

Applying mostly any ELP rules to PDF files which are printed through a Windows PCL5 driver where the characters cannot be searched afterwards. As W-ELP does not OCR any graphical data stream the principal solution for that is to have a second Windows printer for pre-processing. Note: As you need 2 Print Queues also 2 licenses are needed.

The PDF file should not be rasterized through a Windows driver using e.g. Adobe Acrobat Reader but send directly to the W-ELP activated printer. The W-ELP printing process does recognize the PDF file format and will analyse and print it through the build-in functions.

Hereafter please find the step-by-step installation and configuration of the solution: stethos does provide a Quickset for the installation.

1. **Before using this Quickset** please perform these steps:
  - a) Add a new Windows Printer and name it WELP\_PDF2PCL. If you like to use another printer name then you must edit the *PDFPrinting.ini* file which is located in the Quicksets folder of your installation path.  
This is usually C:\Program Files (x86)\WELP\Quicksets. You can use Notepad or any other plain text editor and change the name "WELP\_PDF2PCL" in the lines **21 and 32** to the name you have chosen for your Printer name.
  - b) Use any PCL5, PCL5e or PCL5c printer driver. The HP Color LaserJet 9500 PCL 5c driver [from our website](#) is all the time a good choice.  
For the port use either NUL: or better COM1: or COM2: etc.  
Note: It is very important that this port is NOT used by any other Windows printer!
  - c) Share this printer using the same share name as the name of the printer itself.
  - d) Activate that new printer in the W-ELP Control Center Install Tab.
  - e) Have a second Windows printer ready for receiving the native PDF files. Even you can choose any name and use any driver for that printer this document names it ELP\_IN and – for simplicity reasons – uses the Generic / TextOnly printer driver. Make sure you have the ELP\_IN also activated in the W-ELP Control Center Install Tab.
  - f) For testing you might want to set both printers to NOT delete printed jobs. You can use the Windows Print management to set this: Printer – Properties – Enhanced-TAB. Please do not forget to uncheck this box once all is working as expected because otherwise it will fill-up your spool space forever.
  - g) Open the both printers to see what is printed (Print Jobs).
  - h) Install the Freeware tool: [PDF-XChange Editor](#). It is a real powerful editor with PDF batch printing capabilities.
  - i) Verify the installation path in the WELP configuration file. Please open the PDFPrinting.ini file usually located at: C:\Program Files (x86)\WELP\Quicksets. Check the very last option in line 21. Maybe change the installation path.
  - j) If possible, please exclude the folder C:\ProgramData\Welp\debug from a virus scanner. If this is not possible, any you need to set the process into the debug mode, you may need to increase in line 21 the process time from 20 units with 5 seconds each. In this case the time maximum needed is the time sending the PDF to the printer and the incoming job of the WELP\_PDF2PCL printer is printed. The value for the CallNow command has to be divided by 5 seconds.

2. W-ELP uses a PowerShell script to perform the printing, it is called PDFCheck.ps1 and it is located in the W-ELP Workpath, usually C:\ProgramData\Welp.  
Even this Script is executed as “-ExecutionPolicy bypass” **existing Windows policies might block the execution.**  
Meaning in well protected and secured environment you may sign that script first.  
In order to test the executability, start PowerShell e.g. by pressing the Windows-Logo-Key and r on your keyboard and paste this command:  
powershell.exe -ExecutionPolicy bypass C:\ProgramData\Welp\PDFCheck.ps1  
This executes the script C:\ProgramData\Welp\PDFCheck.ps1. If it prompts and asks for an input like InCommand: then you know that the current logged-in user can execute the script. Just hit the *Enter/Return* key to terminate the execution.  
Please note that by default the printing process runs in the LOCAL SYSTEM user context. However, W-ELP is able to change the process user if needed in the W-ELP Control Center.
3. Start the W-ELP Control Center, open the configuration tab, select Quicksets, select the PDFPrinting Quickset and activate it. You can leave the software open for a test print and maybe for restoring your previous configuration.  
**Note:** Activating a Quickset overwrites your current W-ELP configuration (convert.ini) and makes a copy of the original configuration before.
4. Now send (not print!) a PDF file to Windows printer ELP\_IN. You have several options how to do that:
  - a) Simply click in the still open Quickset window on the Test button (NOT Test (PDF)).
  - b) Return to the main Configuration Tab, select the Install tab, select the printer ELP\_IN and press the button “Print file on selected printer(s)”. Then select “Browse for a file and print” and locate a PDF file of your choice.
  - c) For productive printing and in case you can’t send the PDF directly to that printer, please use Filesender to poll PDF files from any hotfolder within the server or from other servers using UNC. Filesender is also available as a Windows service! **Note:** Do not activate the “Printer Queue is ELP activated” in the “Send to” section of the Filesender as it will corrupt the PDF file.
  - d) Use the DOS copy /b command like: copy /b filename.pdf \\localhost\PrinterShareName
5. As a result, the PDF must be printed twice on your printing device. If not, please refer to trouble shooting.
6. As a result of the process, you will find some additional files in the W-ELP work path: The files are named after the name of the printer which receives the incoming data stream. Here the explanation of the files:

ELP_IN_PDF.log	Logfile of the PowerShell script
ELP_IN_PDF.txt	This file contains all searchable text of the PDF
ELP_IN_PDF.pdf	A copy of the original PDF file
ELP_IN_PDF.ini	Configuration file, which will be executed by the main W-ELP printing process (not convert.ini!)
ELP_IN_PDF.pdf.pcl	The PCL5 printing file of the PDF
ELP_IN_PDF.ret_tmp	The file returned to the main W-ELP printing process (Contains ini + pcl file)

Note: The txt file is generated to help to apply any rules against the PDF file. Those rules are not defined in the convert.ini! This configuration file is called PDFCheck.ini and finally does write the ELP\_IN\_PDF.ini which is used for the new PCL 5 based data stream.

## 7. How to apply rules to the printing process:

- a) Start your Text editor (e.g. Notepad) and load the above described file xxx\_PDF.txt. Now you will see all searchable text of that printed document.
- b) If you have ELP experience you may now open the file PDFCheck.ini into your editor, otherwise load that file into W-ELP Control Center – Configuration Tab – using the button “Open .ini file”
- c) You can define any search rule, any trigger condition against that txt file. The difference to a standard ini file is, that at the end of the printing the PDFCheck.ini does write the new performed ini file (xxx\_PDF.INI)

Example: If you want to set your own ELP\_Command, do not use the ELP\_Command in the triggered rule, but set that command into the prepared variable. Maybe like this:

```
[Search for Invoice printing]
```

```
Search_Binary=InvoiceNo.:
```

```
Variable=#myELP_Command#:K2;C1F100;C2F102;
```

You may enter any valid ELP\_Command using stapling, paper tray handling etc.

Note: First time printing might need a little longer as the PDF editor is loaded and executed in the background.

### Hints:

You can write any ini file out of any rule set. The example of the returned page counter may only apply in the rule [END OF CONVERT] as before the system may not know how many pages are printed (but you may use #PREPARSEPAGECOUNT# after you turned PREPARSING=ON)

You can return any searched and read variable. Define the variable in the [GLOBAL], collect it in any search rule, and return it like this:

```
File_Write=0;Variable="$VariableName#":#VariableName#. The "$ and $" will be replaced to simple # after the variables had been replaced by W-ELP before writing. So, the returned text in the xxx_PDF.INi file will be for example Variable=#VariableName#: VariableNameValue.
```

You may return any OutPort or Archive command as well. Simply any ELP command key.

To apply and test a new rule, you need only to save the PDFCheck.ini file and to restart the not erased print file in your incoming print queue.

### Limitation:

The limitation is the size of the xxx\_PDF.INI file. It must be below 16Kbytes.

In case you need more, you may return just values and an iniFile command: e.g.

```
Variable=#$xxxx$":#xxxx#
```

```
Variable=#$yyyy$":#yyyy#
```

```
;
```

```
IniFile=#ELP_FORMS_PATH#MyIniFile.ini
```

Now you can apply in MyIniFILE.ini any rules against the provided variables.

## 8. Trouble Shooting:

- a) If the xxx\_PDF.log file was not generated then the PowerShell script might not be executed. See above 2.
- b) If any of the files listed in 6. are missing, open the xxx\_PDF.LOG file and check the last lines.

9. Once all works fine, it is recommended to change the file PDFCheck.ini to a speaking name, e.g. like customername.ini. Once renamed, open the file PDFCheck.ps1 in notepad and search for PDFCheck.ini and change to the new file name. 2 times in comments and one time found in a command.
10. Here again the Workflow for the PDF Printing:
  - a) The ELP-Enabled printer ELP\_IN receives the PDF file and the process is started using the convert.ini.
  - b) Right at the beginning the ELP voter detects a PDF document and executes the rule [PRINTERLANGUAGE PDF] which calls PowerShell and its configuration file PDFCheck.ps1.
    - b.1) Extract all text out of the PDF file into the file QueueName.txt
    - b.2) Call ELP internally a second time. But now the generated text file runs against. config-file: PDFCheck.ini. As a result, the file QueueName.ini is created, which holds the file configuration what ELP need to do, and/or some variables for later process and/or any ELP command like ELP\_Command or Archiving etc.
    - b.3) Call the PDF-Editor PDFXEdit.exe to print the PDF file through the queue WELP\_PDF2PCL. During printing, ELP does execute the rule [WELP\_PDF2PCL] in the convert.ini. Actually, the file PCL is archived into the file: QueueName\_pdf.pdf.pcl
    - b.4) Copy the two files QueueNameini and QueueName\_pdf.pdf.pcl together to the final filename: QueueName\_pdf.ret
  - c) The convert.ini reads back the new above generated file. In the first step the new command file at front of the PCL stream is executed. Now the main printing process knows all provided variables or commands
  - d) The original PDF printing stream is waved and ELP continues to process with its PCL version.  
Meaning the convert.ini is further processed and any further configurations can be performed.

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