cups-filters
The non-Apple part of CUPS, maintained by OpenPrinting

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- **From version 1.6.x on CUPS dropped features not needed for Mac OS X**

  ➢ Filters for file conversion and Postscript workflow: imagetops, pdftops, pstoraster, …

  ➢ Serial and parallel backends

  ➢ CUPS broadcasting/browsing for automatic availability of shared printers on remote CUPS client, replacement technology Bonjour has only broadcasting and no browsing, also incompatible with old CUPS versions

- **Dropped CUPS filters were put into there own source package on CUPS SVN → Seed for cups-filters**

- **cups-filters started by OpenPrinting end of 2011**

  ➢ Legacy filters package of CUPS with pure PS workflow filters dropped

  ➢ PDF workflow filters (formally maintained as CUPS add-on) added

  ➢ cups-browsed added end of 2012 for Bonjour browsing and legacy CUPS broadcasting/browsing

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- **Dropped CUPS filters made up a PostScript-based print workflow**

- **cups-filters supplies filters for the new PDF-based print workflow**

  - Filters from CUPS legacy package: commandtoescpx, commandtopclx, imagetoraster, pdftops, rastertoescpx, rastertopclx

  - PDF filters from OpenPrinting Japan: pdftopdf (old Poppler-based), pdftoraster (Poppler-based), pdftoopvp, imagetopdf

  - PDF filters from Google Summer of Code projects: texttopdf, pdftoijs, pdftopdf (new QPDF-based)

  - Also added: bannertopdf, textonly, pstopdf

  - Dropped filters from CUPS legacy package: Bannertops, imagetops, texttops

- **cups-filters adopts serial and parallel backends**

- **Cups-filters usually used with Ghostscript, supplying gstoraster, gstopxl**

- **CUPS 1.6.x drops CUPS broadcasting and browsing**

- **CUPS 1.6.x does Bonjour broadcasting as defined as PWG standard, but does no Bonjour browsing**

- **cups-browsed solves the problems caused by this (works with all apps):**

  - In **default configuration**, cups-browsed does **Bonjour browsing** and auto-generates local raw queues pointing to the discovered remote CUPS queues, solving the problem with remote CUPS 1.6.x servers

  - **Legacy Option** (via config file): cups-browsed does **CUPS browsing** on CUPS 1.6.x clients with older remote CUPS servers

  - **Legacy Option:** cups-browsed does **CUPS broadcasting** on CUPS 1.6.x servers for older remote CUPS clients.

  - **Legacy Option:** cups-browsed does **BrowsePoll**, on CUPS 1.6.x clients for servers with broadcasting turned off.

- **Alternative: GTK 3.8.x adds Bonjour browsing to the print dialog (GNOME/GTK apps only!)**

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Let's go mobile!

- **Mobile systems have different printing system demands:**
  - ➢ Move between different local networks (home, office, …)
  - ➢ No local printers, only network printers
  - ➢ Simple UI, no printer setup tool
  - ➢ Lightweight printing stack → No driver/PPD library
- **cups-browsed is already browsing Bonjour broadcasts:**
  - ➢ It already picks up remote CUPS queues
  - ➢ In the works: Also pick up network-connected printers:
    - ▪ Only IPP printers, as they provide capability info
    - ▪ IPP Everywhere (PWG Raster, …, excelent capability info)
    - ▪ PDF
    - ▪ PostScript
    - ▪ PCL 5c/5e/6/XL
    - ▪ Auto-generate PPD, create queue
  - ➢ Removes queues on shutdown or when printer disappears

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Questions?