
PaperTray=4
```

```
; Then send to first 99 pages to out-tray 5 and the rest to out-tray 7 of the server
```

```
; (Esc&l5G) I do not know if 5 and 7 is correct, but you can play with those numbers
```

```
; in order to switch the trays
```

```
ELP_COMMAND=C1:1M5;C1:100M7;
```

```
[Rule 2 for Tray 2 to Out-bin 2 / 3]
```

```
Trigger_Binary=1
```

```
; Secondary trigger is input Tray 2 (Esc&l1H)
```

```
PaperTray=1
```

```
ELP_COMMAND=C1:1M6;C1:100M8;
```

Notes about the ELP_Command:

This works, as when one ELP_Command for setting anything is provided, ELP will remove all those commands from the data stream and insert on the requested pages the new definition.

So in this example ELP sets page 1 to be posted to Tray X and the page 100 to Tray Y. All pages from 2 to 99 will be posted also to Tray X, as the printer keeps the definition until it is changes on page 100 for the remaining pages.

If you like for Page 200 and up to select Tray Z then simply add C1:200M9; etc.

Tipp:

If the requirement is to change the tray on variable pages, then establish a page counter (A25) and use the counter in the ELP_Command_ADD function together with the ELP_Replace_Variables=ON key.

More information about this on request.

Q31: ASCII-files: How to initialize, insert page breaks and set first print position

Q: We do have a pure ASCII-file and those problems:

1. The data stream has three leading empty lines , how can I erase them
2. The next page data is starting on the previous page and on is moving on the following pages up
3. Some lines are printing out of paper, so 2 characters are missing on the right side.

The problem can be solved by

- A) A proper initialisation
- B) Inserting FormFeeds to handle correct page breaks
- C) Search for Row 3 on every page and reposition it to any new position on the page..

Here is the inifile:

```
[GLOBAL]
ELP=ON
; The next command does nothing (one copy), but is used to activate
; the ELP_init_job key (Proper initialization), You may add here any
; addition forms etc.
ELP_COMMAND=K1;
; proper initialization: Ascii files should be correct initialized
; here just an example:
ELP_INIT_JOB=\x1B%-12345X\x1BE\x1B(10U\x1B(sp10.5hsb4099T\x1B&l26aleO\x1B&l8C
;
; -----Init
;
; IBM PC 8 Symbolset maybe you need to change that
;
; 10.25 cpi Courier for missing characters
;
; A4 1 headline portrait
;
; 6 lpi
; You may change the 10.25 cpi, if still not all characters fit use 10.5 or even smaller
; You also my change the printer setting to WIDE Printing
; If the 6 lpi is not correct, then change the value so you may expand or compress
; the text

[search row 3 to reposition the print position]
; Search Row 3 on every page
search_rowno=3
; Reposition it to any other position. Value in 1/720 inch
add_binary=\x1B&a100V

[search row X to add a form feed]
; Now we search the last row on the page, remember that we need on the next page
; 3 empty lines, so I think in your case it is around 60 lines per page.
search_rowno=60
; Insert a form feed, This will also reset the line counter to 1. I mean in this case
; row 60 is the first row on the next page!
add_binary=\x0C
```

I hope this helps. You can find on www.hp.com a PCL5 Technical Reference Manual

Q32: Triggering one of 2 functions with hierarchy

Q: I know the following can be done by setting up 2 or more queues, but can ELP select the input trays (original and copy) and output bin, with trigger data from the spool file i.e. if "Invoice" is found, Original from Tray2, Copy from Tray3, Output to Bin1 if "Check" is found, Original from Tray4, Copy from Tray5, Output to Bin2

A: You can setup as many rules as you like. The rules are processed in this order

1. ALWAYS: On Startup, keys defined in section GLOBAL
2. QUEUE NAME: On Startup, keys defined in section with the name of the queue
3. USER NAME: On Startup, keys defined in section with the name of the user logonname
4. SEARCHED Items: During reading the data stream
5. TRIGGERED Items: After the data stream is read
6. Data base related research

Notes:

After every step you can exit the process using the key `infile=c:\xxxxx` in this case the `xxxx` file is not found but all searches and triggers of the actual ini-file are erased

So the only question is what can be found first in the data stream. Here my example is first the term invoice and then checked:

A possible ini-file could look like that:

```
[Global]
....

[Search for checked]
SEARCH_WINDOWS=Checked
ELP_COMMAND=.....
; dummy to stop the search and evaluation process
infile=c:\xxxxx

[Trigger for invoice]
TRIGGER_WINDOWS=Checked
ELP_COMMAND=.....
```

Note: You may even swap the sections this will not change the result, as search always may come first if found, and ELP will stop the data stream evaluation as the requested new ini-file is not there, and continue with processing it.

Even instead of `SEARCH_WINDOWS` you can use `TRIGGER_WINDOWS` as well, as in this example the top trigger is evaluated first.

Q33: Printing a Job X times and personalize it with a continuous counter

Q: my customer has a document, which needs to be printed X times. On the first page of each copy, there must be a unique number, which has to be increased per copy.

Here is the way how to do this in theory:

Define a form which positions an ELP variable on the place you need the counter. This form is inserted on every copy. Therefore the form number needs to be over 25000, otherwise the form would be only loaded once at the first time it is used and the number is not increased.

The insertion of the form is done with an ELP_Command

The counter itself is increased by a search of a unique information in the form.

The practice:

1. Generate a new form, which positions the variable number on the page and define the variable within that form.

In order to be save, we suggest to use MS Word and any PCL 5 driver. Use the new Forms & Field Installer to place the needed variable in your form at the needed position, in your selected style. The variable name should be #MyCounter#"

Then Generate withteh Word macro software the macro with the PCL 5 driver. The macro Number needs to be over 25000(!). This will tell ELP to reload the form on every page used.

As the term #MyCounter# will be defined at the beginning of the process (Section GLOBAL) as a ELP variable, ELP automatically replaces it with the actual counter value.

2. Define the new counter variable in the ini-file and set it to the start-up number minus 1
3. Define the ELP_Command which reprints using the K Command the document n times (here 10). On the first page of copy number one the form 25555 is inserted. In order that not all copies need to be defined, the D1; command ensured that for all copies the C1:1 command apply. E.g. for Copy 2 first page ELP searches in the ELP_Command for the following definitions
C2:1... not found
C2... not found
D#; # is here 1 so the definition of first copy will be applied
C1:1.. is then used for Copy 2 and all the following copies, but only on the first page.
4. Now in the last step the rule for increasing the counter needs to be defined: We simply look into the form 25555 and search for a unique sequence. Which in our case is even a part of the PCL Sequences we used for positioning the counter:
\x1B&fS\x0E\x1B)10U

So the final ini-file looks like that:

```
[GLOBAL]
; Set the maximum incoming print job size to 30 MBytes
ELP_MAX_HEAP=30000000

;Defines the first counter value, so start with 100, as the
; counter increase is found before the value is printed
; #'s are not needed, as they are surrounded automatically
Variable=MyCounter:99
; Prints on every first page the form 25555, which is always reloaded
ELP_COMMAND=K10;C1:1F25555;D1;

[Increase Counter]
;Search a unique data in the macro in order the counter can be increased
Search_binary=\x1B&fS\x0E\x1B)10U
; increase counter
counter=#MyCounter#
```

Tip:

If you need the counter also or even exclusively in Barcode, use instead of Univers PCL selection sequences and barcode selection sequences. But do not forget to unselect the barcode.

You may use the counter on every page. See also above in the example how counter values can be stored and continued even between print jobs.

Q34: Triggering invoice / delivery notes etc. forms for different companies

I have another question in the Detlef project. This customer have 4 different companies (Detlef, Thomas, Tim, Sutter) they want to print 3 different documents per company (INVOICE, LETTER, RECEIPT) Each document have a trigger (#F1#,#C1#,#R1#) But we have not a trigger per company, so we configure 4 printers sections, one per company.

The problem is that per document we have a different form a special header, font a lines configuration, so I put the command in different ini files, but the inifile command does not work when you use it 2 times:

```
CONVERT.INI
[Detlef]
IniFile=C:\Programme\wELP\FORMS\Detlef.ini

*****Detlef.INI
[INVOICE_Detlef]
IniFile=C:\Programme\wELP\FORMS\FACDetlef.ini
TRIGGER_Binary=#F1#

***** FACDetlef.INI ;The WELP do not enter in this ini file
[FACTURA_Detlef]
ELP_COMMAND=C1H8F8000;
Search_Binary=#F1#
ERASE_BINARY=1
..... HERADER, FONT, LINES....
```

Could you please help me?

Dear friend,

In your example I assume that Detlef is the name of the printer you used for printing all documents of the company Detlef. Using the IniFile key ELP automatically calls on process start the stag.ini file which is fine.

In that main IniFile you use the TRIGGER_Binary command which is performed AFTER all data is read, so actually the FACDetlef.INI file is called, but there the search_binary is never performed, as search keys are performed through reading data in. This is the reason why it is not working.

If you would have only to put some forms on the page, then you could have doen it all with only one IniFile:

```
[Global]
...

[Detlef]
; Define using Vraiables which Forms should be used for company stag
; By setting them in the section of the STAG printer name
Variable=InvoiceForm:1000
Variable=LetterForm:1001
Variable=ReceiptForm:1002

[Thomas]
Variable=InvoiceForm:1100
Variable=LetterForm:1101
Variable=ReceiptForm:1102

[Tim]
Variable=InvoiceForm:1200
Variable=LetterForm:1201
Variable=ReceiptForm:1202

[Sutter]
Variable=InvoiceForm:1300
Variable=LetterForm:1301
Variable=ReceiptForm:1302

[Search for Invoice Form]
; Search for your info in the data stream which form is requested
Search_Binary=#F1#
```

```
; Delete the trigger
Erase_Binary=1
; Set the ELP command using the above company set form variable
ELP_COMMAND=C1H1#InvocieForm#
```

```
[Search for Letter Form]
Search_Binary=#C1#
Erase_Binary=1
ELP_COMMAND=C1H1#LetterForm#
```

```
[Search for Receipt Form]
Search_Binary=#R1#
Erase_Binary=1
ELP_COMMAND=C1H1#ReceiptForm#
```

So far so good. This was just for an initial explanation. Looking at your provided files, I see, that you further manipulate the data stream depending upon the kind of form, using different searches.

Normally you could now put the form native IniFile call into each form section, like:

```
[Search for Letter Form]
Search_Binary=#C1#
Erase_Binary=1
ELP_COMMAND=C1H1#LetterForm#
IniFile=c:\programme\elp\forms\Letter.ini
```

Q35: Page counter on back side of the page

Q. What we need is to print on every backside of the page small form containing document number, date, current sheet number - we don't know how to count pages. All documents should be sent to the printer in simplex mode - W-ELP must change it to duplex and add the form on the back side. So we use duplex only for form printing and actually we need to count not pages, but sheets.

Version 1: If there is no UEL in the data stream (Esc%-12345X):

1. Make any mac forms and use the Variable #ACCTOTALPAGES# on the form. Name the form over 25000, so that it is loaded every time.

2. If you then would use the form as it is, the form would go onto the same page, so I suggest a small tick: Take any HEX Editor and add the following Sequence right at the beginning of the form: Escx&a0G. This is the sequence for go to on the next page, as ELP is only recognizing the FormFeed for page counting, the printer will go on the next page, but ELP does not recognize that ;-)
If you like this results in a paper sheet counting.

3. Then add the ELP_COMMAND=C1:1S2F25200;C1F25200;

ON the first page duplex mode is set, and then on every ELP recognized FormFeed, the macro 25200 is called. Normally ELP_COMMAND=C1S2F25200; would be enough, as the duplex command will always be on the front page, but if this is not the case, the longer command is more save, as otherwise, the Duplex command would be inserted on every page, which will lead into simplex printing... (PCL definition).

4. If you print now, the first back page will not display the variable content, but the name. And on the following back pages the counter is actually minus -1 to the real pages.

The reason is, that at that time on the first page form feed, the page counter does not yet exist. So with the insertion of the key: Variable=ACCTOTALPAGES:1 in the section Global it is set to the proper start value.

5. If you need forms on the font page as well, then the F25200 must be the last one defines, like ...F1000F10100F25200;

I hope you do understand the trick.

Convert.ini

```
[GLOBAL]
ELP=ON
MACRO_DOWNLOAD=ON
ELP_MAX_HEAP=1000000
ELP_COMMAND=C1:1S1F25200;C1F25200;
Variable=ACCTOTALPAGES:1
```

Example for Macro 25200.mac

```
Esc&a0GEsc&f0XEsc&a3000v350HEsc(10UEsc(s1p12vsb4148TPaper count: #ACCTOTALPAGES# Date:
#DATETEXT# Document name: #PRINTDOCNAME#Esc&f1x10X
tip: Use the new Forms & Field'Installer Word macro to place those kind of variables in
your MS Word created form.
```

Version 2: If there are UEL in the data stream (All Windows drivers do that):

Well, in this case the variable #ACCTOTALPAGES can't be used, as it is set to 0 every time such an UEL escape sequence is found.

There for an own page counter needs to be established like this:

1. If there is the macro, which is loaded on every page, an own Trigger word if there is not yet one. Like: MyOwnTrigger
2. Add at the place in the form your own page counter variable: MyPageCounter
3. Now initialize in the global section your trigger Variable MyPageCounter to 0 or to 1, depending if your searched trigger word is found before or after the page indicator:
4. Finally generate a search section for the trigger, erase it, so it is not printed and increment the counter.

Convert.ini

```
[GLOBAL]
ELP=ON
MACRO_DOWNLOAD=ON
ELP_MAX_HEAP=1000000
ELP_COMMAND=C1F25200;
Variable=MyPageCounter:0
```

```
[My own counter]
Search_Binary= MyOwnTrigger
Erase_Binary=1
Counter=#MyPageCounter#
ReadOnlySearchKeys=ON
```

Example for Macro 25200.mac

```
MyOwnTriggerEsc&a0GEsc&f0XEsc&a3000v350HEsc(10UEsc(s1p12vsb4148TPaper count:
#MyPageCounter# Date: #DATETEXT# Document name: #PRINTDOCNAME#Esc&f1x10X
```

Q36: 2 page mail merge document printing at full speed

Q: The process is to print a newsletter, duplex, tabloid. The front page of the newsletter has variable data (customer address), which is generated from Adobe InDesign. The Adobe InDesign document knows ONLY about a single tabloid size page, there is no second page as far as InDesign is concerned. Therefore, my strategy was to overlay the form that is the front page with every InDesign generated page (the customer address) with a form (the front page of the newsletter). I also have the second page of the newsletter (does not change, and it needs to be printed on the back of every page).

So it looks, that you want to print 2 pages, but the print data stream has only one front page with overlay form 1001 and the macro 1002 should be automatically inserted on the back page.

- A) Start PAdmin - Installation - Activate the queue
- B) Change to Ini-File - Add Section - Double click on queue and close the add window (now you have a ruled section, which will be called whenever a job comes along this queue)
- C) Mark the new section - Add key - open ELP keys and double click on ELP_COMMAND
- D) As it is too complicated to insert this command by hand, click on Generator
- E) As you print only one copy and differentiate a left and a right handed page, open the pull down menu at Select Page # and select the Right Pages (1st 3rd etc)
- F) Perform in this order.
 - Double click on your form 1001,
 - Select Duplex long side printing
 - Add a FormFeed
- G) Select the left page like described in E) and insert Form 1002. Close all windows until back to PADMIN main menu, -> The resulting ELP_COMMAND: C1:RF1001S1FF;C1:LF1002;

Now verify the setting.

Q37: Getting the correct user name for data stream send by hosts

Q: When we send data stream form the host, how can we archive them to a user specific directory. The user name provided through the queue is always the host name.

A: There are in theory 4 ways (ore more ??) possible, the first 2 I havn't tested before and you need version 8 of the software, which I am going just to release in the next 2 days.... (We added monitored printing (save printing))

They are all related to the ini-file you have now... Meaning the standard archive command must be executed after you had the chance to recognize that this is an Hoste based stream. In other words the default Archive command needs to be in a triggered section!

My favourite and you will see most elegant solution is the third method! Because it even works today and provides to the printer the most information for any future products.

1. Solution

The name is provided as a part of the document description in the queue. We do have functions like left() and right() and even strpos(). Then the solution could be (Not tested!):

```
[RZPH98]
; section which is triggered for all data stream coming fr0m that server
Variable=MyPosVar:STRPOS(#USERNAME#, "@")
Variable=MyUserName:LEFT(#USERNAME#, #MyPosVar#)
; the rest is maybe not needed at all, just ot show you...
OutArchiveDir=.....
; This is to stop execution of original ini file, so nothing else is used,
; maybe unless you put additional stuff into the section or in a valid init-file name
EXIT=ON
```

Important note:

This will only work in the version 8.0 and newer.

2. Solution

Before every data stream you can have your own ini-file, which is also executed when found...

The file content is like that (Esc is Hex 1B or Ascii 27)

```
Esc%-12345X@PJL ENTER LANGUAGE=ELP
[GLOBAL]
; here you can add any command you like e.g. the oferwriting of the user variable:
variable=USERNAME:YourName
; or
; OutArchiveDir=#PCNAME#\archive\YourName;Filename
; Exit=ON
; or even both:
; variable=USERNAME:YourName
; OutArchiveDir=#PCNAME#\archive\#USERNAME#;Filename
Esc%-12345X FOLLOWED BY YOUR FILE NAME
```

Same important note applies as above

3. And preferred solution

Before explaining this one some background info:

When a job arrives, ELP takes the user name from the windows queue, but as like your HOST case, this might not be necessarily the user who created the file.

So ELP looks also in the file and searches for some PJL commands, which are defined by HP to tell the printer some more infos about the job.

This PJL command is @PJL SET JOBATTR="JobAcct1=UserName" So if this PJL command is found, ELP overwrites the windows USERNAME with the name after JobACCT1=

Hopefully your job starts with Esc%-12345X followed maybe with some PJJL commands where the last one is @PJJL ENTER LANGUAGE=PCL or POSTSCRIPT followed by CR-LF and the real data stream, then the change is very very easy, and the beginning of the job could look like this:

```
Esc%-12345X@PJJL COMMENT "Host Job BlahBlah Blah"  
@PJJL SET JOBATTR="JobAcct1=SwedishPrint"  
@PJJL ENTER LANGUAGE=PCL  
EscE....
```

If a printer is not able to handle the PJJL stuff, nothing will happen, usually they ignore it.

Tip: Print a windows job into a file and open it with Notepad to see, what you can set with PJJL commands. Take a LJ 4250 to see the most available stuff.

4. Last method

You put the name with a trigger into the data stream:

```
[Search for own user name]  
; Trigger  
Search_Binary=!USERNAME!  
; delete this and the next word  
Erase_Binary=ON  
StorenextWordToVariable=USERNAME
```

So the data stream will contain a text this:

```
!USERNAME!SwedPrint
```

TIPP: If you want to maintain it in the data stream, maybe do not erase it, but set the printer to white printing before and back to black after the text, so the text will not be displayed on the paper.

Q38: Converting print files to macros and update them

Q) First, let me say that our first newsletter printing using W-ELP went FLAWLESSLY! We are very pleased with both our purchase as well as support!

I have another question, however...

When we PRINT a file to disk to be used as an overlay, and ADD the file to the MACRO list (example: MyFile1.prn gets added as 1001.MAC), the ELP takes some time digesting the file and adding as a macro. This itself is not the question. The question is, if I change MyFile1.prn's contents, must I remove 1001.MAC and again add MyFile1.prn as 1001.MAC? I'm trying to understand if the process of adding MyFile1.prn sends the file to the printer, or if it looks up the contents of MyFile.prn when I perform the actual printing (which uses 1001.MAC).

A) Dear Mike,

The PRN file is just used to convert the Document from your application (like MS Word, Excel etc.) into an printer interpretable file. So in our case a PCL 5 file (Printer Command Language, the language for nearly all Laser and even some Ink-Printers in the world).

Now ELP converts this file into a printer Macro (= Form, that on a specific command is overlayed on to of the actual data stream on the page)

The macro is in theory the data stream wrapped in some frame commands and all statements which may cause an form feed are erased.

So only the file ###.mac is used. The prn can be erased, or you may use it for versions, so you can have a Easter form, Christmas form etc...

Once you convert a prn file to a mac file and the number is already used, the old macro is overwritten, if you type yes. So ELP will always only take the mac files. It does not remember where the file came from. But you give me an idea, we could put that into the documentation file of the macro...! I will do that right away.

Tipp: You may use several forms on a page, that could make updates easier, like

1000. mac	logo
1010. mac	footer
1020. mac	address in the couvert
2000. mac	Advertisement 1...

So the ELP_COMAMND might be: C1:1F1000F1010F1020F2000;C1F1000;

C1:1 is only page one

C1 remaining pages will only hold the logo

Q39: Printing two A5 pages on one A4 page

The trick is to differentiate between a left handed (2, 4, 6, ..) and a right handed page (1, 3, 5, ..) using the Left and Right ELP_Command definitions. The theory:

- a) to suppress the form feed on the right handed pages
- b) Move both pages in the position you need to have
- c) Setup the page size correctly.

Here is an example:

The A5 document was printing in Landscape, so in A4 the customer requested that the right hand page is on top, and the second page on the bottom of the A4 page.

The pure ELP_COMMAND looked like that:

```
ELP_Command=C1:RA26D0PS0PL0N1;C1:LPS4000PL0;
; C1:R defines the pages 1, 3, 5 etc...
;   A26   -> A4
;   D0    -> Portrait
;   PS0PL0 -> Set PCL coordinate system to 0,0
;   N1    -> Ignore next Formfeed (From right hand page)
; C1:L defines the pages 2, 4, 6 etc...
;   PS4000 -> Set PCL coordinate system to 4000 / 720 * 2,54 cm from top
;   PL0    -> keep the standard left margin.
```

Note:

Using the PL and PS parameter the 0,0 coordinate position can be moved even outside of the page. So if the data stream needs to be positioned not on top but in landscape beside itself, then you may need to move the origin out of the paper, maybe like this:

```
ELP_Command=C1:RA26D1PS5000PL0N1;C1:LPS-4000PL0;
```

Note: D1 is now landscape and the origin setting is really strange, a positive number moves the first page to the left, a negative number moves the second page to the right.

However, you can position the pages wherever you like.

Q40: Collection jobs for eliminate the printers job setup time

Q: "Each invoice is one different spool file (4K size, plain ascii from IBM AS400). The user has a badge to release over 1000 invoices/day.

The printer used to print these invoices is a Toshiba 810 (80 copies / minute) which takes 8 seconds to initialize when processing a new spool.

Collection manually the jobs, we doubled the speed of the 810 printing in duplex mode."

A: Well you have 2 issues:

1. Collecting all jobs using the archive functionality:

```
[AS400in]
; we assume ELP receives the data in a queue (printer) named "AS400in"
OutArchiveDir=#ELP_FORMS_PATH#\archive;#DATESERIAL#_#MILLISECONDS#.prn
; store all jobs sorted by their incoming time
NoPrinting=ON
; Do print nothing
; Note:
; If the job misses a Form Feed at the end, then you can add it:
; ELP_COMMAND=C1I1;
; Dummy command to draw form plain paper but needed to add the form feed
; ELP_EXIT_JOB=\x0C
```

2. Triggering the printout, so all collected jobs are really printed.

Actually there are 2 ways to do the final print out, which may be combined any way, to make sure that in the evening all jobs are printed:

2.1 Time based:

Use the nice freeware utility <http://www.splinterware.com/> like explained in the fist example of the ELP manual, chapter "Time based printing / Time based actions"

Note: In addition you may need to reset the Job_Counter.var file in the patch process like this:

```
Copy /b c:\programme\welp\forms\archive\invoice*.* \\MyELPPC\PrintQueueName
Rem Then delete the files:
Del d:\archive\invoice*.* /Q
Copy /b c:\programme\welp\forms\init_count.var c:\programme\welp\forms\job_counter.var
```

The file init_count.var is an ASCII file which has only one line of text data, a zero.

2.2 As wished every X invoices.

Add to the AS400in rule section this line:

```
JobCounter=#ELP_FORMS_PATH#job_counter.var
```

Generate a new rule

```
[On every 50th job]
Trigger_Binary=1
; Primary trigger, which comes for all jobs true
Trigger_Variable=#JOB_COUNTER#:50
Call=The same batch file as used in 2.1
Variable=JOB_COUNTER:0
```

Q41: How can I print alternating from different paper trays

Q: I have a printer which can print A4 long edge and short edge feeding. I want to setup ELP, that it draws the jobs alternating from those two trays.

A: The solution is to use a variable which is updated for each job. Depending on its alternating value, the rules for paper feeding are applied.

```
[GLOBAL]
;..... default inits

; Read variable #job_counter# which is automatically per job incremented
JobCounter=#ELP_FORMS_PATH#JobCounter.var
; the next command sets the variable to 0 or 1, alternating and add 1
Counter=#JOB_COUNTER#;%2+1
; Now the counter value is 1 or 2.
ELP_Command=C1:1I#JOB_COUNTER#;
```

The 2 printer paper tray need to be set now to media type Normal and media type Bond and ELP will alternate the print jobs between those trays.

Q42: Stapling every X Pages together, X maybe the copies of each page

See also Q56 for splitting a file in X pages for maximum stapling.

Q: The customer is migrating from NCR printing to a Ricoh MFP. What they want is that every page they send from their application will print on pink paper, then be duplicated onto green paper, and then be stapled.

A: There are 2 ways to do that (For 100% HP compatible printers):

1. Using the ELP_COMMAND=R2;C1H4;C2H30;T200:2;

R2; Makes 2 Copies from every page, in the form 11 22 33 44 etc. So every page is duplicated.

C1H4; Copy 1 is drawn from tray 2 with the Escape Sequence Esc&l4H

C2H30; Copy 2 is drawn from tray 5 with the Escape Sequence Esc&l30H

T200:2; Use Ricoh stapling top left, and staple together every 2 pages.

So every page is duplicated and the original and the copy is stapled together.

As the print document may contain download fonts etc. ELP will reprint for each 2 pages the whole job from the beginning. There is a command to HP printers, that you can tell them easily where to start.

Note: If you run that example on an non HP printer and the result is like this:

```
1 2
1 2 3 4
1 2 3 4 5 6
```

So always the first pages are reprinted, then you know, that your printer is not fully HP compatible! So please sue method 2.

The real negative thing about that one is also, that if you print larger files in respect of the amount of pages, it could take the printer quite a long time to process and ignore the first unprinted pages. But we know, up to 50 windows pages the HP printers have no problem with that.

2. First split and then staple the job.

For this way, you need to ELP activated queues. The first one (QueueA) will receive the printed data and does not print at all. Instead it takes the data, reprints each page and splits the page out a second queue, which then inserts the staple command. In our example this is QueueB.

Note: If you direct the QueueA to the Port NULL, then you do not have a printer behind the queue which needs to be powered on. Otherwise add the command NoPrinting=ON into the QueueA rule/section.

You also need a dummy form, which will tell ELP to split off the job right at the next FormFeed. Therefore you may take an hex Editor and type this line into a file called 25555.mac at the forms directory:

```
Esc&f0XEsc)s-997ZEsc&f1X Esc&f10X
```

Where Esc stands for ASCII 27 or Hex 1B.

The macro number needs to be over 25000, so the form is loaded every time it is used!

On the next page is the set of rules you may apply:

```

[Global]
; no changes here leave the standard key in

[QueueA]
; Section named as the queue where the data is coming in, so this section is
; automatically executed on data arrival to that queue
ELP_Command=R2;C1H4A26;C2H30F25555;
; R2; Command to may 2 copies in 11 22 33 44
; In the C1 command the page size is added, here A4
; In the C2 command the form 25555 is loaded now on every second page
; as this macro contains the file split command for the outport method, ELP will
; create in the second queue for every copy a new file
OutPort=#PCNAME#\ShareNameOfSecondQueue
; So you need to change this to the actual real share name (max 8 characters)
; NoPrinting=ON
; last key needs to be enables, if the port from QueueA is a printer port and not NULL

[QueueB]
; Section named as the queue where the data is coming form QueueA, so this section is
; automatically executed on data arrival to that queue
ELP_Command=T200;
; now every job is stapled.

```

Again the theory what is going on:

1. In the process step of the first queue ELP receives a file for example with 3 pages: 1 2 3.
2. The ELP command itself generates a print job like this:

```
1 1+Form 25555 2 2+Form 25555 3 3+Form 25555
```
3. While writing this document out to the second queue using the OutPort command, ELP will find on every 2 second page with the help of the macro 25555 the ELP command directive Esc)s-997. This directive was included with the form loading trick and tells the out writing process to cut of the data right after the next formfeed and start a new print job. This is why the form ID is over 25000, so it will be every time loaded, and not only once and called.

As a result and you can verify by setting the QueueB on hold, there will arrive 3 or maximum 4 jobs. Their content are:

```

Job 1:      Page 1 and its copy plus an empty macro 25555 which does nothing anymore.
Job 2:      Page 2 and its copy plus an empty macro 25555 which does nothing anymore.
Job 3:      Page 3 and its copy plus an empty macro 25555 which does nothing anymore.
mabybe:
Job 4:      Which holds the de-initialization code of the incoming job to QueueA.

```

If you want to get rid of Job 4, then use this statement in section Global: KillJobWithLessBytes

4. Finally the ELP_COMMAND for stapling is performed on every job arriving in QueueB

Benefit of this method:

- Runs also on non HP compatible machines
- No printing speed loss for larger jobs.

Tip:

If you want to do the same thing but you want to staple always 2 pages together, like incoming 12345678 out going: 1122(stapled) 3344(stapled) 5566(stapled)

Then change the QueueA ELP_COMAMND to this: R2;C1H4A26;C2:1H30;C2:2F25555;

Q43: Inserting another (color) page every X Job.

Q: A client sends 8000 jobs to the printer. I would like to get after each 100 jobs a separation page.

A: Usually this rule is performed on a printer queue base:

```
[GLOBAL]
REM=This section is executed for every data stream
ELP=ON
Macro_Download=ON
ELP_Max_Heap=10000000000
Free_Escape=OFF
PCLPreciseMode=OFF

; Define the counter variable and set it to a default value
Variable=MyJobCount:0

[Queue Named rule]
; rename the above rule name to the real queue name, so it is triggered by default
; Read all ELP Variables from the file c:\programme\welp\forms\_Queuel_MyJobCount.txt
; which is only one: #MyJobCount#
Variable_File=#ELP_FORMS_PATH#\Queuel_MyJobCount.txt
; Store the variable #MyJobCount# at the end of the process into the same file
; if the file does not exist, it is generated
Variables_Store=#ELP_FORMS_PATH#\Queuel_MyJobCount.txt;#MyJobCount#
; Increase the job counter by one
Counter=#MyJobCount#

; Below the alternating paper tray drawing is realized
[Is it the 100th Job?]
; Primary trigger is always true, so that the real secondary trigger is analysed
Trigger_Binary=1
; This is the real rule, this section becomes true if the alternating variable has
; got the value 1
Trigger_Variable=#MyJobCount#:100
; Then insert an extra page from another tray, after the job.
; This extra page can be defined by designing a print job which does what you want
; and print them into the file 2000.mac located in the WELP\FORMS directory.
ELP_Command=EE2000;K1;
; and set the alternating variable to 2 (which will be then stored according)
Variable=MyJobCount:0
```

Hints:

1. The separator page is a standard print job with a macro number. The macro "form" example above is using the macro number 2000, so the file 2000.mac in the forms directory, but it is NOT a macro. So please create any document e.g. with Microsoft word, which draws the paper from the tray with the separator page. Then print this document to a file. Copy this file to the forms directory and name it 2000.mac.

2. If you have a printer with A4-L and A4-P paper trays, you can also setup an ELP command which switches for job 100 the tray. Then the ELP_COMMAND may look like that:

```
; The A4-L tray is setup up with media type PrePrinted
ELP_COMMAND=C119;
```

3. the file _queue_JobCounter.txt should be delete before starting any new print batch. Then at the job 100 of the new print batch will be the first separator page inserted, otherwise the first separator page is inserted after the next 100th job, continuously counted since the separator page of the last job

4. Another method is indirectly described in Q 41.

Q44: PJP and PCL settings for toggling color and grey scale

The original question was for Ricoh printers like that, but the answer is applicable for HP as well.

I want to force some applications to print in Black and White only. Now with the Ricoh Drivers, they all have the same line in the header which determines whether or not the job will print out in color or black and white.

It looks like this for colour
@PJP SET DATAMODE=COLOR

and this for Black and White
@PJP SET DATAMODE=GRAYSCALE

You will notice that in some data streams, it determines the application it was printed in: for example: from outlook it looks like this
@PJP SET JOBNAME="mhtml:mid://00000001/"

My idea is to trigger the job from the string "mhtml:mid" - as this is always present when printing from Outlook client and then switch always to gray scale:

1. Answer only for HP and 100% compatible printers (only basic module needed)

Use convert.ini only:

```
[Search for @PJP SET JOBNAME="mhtml:mid:]  
Search_Binary=@PJP SET JOBNAME="mhtml:mid:  
; will enter HP PJP sequence for gray printing, if one exists it is replaced  
PlanesInUse=1
```

2. Answer for HP and PCL compatible printers (ELP module needed)

Use convert.ini only.

```
[Search for @PJP SET JOBNAME="mhtml:mid:]  
Search_Binary=@PJP SET JOBNAME="mhtml:mid:  
; will enter HP PCL sequence for gray printing, if one exists it is replaced  
ELP_Command=C1C2;
```

3. Use search and replace with 2 ini-files (only basic module needed)

There 2 ini-files are needed. The convert.ini will call the grayscale.ini. The principle is, that in the covert.ini is searched for the trigger stuff, and then it is totally replaced by the greyscale.ini, meaning that no search or any other triggers out of the convert.ini are still existing, when another ini-file is called. Using the inifile key starts from that event on a complete new game, unless some things are not already activated

The trick here is as well, that always the PJP JOBNAME comes before the grayscale setting.

Convert.ini

```
[Search for @PJP SET JOBNAME="mhtml:mid:]  
Search_Binary=@PJP SET JOBNAME="mhtml:mid:  
Inifile=c:\programme\welp\forms\grayscale.ini
```

Grayscale.ini

```
[Search for Ricoh (or any other brands) color command]  
Search_Binary=@PJP SET DATAMODE=COLOR  
Replace_Binary=@PJP SET DATAMODE=GRAYSCALE  
ReadOnlySearchkeys=ON
```

4. Use search and replace with only 1 ini-files (only basic module needed)

Uses a variable and a small tick.

Convert.ini

```
[GLOBAL]
. . . . whatever is in there:
; sets default the color printing variable to color
VARIABLE=My_COLOR_Mode:COLOR

[Search for @PJL SET JOBNAME="mhtml:mid: ]
Search_Binary=@PJL SET JOBNAME="mhtml:mid:
VARIABLE=My_COLOR_Mode:GRAYSCALE

[Search for Ricoh (or any other brands) color command]
Search_Binary=@PJL SET DATAMODE=COLOR
Replace_Binary=@PJL SET DATAMODE=#My_COLOR_Mode#
ReadOnlySearchkeys=ON
```

Important note: As it is hardly to be seen: There are 2 blanks between @PJL and SET in the replacement argument. This is needed to avoid recursive search and replacing , when the variable content is still COLOR!

Q45: Print 2 or 4 print pages on one piece of paper

Q: The client has an A4 job with X pages and he wants to print it on A3 duplex. The first A4 page goes on the A3 page left side the second to the right, the next on the back side to the left etc.

A: This can be done with the following ELP_COMMAND:

```
C1:1A27S1D1;C1:RPS0FS;C1:LPS-6000;
```

C1:1 sets only on the first page:

- the A3 paper size: A27
- the duplex command: S1 (or S2 can also be used)
- the paper printing orientation landscape: D1

C1:R defines every right handed page, which need to go to the left part of the A3 page

- PS0 Sets the left margin to 0 in order to print the page on the left side
- The FS command will make ELP not to perform the next formfeed. So all right handed A4 pages will not perform a formfeed in order to place the next page to the right.

C1:L defines every left handed page, which need to go to the right part of the A3 page

- The PS-6000 command will move the coordinative system 6000 units (half a landscape page) to the right. So the next page will fit to the right. As printed in landscape it is a negative movement.

Done:

Q46: Stapling a duplicated Job

Generate X copies sans staple them together is no problem at all, when each page is duplicated, using the R#; or Q#; ELP_Command. Especially when a job is only one page, the R command can be used.

The situation is different, when the complete jobs need to be printed twice, then by default there it is for most printer manufacturers not possible to staple both jobs together.

Here is the possible convert.ini rule setting using ELP:

```
[Print my invoice twice and staple it together]
Trigger_Windows_new=Invoice no.:
; Once this text is found, this rule apply
EraseAllPJL=ON
; Delete the complete PJL print file header, so a new ELP header can be set in place
ELP_COMMAND=ET;K2;T200;
; (ET;) Wrap the Job in an ELP own PJL header
; (K2;) make 2 copies
; (ET200;) Staple it together, here on a Ricoh printer
```

Notes:

1. In that command the typical ELP commands for inserting pages etc. can of course be used.
2. You can put the 2 statements also in Section/Rule GLOBAL for every job, or based upon user names or printer queues.

Q47: Printing coloured forms and watermarks underneath black text

Q1: We have a customer that would like to create colour macro. The problem is when the macro is in colour, it's on top, so all text is not visible. How can we create a macro in colour so it's printing "under" the text?

A: ELP does call the ELP_COMMAND F Parameter at the end of the page, right at the form feed. As color is always printed on top, all other printed information is erased. So the colored watermarks have to be called at the beginning of the page. Naturally this will do the job: ELP_COMMAND=C1G1000; where 1000 is the colored form.

The disadvantage is, that an additional page may be printed at the data stream end, because the G command is inserted right at the beginning of the page, where it is still unknown if there is one additional data to be printed.

To avoid that, there are 3 possibilities:

1. You only want to print the colored watermark on the first page: ELP_Command=C1:1G1000;
2. You know exactly how many pages per job are printed: ELP_Command=C1:1-5G1000; where this examples indicate 5 page
3. You do not know how many pages:

```
[GLOBAL]
;. . . Standard settings
; Count the pages using the preparer, result is in variable
PreParsing=ON
```

```
[Trigger for Forms]
; This section is always performed
Search_Binary=1
ELP_Command=C1:1-#PREPARSEPAGECOUNT#G1000;
```

Tipps:

- If you insert on the first page a terms and condition then use another variable and increase the variable by 1, or see next question in that example:
- Sometimes the form is printed on the first page and the data on a second and beginning with the third page all fits. You can usually avoid that, if the ELP command is extended with the page size, orientation, simplex/duplex and the input tray ELP_Commands, which have to be located before the G command. So for A4, Portrait and Plain paper the complete command would be:

```
ELP_COMMAND=C1:1A26I1D0S0G8000;
```

- All Page commands must be set in front of the G command. If set behind, the form will be separate printed form the data, one page in front. Use the same method as above.

Q2) I have the same problem as above, but I print all in duplex and I insert on every page the terms and condition. I currently use the ELP_command: C1:RS1F1000FF;C1:LF1100; where I insert the form 1000 and a form feed on the front page as well as the duplex command. Macro 1100 is my terms and condition on each back page. Macro 1000 needs to go below the text, as it is in colour.

A2) So the situation is the same, the form has to be printed before the text is printed, using the G command. However the last printed page is doubled in page size (multiplied by 2) compared to what the preparer did evaluate. As the R and L commands to not allow to set the limitation age size as above there is an other method needed to suppress the last additional blank empty page with the pblank form printed:

```
[GLOBAL]
;. . . Standard settings
; Count the pages using the preparer, result is in variable
PreParsing=ON
```

```
[Trigger for Forms]
; This section is performed for invoices
Trigger_Binary=Invoice
; As the ELP command inserts N new pages, the last page number to be printed is
; N * 2 + 1, and it contains the blank form, form the insertion direct after the
; formfeed.
Counter=#PREPARSEPAGECOUNT#;*2+1
```

```

ELP_Command=C1:RG900FFF1002X#PREPARSEPAGECOUNT#;c1:1A26D3H1S1;
; C1:R insert on all right pages of copy 1
;   G1000 the form 1000 (letterhead)
;   FF a form feed
;   F1002 form 1003 the T-C's on the back page before the regula Form Feed
;   X#PREPARSEPAGECOUNT#, but do not do it on the last page plus one, as calculated
;   above. So the empty page with the form on is suppressed.
; C1:1 On the very first page,
;   A26 A4 paper size
;   D3 In that case it was reverse landscape print requested
;   H1 Draw paper out of tray 2
;   S1 set duplex.

```

The C1:1 command is only to prevent the data stream to perform a formfeed after the very first page. All commands which may eject the page, are moved in front of the macro insertion.

Q2) I want to print duplex as well, but I need only on all right pages the watermark below my text:

A2) The solution is pretty close the same to the solution above, but shorter:

```

[GLOBAL]
PreParsing=ON

[Trigger for Forms]
; This section is performed for invoices
Trigger_Binary=Invoice
; Increment counter by one, so that the counter is set to amount of pages + 1
Counter=#PREPARSEPAGECOUNT#;
ELP_Command=C1:RS1G11111X#PREPARSEPAGECOUNT#;
; C1:R insert on all right pages of copy 1
;   S1 Print duplex
;   G11111 the form 11111 (letterhead)
;   X#PREPARSEPAGECOUNT#, but do not do it if the last page plus one, is again a
;   right page. So the empty page with the form at the end
;   is suppressed.

```

Note: When the pages are not duplexed, but maybe feeded anyway through the printers duplexer then you may need to erase on the back pages, like above:

```

C1:RS1A26H4D0G11111X#PREPARSEPAGECOUNT#;
; S1 duplex
; A26 A4
; H4 Tray 2
; D0 Portrait

```

Q48: The first page is printed with the form but no data

Q: I am printing from a main frame and the first page is printed with the form but no data on. My ELP_COMMAND=C1F500;

A: Some main frame spoolers do always send a FormFeed at the beginning of the job. So you need to get rid of this character

Solution A:

Only such streams are printed and all streams start with FormFeed.

```
[Search and delete first FormFeed]
; Search for FormFeed
Search_Binary=\x0C
; Delete it
Erase_Binary=1
; But only one time -> so the first is deleted
Search_Only_Once=ON
```

Solution B:

The first unloved FormFeed is only appearing in certain data streams.

```
[Invoice]
Trigger_Windows=invoice
; print on all pages Form 5000 and ignore Page 1
ELP_COMMAND=C1:1N;C1F500;
```

Solution C:

The first unloved FormFeed is only appearing in certain data streams, but the first pages need to be different form the following pages.

```
[Invoice]
Trigger_Windows=invoice
; print on all pages Form 5000 and ignore Page 1
; First page is ignored, second page is the first invoice page
ELP_COMMAND=C1:1N;C1:2F500;C1F502;
; Alternative with terms and confitions
;ELP_COMMAND=C1:1N;C1:2S1F500FF;C1:3F501;C1S0F502;
```

Q49: First page is an invoice, the following pages in duplex with different macros on front and back pages

Q: My first page is an invoice with letterhead form and the following pages do contain a huge table with X amount of pages. Those pages need to be printed in duplex and with 2 different watermarks on each side:

A1: Use this ELP command:

```
C1:1S0F1000;C1:2S1F2000;C1:3F3000;C1:4F2000;C1:5F3000;C1:6F2000;C1:7F3000;
C1:8F2000;C1:9F3000;C1:10F2000;C1:11F3000;.....
```

S0 is simplex command

S1 is the duplex command

F.... The form numbers on the pages.

The disadvantages of this version:

1. Define for every page a special ELP page command.
2. As the maximum command line length is 512 Bytes, you are limited.
3. You can use ELP_Command_Add to add another 3 times 512 bytes,
4. But then the maximum length for the ELP_Command is reached. So the maximum list length is about 100 pages and a still lot of typing.

A2: The command can be reduced by 50% as in that example ever page 2, 4, 6, 8 are the same. Those pages are in the natural order all left hand pages:

```
C1:1S0F1000;C1:LS1F2000;C1:3F3000;C1:5F3000;C1:7F3000;C1:9F3000;C1:11F3000
;C1:13F3000;C1:15F3000;.....
```

So 50% of typing is saved, or still the maximum amount of pages is now doubled.

A3: The shortest possible way to do it, and having then an indefinite amount of following pages

```
C1:1S0F1000;C1:LS1F2000;C1:3F3000R1;
```

So the R1 command resets the page counter after the first page to page 1 plus one. So the next pages will be for the system page two. And the correct left hand command applies.

Q50: Depending upon the data stream content, I want to add X pages, and all must be OMRed with the envelop insertion sign on last page

Q: We do have a data stream with x pages. On those pages could be found none, one or some triggers. If they are found, each trigger is the indication to add minimum one page, but also several fixed pages to the job. Finally OMR marks for our envelope machine needs to be added, and the insertion is always after the last page.

A1: Use this ELP command:

The startup work is generate for every added page a form, so print all pages, pager per page into a print file, using a PCL 5 driver and Start PPAdmin and Add them as unique macros, page for page. If a trigger needs to add 2 pages, you need 2 forms/macros, one for page 1 and one for 2.

```
[GLOBAL]
; Turn preparsing on to get the variable #PREPARSEPAGECOUNT#, which does contain
; after having read all data the amount of letter pages.
preparsing=ON
; Define a variable, which will sum up all forms to be added at the end of the document
Variable=ELPVariable:EX
; This variable will inform the ELP process, if any forms have to be added
Variable=MyELPFlag:0
; Does nothing, simply that the command is defined.
ELP_COMMAND=K1;
```

```
[Trigger Add one page on Trigger XXXXXX]
; if needed use trigger_Windows_new
Trigger_Windows=XXXXXX
; Ok if found then set the Flag to true, that pages need to be added
Variable=MyELPFlag:1
; Add to the Variable the new ELP part command, here
; call form F3000 and add behind a Formfeed FF
Variable=MyDummy:#ELPVariable#F3000FF
; ELP does not support Variable=Variable commands, so it was stored first in a
; temp variable #MyDummy# and then written back to the original variable #ELPVariable#
Variable=ELPVariable:#MyDummy#
, Increase my Page Counzter by 1
Counter=#PREPARSEPAGECOUNT#
```

```
[Trigger Add two pages on Trigger YYYYYY]
Trigger_Binary= YYYYYY
; again set flag if only this trigger is found
Variable=MyELPFlag:1
; Now add two more forms F2000 and F21000 with a FormFeed after each Form
, Same temp variable procedure like above
Variable=MyDummy:#ELPVariable#F2000FFF2100FF
Variable=ELPVariable:#MyDummy#
; Increase the page counter by 2
Counter=#PREPARSEPAGECOUNT#+2
```

```
[Add now the Collected forms string to the ELP_Command]
; primary trigger always true
Trigger_Binary=1
; Secondary trigger only true if min one trigger is found
Trigger_Variable=#MyELPFlag#:1
; tell ELP that in ELP_Command uses no Variables, which need to be replaced
ELP_REPLACE_VARIABLES=ON
; Add the collected Command to the real ELP command. Note that the command does start
; with EA, which is the command for add a full ELP_Command at the end of the job
ELP_COMMAND_ADD=#ELPVariable#;
```

```
[OMR global definitions]
As always OMR is used trigger it here at the end by default
Trigger_Binary=1
; OMR is no wtured on
OMR_Enabled=ON
```

```
; The envelope insertion mark is printed on the last page, by default
OMR_USEREADPAGECOUNTER=#PREPARSEPAGECOUNT#
; . . . . Followed by the OMR settings for the desired machine etc.
OMR_Type=STIELOW
OMR_Position=2,200,90
OMR_LineWidth=7.00
OMR_LineHeight=0.50
OMR_LineDistance=4.23
```

Q51: Depending upon the paper tray used, print specific forms on every page

Q: What can be the W-ELP command to merge a macro according to a tray command: If the document is requested to be printed on tray 2, merge with macro 1000, if tray 3 merge with macro 2000 and tray 4 merge with macro 3000.

There are minimum 1 solutions for that solution, depending if a whole job is printed to a unique try or id the tray selection may change during the job.

One comment before the solutions are explained. In both displayed cases we need to make us eof the PCL 5 paper tray command Esc&l#H. This command is inserted by the software and the # is the internal PCL tray number. Unfortunately the tray 1 is not 1 in PCL it us usually 4, the next tray 4, and then maybe the next one 6 or 10 or 20. In other words, you need to know the correct PCL tray numbers for the physical tray you want to draw the paper from. A help can be the ELP Command Generator form W-ELP. The second drop down list box from the Input Tray group has those internal try numbers in the () after each tray description.

A1: Let's assume the easy way, the whole job is drawn out of the same paper tray:

[GLOBAL]

```
; leave whatever was in there
```

```
[Tigger on Tray 4]
```

```
; Primary trigger is always true as we find always a digit 1 in all streams
```

```
Trigger_Binary=1
```

```
; Secondary Trigger is only true for tray 4 (Standard HP tray 2)
```

```
PaperTray=4
```

```
; use the ELP command to print on all pages the Form 1000
```

```
ELP_COMMAND=C1F1000;
```

```
[Tigger on Tray 5]
```

```
Trigger_Binary=1
```

```
PaperTray=5
```

```
ELP_COMMAND=C1F2000;
```

```
; etc...
```

A2: If the tray changes in the print job from page to page, this will not work anymore. There are several solutions for that one, here is just the one we assume as the best:

Before we start, you need to know that ELP is very recursive, so if we would replace a command by a command plus something, then the software will start to loop. However, you need anyway to setup each tray with different media type, in order to prevent to draw form other trays, once the tray is empty. In our example the Tray 2 to 4 has to be set to Plain, Preprinted and Letterhead.

The second benefit is, that you save also the ELP module, so the solution is cheaper, as it only uses the internal basic method of tray mapping. In this case ELP does not map, but add a functionality.

[GLOBAL]}

```
; all standard entries but add:
```

```
TRAYMAP= My New Tray Map Rule Section
```

```
[My New Tray Map Rule Section]
```

```
Tray4=\x1B&n6WdPlain\x1B&f5x1000y4X
```

```
Tray5=\x1B&n11WdPreprinted\x1B&f5x2000y4X
```

```
Tray6=\x1B&n11WdLetterhead\x1B&f35x000y4X
```

As the rules and the questions are fairly easy, there is no explanation to the used Escape sequences.

One note only: The command will start to print an overly on all coming pages. If the form (=macro) is only to be printed on the first page after the tray change, then replace 4X by 3X.

Q52: Delete the Job name in PJL section due to security reasons

Q: We have documents from MS Word, which are so private, that even the document name should not be part of the data stream.
Example of PJL section

```
...
@PJL JOB NAME="Microsoft Word - Dokument1"
@PJL SET JOBNAME="Microsoft Word - Dokument1"
@PJL SET ....
```

We would like to delete the first 2 lines! Erase_Binary does not really work, as the document name may change from document to document

Solution 1:

You may use the ELP key EraseAllPJL=ON. Then ELP does erase automatically the complete PJL sections of the job, beginning and ending.

If you need the rest of the PJL statements, then you need to go for solution 2.

Solution 2:

does only modify those 2 lines in the JL section of the print file, So simply add those two rules to the covert.ini file. Anyway, you need to check if your driver does not repeat the full document in the "end of job" PJL command. If the driver lists again the full document name there, then you need to add this command in the first rule as well

```
[Shorten the PJ JOB Names]
search_Binary=@PJL JOB NAME="Microsoft Word -
search_Binary=@PJL SET JOBNAME="Microsoft Word -
; End the command with a " and add a new trigger word.
Add_Binary="MyELPNewTriggerWord
; Speed up
ReadOnlySearchKeys=ON
```

```
[If MyELPNewTriggerWord is found]
; As added text is send recursively through ELP, once used above it will be found here
Search_Binary= MyELPNewTriggerWord
; Delete the trigger word
Erase_Binary=1
; The next 50 bytes will be stored and Erased! As StoreNextWord keys will also erase
; if the searched word is erased
; In order to erase also multi word names, max 50 characters are deleted, but also max
; up to the next [CR-}LF Byte[s]
StoreNextWordToVariable=#oooo#;50
ReadOnlySearchKeys=ON
```

Solution 3:

Add after the application name another job name and move the real name into a PJL comment commad, which will not be used for any job accounting properties.

```
[second version]
search_Binary=@PJL JOB NAME="Microsoft Word -
search_Binary=@PJL SET JOBNAME="Microsoft Word -
Add_Binary=secured job by IBS"\x0A@PJL SET COMMENT="
ReadOnlySearchKeys=ON
```

Q53: Print every 250th page a separation page form another tray.

I need to print every 250th page a separator page form another paper tray. How can ELP do this:

Here is the ELP_COMMAND for that:

```
ELP_COMMAND=C1:1I1;C1:250FF;C1:251I9R0;
```

The functionality of that sequence:

C1:1I1; On the first page ELP sets the requested paper tray to media type Plain. You may also use any other or direct the ELP H command for the usage of the PCL 5 selecting tray number
C1:250FF; Insert a new blank page behind page 250
C1:251I9R0; Then the blank page is page 251, this page will be printed form paper tray with media type preprinted (I9) and then R0 will set the internal pager counter back to 0. So printed page 251 from the data stream will be counted as page 1 and the C1:1 command applies again, and sets the daring paper tray back to I1

Tips:

- a) When you test it, it is maybe wise to set it on page 5 and 6 or so
- b) You may also print a form on the inserted page even with a text for example for the section number

Q54: We need to split big mail merge jobs into its single invoice files and then reprint each job twice from different trays.

Q: But the add-on problem is, that the client has 100 printers and does not want to setup and admin 200 queues.

A. The idea here is to split the file using the output method, but instead to a different queue, to the same one, so the part job arrives a second time and then can be processed as needed.

So ELP need to insert a trigger in the data stream to detect the first and the second run. Here is the trick and configuration

The trick:

While resending the splitted parts to the same queue, ELP uses an OutSearch_Binary and add right behind the PJJ UELs command Esc%-12345X and new PJJ comment command, which does nothing then add a comment into the stream.

Now when the jobs arrives the second time in the ELP process, the search_binary rule will detect during reading the job in, this trigger and then process the requested functionality on that job,. If this rule becomes executed, it also needs to make sure , that the rest of the configuration file is NOT executed anymore. So using the inifile key, the ini file is changed or simply used to end the configuration process.

Note, each queue needs to be shared with a share name up to MAXIMUM 8 characters, otherwise the process will not work.

The configuration:

```
[Global]
; Whatever is needed here

[Detect second run version 1]
; When this is found in the data stream
Search_Binary=@PJJ COMMENT="ELP second run Trigger text"
; Perform the 2 copies as requested out of 2 input trays
ELP_Command=K2;C1I1;C2I9;
; Now exit the ini file examination. So this will be only rule which is performed
inifile=c:\ThisFileDoesNotExist.ini

; Any rule below here is only performed,
; 1. when the top rule did not take place
; 2. Are obviously performe din the process behind the place where the trigger
; was inserted.

[Add Split trigger after the next formfeed]
; Search for a trigger expression on the last page of an invoice
Search_Binary=Total amount incl. vat
; Insert the split command, that the job is splitted at next FormFeed
Add_Binary=\x1B)s-997Z

[The split command using OutPort method]
; This rule is always performed, afer the complete job was read into ELP,
Trigger_Binary=1
; Send job to the same queue. Sometimes this does not work, then modify it
; like that \\NameofYourPC\#PRINTERSHARNAME#
Out_port=#PCNAME#\#PRINTERSHARNAME#
; Make shure all fonts etc are added to each job part.
OutPortMode_CollectFonts=ON
; DO not print anything
NoPrinting=ON

[While splitting, add the trigger for detecting the second run]
; We assume that the Job starts with an UEL: Esc%-12345X
; so while sending the split job out, ELP does add the second run detection trigger
OutSearch_Binary=\x1B%-12345X
; Now we insert there trigger for the second run
Add_Binary=@PJJ COMMENT="ELP second run Trigger text"\x0D\x0A
; Speed stuff up
ReadOnlySearchkeys=ON
```

Tipp:

Only one specific rule had been performed to the splitted job parts in the example above,. Just in case you need more rules to be applied to the splits, like to differentiate between German and English Ivoides / Letters etc... Then you need to call a second ini file:

```
[Detect second run version 1]
; When this is found in the data stream
Search_Binary=@PJL COMMENT="ELP second run Trigger text"
; Acivate a second ini-fiel, only addicted to the already splitted jobs
inifile=#ELP_FORMS_PATH#Splitted.ini
```

Then create an new text file in the WELP\forms directory, called splitted.ini and do all your settings for the second run in here.

Q55: Can ELP change Postscript streams like PCL streams

For speed reasons Postscript and PCL 6 files are by default NOT parsed and NOT changed at all by ELP

BUT:

If you add this statement into the rule global of the convert.ini:

```
BarcodesPostScript=ON
```

then ELP will also parse Postscript for our way of printing barcodes (Having PCL barcode commands in the postscript file and the output will be automatically in postscript). As a side effect, the search commands are in that configuration also all fully performed!

Q56: Split a big job into 50 pages peaces, as this is maximum amount of pages being stapled.

Q: We want to split a job into 50 pages parts, as this is the maximum amount of pages, the printer can staple together.

A: No problem here you go:

You need to prepare a macro with ID 25555 and store it into the WELP\forms directory named 25555.mac name. The file content is:

```
Esc&f0XEsc)s-997ZEsc&f1X Esc&f10X
```

You may use DOS EDIT to generate the file. Again the Escape sign Esc is entered in DOS EDIT like that: Press Strg + P then press the Escape key. As a result you get an arrow to the left displayed.

Setup 2 queues, A and B, connected to your printer. You will print to Queue A and only this queue needs to be ELP activated. So one license is enough. This example also assumes that the stapling commands are already set in the print file. Queue B will be shared with the share name ELP_OUT.

Then add those 4 keys either to the rule GLOBAL or to the Rule with the name of Queue A.

```
; sends the outgoing data stream to the out queue B
OutPort=\\127.0.0.1\ELP_OUT
; The data stream is on Queue A not printed
NoPrinting=ON
; Every 50th page macro 25555 is inserted and the page counter set to 0
ELP_Command=C1:50F25555;R0;
; in order that all parts are correctly printed
OutPortMode_CollectFonts=ON
```

Note: the form 25555.mac is reloaded every time. So the ELP internal command Esc)s-997Z is coming before the form feed and advices ELP to split after the next form feed. This means, the out port is temporarily closed and reopened.

Q57: Print Job Duplex, but starting with a specific page change to simplex.

Find here 3 ways of how to do it, hopefully one fits your needs

1. Last page needs to be printed always simplex on a new page (There is a bank form attached)

This and some similar examples are better described in Q16

```
[GLOBAL]
; turned on, ELP will store in the value :#PREPARSEPAGECOUNT# the amount of pages
Preparsing=ON
; set first page to Duplex and last page to simplex
ELP_COMMAND=C1:1S2;C1:#PREPARSEPAGECOUNT#S0;
```

2. Third last page and the following pages need s to be printed simplex

```
[GLOBAL]
Preparsing=ON

[Set 3rd last page to simplex]
Trigger_Binary=1
Trigger_Variable=#PREPARSEPAGECOUNT#>3
; Reduce the counter by 2, so will be the third last page then
Counter=#PREPARSEPAGECOUNT#;-2
ELP_COMMAND=C1:1S2;C1:#PREPARSEPAGECOUNT#S0;
```

3. on any page X switch back to simplex printing

Well to be absolutely independent, you may need an own page counter while reading the data stream and then set the ELP_Command according the found page number. However usually the data stream needs to have a paper tray selection in the data stream, in order to change from tray A to B.

Is this the case, then here is the easy solution:

```
[GLOBAL]
; Turn duplexing on page 1 on
ELP_Command=C1:1S1;
; start ELPs paper tray handler
TRAYMAP= Tray Rule

[Tray Rule]
; The last pages are drawn form paper tray with PCL 5 selection number 5 (Tray 3)
; So then the tray command is changed to:
TRAY5=\x1B)s-996Z\x1B&n9WdPreprinted\x1B&l0S
; Turn ELP handling off, so the Simplex command is not erased which
; would be the case as ELP_Command uses an duplex/simplex command
; change Papertray to Mediatype command. Set printer Tray 3 to Preprinted
; Set job to simplex
```

This rule set uses the paper tray switch to the form paper in order to add there the simplex command.