

**1 Subj: Comparison of IPP and the IETF Job Monitoring MIB attributes**

2 From: Tom Hastings

3 File: ipp-jmp.doc

4 Date: 5/13/97

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6 The IPP attributes correspond to the second "IPP Model and Semantics" Internet Draft, 5/12/97. The  
7 keyword types: type1, type2, type3, and type4 are indicated. The order of the IPP attributes is that of the  
8 IPP Model and Semantics document.

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10 The JMP enum values correspond to the values in the Job Monitoring MIB Internet-Draft 00 (same as  
11 version V0.81).

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13 Unless the Notes indicate otherwise, the syntax and the semantics are the same.

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15 A "-" indicates that there is no such MIB attribute, but (in my opinion) that is ok.

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17 A "-???" indicates that there is no such MIB attribute, but (in my opinion) the JMP should consider adding  
18 the attribute to the Job Monitoring MIB, either because it would be useful for job monitoring or for job  
19 accounting or for system utilization. For some of the ???, I've already added issues to the JMP Issues list  
20 and have indicated the issue number here.

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22 The double lines indicate groupings of attributes in IPP.

23 **1. Job Attributes Supplied by Client (Filled in by Printer if not**  
24 **supplied)**

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IPP Attribute	JMP MIB attribute	Notes
job-name (name)	jobName(13)	255 (IPP) vs 63 (JMP) max. ok???
job-sheet (type4 keyword)	-	
notificaiton-events (type1setOf type2 keyword)	-	
notification-addresses (1setOf URL)	-	
job-priority (int(1:100))	jobPriority(31)	
job-hold-until (type4 keyword)	jobHoldUntil(33)	
multiple-documents- are (type2 keyword)	-	
best-effort (type2 keyword)	-	
medium (type4 keyword)	mediumRequestedName(64)	255 (IPP) vs 63 (JMP) max. ok??? IPP allows the media names to includes media size and input tray as well.???
number-up	-???(ISSUE 81)???	IPP: 'none', '1', '2', '4'

(type3 keyword)		
sides (type2 keyword)	sides(36)	IPP: 1-sided, 2-sided-long-edge, 2-sided-short-edge vs. JMP: numbers 1 or 2. ISSUE 80???
printer-resolution (type2 keyword)	-???	IPP: draft, normal, high
print-quality (type2 keyword)	printQualityRequested(38)	same values: draft, normal, high
copies (int(1:2**31-1))	jobCopiesRequested(44), documentCopiesRequested(46)	Depending on the value of IPP multiple-documents-are attribute: single-document vs. multiple-documents-xxx. ISSUE 86: clarify when to use which JMP attribute.
finishing (1setOf type2 keyword)	finishing(37)	Same values; IPP coded as keywords, JMP as enums.
compression (type3 keyword)	-	
job-k-octets (int(0:2**31-1))	<b>documentCopiesRequested (46)</b>	
job-impressions (int(0:2**31-1))	<b>impressionsRequested(54)</b>	
job-media-sheets (int(0:2**31-1))	<b>sheetsRequested(60)</b>	
number-of-documents (int(0:2**31-1))	<b>numberOfDocuments(25)</b>	

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## 2. Job Description Attributes

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IPP Attribute	JMP MIB attribute	Notes
job-URL (url)	-	
job-originating-user (name)	<b>jobOwner(15)</b>	255 (IPP) vs 63 (JMP) max. ok???
job-originating-host (name)	<b>submittingServerName(19)</b> )	Only for configuration 3. Do we need job-originating-host??? IPP is not clear when a Printer passes a job to another Printer, whether job-originating-host is the client's host name or the first Printer's host name for this attribute on a job in the second Printer.
user-locale (type3 keyword)	-	
job-state (type1 keyword)	jobState(3)	IPP: unknown, pending, processing, terminating, retained, completed; JMP : Other(1), unknown(2), held(3), pending(4), processing(5), printing(6), needsAttention(7), canceled(8), completed(9); IPP 'held' is done with job-state-reasons. IPP doesn't have 'printing' to be more general and simpler. IPP 'needsAttention' is done with "job-state-

IPP Attribute	JMP MIB attribute	Notes
		reasons" = 'printer-stopped' IPP 'terminating' is like JMP canceled, except in IPP the job then goes to retained and completed. JMP retained is done with "jobStateReasons" = 'jobRetained'
job-state-reasons (setOf type2 keyword)	jobStateReasons1(5)	Need to add the following IPP job state reasons to JMP: job-incomplete , job-sending-to-output-device, job-queued-in-output-device, job-printing, printer-stopped, printer-partly-stopped ISSUE is IPP job-incomplete the same as JMP documentsNeeded??? or should JMP documentdNeeded be changed to jobIncomplete?
job-state-as-text (text)	-???	May be a good general attribute to add to JMP???
output-device-assigned (name)	<b>physicalDeviceName(24)</b>	255 (IPP) vs 63 (JMP) max. ok???
submission-time (dateTime)	<b>jobSubmissionToServerDateAndTime(70), jobSubmissionToDeviceDateAndTime(71)</b>	
number-of-intervening-jobs (int(0:2**31-1))	<b>numberOfInterveningJobs(9)</b>	
job-message-from-operator (text)	-	
completion-time (dateTime)	<b>jobCompletedDateAndTime(76)</b>	
job-k-octets-completed (int(0:2**31-1))	<b>jobKOctetsCompleted(50)</b>	
job-impressions-completed (int(0:2**31-1))	<b>impressionsCompleted(55)</b>	
job-media-sheets-completed (int(0:2**31-1))	<b>sheetsCompleted(61)</b>	

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### 3. Document Attributes Set by Client

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IPP Attribute	JMP MIB attribute	Notes
document-name	<b>documentName(27)</b>	255 (IPP) vs 63 (JMP) max. ok???

IPP Attribute	JMP MIB attribute	Notes
(name)		
document-format (type2 keyword)	<b>documentFormatType(30)</b>	IPP says MIME types, but JMP and PMP are Printer Interpreter Language enums???
document-URL (reference url)	<b>fileName(26)</b>	Should fileName be generalized to documentURL or add another attribute to JMP???

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#### 38 4. Printer Attributes Set by Printer/Queried by Client

39 Most of the following IPP attributes are not in the Job Monitoring MIB, because they are in the Printer  
40 MIB and/or the Job Monitoring MIB is not attempting to model the device, only the jobs. However, a few  
41 of these IPP Printer attributes are represented as General objects in the Job Monitoring MIB as indicated  
42 below.  
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IPP Attribute	JMP MIB attribute	Notes
printer-URL (url)	-	
printer-name (name)	jobSetName	255 (IPP) vs 63 (JMP) max. ok???
printer-location (text)	-	
printer-description (text)	-	
printer-more-info-site (url)	-	
printer-driver-installer (url)	-	
printer-make-and- model (text)	-	
maximum-printer-speed (integerUnits)	-	
printer-more-info-manf (url)	-	
printer-state (type1 keyword)	-	
printer-state-reasons (type2 keyword)	-	
printer-is-accepting- jobs (boolean)	-	
printer-state-as-text (text)	-	
queued-job-count (int(0:2**31-1))	jmNumberOfActiveJobs	

<b>IPP Attribute</b>	<b>JMP MIB attribute</b>	<b>Notes</b>
printer-message-from-operator (text)	-	
printer-locale (locale)	-	
font-substitutions (setOf setOf font)	-	
scheduling-algorithm (type3 keyword)	-	
printer-fonts (setOf font)	-	

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