

Printer Registration, CUPS, Pasta Configuration, PDF Printing – Oracle Applications R11/R12

It's been years I had dreamt to have a network printer setup at my home for Oracle Applications. It's fulfilled this week. Thanks for the affordable prices, In India the printer costs around Rs 7000.00 and in USA it should be around \$70. Any printer (HP, brother etc) with network feature should work.

Here is my Messy System Setup ☺



Brother – Network printer –
Photo Printer, scanner, fax,
copier, – All in one
MFC-295CN



Dell Server

8 port hub – One end of Ethernet cable goes to printer and other end goes to Hub, it automatically assigns a IP address

■ High Level Steps

- Download CUPS software
- Download the driver for your printer
- Add the printer - Brother_MFC-295CN
- Modify pasta_pdf.cfg for PDF Printing
- Register the printer with Oracle Applications

Printer IP Address – 192.168.1.5

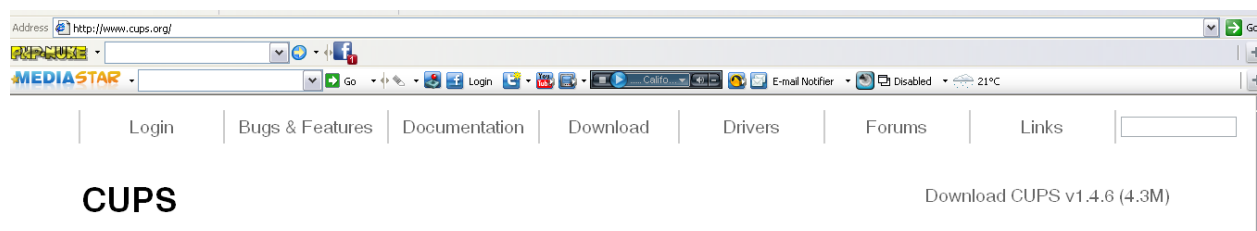
In companies, first 3 activities will be done by System Administrators – No worries,

lpstat -a – to know all the printers registered from Linux/Unix

```
hp501 accepting requests since Mon Jun 04 11:08:17 2007
hp9k01 accepting requests since Mon Jun 04 11:38:14 2007
hkhp410001 accepting requests since Mon Jun 04 11:38:54 2007
hkhp410003 accepting requests since Mon Jun 04 11:39:35 2007
hkhp510001 accepting requests since Mon Jun 04 11:42:16 2007
hkhp510002 accepting requests since Mon Jun 04 11:42:50 2007
hp405001 accepting requests since Mon Jun 04 11:43:22 2007
hp9k07 accepting requests since Mon Jun 04 11:49:56 2007
```

■ Download CUPS software

Navigate to <http://www.cups.org>, click on Download next to the latest version, then choose the .tar.gz or .tgz file and save it on your computer. Once installed we perform the following steps (please note that you might have to change the version numbers if you downloaded a newer version).



Steps (see „Description" for definition):

1. tar xvjf cups-1.4.6-source.tar.bz2

2. cd cups-1.4.6
3. ./configure
4. make
5. make install (you need to be root to install the binaries)
6. /etc/init.d/cups start

- Download the driver for your printer

http://welcome.solutions.brother.com/bsc/public_s/id/linux/en/index.html



Brother Drivers for Linux® distributions

[Before the Installation](#)

Download

- [Printer Driver](#)
- [Scanner Driver / Scan-Key-Tool](#)
- [PC-FAX Driver](#)
- [P-touch, QL/PJ-Printer Driver](#)

Click Printer Driver

MFC

[MFC-210C](#) [MFC-215C](#) [MFC-230C](#) [MFC-235C](#) [MFC-240C](#) [MFC-250C](#) [MFC-253CW](#)
[MFC-255CW](#) [MFC-260C](#) [MFC-290C](#) [MFC-295CN](#) [MFC-297C](#) [MFC-3220C](#) [MFC-3240C](#)

Select MFC-295CN

MFC-295CN

| Download | Format | Version | Size | Release Date |
|------------------------------------|--------|---------|---------|--------------|
| LPR driver | rpm | 1.1.2-1 | 1901 KB | 2009.Aug.25 |
| cupswrapper driver | rpm | 1.1.2-2 | 15 KB | 2009.Sep.10 |

mfc295cnlpr-1.1.2-1.i386.rpm

mfc295cncupswrapper-1.1.2-2.i386.rpm

rpm -Uvh mfc295cnlpr-1.1.2-1.i386.rpm

rpm -Uvh mfc295cncupswrapper-1.1.2-2.i386.rpm

```
[root@linux4 printing]# rpm -Uvh mfc295cnlpr-1.1.2-1.i386.rpm
Preparing... ##### [100%]
 1:mfc295cnlpr ##### [100%]
[root@linux4 printing]# rpm -Uvh mfc295cncupswrapper-1.1.2-2.i386.rpm
Preparing... ##### [100%]
 1:mfc295cncupswrapper ##### [100%]
cups: restarted scheduler.
[root@linux4 printing]# lpstat -a
MFC295CN accepting requests since Thu 24 Feb 2011 01:26:07 AM IST
```

Search in Printers:

Showing 1 of 1 printer.

| Queue Name | Description | Location | Make and Model | Status |
|------------|-------------|----------|------------------------|--------|
| MFC295CN | MFC295CN | | Brother MFC-295CN CUPS | Idle |

Click MFC295CN

MFC295CN (Idle, Accepting Jobs, Not Shared)

Maintenance Administration

Description: MFC295CN

Location:

Driver: Brother MFC-295CN CUPS (color, 2-sided printing)

Connection: usb:/dev/usb/lp0

Defaults: job-sheets=none, none media=na_letter_8.5x11 in sides=one-sided

Click Administration – Modify printer

Modify MFC295CN

Current Connection: usb:/dev/usb/lp0

- Local Printers:**
- SCSI Printer
 - Hal printing backend
 - no_device_found (HP Fax)
 - LPT #1
 - hp no_device_found

Discovered Network Printers:

- Other Network Printers:**
- LPD/LPR Host or Printer
 - Backend Error Handler
 - AppSocket/HP JetDirect
 - Windows Printer via SAMBA
 - Internet Printing Protocol (http)
 - Internet Printing Protocol (ipp)

Continue

Modify MFC295CN

Connection:

Examples:

```
http://hostname:631/ipp/  
http://hostname:631/ipp/port1
```

```
ipp://hostname/ipp/  
ipp://hostname/ipp/port1
```

```
lpd://hostname/queue
```

```
socket://hostname  
socket://hostname:9100
```

See "[Network Printers](#)" for the correct URI to use with your printer.

Modify MFC295CN

Description:

(Human-readable description such as "HP LaserJet with Duplexer")

Location:

(Human-readable location such as "Lab 1")

Connection:

Sharing: Share This Printer

Modify MFC295CN

Description: MFC295CN

Location: MFC295CN

Connection: lpd://192.168.1.5/binary_p1


Sharing: Do Not Share This Printer

Make: Brother

Model:
Brother MFC-295CN CUPS (en)
Brother DCP-1200 Foomatic/gimp-print-ij5 (en)
Brother DCP-1200 Foomatic/hl1250 (en)
Brother DCP-1200 Foomatic/ljet2p (en)
Brother DCP-7025 BR-Script3 (en)
Brother DCP-8020 BR-Script3 (en)
Brother DCP-8025D BR-Script3 (en)
Brother DCP-8040 BR-Script3 (en)
Brother DCP-8045D BR-Script3 (en)

Or Provide a PPD File:

Authentication Required

 A username and password are being requested by <http://localhost:631>. The site says: "CUPS"

User Name:

Password:

Modify Printer MFC295CN

Printer **MFC295CN** has been modified successfully.

MFC295CN (Idle, Accepting Jobs, Not Shared)

Maintenance Administration

Description: MFC295CN

Location: MFC295CN

Driver: Brother MFC-295CN CUPS (color, 2-sided printing)

Connection: lpd://192.168.1.5/binary_p1

Defaults: job-sheets=none, none media=na_letter_8.5x11in sides=one-sided

Jobs

Search in MFC295CN:

[Click Maintenance – Print Test Page](#)

Printer Test Page

Printer Name: MFC295CN
Description: MFC295CN
Location: MFC295CN
Make and Model: Brother MFC-295CN CUPS
Media Dimensions: 8.50 x 11.00 inches
216 x 279 millimeters
Media Name: 8.50 x 11.00 in 8.50 x 11.00 inches



Check printers.conf in /etc/cups

http://welcome.solutions.brother.com/bsc/public_s/id/linux/en/instruction_prn1c.html#ppd1

Step 5b. (for Network Connection) Configure your printer on the CUPS web interface

5b-1. Open a web browser and go to "<http://localhost:631/printers>".

5b-2. Click "Modify Printer" and set following parameters.

- | | |
|---|---------------------------------|
| - LPD/LPR Host or Printer | for Device |
| - lpd://(Your printer's IP address)/binary_p1 | for Device URI |
| - Brother | for Make/Manufacturer Selection |
| - Printer-driver's name | for Model/Driver Selection |

Note for Ubuntu8.10: Please set "AppSocket/HP JetDirect" for Device menu

```
[root@linux4 printing]# cat /etc/cups/printers.conf
# Printer configuration file for CUPS v1.4.6
# Written by cupsd on 2011-02-24 01:34
# DO NOT EDIT THIS FILE WHEN CUPSD IS RUNNING
<Printer MFC295CN>
Info MFC295CN
Location MFC295CN
MakeModel Brother MFC-295CN CUPS
DeviceURI lpd://192.168.1.5/binary_p1
State Idle
StateTime 1298491440
Type 8425548
Filter application/vnd.cups-raw 0 -
Filter application/vnd.cups-postscript 0 brlpdwrappermfc295cn
Filter application/vnd.cups-command 0 commandtops
Accepting Yes
Shared No
JobSheets none none
QuotaPeriod 0
PageLimit 0
KLimit 0
OpPolicy default
ErrorPolicy stop-printer
Attribute marker-colors \#000000,\#FFFF00,\#00FFFF,\#FF00FF
Attribute marker-levels 0,0,0,0
Attribute marker-names Black Ink Cartridge,Yellow Ink Cartridge,Cyan Ink Cartridge,Magenta Ink Cartridge
Attribute marker-types inkCartridge,inkCartridge,inkCartridge,inkCartridge
Attribute marker-change-time 1298491443
</Printer>
```

```
[root@linux1 cups]# lpstat -a
```

```
Brother_MFC-295CN accepting requests since Thu 24 Jun 2010 06:52:15 PM IST
```

Test the printer

lp <filename>

Modify pasta_pdf.cfg for PDF Printing

```
cd $FND_TOP/resource
```

```
vi pasta.pdf.cfg - confirm the below.
```

```
% Preprocess for PDF output
```

```
% This is an example for PDF output to print.
```

```
; Xpdf
```

```
preprocess=pdftops {infile} {outfile}
```

```
; Ghost Script
```

```
; preprocess=pdf2ps {infile} {outfile}
```

```
; Acrobat
```

```
; preprocess=acroread -toPostScript -pairs {infile} {outfile}
```

For landscape printing only

```
cp pasta_pdf.cfg pasta_pdf_land.cfg
```

```
vi pasta_pdf_land.cfg
```

Modify the below line

```
printCommand=lp -c -o landscape -d{printername}
```

Restart the concurrent processing server after the changes

Register the printer with Oracle Applications

Login with System Administrator Responsibility

- Check printing – Change Style – PDF Publisher

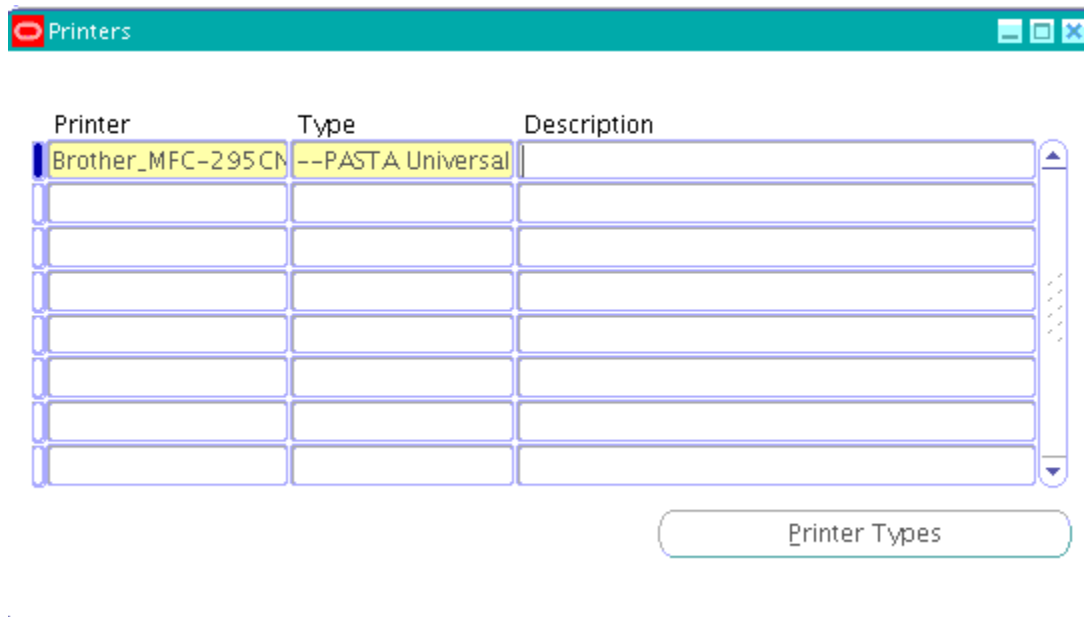
The screenshot shows the 'Concurrent Programs' configuration window for the program 'Format Payment Instructions'. The window is divided into several sections:

- Program Information:** Program Name: Format Payment Instructions (checked Enabled), Short Name: IBY_FD_PAYMENT_FORMAT, Application: Payments, Description: Formats payment instructions.
- Executable:** Name: IBY_FD_PAYMENT_FORMAT, Method: Java Concurrent Program, Options: (empty), Priority: (empty).
- Request:** Type: (empty), Incrementor: (empty), MLS Function: (empty).
 - Use in SRS
 - Run Alone
 - Enable Trace
 - Allow Disabled Values
 - Restart on System Failure
 - NLS Compliant
- Output:** Format: PDF (dropdown), Save (S), Print, Columns: (empty), Rows: (empty), Style: PDF Publisher, Style Required, Printer: (empty).
- Business Events:**
 - Request Submitted (Y)
 - Request On Hold
 - Request Resumed
 - Request Running
 - Program Completed
 - Post Processing Started
 - Post Processing Ended
 - Request Completed (Z)

At the bottom of the window, there are four buttons: Copy to..., Session Control, Incompatibilities, and Parameters.

Navigation: System Administrator - Install – Printer

If printer is known printer (HP), select type accordingly else select PASTA Universal Printer



We need to Register the Printer with the same name which has been derived at the Linux BOX level, and define the Type as Brother_MFC-295CN

Navigation: System Administrator - Install - Printer – Driver

In this we will be having four options where we can define a Custom Printer as well as Custom Printer Drivers for Printer.

We need to register a Printer in the following Steps: Driver -> Styles -> Types -> Register

In order to make use of PDF Printing Directly from a Concurrent Program we need to have PASTA_PDF Driver existing in the Oracle Applications.

Navigation: System Administrator -> Install -> Printer -> Driver

Driver Name : PASTA_PDF

User Driver : Pasta PDF Driver

Description : Pasta driver to print pdf converted to PostScript by 3rd party utility

Driver Method : Program

Driver Method Parameters : Spool File

Program Name : FNDPSTAX

Arguments: -pn\$PROFILE\$.PRINTER -f\$PROFILE\$.FILENAME -c\$PROFILE\$.CONC_COPIES -
Fpasta_pdf.cfg

Printer Drivers

Driver Name: PASTA_PDF User Driver: Pasta PDF Driver

Description: Pasta driver to print pdf converted to PostScript by 3rd party utility

SRW Driver: []

Platform: []

Driver Method

Command

Program

Subroutine

Driver Method Parameters

Spool File

Standard Input

Program Name: FNDPSTAX

Arguments: -pn\$PROFILES\$.PRINTER -f\$PROFILES\$.FILENAME -c\$PROFILES\$.CONC_COPIES -Fpa:

Initialization: []

Reset: []

We need to check whether a PDF Publisher Styles exists or not.

Navigation: System Administrator ->Install -> Printer -> Style

Print Styles

Style Name: PDF Publisher Seq: 24

User Style: PDF Publisher

SRW Driver: []

Description: []

Layout

Columns: 132 Rows: 55 Suppress Header

Orientation: []

Check that for the type PASTA Universal Printer Type - PDF Publisher and PASTA_PDF are present.

| Style | Driver Name |
|----------------------|-----------------|
| CANADACHEQUE | CANADACHEQUE |
| DYNAMIC | PASTA_DYNAMIC |
| ERW2Paper2001orlater | PASTA_ERW2 |
| GRKINVRPT | PASTA_GRKINVRPT |
| LANDSCAPE | PASTA_LANDSCAPE |
| LANDWIDE | PASTA_LANDWIDE |
| PDF Publisher | PASTA_PDF |

Defining and Assigning the Printer at Concurrent Program Level

Let us consider the Example of Defining a printer for Concurrent Program.

Usually we define Portrait or Landscape for the Style in the Concurrent Program at Output Tab.

Here we need to specific PDF Publisher as the Style in Concurrent Program and as well we have to mention the Name of the Printer which was registered in the Oracle Applications.

Concurrent Programs

Program: Enabled

Short Name:

Application:

Description:

Executable

Name: Options:

Method: Priority:

Request

Type:

Incrementor:

MLS Function:

Use in SRS Allow Disabled Values

Run Alone Restart on System Failure

Enable Trace NLS Compliant

Output

Format:

Save (S)

Print

Columns:

Rows:

Style:

Style Required

Printer:

Business Events

Request Submitted ... Request Running Post Processing Ended

Request On Hold Program Completed Request Complete...

Request Resumed Post Processing Started

Run this program to get the output at Printer Tray

Select Options to select printer name and give number of copies as 1

Bounce the Concurrent Managers in case things didn't work

Submit Request

Run this Request...

Name: Active Users

Operating Unit:

Parameters:

Language: American English

Copy...

Language Setting...

Debug Options

At these Times...

Run the Job: As Soon as Possible

Schedule...

Upon Completion...

Save all Output Files

Layout:

Notify:

Print to: Brother_MFC-295CN

Options...

Help (C) Submit Cancel

References: <http://www.netikus.net/documents/Linux-Printing-Cups.pdf>

http://www.appsassociates.com/resources/bi-resources/PDF_Printing.pdf

Printing junk characters or getting the below error

Problem ->

Request ID 62347 completed warning and below is the log message, but when we use reprint option it printed properly

Printing output file.

Request ID : 62347
Number of copies : 1
Printer : test

Error: May not be a PDF file (continuing anyway)
Error (0): PDF file is damaged - attempting to reconstruct xref table...
Error: Couldn't find trailer dictionary
Error: Couldn't read xref table
Pasta: Error: Preprocess failed. Command=pdftops
/d01/oracle/linux1/inst/apps/linux1/apltmp/pasta2433_0.tmp
/d01/oracle/linux1/inst/apps/linux1/apltmp/pasta2433_1.tmp
Pasta: Error: Preprocess or Print command failed!!!
APP-FND-00500: AFPPRN received a return code of failure from routine FDUPRN. Program exited with status 1

Cause: AFPPRN received a return code of failure from the OSD routine FDUPRN. Program exited with status 1.

Action: Review your concurrent request log file for more detailed information.

Solution

check
\$FND_TOP/resource

pasta_pdf.cfg

preprocess=pdftops {infile} {outfile}

Also,

Cause

Report" is defaulting to the RTF output format instead of PDF format. The BI Publisher Template "Default Output Type" is incorrectly set to the RTF format.

Solution

1. Verify / set the "Default Output Type" to PDF as follows:
 - a) Responsibility = XML Publisher Administrator
 - b) Navigate --> Home: Templates
 - c) Query the Template Code
 - d) Click on the template name
 - e) If the "Default Output Type" on the right side of the screen is not set to "PDF", click on the "Update" and set the "Default Output Type" to PDF and save the change.
2. Retest submitting and printing the report with the "PDF Publisher" print style.

In BI-Publisher the output format should be pdf instead of rtf, and output format should be XML