



Suchy **MIPS**

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BENS G3

PRESCRIBE Filter

Manual

Suchy MIPS



Release MAI 2011

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1. Functional Specifications

The Prescribe2PCL filter converts prescribe print data into PCL print data, thus enabling the output on standard PCL printing systems. In addition, the filter offers the possibility to carry out some separate control operations via a configuration file. That way, for example, the standard settings of the printer that were made via the printer's control panel can be mapped in the configuration file. Furthermore, it is possible to reposition the created print image horizontally as well as vertically. A detailed description of the configuration file is given in the following paragraphs.

2. Installation of the Filter

For installing the filter on BENS, please proceed as follows:

Filter

- Start the BENS HTML administration tool.
- Select **Configuration** → **Filters** from the menu and then click on the button **Add Filter**.
- Click on the button **Search**, mark the macro filter file we included in our delivery and click on the button **Save**. The name of the filter then appears in the list of all filters available on BENS.

Configuration

- Please adjust the included XML configuration file according to your own requirements, following the instructions set down in the ensuing pages.
- Select **Configuration** → **Filters** from the menu and then click on the name of the filter.
- Click on the button **Add config file**.
- Click on the button **Search** and select the corresponding XML file.
- Enter a name for the configuration file in the field **Config file description** (the file name will not be adopted automatically).
- To finish this process, click on the button **Update config file**. The configuration file will then appear in the list of all configuration files for this filter.

3. Implementation of the Filter

BENS will only employ the uploaded filter when it is activated for a virtual printer. In order to activate a filter for a virtual printer, please proceed as follows:

- Select **Configuration** → **Virtual Printers** from the menu.
- Click on the name of the virtual printer for which you wish to activate the filter.
- From the combo box **Add filter** select the name of the filter. The filter name will then appear in the list for the filters activated for the currently used virtual printer.
- Then select the suitable configuration from the combo box **Filter config**.
- The activation of the filter is now concluded.

Note: A filter can only be used when it was activated for a virtual printer.

The filter can only be used on those virtual printers on which it was activated.

Each virtual printer requires a license for the activation. When there are no licenses left, an error message will be displayed on activation.

The licenses are not assigned to specific virtual printers. When you delete a filter from the virtual printer, a license will be released, enabling you to reactivate the filter on another virtual printer.

4. Example of a Configuration File for the Filter

```
<?xml version="1.1" encoding="iso-8859-2"?>
<Prescribe version="1.1">

** DEFAULT PRINTER SETTINGS **
<DefaultFont>(ON?(sspb10h4099T</DefaultFont> ' default Font
<LinesPerInch>6</LinesPerInch> ' default is 6
<Resolution>300</Resolution> ' default resolution
<Ornt>0</Ornt> 'default orientation'

<PageX>21</PageX> 'default physical page width in cm
<PageY>29.7</PageY> 'default physical page height in cm

<PageRM>19.8</PageRM> 'default printable area width in cm
<PageBM>28</PageBM> 'default printable area height in cm

** HORIZONTAL AND VERTICAL OFFSET SETTINGS IN MM **
<XOffset>0</XOffset>
<YOffset>0</YOffset>

** UNIMPLEMENTED PRESCRIBE COMMAND SUBSTITUTIONU **
** SUBSTITUE: first entry "type"[PCL or PJJ], second: "PRESCRIBE", third "new value"
<ESC-Symbol>?</ESC-Symbol>
<Substitute> <T>PCL</T><O>STAK 2</O><N>?&I3G</N></Substitute> 'Example for subst. with PCL
<Substitute> <T>PJJ</T><O>STPL 2</O><N>@PJJ SET FINISH=STAPLE</N></Substitute> 'Example for subst. with PJJ

** ERROR CORRECTION FOR PRESCRIBE COMMANDS BEING PRINTED INSTEAD OF EXECUTED **
<Delete-Line>MAP 0.0, 0.0;</Delete-Line> ' the line beginning with this will be deleted from the file when we are outside prescribe
<Delete-Line>MAP 1.0, 0.0;</Delete-Line> ' the line beginning with this will be deleted from the file when we are outside prescribe
<Delete-Line>MAP 2.0, 0.0;</Delete-Line> ' the line beginning with this will be deleted from the file when we are outside prescribe

** DON'T MAKE CHANGES IN THE FOLLOWING PART WITHOUT AUTHORISATION FROM SUCHY MIPS'

<PMX>1.2</PMX>
<PMY>.85</PMY>
<PTM>120</PTM>
<PBM>120</PBM>
<XCor>56</XCor>
<YCor>28</YCor>
<PageLM>0</PageLM>
<PageTM>.85</PageTM>

<noMapOffset>.42</noMapOffset>

<BitmapEncoding>0</BitmapEncoding> ' 0: No encoding
' 1: runlevel encoding
' 4: Delta Row compression
' 5: Adaptive compression

<FontType>old</FontType> ' old: use the old typefaces.
' new: use the new scalable typefaces

<useNewCursorStack>new</useNewCursorStack> ' switch between new and old Cursor handling only TEST

<BufferSize> 0 </BufferSize> ' Buffersize for reading if input is not cin. Zero means filesize
<TestLevel>0</TestLevel> ' 0 = no Testoutput, other values: 1,2,3 (Higher Numbers means more output
<NumberCass>1</NumberCass> ' 1: use allways Cass 1
' 0: use all Cass
<WithBarcodes>0</WithBarcodes> ' 0: generate PCL with barcodes
' 1: Don't generate barcodes
<BarcodeTerminator>~(s0T</BarcodeTerminator> 'PCL Barcode Terminator

</Prescribe>
```

5. Explanation of the Configuration File:

For a better legibility, single paragraphs of the configuration file were highlighted in colour. Only the values marked in **bold/green** may be altered.

5.1. Default Printer Settings

```
*** DEFAULT PRINTER SETTINGS ***
<DefaultFont>?(0N?(sspb10h4099T</DefaultFont> ' default Font
<LinesPerInch>6</LinesPerInch> ' default is 6
<Resolution>300</Resolution> ' default resolution
<ornt>0</ornt> 'default orientation'^
<PageX>21</PageX> 'default physical page width in cm
<PageY>29.7</PageY> 'default physical page height in cm
<PageRM>19.8</PageRM> 'default printable area width in cm
<PageBM>28</PageBM> 'default printable area height in cm
```

In this paragraph, values can be determined that are normally entered via the printer menu on the printer control panel.

5.1.1. DefaultFont

Using *DefaultFont*, the default font is set with a corresponding PCL command. The example shows Courier 10 cpi medium, symbol set latin, which is used under Windows and Unix/Linux systems. When Prescribe data are sent to the printer without a previous font selection, or a soft reset occurs, these data are printed with the font that was preset here. If, in some cases, for example national characters like german umlaut vowels are not printed correctly, the symbol set used by the Prescribe printer shall be find out and entered hier.

5.1.2. LinesPerInch

Using *LinesPerInch*, the number of lines per inch is determined. When Prescribe data are sent to the printer without this specification, these data are printed with the line spacing that was preset here. The default value is 6 lines per inch.

5.1.3. Resolution

Resolution determines the printing resolution of the original Prescribe print data. If Prescribe data are sent to the printer without this specification, these data are printed with the resolution that was preset here. The default value is 300 dots per inch (dpi). This value represents the resolution of older Prescribe printers.

5.1.4. Ornt

With *Ornt*, the page orientation is determined. 0 stands for portrait and 1 stands for landscape. If Prescribe data are sent to the printer without this specification, these data are printed with the page orientation that was preset here. The default value is 0, representing the portrait position.

5.1.5. PageX

PageX determines the page width in cm. As default, the DIN A4 width is preset (21 cm). If Prescribe data are sent to the printer without this specification, these data are handled as if they were to be printed on DIN A4.

5.1.6. PageY

PageY determines the page height in cm. As default, the height of DIN A4 is preset (29.7 cm). If Prescribe data are sent to the printer without this specification, these data are handled as if they were to be printed on DIN A4.

5.1.7. PageRM

Using *PageRM*, the horizontal printable area in cm can be determined (from a portrait-viewpoint).

5.1.8. PageBM

Using *PageBM*, the vertical printable area in cm can be determined (from a portrait-viewpoint).

5.2. Horizontal and Vertical Offset Settings in mm

```
*** HORIZONTAL AND VERTICAL OFFSET SETTINGS IN MM ***  
<XOffset>0</XOffset>  
<YOffset>0</YOffset>
```

In this area, values for the horizontal and vertical offset of the entire print image can be predefined.

5.2.1. XOffset

With *Xoffset*, the entire print image can be set off to the right or to the left along the shorter paper edge. Positive values will cause an offset to the right. Negative values will cause an offset to the left.

5.2.2. YOffset

With *Yoffset*, the entire print image is set off downwards or upwards along the longer paper edge. Positive values will cause a downward offset. Negative values will cause an upward offset

Note:

A horizontal or a vertical offset of the print image can in fact only be realised, when the entire print image leaves a margin of sufficient size on the target printer. Should the print image on the target printer already reach up to the right margin, an offset to the right using *Xoffset* will not produce the desired results.

5.3. Unimplemented Prescribe Command Substitution

```
*** UNIMPLEMENTED PRESCRIBE COMMAND SUBSTITUTIONU ***  
*** SUBSTITUTE: first entry "type"[PCL or PJJ], second: "PRESCRIBE", third "new value"  
<ESC-Symbol>?</ESC-Symbol>  
<Substitute> <T>PCL</T><O>STAK 2</O><N>?&I3G</N></Substitute>  
<Substitute> <T>PJJ</T><O>STPL 2</O><N>@PJJ SET FINISH=STAPLE</N></Substitute>
```

With this entry, new, not implemented Prescribe commands can be substituted by PCL commands.

5.3.1. ESC Symbol

The *ESC Symbol* determines which character is used in the configuration file in lieu of the not printable character „Escape“. By default, the character question mark „?“ is used.

5.3.2. Substitute

Substitute determines which Prescribe command is substituted for which PCL command. Differing from other configuration entries here, it has to be determined additionally whether the Prescribe command is substituted for a PJJ command or for a PCL command. <T> stands for the target command type (PCL or PJJ). <O> represents the original Prescribe command and <N> the new command. If the Prescribe command is converted into a PJJ command, the newly created PJJ command is attached to the PJJ-header at the beginning of the PCL file. If the Prescribe command is converted into a PCL command, the target command is inserted at the same position in the print data stream it previously used to hold in the Prescribe file.

5.4. Error Correction for Prescribe Commands being printed instead of executed

<Delete-Line>MAP 0.0, 0.0;</Delete-Line>

Using this section, some programming errors in Prescribe files can be corrected.

5.4.1. Delete Line

Delete Line determines whether or not printable lines beginning with a certain Prescribe command should be deleted.