

IPP Counters Extension Proposal

Base Standards

Printer MIB (Print Device and Subunits)

- Prt MIB v1 (IETF Proposed Std RFC 1759, 03/95)
- Prt MIB v2 (IETF Proposed Std RFC 3805, 06/04)
- Sparse set of counter attributes

Job Monitoring MIB (Job and Document)

- Job Mon MIB v1 (IETF Info RFC 2707, 09/99)
- Large set of counter attributes

Internet Printing Protocol (Print Service and Job)

- IPP/1.1 (IETF Proposed Std RFC 2911, 09/00)
- Sparse set of counter attributes

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Monitoring Standards

Imaging System Counters (Multifunction)

- Imaging System Counters (PWG 5106.1, 09/05) – abstract counter datatypes and semantics for System and Services (but not Jobs, Docs, etc.)
- Imaging Counter MIB v1 (PWG 510x.y, 12/05) – complete mapping of Imaging System Counters for System and Services with Subunits extension
- Comprehensive set of counter elements – with conformance requirements for each service

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Management Standards

IPP Administrative Operations (Printer and Job)

- IPP Admin Ops (IETF Prop Std, RFC 3998, 03/05)

Web-based Imaging Management Service (WIMS)

- WIMS Abstract Protocol (Last Call ending 01/06)
- WIMS Base Schema – semantics and elements of System, Service, and Device
- WIMS Subunits Schema – semantics and elements of Subunits from Printer MIB v1/v2 plus Scanner
- WIMS Schedule Schema – semantics and elements of superset of IPP Administrative Operations

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Protocols Supporting Counters

SNMP

- Printer MIB v1/v2 – widely deployed
- Imaging Counter MIB v1 – not deployed yet

HTTP

- IPP/1.0 and IPP/1.1 – widely deployed

SOAP

- PSI/1.0 – not deployed yet
- WIMS/1.0 – not approved yet

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Rapid Deployment for Counters

IPP Counters Extension

- Print Service – define set of ‘printer-xxx’ for existing IPP Printer Description Attributes group
- Print Job – define set of ‘job-xxx’???
- Print Document – define set of ‘document-xxx’???

Out-of-scope

- System Totals – IPP only defines Print Service
- Print Device – IPP doesn’t define Device object
- Subunits – IPP doesn’t define Subunit objects
- Other Services – IPP operations *must* be targeted at IPP Printer object (access control problem)