Printing Color Management
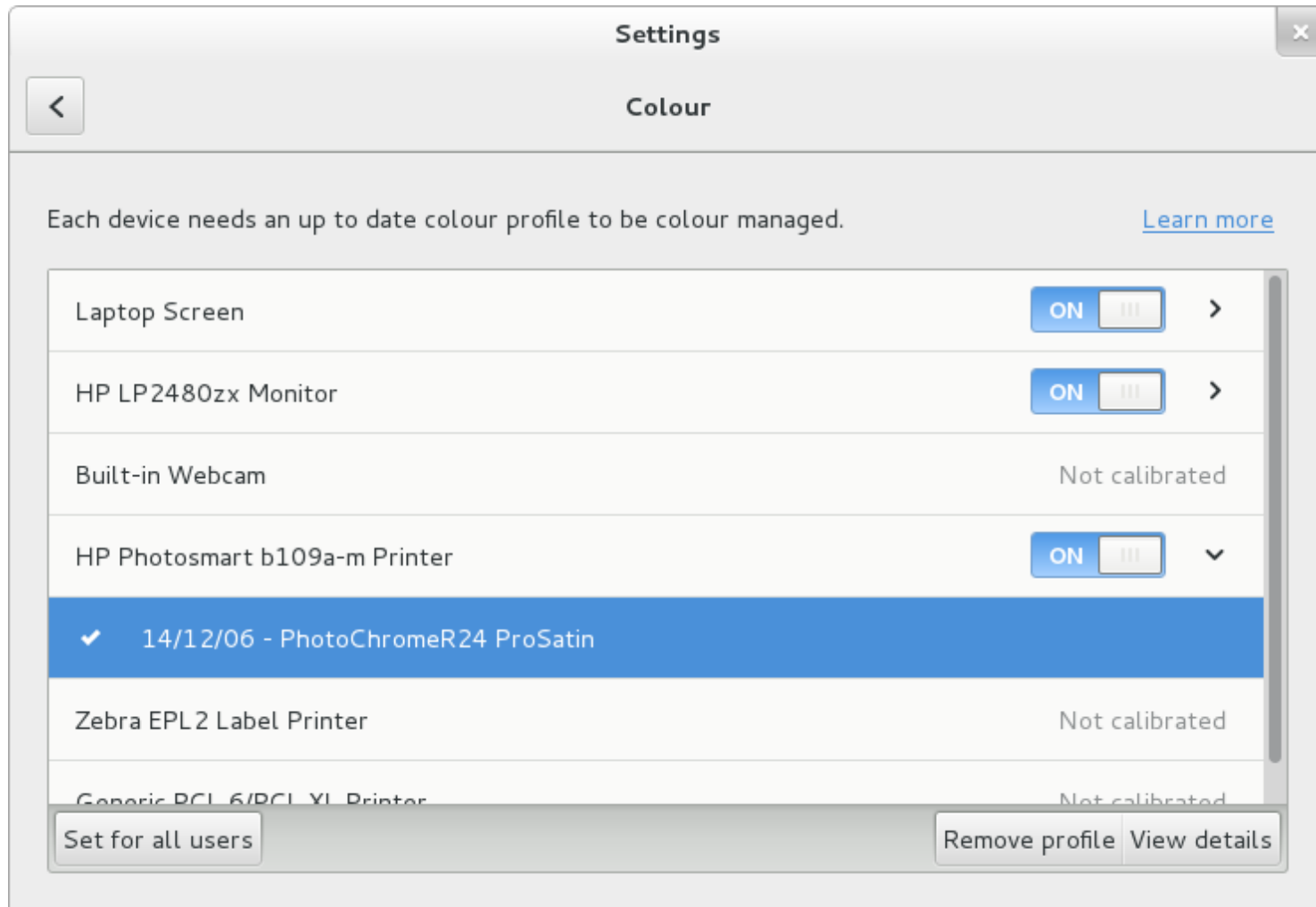
Richard Hughes
colord maintainer, Red Hat UK
15th May 2013

First, caveat emptor

- I'm only going to be talking about:
    - colord integration in Linux
    - My 40,000ft view on how things should work
    - It's okay to disagree with me, *cough*, libCmpx

- Not all of this stuff is 100% working or well tested

Introducing colord on the desktop...

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Priority for a profile in the printing system

1 ⟶ 2 ⟶ 3

OutputIntent	colord	PPD
User document override	User/admin supplied defaults	Vendor supplied defaults

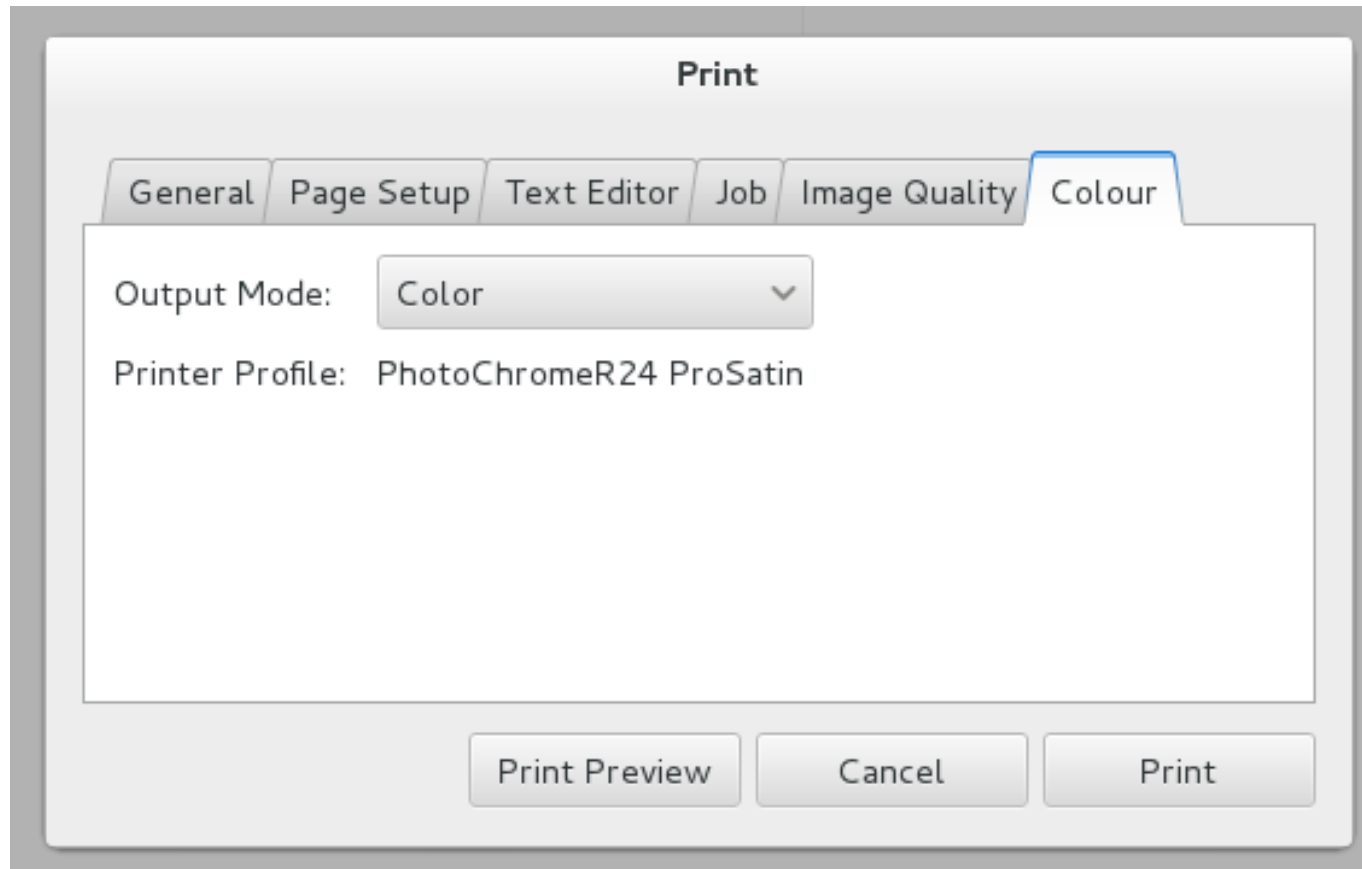| Ghostscript	gstoraster foomatic

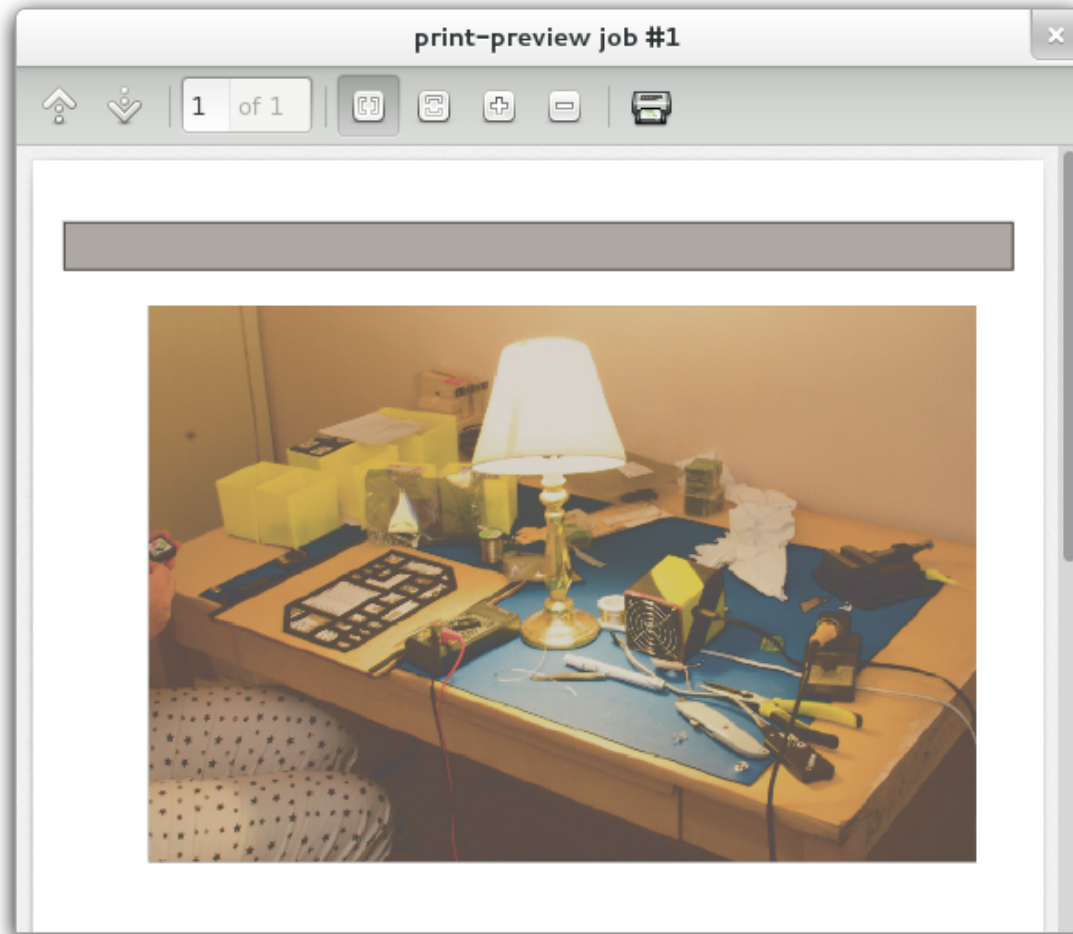# Implementation of colord override

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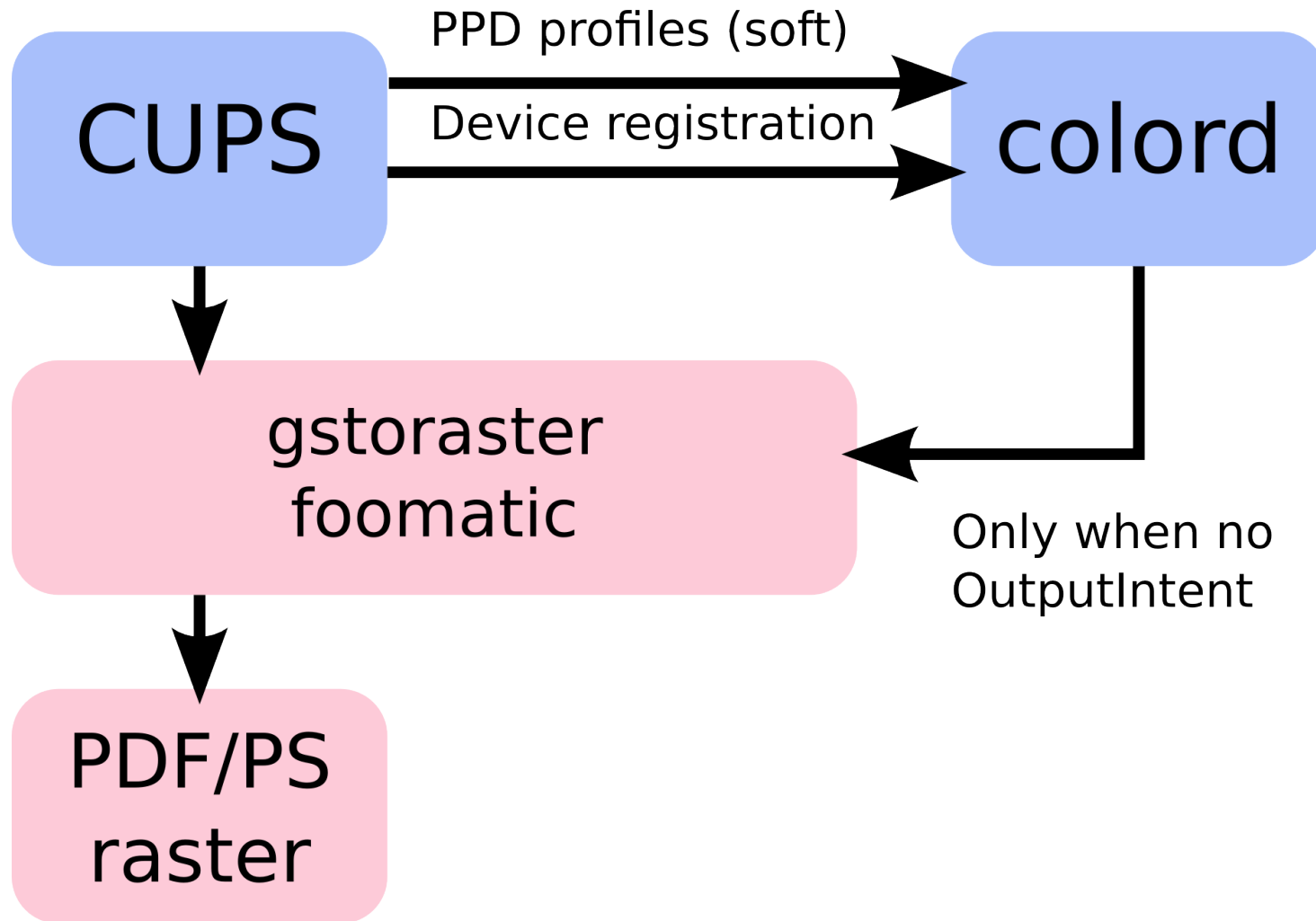
Gtk+ Print Dialog

- Deliberately no way to set OutputIntent

Print Preview as Poor-mans Softproofing

- Prototyped at ColorManagement Hackfest 2012

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Gtk+ Print Dialog Future

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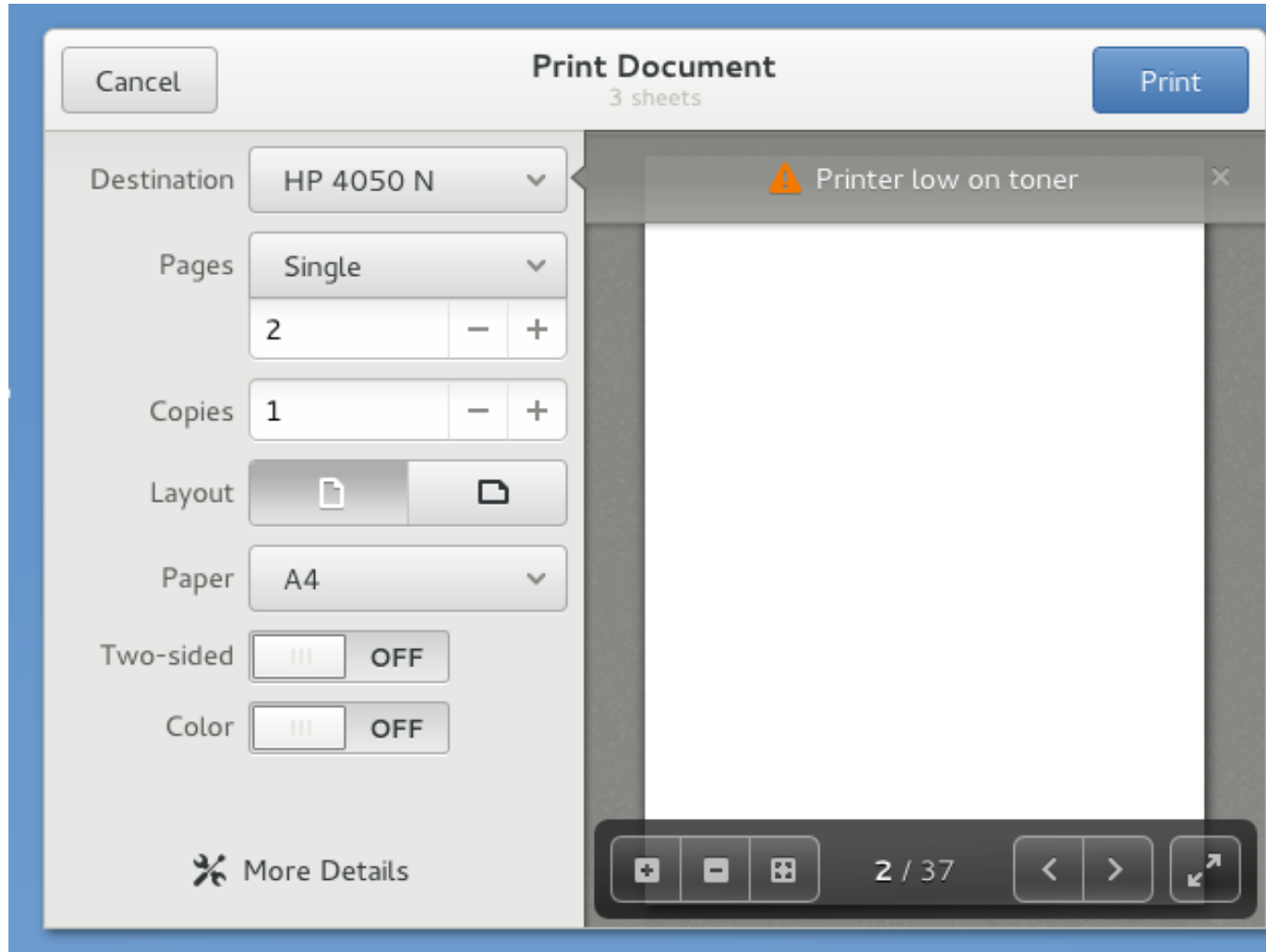
Device to Profile ICC Metadata

- **`MAPPING_format`**

  - The format used for matching, e.g. `ColorModel.OutputMode.OutputResolution`

- **`MAPPING_qualifier`**

  - The qualifiers the profile should adopt by default, e.g. `RGB.Plain.300dpi`

- **`MAPPING_device_id`**

  - The device this profile should be paired with, e.g. `cups-Photosmart-B109a-m`

Call to action

What needs doing:

- Test and implement the OutputIntent functionality

  - Adding code where required to Ghostscript

- Gtk+ print dialog work needs to be completed

  - Also links in with Wayland and GPU FSCM

- Make easier to generate ICC profiles for printers

  - Depends on ink / paper / printer / printer-driver