

# Driverless Fax - “a new reality”

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- **IPP Fax**

The standard for sending faxes, as print jobs, through the fax functionality of the device.

- **Fax Support:**

The fax support is provided by an additional printing channel with its own URI (ending with "/ipp/faxout" instead of "/ipp/print") and printing to this channel makes the document being faxed. It naturally requires supplying the phone number as an IPP attribute,.

- **Capabilities:**

Polling the device FAX URI for capabilities, you get the fax-specific "printer" capabilities and options to be used for fax jobs.

- **Readiness:**

Current devices have this functionality readily available but the desktop applications need to be groomed to handle the same. This is far from intuitive and the usual computer user without deeper knowledge of printing with Linux would not find out how it works.



# The Future

- **Components**

GUI - To handle out the user interface.

Non-GUI - For the backend processing.

- **Backend:**

“driverless-fax” utility to provide discovery of the printers having the capability of IPP Fax: It is a CUPS backend (linked into `/usr/lib/cups/backend/`), only acting in discovery mode (being called by CUPS without arguments when `lpinfo -v` or an equivalent IPP call from a printer setup tool is performed). It will list all driverless-capable fax-supporting printers with IPP URIs. This way driverless IPP fax-printers will get listed under the discovered network printers in printer setup tools (also when actually USB-connected when IPP-over-USB or a Printer Application is in use).

It is also a PPD generator executable (linked to `/usr/lib/cups/driver/`). CUPS calls it with "list" argument when doing `lpinfo -m` or the equivalent IPP call. Then it will return the PPD URI for each driverless IPP printer it discovers. This makes a printer setup tool list a `make/model/driver` entry for each of the discovered driverless-IPP-capable printers. If the printer setup tool associates discovered printers and driver entries automatically, a driverless IPP fax supported printer is easily set up.



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