Charter of the PWG

IPP Working Group

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Problem Statement:

New mobile devices (e.g., cellphones, PDAs, netbooks, tablets, etc.) do not follow the traditional use models for printing services. For mobile devices, discovery of available printers and their capabilities is both more difficult than for traditional desktop systems and more important (because of dynamically changing network attachment points).

New network architectures (e.g., Cloud, SASS, Software-Defined Networks, etc.) do not follow the traditional use models for enterprise networks. In shared infrastructure environments, enterprise services and databases are often configured on external networks accessible only via the public Internet. Client enrollment, printer registration, user access control, job and document forwarding, and job accounting features are inherently more difficult to deploy than for traditional enterprise networks (because perimeter firewalls are both insufficient for security and difficult to traverse for Internet-based services).

The current IPP WG project schedule includes the development of the following new or updated specifications:

(a) IPP Finishings v2.0 (FIN) (wd-ippfinishings20-yyyymmdd) – define an update to IPP Finishings v1.0 (PWG 5100.1-2001) that includes new finishing types and extends the sparse definition of the "finishings-col" in IPP Production Printing Attributes – Set 1 (PWG 5100.3-2001);

(b) IPP over HTTPS Transport Binding and 'ipps' URI Scheme (IETF draft-mcdonald-ipps-uri-scheme-xx.txt) – define an IETF or PWG standards-track 'ipps' URI scheme for IPP over HTTPS that will always **start** TLS first **before** the HTTP session layer, designed to be coherent with the original IPP URL Scheme (RFC 3510) and IPP Everywhere (PWG 5100.14-2013);

(c) Lightweight Directory Access Protocol (LDAP): Schema for Printer Services (IETF draft-mcdonald-ldap-printer-schema-xx.txt) – define an IETF or PWG specification that updates the original LDAP Schema for Printer Services (RFC 3712), adding new discovery attributes (e.g., geolocation) needed for IPP Everywhere (PWG 5100.14-2013);

(d) IPP 2.0, 2.1, and 2.2 (IPP2X) (wd-ipp20-yyyymmdd) – define an errata update to IPP 2.0 Second Edition (PWG5100.12-2012) to address known errata, add missing attributes or values, and avoid increasing any conformance requirements for the purpose of advancing IPP/2.0 to full PWG Standard;

48 (e) IPP Implementor's Guide v2.0 (IG) (wd-ippig20-yyyymmdd) – define update to IPP/1.1 Implementor's
49 Guide (RFC 3196) that specifies best practices for interoperability in implementations of IPP Client and
50 IPP Printer software and considers all of the IETF and PWG IPP extensions published since 2000;
51
52 (f) IPP Everywhere Printer Self-Certification Manual v1.0 (SELFCERT) (wd-ippeveselfcert10-yyyymmdd)
53 – define IPP Everywhere Printer self-certification test procedures, the process required for registering the
54 test results in order to use the PWG "IPP Everywhere " logo on a product, and a license agreement for the
55 use of this logo;
56
57 (g) IPP System Control Service v1.0 (SYSTEM) (wd-ippsystem10-yyyymmdd) – define an IPP System
58 Control service that extends IPP Job and Printer Administrative Operations (RFC 3998) and provides **read-**
59 **only** access to selected status, configuration, counters, etc. in the PWG SM System object and PWG
60 System Control Service, designed to be coherent with PWG SM System Control Service (PWG 5108.06-
61 2012);
62
63 (h) IPP Shared Infrastructure Extensions (INFRA) (wd-ippinfra10-yyyymmdd) – define new IPP Client,
64 IPP Proxy, and/or IPP Printer operations and attributes designed to support IPP-based network printing in
65 Cloud, Software Defined Network (SDN), and other shared infrastructure environments;
66
67 (i) IPP FaxOut Service v1.1 (FAXOUT) (wd-ippfaxout11-yyyymmdd) – define an errata update to IPP
68 FaxOut Service v1.0 (PWG 5100.14-2014) to address known errata, add missing attributes or values, avoid
69 increasing any conformance requirements, and align with PWG IPP Scan Service (PWG5100.SCAN);
70
71 (j) IPP Scan Service (SCAN) (wd-ippscan10-yyyymmdd) – define an IPP Scan Service, designed to be
72 coherent with PWG SM Scan Service (PWG 5108.02-2009);
73
74 (k) IPP Printer State Extensions v1.1 (PSX) (wd-ippstate11-yyyymmdd) – define an errata update to IPP
75 Printer State Extensions v1.0 (PWG 5100.9-2009) to address known errata, add missing attributes or
76 values, avoid increasing any conformance requirements, and align with IPP Shared Infrastructure
77 Extensions (PWG5100.INFRA);
78
79 (l) Printer MIB and IPP MFD Alerts v1.1 (MFDALERTS) (wd-pmpmfdalerts11-yyyymmdd) – define an
80 errata update to Printer MIB and IPP MFD Alerts v1.0 (PWG 5107.3-2012) to address known errata, add
81 missing attributes or values, avoid increasing any conformance requirements, and align with IPP Shared
82 Infrastructure Extensions (PWG5100.INFRA);
83
84 (m) IPP Everywhere Multifunction v1.0 (EVEMFD) (wd-ippevemfd10-yyyymmdd) – define an update to
85 IPP Everywhere v1.0 for multifunction devices that incorporates IPP 2.0, 2.1, and 2.2 (IPP2X), IPP
86 Transaction-Based Printing Extensions, "ipps:" URI Scheme, LDAP Printer Schema, IPP JPS3, IPP
87 Finishings v2.0, IPP Shared Infrastructure Extensions, IPP FaxOut, IPP Scan, and IPP System Control
88 Service;
89
90 (n) TBD – define errata updates to IETF and PWG IPP protocol extensions as necessary, to address known
91 errata, add missing attributes or values, and avoid increasing any conformance requirements;
92
93 (o) TBD – define errata updates to IETF and PWG SNMP MIBs as necessary, to address known errata, add
94 missing values, and avoid increasing any conformance requirements.
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Out-of-scope:

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99 The following projects and activities are out-of-scope for the IPP WG:

100 • OOS-1 Definitions of new device discovery protocols in IPP projects, although new profiles or subsets of
101 existing device discovery protocols are appropriate and encouraged.

102 • OOS-2 Definitions of new device management protocols (except for IPP System Control Service above) in
103 IPP projects, although new profiles or subsets of existing device management protocols are appropriate and
104 encouraged.

105 · OOS-3 Definitions of new IPP or non-IPP transport protocols (except for IPP over HTTPS above) in IPP
106   projects, although the design of IPP projects MUST NOT preclude future transport extensions.

107 · OOS-4 Definitions of new work on the following potential IPP projects is suspended until use cases,
108   editors, and interested vendors have been identified: IPP FaxIn Service, IPP Resource Service, IPP
109   Transform Service.

110 · OOS-5 Definitions of new work on the following potential IPP projects is abandoned: IPP Copy Service,
111   IPP EmailIn Service, IPP EmailOut Service.

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Objectives:

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115 The following objectives should guide all new IPP WG projects:

116 · OBJ-1 Optimize all IPP extensions for small memory and resource footprints for IPP Clients and IPP
117   Printers.

118 · OBJ-2 Design all IPP extensions to allow for other future protocol bindings (e.g., Web Services).

119 · OBJ-3 Design all IPP extensions to allow the use of vendor-neutral generic print software by IPP Clients.

120 · OBJ-4 Design all IPP extensions to allow ease of integration with shared infrastructure environments and
121   Internet-based services.

122 · OBJ-5 Define the set of new IPP specifications enumerated in the Problem Statement clause above.

123 · OBJ-6 Define updates and extensions to existing IETF and PWG SNMP MIBs as necessary.

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Milestones:

126 **Charter Stage:**

127 · CH-1 Initial draft of IPP WG Charter – August 2014 – DONE
128 · CH-2 Stable draft of IPP WG Charter – September 2014
129 · CH-3 PWG Approval of IPP WG Charter

130 **Definition Stage:**

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132 · URI-1 Initial draft of IPP over HTTPS and 'ipps' URI Scheme – Q3 2010 – DONE
133 · LDAP-1 Initial draft of updated LDAP Printer Schema – Q4 2011 – DONE
134 · IG-1 Initial draft of IPP Implementor's Guide v2.0 – Q4 2012 – DONE
135 · INFRA-1 Initial draft of IPP INFRA – Q1 2013 – DONE
136 · SELFCERT-1 Initial draft of IPP Everywhere Self-Certification – Q2 2013 – DONE
137 · FIN-1 Initial draft of IPP Finishings v2.0 – Q3 2013 – DONE
138 · INFRA-2 Prototype draft of IPP INFRA – Q3 2013 – DONE
139 · SCAN-1 Initial draft of IPP Scan Service – Q4 2013 – DONE
140 · SELFCERT-2 Prototype draft of IPP Everywhere Self-Certification – Q2 2014 – DONE
141 · FIN-2 Prototype draft of IPP Finishings v2.0 – Q2 2014 – DONE
142 · IG-2 Prototype draft of IPP Implementor's Guide v2.0 – Q2 2014 – DONE
143 · SYSTEM-1 Initial draft of IPP System Control v1.0 – Q3 2014 – DONE
144 · URI-2 IETF or PWG Last Call of IPP over HTTPS and 'ipps' URI Scheme – Q4 2014
145 · LDAP-2 IETF or PWG Last Call of LDAP Printer Schema – Q4 2014
146 · IPP2X-1 Initial draft of IPP 2.0, 2.1, and 2.2 – Q4 2014
147 · IPPSTATE-1 Initial draft of IPP Printer State Ext – Q4 2014
148 · MFDALERTS-1 Initial draft of MFD Alerts v1.1 – Q4 2014
149 · FAXOUT-1 Initial draft of IPP FaxOut v1.1 – Q1 2015
150 · IPP2X-2 Stable draft of IPP 2.0, 2.1, and 2.2 – Call for Objections – Q1 2015
151 · IPPSTATE-2 Stable draft of IPP Printer State Ext – Call for Objections – Q1 2015
152 · MFDALERTS-2 Stable draft of MFD Alerts v1.1 – Call for Objections– Q1 2015
153 · SYSTEM-2 Prototype draft of IPP System Control v1.0 – Q2 2015

154   •   FAXOUT-2   Stable draft of IPP FaxOut v1.1 – Call for Objections – Q2 2015
155   •   EVEMFD-1   Initial draft of IPP Everywhere Multifunction v1.0 – TBD
156   •   EVEMFD-1   Prototype draft of IPP Everywhere Multifunction v1.0 – TBD

157   **Implementation Stage:**

158   •   INTEROP-1   Interoperability testing of IPP Everywhere implementations – Q1 2015
159   •   INTEROP-2   Interoperability testing of IPP INFRA implementations – Q4 2015
160   •   INTEROP-3   Interoperability testing of IPP System Control Service implementations – Q1 2016
161   •   INTEROP-4   Interoperability testing of IPP Everywhere Multifunction implementatations – TBD