

# GSoC Project Updates - 2021

PWG Aug F2F Meeting  
Aug 18, 2021



## Open Printing

making printing just work

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# GSoC 2021 Projects

- **cups-filters: Create a single, universal CUPS filter to replace the chain of individual filters**

To convert the job data format from the input data type to what the printer needs CUPS calls a sequence of different individual filters, each as a separate executable. To reduce the overhead of calling external executables, we will let a sequence of filter functions be called by a single executable.

- **Firmware and other file handling in PAPPL**

For some printers there are firmware files, color profiles, or other data files needed to make them correctly, also a printer driver could handle firmware updates for the printer. So Printer Applications need a way to let the user upload files and manage them. This will be implemented in this project.

- **GUI for listing and managing available IPP Print/Scan services (or DNS-SD-advertised network services in general)**

All available printers and scanners will simply be IPP services (physical network printers or Printer Applications) and drivers will be Printer Applications. They are managed by their web administration interfaces and/or IPP System Service. So the user needs to know about the services available and also needs an easy way to get to their web admin interfaces. In this project an appropriate GUI is developed.



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- **Converting filters to filter functions**

To allow easy use of the CUPS filters in Printer Applications we convert the individual executables into library functions, the filter functions. Most of them are already converted. This project will convert the missing ones: texttopdf, bannertopdf, pdftoraster, and rastertopwg.

- **cups-filters: Make sure all filter functions work without PPD files**

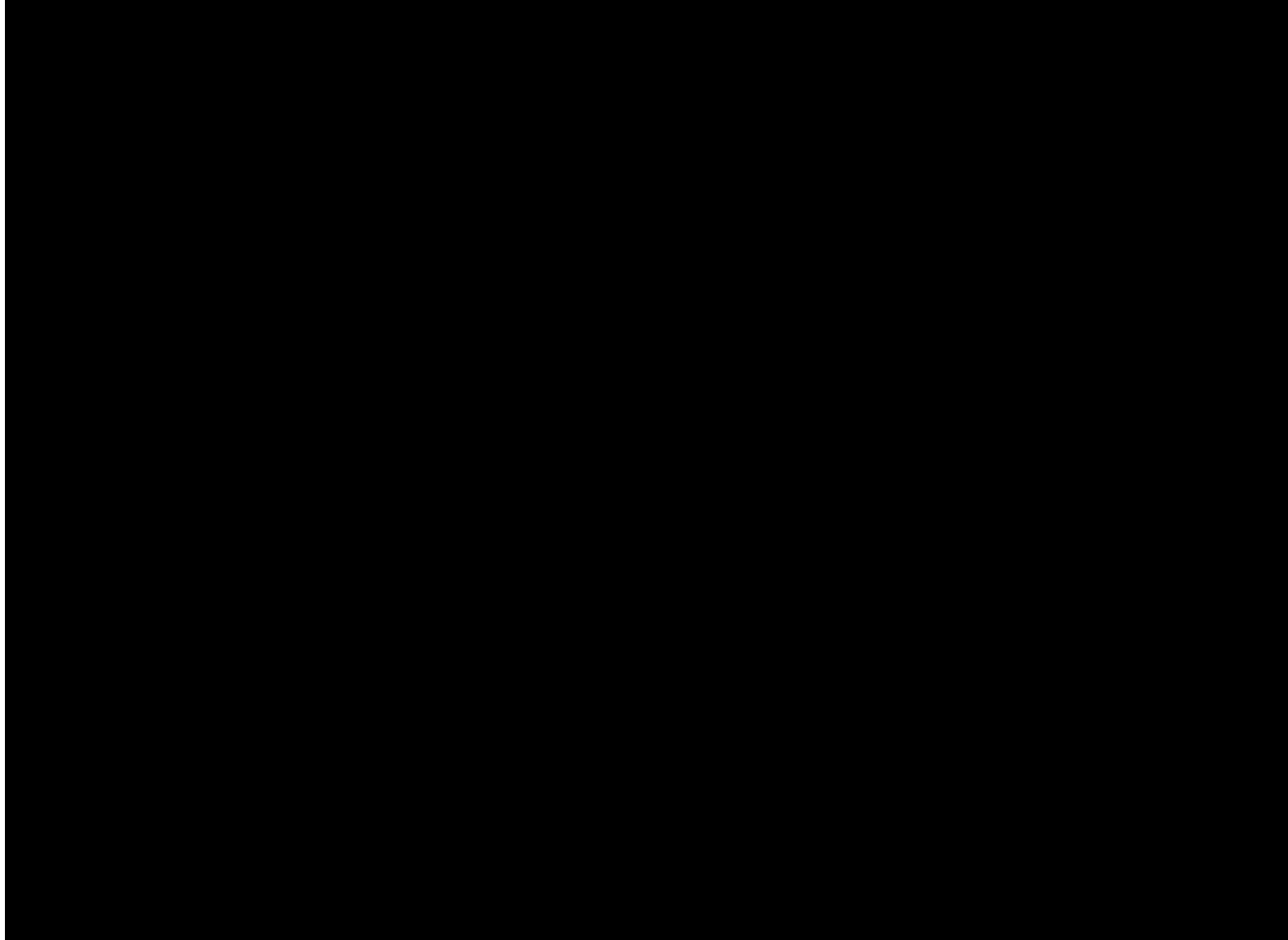
We want to get rid of PPD files in the printing process and control jobs by IPP attributes. For this all filter functions also need to work correctly if there is no PPD file assigned to the print queue. This project is about checking all filter functions whether they also work only with printer and job IPP attributes.

Click [here](#) for more details.



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Demo



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# GSoC 2021 Mentors & Admins

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- **Michael Sweet**
- **Ira McDonald**
- **Smith Kennedy**
- **Danny Brennan**
- **Zdenek Dohnal**
- **Alexander Pevzner**
- **Mohit Mohan**
- **Vikrant Malik**
- **Sahil Arora**
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- **Rithvik Patibandla**
- **Nilanjana Lodh**
- **Dheeraj Yadav**
- **Jai Luthra**
- **Sambhav Dusad**
- **Admins:**  
Till Kamppeter  
Aveek Basu

Welcome  
**New**  
Mentors !!



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Thank You

Thank You !!

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