PDF Printing
BRIEF

Printers

This document discusses features and instructions on how to print PDF directly on Honeywell Printers.

Introduction

Printing PDF directly to a printer is commonly used by ERP systems, for example, SAP and Oracle, without middleware or by a smart device with generated PDF. Honeywell enables direct PDF printing through a firmware update on all thermal printers listed below.

Platform & Printer Support

This feature is applicable to the following Honeywell printers only.

- RP2f, RP4f
- PC23d, PC42d, PC42t, PC43d, PC43t
- PC45d, PC45t
- PD43, PD43c, PD45, PD45S
- PM23c, PM42, PM43, PM43c, PM45, PM45c, PM65
- PX240, PX240S
- PX940V, PX940A, PX4ie, PX6ie, PX45, PX65

Firmware Version

This program is available from printer field trial firmware version 10.17.980248 and later versions.

Language Support

To enable PDF printing, select PDF as Command Language. From printer LCD/web page select **Settings > System Settings > General > Command language**.

Features

- Support receiving and printing PDF directly.
- Support below Fingerprint commands to configure printer or get status.
  - PRINT
  - SETUP
  - RUN
  - VERBON/VERBOFF
- Support both embedded fonts and non embedded fonts in PDF.
- PDF is printed with its original size using top-left corner as origin. Printed label size remains the same on different resolution.d non-embedded fonts in PDF.

PDF Fonts

The PDF supports the use of the following font formats:

- TrueType
- OpenType: From PDF 1.6 onwards, OpenType fonts can be stored directly in a PDF. Within an OpenType font, the character shapes or glyphs can be encoded using either TrueType or Type 1.
- Type 1: The format has effectively been superseded by OpenType.
- Type 3: Type 3 is an outdated file format for fonts.
- Composite fonts (Type 0): both Type 1 (CIDFontType0) and TrueType (CIDFontType2) are supported.

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Fonts are supported through,

- Embedded fonts
- Subset fonts
- Non-embedded fonts: refer to next section for details.

Print with Non-Embedded Font

To print with non-embedded fonts, you need to install the needed fonts under /home/user/fonts directory on your printer. Avoid installing more fonts than needed because too many font files affect printing performance.

Refer to printer data sheet for the partition size for user installable fonts.

Adobe CMAP and CIDFont

To print CID-keyed fonts, user needs to embed the fonts inside PDF and install **poppler- data** package inside the printer. **poppler-data** package contains the CMap and CIDFont resource.

This package is normally required for Chinese, Japanese, and Korean (CJK) characters. The latest **poppler-data** can be downloaded from https://poppler.freedesktop.org/

To install the package, unzip the poppler-data file, then FTP/SFTP below folders to the printer and put all under /home/user/fonts/poppler/.

Name

- cidToUnicode
- cMap
- nameToUnicode
- unicodeMap

General Recommendations

In order to minimize errors in PDF printing, try following the below mentioned guidelines:

- Always embed all fonts.
- Always embed complete fonts, do not subset fonts.
- Only use non-embedded fonts when PDF size is a concern.
- On legacy printers, for example, PM43 and PC43, it takes a longer time to process PDF, especially large and high-resolution images. Recommend designing the label with the right image resolution.
- Create black and white content only.

Limitations

Here are some of the known limitations:

- PDF printing cannot be paused / canceled.
- If color PDF file is sent, some content details may be lost.
- Support single page PDF file only.

Issue Reporting

Any issues found related to the PDF printing or any improvements proposed should be reported through a tech support case.

Appendix – Fingerprint Command Examples

PRINT

1. Get firmware version, printer family
   PRINT VERSION$
2. Get printer last error
   PRINT ERR
3. Get printer status
   PRINT PRSTAT

SETUP

1. Change media type
   SETUP "Printing,Media,Media Type,Media With Gaps"

RUN

1. Change user
   RUN "su –p pass itadmin"

2. Shell command
   RUN "ls"
   VERBON | VERBOFF

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