

ChromiumOS Printing Update

Printer Working Group F2F May 2023

Agenda

- Review of ChromiumOS
- Projects used in printing
- Features in Chromium
- Improvements since last year
- Work in progress



What is ChromiumOS?

- Google's Open Source operating system for Chromebooks (and other devices)
 - Approximately the same as ChromeOS minus some Google-only parts
- Gentoo derivative
 - Everything is built from source
- Supports a variety of ARM and x86-64 architectures
- Code available at <u>chromium.googlesource.com</u>



Open Source Printing Projects in ChromiumOS

- CUPS
 - Print spooling
 - Driverless support
- <u>cups-filters</u>
 - gstoraster
 - pdftops
 - foomatic-rip
- Ghostscript

- <u>sane-airscan</u>: Mopria eSCL scanning
- SANE
- <u>avahi</u> + <u>nss-mdns</u>: mDNS resolution
- <u>ippusb_bridge</u>: local IPP-USB sockets



Features in Chromium

- mDNS detection
- Driverless support
- Automatically matching printers with (Google-hosted) PPDs
- IPP-USB through local (UNIX domain) sockets



Recent Improvements

- Per-user setup (printer lists, driverless localizations, etc)
- Support for IPP client-info attribute
- More PPDs and CUPS filters
- Improved automatic setup for older printers
- PPD viewer
- General audit and cleanups of media size names
- Lots of test coverage and automation improvements

Work in Progress

- Roll printing
 - Mapping PPD trim options to IPP finishings
- Media type and borderless printing
 - Challenges with getting localizations for non-standard strings
- Ongoing work in OAuth2 support
 - Available for testing behind a Chrome flag
 - Tracking with PWG discussions before moving to publicly available state
- General movement towards IPP-USB and IPP Everywhere





Thank you!

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Google Open Source