

How to print shelf labels with PROMPT Report Writer and edxdocpb

Design approach

The primary purpose of this procedure is to document the design and development due to its uniqueness. The approach used to print shelf labels with the Sato CT 400 Thermal barcode label printer was to use the PROMPT Report writer directing the report to ELECTPRT. In other words we are printing to a file and not to a printer.

Next we modified edxdocpb to do two things:

1. Strip excess trailing characters from each line generated to the file except line 6 that has 18 trailing blanks.
2. Once the file is fixed by edxdocpb then the program (edxdocpb) prints the file to the Sato CT 400 using the command found in edxdocpb.sys type "bar". The program uses 'cat "%p" > /dev/lp0' to accomplish the print.
3. To implement this approach it is necessary that /dev/lp0 have ownership of edx and group and permissions of both w and x.
4. Also, edxdocpb.sys requires a "bar" stanza like is found on the MAC administrative system and at Hughes Candy.
5. Finally a directory named "bar" must be added under the edxdocpb directory with ownership of edx and group.

Printing shelf labels with the Sato CT 400 thermo printer

When we started this project we thought we would have to use Windows and pass data from Linux to Windows to print. Once we got into the project here is what we learned.

First we had to design the label and we chose the following:

- Line 1 – As much product description as would fit (We got 27 characters)
- Line 2 – Left = Unit of measure, Center = Pack quantity, Right = SKU number
- Line 3 – The Bar Code with adequate space to the right to print a retail price
- Line 4 – The translated bar code

Next we were learned that 7 lines of control codes must be sent to the Sato that tells it how to print the data stream that follows, for each shelf label be printed.

The best way to understand these control codes is look at them on the Linux Sever at MAC or Hughes using vi and on the file garvin2.txt because the control codes can viewed with this editor. I refer to these 7 lines of control codes as "headers".

Finally 8 lines of additional control codes into which data is inserted to print each shelf label follow the header control codes. I refer to these 8 lines as "detail lines".

How we did the printing with report writer

The “headers” are entered as header information in the report writer. See report writer specification SHELFLBL but be aware that you DO NOT SEE the control characters and must examine the Linux text file garvin2.txt referred to above to understand each non-printable control character entered as headers.

To pass the necessary control characters to the report writer detail lines we used the file MKRPTFLE found at PBS menu option MK, 12 – Report Writer Literals. The only way to truly understand this is to study both the report specification SHELFLBL and the file garvin2.txt because the control characters appear in garvin2.txt but do not display in Option 12 of MK even though they are there.

A feature

As previously explained above we allowed space for a price to be printed to the right of the bar code on the label.

We refer to the label without a price as a “shelf label” and with price as a “price label”.

To get a price to print you must edit the report SHELFLBL and insert a line after the detail line 2 MKRPTFLE 36 24 (Filed#, Print Position) that holds data for a retail price, for example 1 INPROFLE 15 34 (this would print list price from field 15). Also, if you want a preceding dollar sign to appear before the price, change the 36 to 53 in “2 MKRPTFLE 36 24”.

Hughes Candy installation

#iIN8MENU (IC, 1, 6) was modified to add shelf label printing using options 13 – 16 as follows:

- 13 – Select by group – Report Specification SHELFLBL
- 14 – Select by group and class – Report Specification SHELFLB1
- 15 – Select by ABC Code – Report Specification SHELFLB2
- 16 – Select by SKU – Report Specification SHELFLB3