1   Name of Job Submission Protocol: IETF IPP
2   Version of Job Submission Protocol: V1.0, Internet-Draft, 6/3/97
3   Is your Job Submission Protocol to a Server (config 2 and 3) or to a Printer (config 1) or
4   both: all 3 configurations
5   File name (please use file name listed above): ietf-ipp_v11.doc
6   Assigned person: Tom Hastings (version 1.1 updated by Dennis Carney)
7   Date: 4/21/99
8
9   Any general mapping problems that apply to a number of attributes, such as length of
10   strings, size of integers, ASCII vs. binary encoding of attribute values, etc.:
11
12   1. IPP names are 255 characters long while JMP names are limited to 63 octets.
13
14   2. IPP encodes values as UTF-8 keywords (ASCII is a one-octet subset), while JMP uses
15   enums for some corresponding attributes (a JMP ISSUE - see below).
16
17
18   Summary of changes for version 1.1, 4/9/99, by Dennis Carney:
19   1.   Updated list of JMP names and equivalent IPP names to bring up-to-date.
20   2.   Deleted "page" column from table, since the page numbers are out-of-date and will
21   always be out-of-date every time a new version comes out.
22

Attribute or object	Job submission protocol attribute	Notes
The General Group (Mandatory)		
jmGeneralNumberOfActiveJobs	queued-job-count	IPP counts jobs in pending-held, JMP doesn't
JmGeneralOldestActiveJobIndex		
jmGeneralNewestActiveJobIndex		
jmGeneralJobPersistence		
jmGeneralAttributePersistence		
jmGeneralJobSetName	printer-name	63 octets vs. IPP 255 characters
The Job ID Group (Mandatory)		
jmJobSubmissionID		
jmJobSetIndex		
The Job Group (Mandatory)		
jmJobState:	job-state:	
unknown	unknown	
pending	pending	
pendingHeld	pending-held	
processing	processing	
processingStopped	processing-stopped	
canceled	canceled	

Template for Mapping from Job Submission Protocols to JMP objects/attributes

aborted	aborted	
completed	completed	
jmJobStateReasons1:	job-state-reasons:	0 bits == IPP 'none'
other		(no 'other' anymore in IPP?)
unknown		
JobIncoming	job-incoming	
submissionInterrupted	submission-interrupted	
jobOutgoing	job-outgoing	
jobHoldSpecified		
jobHoldUntilSpecified	job-hold-until-specified	
jobProcessAfterSpecified		
resourcesAreNotReady	resources-are-not-ready	
deviceStoppedPartly	printer-stopped-partly	
deviceStopped	printer-stopped	
jobInterpreting	job-interpreting	
jobPrinting	job-printing	
jobCanceledByUser	job-canceled-by-user	
jobCanceledByOperator	job-canceled-by-operator	
jobCanceledAtDevice	job-canceled-at-device	
abortedBySystem	aborted-by-system	
processingToStopPoint	processing-to-stop-point	
serviceOffline	service-offline	
jobCompletedSuccessfully	job-completed-successfully	
jobCompletedWithWarnings	job-completed-with-warnings	
jobCompletedWithErrors	job-completed-with-errors	
jobPaused		
jobInterrupted		
jobRetained		
jmNumberOfInterveningJobs	number-of-intervening-jobs	
jmJobKOctetsPerCopyRequested	job-k-octets	
jmJobKOctetsProcessed	job-k-octets-processed	
jmJobImpressionsPerCopyRequested	job-impressions	
jmJobImpressionsCompleted	job-impressions-completed	
jmJobOwner	job-originating-user-name	63 octets vs. IPP 255 characters
JmAttributeTypeTC - attribute type definitions		
other		
Job State attributes		
jobStateReasons2		
jobStateReasons3		
jobStateReasons4		
processingMessage	job-state-message	

Template for Mapping from Job Submission Protocols to JMP objects/attributes

processingMessageNaturalLangTag	???	
JobCodedCharSet	???	
JobNaturalLanguageTag	???	
Job Identification attributes		
jobURI	job-uri	
jobAccountName		
serverAssignedJobName		
jobName	job-name	63 octets vs. IPP 255 characters
jobServiceTypes		
jobSourceChannelIndex		
jobSourcePlatformType		
submittingServerName		
submittingApplicationName		
jobOriginatingHost		
deviceNameRequested	printer-name	63 octets vs. IPP 255 characters
queueNameRequested		
physicalDevice	output-device-assigned	63 octets vs. IPP 255 characters
numberOfDocuments	number-of-documents	
fileName	document-URI	JMP ISSUE: clarify that the fileName attribute could be a URI
documentName	document-name	63 octets vs. IPP 255 characters
jobComment		
documentFormatIndex		
documentFormat	document-format	The MIME type value maps to the MIME type value, 63 octets vs. IPP 255 characters
Job Parameter attributes		
jobPriority	job-priority	
jobProcessAfterDateAndTime		
jobHold		
jobHoldUntil	job-hold-until	
outputBin		
sides	sides	map 'one-sided' to 1, 'two-sided-long-edge' and 'two-sided-short-edge' to 2
finishing	finishings	same values, but map IPP keywords to JMP enums. Both can be MULTI-VALUED JMP ISSUE: also allow Octets as supplement?
Image Quality attributes (requested and used)		
printQualityRequested	print-quality	same values, but map IPP keywords to JMP enums JMP ISSUE: also allow Octets as supplement?
printQualityUsed		
printerResolutionRequested	printer-resolution	
printerResolutionUsed		

Template for Mapping from Job Submission Protocols to JMP objects/attributes

tonerEcomonyRequested		
tonerEcomonyUsed		
tonerDensityRequested		
tonerDensityUsed		
Job Progress attributes (requested and consumed)		
jobCopiesRequested	copies	
jobCopiesCompleted		
documentCopiesRequested	copies	only >1 documents in the job
documentCopiesCompleted		
jobKOctetsTransferred		
sheetCompletedCopyNumber		
sheetCompletedDocumentNumber		
jobCollationType		
Impression attributes (requested and consumed)		
impressionsSpooled		
impressionsSentToDevice		
impressionsInterpreted		
impressionsCompletedCurrentCopy		
fullColorImpressionsCompleted		
highlightColorImpressionsCompleted		
Page attributes (requested and consumed)		
pagesRequested		
pagesCompleted		
pagesCompletedCurrentCopy		
Sheet attributes (requested and consumed)		
sheetsRequested	job-media-sheets	
sheetsCompleted	job-media-sheets-completed	
sheetsCompletedCurrentCopy		
Resource attributes (requested and consumed)		
mediumRequested	media	(IPP attribute is equivalent to 'as octets' version of JMP attribute only)
mediumConsumed	media	(IPP attribute is equivalent to 'as octets' version of JMP attribute only)
colorantRequested		
colorantConsumed		
mediumTypeConsumed		
mediumSizeConsumed		
Time attributes (set by server or device)		
jobSubmissionToServerTime		

Template for Mapping from Job Submission Protocols to JMP objects/attributes

jobSubmissionTime	time-at-creation	JMP: time when submitted; IPP: time when job object got created
jobStartedBeingHeldTime		
jobStartedProcessingTime	time-at-processing	
jobCompletionTime	time-at-completed	
jobProcessingCPUTime		

23
24   IPP job attributes not in JMP are:
25   .   job sheets
26   .   job-message-from-operator
27   .   multiple-document-handling
28   .   page-ranges
29   .   number-up
30   .   orientation-requested
31   .   job-printer-uri
32   .   job-more-info
33   .   attributes-charset (???)
34   .   attributes-natural-language (???)
35