The Printer Working Group

IPP Workgroup Session, Day 1

April 29, 2015

PWG F2F Meeting

Sunnyvale, CA (hosted by Apple)

IPP WG Meeting Agenda, Day 1

April 29, 2015

When	What
2:45 - 3:00	IPP Workgroup Status
3:00 - 4:00	IPP Shared Infrastructure Extensions (INFRA)
4:00 - 5:00	IPP Implementor's Guide 2.0 (IG)

IPP WG Meeting Agenda, Day 2

April 30, 2015

When	What
9:00 - 10:15	IPP System Service (SYSTEM)
10:15 - 10:30	Break
10:30 - 12:00	IPP Everywhere Printer Self-Certification
12:00 - 1:00	Lunch
1:00 - 2:00	IETF IPP/1.1
2:00 - 3:00	IEEE IPP/2.0
3:00 - 3:15	Break
3:15 - 4:15	Proposals
4:15 - 4:30	Next Steps

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 Shared Infrastructure Extensions (INFRA), IPP System Service (SYSTEM), IETF IPP/1.1, IEEE IPP/2.0, LDAP Schema for Printer Services
  - Michael Sweet (Apple) – IPP Shared Infrastructure Extensions (INFRA), IPP System Service (SYSTEM), IETF IPP/1.1, IEEE IPP/2.0, LDAP Schema for Printer Services
  - Smith Kennedy (HP) - IPP Implementor's Guide 2.0 (IG)

- IETF RFCs in development:
    - IETF IPP/1.1: Encoding and Transport (updates RFC 2910/3382)
    - IETF IPP/1.1: Model and Semantics (updates RFC 2911/3382)
    - IETF LDAP Schema for Printer Services (updates RFC 3712)
        - IETF + IANA Approved, RFC Editor's Queue

- PWG Specifications in development:
    - IPP 2.0, 2.1, and 2.2   - Stable Draft
    - IPP Everywhere Printer Self-Certification Manual 1.0 (SELFCERT)
        - Prototype Draft
    - IPP Implementors Guide 2.0 (IG)   - Stable Draft, in PWG Last Call
    - IPP Shared Infrastructure Extensions (INFRA)
        - Stable Draft (PWG Last Call concluded)
    - IPP System Service (SYSTEM)   - Interim Draft

- Recent Candidate Standards:
  - PWG 5100.15-2014: IPP FaxOut Service (errata)
  - PWG 5100.17-2014: IPP Scan Service (SCAN)
  - PWG 5100.1-2014: IPP Finishings 2.0 (FIN)

- Recent IETF RFCs:
  - RFC 7472: IPP over HTTPS Transport Binding and "ipps" URI Scheme

- Up-to-date pending IANA registrations online:
  - http://www.pwg.org/ipp/ipp-registrations.xml
  - Continue to maintain this in parallel for new specifications
    - PWG version includes draft specifications that have reached prototype status
  - Also pending errata for PWG 5100.9 and 5107.3 to correct xxx-error usage (per WG mailing list discussion)
    - Explain issues and update registry for IANA Printer MIB (ASN.1 comments)
    - Update IANA IPP registry for keywords that do not require "-error" on the end

IPP Shared Infrastructure Extensions (INFRA)

- Current stable draft at:
  - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippinfra10-20150416-rev.pdf
- PWG Last Call concluded March 9, 2015
  - 10 responses
  - 68 comments
  - http://ftp.pwg.org/pub/pwg/ipp/wd/lcrc-ippinfra10.txt
- Proposed schedule:
  - Start PWG Formal Vote after this F2F

IPP Implementor's Guide 2.0 (IG)

- Current stable draft at:
  - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippig20-20150303-rev.pdf
- Have prototype experience from Apple
- In PWG Last Call Q2 2015 until May ??, 2015
- Proposed schedule:
  - PWG Formal Vote Q2 2015

The Printer Working Group

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4:15 - 4:30	Next Steps

IPP System Service

- Current interim draft at:
  - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippsystem10-20150315-rev.pdf
- Proposed Schedule:
  - Prototype draft in Q3/Q4 2015

Create-Printer

Request	Response

Get-Printers

Request	Response

Register-Output-Device

Request	Response

Create-Resource

Request	Response

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Break

IPP Everywhere Printer Self-Certification Status

- Current prototype draft and tools:
  - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippeveselfcert10-20150415.pdf
  - http://www.pwg.org/ipp/everywhere.html (for tools)
- Received some beta test feedback
  - ... but no test results submission to beta site
- Proposed schedule:
  - Publish stable draft - Q2 2015
  - WG Last Call Q2/Q3 2015
  - PWG Last Call Q3 2015

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Demo

IPP Everywhere Printer Self-Certification Web Site

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Lunch Break

IETF IPP/1.1

- Developing two new RFCs to replace (obsolete) RFCs 2910, 2911, and 3382 (collection attribute syntax)
- Preliminary drafts:
  - http://tools.ietf.org/html/draft-sweet-rfc2910bis
  - http://tools.ietf.org/html/draft-sweet-rfc2911bis
- Goals:
  - Advance IPP/1.1 to full IETF standard
  - Reference new "ipp" and "ipps" URI scheme definitions
  - Update TLS references and requirements
- Proposed schedule:
  - IETF Last Call - Q3/Q4 2015
  - IESG Approval - Q1 2015

IEEE IPP/2.0

- Updating PWG 5100.12-2011: IPP/2.0 Second Edition to full IEEE standard
- Stable draft at:
  - http://ftp.pwg.org/pub/pwg/ipp/wd/wd-ipp20-20150417.docx
- Goals:
  - Advance IPP/2.0 to full IEEE standard
  - Reference new"ipps" URI scheme definition
  - Update TLS references and requirements
- Proposed schedule:
  - WG Last Call - Q3 2015
  - PWG Last Call - Q3 2015
  - PWG Formal Vote - Q3/Q4 2015

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Break

Proposal 1: Adopt IPP 3D Printing Extensions

- Michael Sweet (Apple) has prepared a white paper for an IPP extension to support 3D Printing
  - http://ftp.pwg.org/pub/pwg/BOFs/3d-printing/wd-apple-ipp3d-20150413.pdf
- Discussion: do we want to adopt this white paper as new work in the IPP WG?
- Process for adopting new work:
  - Prepare white paper outlining the scope of work - completed
  - Do a PWG Formal Vote to approve the addition of new work to the IPP WG charter - pending
- Proposed schedule:
  - PWG Formal Vote for addition to IPP WG charter in Q3 2015
  - Prototype draft in Q3 2016

- Proposal from Xerox to add attributes for accounting color/monochrome/duplex pages via IPP
  - The Counter MIB (PWG 5106.3) and Semantic Model already define them
    - Map "Images" in Counter MIB to "pages" in IPP
  - IPP already defines the "total" counters
  - Rather than do a full spec, looking to simply register the new attributes based on the existing specs
- Discussion: do we want to register attributes for all of the Counter MIB properties (beyond what follows)?
- Process for registering new attributes:
  - IPP WG review and approval
- Proposed schedule:
  - Preparation of registration request in Q3 2015
  - IPP WG review in Q3 2015

Job Description Attributes

- job-impressions-col (collection)
  - blank(integer(0:MAX))
  - blank-two-sided (integer(0:MAX))
  - full-color (integer(0:MAX))
  - full-color-two-sided (integer(0:MAX))
  - highlight-color (integer(0:MAX))
  - highlight-color-two-sided (integer(0:MAX))
  - monochrome (integer(0:MAX))
  - monochrome-two-sided (integer(0:MAX))
- job-impressions-completed-col (collection), job-media-sheets-col (collection), job-media-sheets-completed-col (collection)
  - Same as job-impressions-col

- job-pages-col (collection)
  - full-color (integer(0:MAX))
  - monochrome (integer(0:MAX))
- job-pages-completed-col (collection)
  - Same as job-pages-col

- impressions-col (collection)
  - blank (integer(0:MAX))
  - blank-two-sided (integer(0:MAX))
  - full-color (integer(0:MAX))
  - full-color-two-sided (integer(0:MAX))
  - highlight-color (integer(0:MAX))
  - highlight-color-two-sided (integer(0:MAX))
  - monochrome (integer(0:MAX))
  - monochrome-two-sided (integer(0:MAX))
- impressions-completed-col (collection), media-sheets-col (collection), media-sheets-completed-col (collection)
  - Same as impressions-col

- pages-col (collection)
  - full-color (integer(0:MAX))
  - monochrome (integer(0:MAX))
- pages-col-completed (collection)
  - Same as pages-col
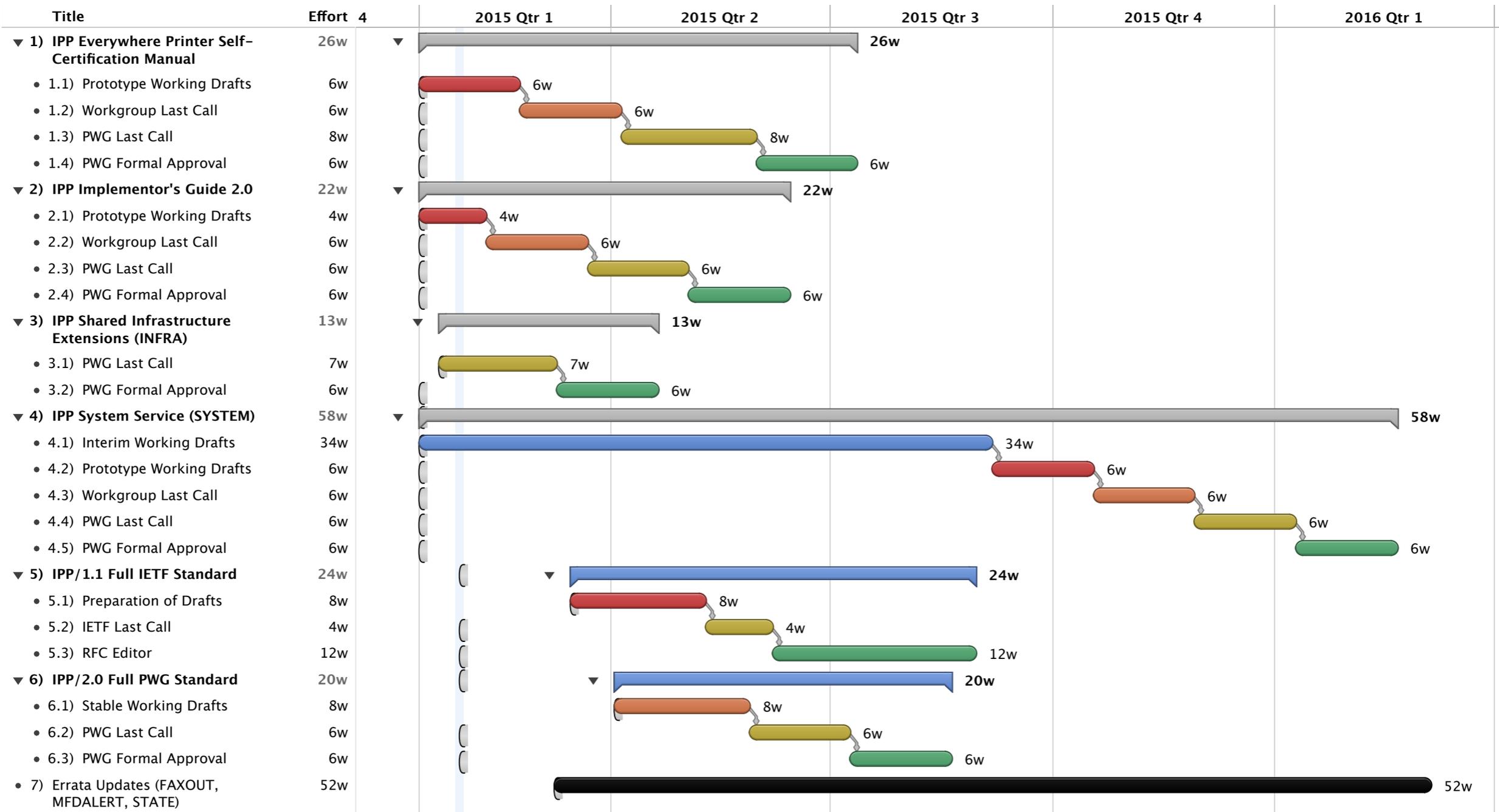
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Next Steps

30

IPP WG Next Steps

Title	Effort	4	2015 Qtr 1	2015 Qtr 2	2015 Qtr 3	2015 Qtr 4	2016 Qtr 1
▼ 1) IPP Everywhere Printer Self–Certification Manual	26w			26w			
● 1.1) Prototype Working Drafts	6w		6w				
● 1.2) Workgroup Last Call	6w			6w			
● 1.3) PWG Last Call	8w			8w			
● 1.4) PWG Formal Approval	6w			6w			
▼ 2) IPP Implementor's Guide 2.0	22w			22w			
● 2.1) Prototype Working Drafts	4w		4w				
● 2.2) Workgroup Last Call	6w		6w				
● 2.3) PWG Last Call	6w			6w			
● 2.4) PWG Formal Approval	6w			6w			
▼ 3) IPP Shared Infrastructure Extensions (INFRA)	13w		13w				
● 3.1) PWG Last Call	7w		7w				
● 3.2) PWG Formal Approval	6w		6w				
▼ 4) IPP System Service (SYSTEM)	58w						58w
● 4.1) Interim Working Drafts	34w				34w		
● 4.2) Prototype Working Drafts	6w					6w	
● 4.3) Workgroup Last Call	6w					6w	
● 4.4) PWG Last Call	6w					6w	
● 4.5) PWG Formal Approval	6w						6w
▼ 5) IPP/1.1 Full IETF Standard	24w			24w			
● 5.1) Preparation of Drafts	8w			8w			
● 5.2) IETF Last Call	4w			4w			
● 5.3) RFC Editor	12w			12w			
▼ 6) IPP/2.0 Full PWG Standard	20w			20w			
● 6.1) Stable Working Drafts	8w			8w			
● 6.2) PWG Last Call	6w			6w			
● 6.3) PWG Formal Approval	6w			6w			
● 7) Errata Updates (FAXOUT, MFDALERT, STATE)	52w			52w			

IPP WG Next Steps (1/2)

- IPP Everywhere Printer Self-Certification Manual 1.0
  - Stable draft and WG Last Call in Q2/Q3 2015
  - PWG Last Call in Q3 2015
- IPP Implementor's Guide 2.0 (IG)
  - PWG Formal Vote in Q3 2015
- IPP Shared Infrastructure Extensions (INFRA)
  - PWG Formal Vote Q2 2015
- IPP System Service (Mike/Ira)
  - Prototype working draft in Q3/Q4 2015

- Advance IPP/1.1 to Full IETF Standard
  - IPP/1.1 requires a "fast track" IETF WG - Ira is working with Barry Leiba
  - Stable drafts in Q3 2015
  - IETF Last Call in Q3/Q4 2015 (~15 year anniversary of IPP/1.1)
- Advance IPP/2.0 to Full IEEE Standard
  - IPP/2.0 just needs PWG Last Call and Formal Vote
  - PWG Last Call in Q3 2015
  - PWG Formal Vote in Q3/Q4 2015 (~15 year anniversary of IPP/1.1)

- We welcome participation from all interested parties
- IPP Working Group web page
  - http://www.pwg.org/ipp/index.html
- Subscribe to the IPP mailing list
  - https://www.pwg.org/mailman/listinfo/ipp
- IPP WG holds bi-weekly phone conferences announced on the IPP mailing list
  - Next conference calls May 11 and June 1, 2015 at 3pm ET
    - Skipping May 25, 2015 due to Memorial Day
  - Held on opposite weeks of Cloud Imaging Model WG
  - Held on same weeks of Imaging Device Security WG