

IPP Working Group Session

February 2, 2011

Wailea-Makena, HI

PWG F2F Meeting

IPP WG Meeting Agenda



9:00 - 9:10	Introductions, Minute Taker, Agenda Review
9:10 - 9:20	Current IPP WG status
9:20 - 10:30	Color Management and Media Selection
10:30 - 10:45	Break
10:45 - 12:00	Action Items and Next Steps
12:00 - 1:00	Lunch
1:00 - 2:30	Plenary
2:30 - 3:15	CUPS Raster Subset (PWG Raster)
3:15 - 3:30	Break
3:30 - 4:45	Proximity, Scoping and Levels, Requirements
4:45 - 5:00	Next steps, wrap-up

IPP WG Officers



- IPP WG Co-Chairs:
 - Paul Tykodi (TCS)
 - Ira McDonald (High North)
- IPP WG Secretary:
 - Michael Sweet (Apple)
- IPP WG Document Editors:
 - Ira McDonald (High North) – IPP Version 2.0, IPP Everywhere Requirements, IPP Everywhere, IPP JPS3
 - Michael Sweet (Apple) – IPP Version 2.0, IPP Everywhere Requirements, IPP Everywhere, IPP JPS3, PWG Raster

IPP WG Status



- PWG Formal Vote for IPP/2.0 SE in progress
 - Voting ends February 14, 2011
 - <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp20-20110110.pdf>
- How to Vote
 - Send email to:
 - msweet"at"apple"dot"com* (Mike Sweet, PWG Chair, IPP/2.0 SE Co-Editor)
 - ptykodi"at"tykodi"dot"com* (Paul Tykodi, PWG Secretary, IPP WG Co-Chair)
 - blueroofmusic"at"gmail"dot"com* (Ira McDonald, IPP WG Co-Chair, IPP/2.0 SE Co-Editor)
 - Put your vote in the subject:
 - IPP 2.0 SE Formal Vote-<company name>-<last name>-Yes*
 - IPP 2.0 SE Formal Vote-<company name>-<last name>-No*
 - IPP 2.0 SE Formal Vote-<company name>-<last name>-Abstain*

CUPS Goodies

CUPS ipptool



- <http://www.cups.org/software.php>
- IPP/1.1, IPP/2.0, and IPP/2.1 conformance tests
 - Working on IPP/2.2 conformance test
- Binaries available for Linux, Mac OS X, and Windows
- Thousands of downloads since April
- Features in October release:
 - “Continue past errors” mode
 - Conditional tests based on success/failure of previous test
 - Timeout, authentication, and ipps: support
- New release coming soon:
 - Validate-Job tests
 - Tests for some PWG 5100.x specifications
 - IPP/2.2 conformance test?

CUPS ipptool



- Simple text-based test files:

```
{  
  NAME "Name of test"  
  OPERATION Get-Printer-Attributes  
  GROUP operation-attributes-tag  
  ATTR charset attributes-charset "utf-8"  
  ATTR naturalLanguage attributes-natural-language "en"  
  ATTR uri printer-uri "$uri"  
  STATUS successful-ok  
  EXPECT printer-uri-supported OF-TYPE uri  
}
```

CUPS ippserver (new!)



- Sample IPP/2.0 conforming server implementation
 - Current implementation saves jobs to a directory/folder
 - Also provides Bonjour service registration and simple HTTP status page
 - Ultimate goal is to provide as part of CUPS library and have it abstract away the basic semantic model data and behaviors with entry points that actually do the work (print, cancel, etc.)
 - LGPL2
- Part of the CUPS 1.5 developer snapshots at:
 - <http://www.cups.org/software.php>

IPP Everywhere

IPP Everywhere Topics



- Color Management
- Media Selection
- CUPS Raster Subset
- Proximity
- Scoping and Conformance Levels
- Requirements Outline

Color Management



- Output rendering intent for out-of-gamut colors
- Device ICC color profile(s) for soft proofing
- "print-color-mode (type2 keyword)" to pick between color and monochrome

- Additional media-col member attributes:
 - media-bottom-margin (integer), media-left-margin (integer), media-right-margin (integer), media-top-margin (integer) to provide document margins - printer can choose proper mode to satisfy?
 - media-source (type3 keyword) to specify the input source/tray?
 - Media size, type, source, and margins often go together, but should these be first-class attributes?
 - Also media-*-supported first-class attributes to list supported values?
 - Extend Get-Printer-Attributes to filter on attributes other than document-format?
 - Useful for getting answers like "what are the supported media/margins for duplex printing?"

CUPS Raster Subset



- Draft specification posted:
 - <ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-pwgraster10-20110124.pdf>
- Open issues (proposals in draft):
 - How to handle margins?
 - How to handle duplex printing?

Proximity



- Proximity influences discovery, transport, and format choices
- Local (Wi-Fi/subnet) printing:
 - Discovery does not require dedicated infrastructure
 - Direct to Printer
 - High bandwidth, low-latency network
- Regional (intranet) printing:
 - Discovery requires dedicated infrastructure
 - Direct to Printer or multi-hop printing through server/service
 - Medium bandwidth, moderate-latency network
- Global (Internet/Cloud) printing:
 - Discovery requires dedicated infrastructure
 - Multi-hop printing through server/service and multiple firewalls
 - Low bandwidth, high-latency network

Scoping and Conformance Levels



- Which use cases/proximities do we tackle for IPP Everywhere?
- Do we want multiple conformance levels?

Requirements Outline



- Whiteboard discussion

IPP WG Next Steps

- IPP Version 2.0 Second Edition
 - PWG Formal Vote ends February 14, 2011
- IPP 2.0/2.1/2.2 Interoperability Testing
 - Interoperability event in Q2/Q3 2011
- IPP Everywhere
 - Initial draft requirements in Q1 2011
 - Initial draft specifications in Q1 2011
 - PWG Last Call of Requirements in Q2 2011
 - Prototype draft specifications in Q3 2011
 - Interoperability event in Q4 2011

IPP WG Info / Participation



- We welcome participation from all interested parties
- IPP Working Group web page
 - <http://www.pwg.org/ipp/index.html>
- IPP Working Group wiki
 - <http://pwg-wiki.wikispaces.com/IPP>
- Subscribe to the IPP mailing list
 - <http://www.pwg.org/mailhelp.html>
- IPP WG holds bi-weekly phone conferences announced on the IPP mailing list
 - Next conference call is February 14, 2011 at 1pm (EST)