

## IPP Working Group Session - Day 1

May 16, 2013 PWG F2F Meeting Cupertino, CA





#### Thursday, May 16

9:00 - 9:05	Introductions, Minute	e Taker, Agenda Review
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9:05 - 9:15 Current IPP WG status

9:15 - 12:00 IPP Shared Infrastructure Extensions (IPPSIX)

#### Friday, May 17

9:00 - 9:05	Introductions,	Minute Taker,	Agenda Review
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#### 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 Scan Service, IPP Shared Infrastructure Extensions (IPPSIX), IPP over HTTPS Transport Binding and "ipps" URI Scheme, LDAP Schema for Printer Services
  - Michael Sweet (Apple) IPP Shared Infrastructure Extensions (IPPSIX), IPP over HTTPS Transport Binding and "ipps" URI Scheme, LDAP Schema for Printer Services, IPP FaxOut Service, IPP Paid Printing Extensions
  - Smith Kennedy (HP) IPP Best Practices

#### **IPP WG Status**



- IETF RFCs in development:
  - IETF IPP over HTTPS Transport Binding and "ipps" URI Scheme
     IETF Area Directory Review
  - IETF LDAP Schema for Printer Services (updates RFC 3712)
    - IETF Area Directory Review
- PWG Specifications in development:
  - IPP FaxOut Service PWG Last Call
  - IPP Paid Printing Extensions Prototype Draft
  - IPP Scan Service Initial Draft
  - IPP Shared Infrastructure Extensions (IPPSIX)
    - Initial Draft
- PWG Best Practices in development:
  - IPP Best Practices Interim Draft
  - IPP Everywhere Self-Certification Manual
    - Interim Draft

#### **IPP WG Status**



- Candidate Standards:
  - PWG 5100.14-2013 IPP Everywhere
  - PWG 5100.13-2012 IPP: Job and Printer Extensions Set 3 (JPS3)
  - PWG 5101.1-2013 PWG Media Standardized Names 2.0 (MSN2)
  - PWG 5102.4-2012 PWG Raster Format
- Up-to-date pending IANA registrations online:
  - http://www.pwg.org/ipp/ipp-registrations.xml
    - Registrations for IPP Everywhere have been submitted
  - Continue to maintain this in parallel for new specifications
    - PWG version includes draft specifications that have reached prototype status

## IPP Everywhere Interoperability



- April 2013 ipptool release includes an IPP Everywhere test suite
  - http://www.cups.org/software.php
  - Have one reported test issue and one tool issue, will be doing another release shortly for June 2013
- Sample PWG Raster data available on PWG FTP server:
  - ftp://ftp.pwg.org/pub/pwg/ipp/examples/
- To run the test suite:
  - Download and extract the PWG Raster sample files
  - Run "ipptool -XV 2.0 *printer-uri* ipp-everywhere.test >results.plist"
- Send reports to:
  - Michael Sweet (msweet@apple.com)
- Schedule:
  - Preliminary anonymous results at August 2013 F2F
  - Final anonymous results at October 2013 F2F

#### **Document Editors Needed**



- As we complete our work on IPP Everywhere, we need to identify editors for the IPP Multifunction specifications
- Need a new lead editor for IPP Scan Service
- Additional multifunction services need to be addressed: System Control, FaxIn, Copy?, Transform
  - These should be straight-forward since they are essentially binding specs that reference the corresponding Semantic Model specs
  - See FaxOut as an example
- IPP Multifunction spec will likely be an update of IPP Everywhere with pointers to the corresponding service specifications

#### IPP FaxOut Service



- Current (stable) draft:
  - ftp://ftp.pwg.org//pub/pwg/ipp/wd/wdippfaxout10-20130501.pdf
- PWG Last Call until June 7, 2013
  - Please provide your acknowledgement and any comments

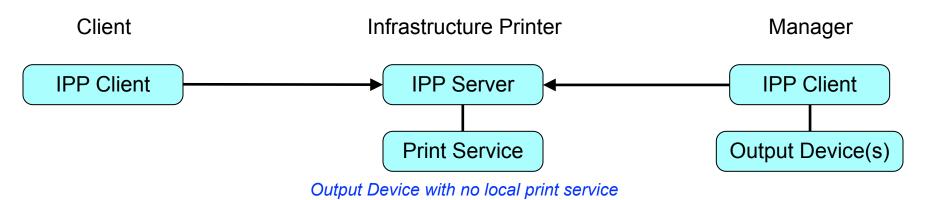
## IPP Shared Infrastructure Extensions (IPPSIX)

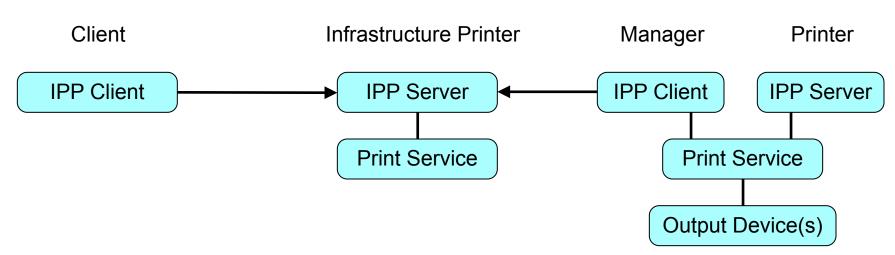


- Current (initial) draft:
  - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsix10-20130328.pdf
- Known issues:
  - Incorporate some clarifications suggested on the Cloud list
  - Need additional figure(s) that show relationship between IPP Manager, IPP Infrastructure Printer, and IPP Printer
- Proposed schedule:
  - Prototype draft Q3 2013
  - Stable draft, WG Last Call Q3/Q4 2013

# IPP Shared Infrastructure Extensions (IPPSIX)







Output Device with local print service and IPP Server



#### IPP Working Group Session - Day 2

May 17, 2013 PWG F2F Meeting Cupertino, CA





#### Friday, May 17

9:00 - 9:05	Introductions, Minute Taker, Agenda Review
9:05 - 10:30	IPP Everywhere Self-Certification
10:30 - 10:45	Break
10:45 - 11:45	IPP Best Practices
11:45 - 12:00	Next Steps



- Consensus thus far has been to define a PWGendorsed self-certification process for Printers:
  - Each vendor can perform the self-certification process or contract it out as desired
  - Passing self-certification grants the right to use the IPP Everywhere logo
  - Vendors will register their self-certification on the PWG web site, which will display a list of self-certified products and vendors
  - Self-certification will be open to everyone, not just PWG members
  - Primary purpose is marketing
- Self-certification of Clients is currently out-of-scope though technically feasible, e.g., with CUPS ippserver



- What we have today:
  - IPP test tool (CUPS ipptool)
  - Test files for ipptool
  - Sample PDF, JPEG, and PWG Raster files for testing
  - Skeleton self-certification manual and license agreement
  - Candidate IPP Everywhere logo:



- What we need:
  - Client software to drive adoption
    - Open Printing???
  - Bonjour test tool
    - Mike to provide in CUPS, LGPL2
  - WS-Discovery test tool
    - wsddebug\_client.exe tool is available from MS
    - Volunteer to write test script/program?
  - Enhancements to CUPS ipptool
    - Hostname and port validation support (Host: header)
    - Identification of ipptool version in output
    - Mike to provide in future CUPS ipptool releases



- What we need (con't):
  - More IPP test files to test media-ready, printer-state-reasons, printer-supply, etc.
    - Volunteers?
  - Define machine-readable report formats for test results
    - ipptool provides XML output using Apple's plist schema, probably sufficient for Bonjour and WS-Discovery
  - Develop registration page(s) on pwg.org
    - Daniel Dressler has volunteered to do this work along with the PWG site update
  - Complete the Self-Certification Manual
    - Define test procedures and requirements in detail
    - Define exception process for tests that might fail
    - Get ISTO legal review/updates of license agreement
    - Get ISTO to register new logos as trademarks



- What we need (con't):
  - Guinea pigs to test the self-certification manual and tools



- Nice to have:
  - GUI that automates self-certification
  - LDAP/SLP/SSDP test tools



- Self-certification test procedures and license agreement will be published using the PWG Best Practices process but use a different prefix and location of published documents:
  - "PWG Licensing" document
  - "IPP Everywhere Self-Certification Manual 1.0"
  - ftp://ftp.pwg.org/pub/pwg/general/licensing/lic-ippeveselfcert10-YYYYMMDD.{docx|pdf}
- Working drafts in IPP wd directory:
  - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeveselfcert10-YYYYMMDD.{docx|pdf}
- Major versions (1.0, 2.0, etc.) contain new content, requirements, license agreements, etc.
- Minor versions (1.1, 1.2, etc.) contain errata to the corresponding major version



- Proposed process for Major Versions:
  - IPP WG reviews potential changes for new versions, prepares a stable working draft
  - IPP WG Last Call of at least 10 working days (14 calendar days)
  - Review of WG Last Call, preparation of a new stable working draft as needed
  - PWG Last Call of at least 16 working days (22 calendar days) to span a face-to-face meeting
  - Formal Review by Steering Committee
  - PWG Formal Vote of at least 16 working days (22 calendar days)
  - Formal Approval by Steering Committee
  - Publication of new self-certification manual
- This is the process for Best Practices documents (section 8 of Process/3.0)



- Proposed process for Minor Versions:
  - IPP WG reviews potential changes for new versions, prepares a stable working draft
  - IPP WG Last Call of at least 10 working days (14 calendar days)
  - Review by IPP WG, preparation of a new stable working draft as needed
  - PWG Call for Objection of at least 16 working days (22 calendar days)
  - Review by IPP WG
  - Publication of new self-certification manual
- This is the process used for maintenance, clarifications, and technical errata (section 9 of Process/3.0)



- Current (interim) draft of IPP Everywhere Self-Certification Manual:
  - ftp://ftp.pwg.org/pub/pwg/ipp/wd/wdippeveselfcert10-20130501-rev.pdf
- Known issues:
  - This is just a skeleton document and needs significant amounts of content for the test procedures
  - The legal agreement still requires review by/content from the ISTO lawyers
- Proposed schedule:
  - Prototype draft in Q3/Q4 2013

#### **IPP Best Practices**



- Current (interim) draft at:
  - ftp://ftp.pwg.org/pub/pwg/ipp/whitepaper/tb-ipp-bestpractices-20130320.pdf
- Proposed schedule:
  - Prototype draft Q3/Q4 2013

#### IPP WG Next Steps



- IPP Everywhere
  - Virtual interoperability event for IPP Everywhere through October 2013 F2F
- IPP Multifunction
  - PWG Formal Vote of IPP FaxOut Service in Q3 2013
  - Initial working drafts of System Control Service and other specifications starting in Q1/Q2 2014
  - Interim working draft of IPP Scan Service in Q1/Q2 2014
- IPP Shared Infrastructure Extensions
  - Prototype working draft in Q3 2013
- Continue working on IPP Everywhere Self-Certification
  - Prototype working draft in Q3/Q4 2013
- Continue working on IPP Best Practices
  - Prototype working draft in Q3/Q4 2013

#### 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 June 3, 2013 at 3pm ET



## Backup Slides

#### XML plist Format



```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/
PropertyList-1.0.dtd">
<pli><pli>t version="1.0">
<dict>
  <key>Transfer</key>
  <string>auto</string>
  <key>Tests</key>
  <array>
     <dict>
        <key>Name</key>
        <string>Get printer attributes using Get-Printer-Attributes</string>
        <key>Operation</key>
        <string>Get-Printer-Attributes</string>
        . . .
     </dict>
  </array>
</dict>
</plist>
```