



# OpenPrinting WG Asia/Japan Regional Group

**OPFC (OpenPrinting Framework Consortium)**  
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# OpenPrinting WG Asia/Japan Regional Group

- **Activities in 2008**
  - **Vector Printer Driver API (OPVP)**
  - **CUPS PDF Filters**
- **Active Participants (alphabetic order)**
  - Atsushi Sekiguchi (Konica Minolta)
  - Hidenori Ishii (Avasys)
  - Hidenori Kanjo (BBR)
  - Koji Otani (BBR)
  - Naruhiko Ogasawara (Ricoh)
  - Olaf Meeuwissen (Avasys)
  - Osamu Mihara (Fuji Xerox)
  - Takashi Kunai (The Linux Foundation)
  - Tatsuya Saito (NEC Soft)
  - Toshihiro Yamagishi (Turbolinux)
  - Yasumasa Toratani (Canon)
  - Yasushi Osonoi (The Linux Foundation)
  - Yoshinari Chigusa (Ricoh)



# Vector Printer Driver API (OPVP) - Activities and Current State

- **Define Printer Driver API Supporting High Level Graphics Functions**
  - Vector drawing API, such as drawing lines, bezier curves, rectangles, images, etc..
  - Renderer (such as poppler and Ghostscript) calls a driver via the API, then driver generates printer command data
- **Version 0.2 – Former Spec.**
  - API Spec. - released in 2003
  - HP PCL5, EPSON, NEC and Canon Drivers have been released so far
  - **Integrated code into many distros as “opvp” driver with GS**
- **Version 1.0 – Latest Spec.**
  - <ftp://ftp.pwg.org/pub/pwg/fsg/vector/pdapispec-1.0rc5.odt>
  - Implementation and driver testing has been completed
  - NEC and Canon Drivers have been tested
  - **Version 0.2 and 1.0 compliant “opvp” driver has been committed to GS8.63**
    - Both the opvp 0.2 compliant printer driver and the opvp 1.0 compliant printer driver work under the new “opvp” code w/o any modifications
  - **Ready to be released with Ubuntu**



# CUPS PDF Filters - Activities and Current State

- **Develop Four CUPS PDF Filters**
  - imagetopdf, pdftopdf, pdftoopvp and pdftoraster
  - Already implemented and released at <http://sourceforge.jp/projects/opfc>
- **SVN Repositories**
  - <http://svn.sourceforge.jp/cgi-bin/viewcvs.cgi/imagetopdf/?root=opfc>
  - <http://svn.sourceforge.jp/cgi-bin/viewcvs.cgi/pdftopdf/?root=opfc>
  - <http://svn.sourceforge.jp/cgi-bin/viewcvs.cgi/pdftoopvp/?root=opfc>
  - <http://svn.sourceforge.jp/cgi-bin/viewcvs.cgi/pdftoraster/trunk/?root=opfc>

| CUPS PDF filters   | Description   |
|--------------------|---|
| <b>imagetopdf</b>  | Convert several kind of images to PDF   |
| <b>pdftopdf</b>    | Convert PDF created by application or previous CUPS filter to layouted (N-up, scaling, etc) PDF |
| <b>pdftoopvp</b>   | Parse PDF and call a driver which is compliant with Vector Printer Driver API (OPVP)            |
| <b>pdftoraster</b> | Parse PDF and output data for a CUPS raster compliant driver                                    |



# OpenPrinting WG Asia/Japan Regional Group - Road-Map/Next-Steps

- **Vector Printer Driver API and Implementation**
  - Maintain "opvp" code and fix bugs if found
  - Investigate further requirement, such as text, color, etc, and enhance the API
  - Develop driver example code, such as PCL6, etc
- **CUPS PDF Filters**
  - Maintain filters code and fix bugs if found
  - Implement pdftoopvp using "libpoppler" to prepare good code maintenance
    - imagetopdf, pdftopdf and pdftoraster have been implemented using external PDF library "libpoppler", but not yet pdftoopvp
- **Seek New Requirements for 2009 Activities**
  - API Standardization as well as implementation
  - Printing and scanning



Questions?

**Any questions?**