

IPP Issues				
Item	What	Who	Notes	Done
1	What is our relationship to Internet Fax? What is their final charter? What is our final charter? Are there any other groups that we need to liaison with?	General	Do not merge these two. There are two separate working groups. Monitor two mailing lists	✓
2	Randy suggested looking at draft-ietf-asid-string-filter-v2-00.txt. Did any one review this and have comments about IPP use of LDAP?	Directory		
3	On 11/14/96, Roger posted httpnew.ps. Has this been reviewed and incorporated?	Protocol Spec	This was put into the appendix of the I-D. NOTE: There should be "flows" in the Model and Semanticdoc and then there should also be the encoding of those flows in the HTTPdoc	✓
4	How will large documents be handled? Content length vs content boundaries?	Protocol Spec	This has become a MIME content-length question	
5	On 11/15/96, Roger posted ipp-http-stuff.doc has this been reviewed or incorporated?	Protocol Spec		✓
6	Have we resolved all of the Attribute Syntax issues?	Model/Semantics		
7	Do we need to add a fan in picture back into the document?	Model/Semantics		
8	Some directory entry attributes are set by the Printer. Some are set by the Administrator? Do we know which are which? Do we care? Notes from Keith: The original set of Printer object attributes were hardware-oriented i.e. a Printer object that is really a physical printer could specify these attributes. Per our phone call, there are now attributes (i.e. "speed", "quality" or "cost" = "high", "medium", "low") that an administrator - not a physical printer - must specify i.e. It seems that an administrator must determine how to assign "high", "medium" or "low" to "speed", "quality" and "cost" while a printer can only return its actual speed and resolution upon which the administrator determines the appropriate attribute value. "Location" can be specified and stored in some - but not all - printers so in some cases the "location" attribute must also be specified by an administrator. I believe the "speed", "quality", "cost" and "location" attributes help the user more easily locate Printer objects. The point is there are now attributes for a Printer object directory entry some of which are defined by the hardware and others by the administrator. A Printer object that is really a printer would only add/modify the hardware attributes for its directory entry and not add/update the administrator attributes for its entry.	Directory		

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9	Where are we on the proposal to establish, through IANA, a well known port for printing via IPP over HTTP? Port 380 has been recommended. Alex's comments: Lastly, from a router vendor's perspective, it is almost mandatory that a new service is also implemented on a new port number if you want to have any chance of filtering, prioritizing, or accounting for it.	Protocol Spec		
10	We still have issues about Subjective values vs. Objective values, especially in the Directory Entry. What is the set of values for each attribute?	Directory		
11	On 11/19/96, Roger posted some sample flows. Is this what is in the current I-D? Have we reviewed the encoding of content within an HTTP operation? In other words, what is the MIME encoding?	Protocol Spec		
12	What are we using for Device Id? Jay's comments: This issue/concept falls right into the same kind of discussion we recently conducted in the PWG regarding printer model identification, particularly with regard to supporting print job submission and job formatting (e, PPD-like file support, etc). Our experience tells us that users want to be able to view "real world" identification information, such as Make, Model and Type (although I'm not quite sure what "Type" would imply depending on the context). The previous related discussion pointed out that an OID must be provided to unambiguously and succinctly define the specific printer model; within the Printer MIB context, this value is defined as the DeviceID object in the HR MIB. During the discussion someone questioned whether this was a workable solution, since the application would have to have knowledge of the OID mappings to determine the model type. Those of us who develop such application software explained that the OID approach was indeed a reasonable solution, citing the need for a clean, simple syntax that has both hierarchical potential and distributed administration within the name space. All of this is achieved via the standard SNMP SMI concept of the "Enterprises" tree. If we use a P1284 Device ID for the IPP, will these same naming features exist? Can someone brief the PWG on the name space administration of the P1284 Device ID? For example, how would an app developer know which vendors have which products registered for which IDs?	Model/Semantics		
13	What is the status of overlap with WEBDAV?	General	Potential for MIME type cooperation. We should share info, but not have	✓

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			dependencies. See if we can harmonize attributes. Monitor the mailing list.	
14	What is the current write up on printer-name vs. URL and job-identifiers URL?	Model/Semantics		
15	What is the current security story?	Security		
16	Have we resolved all of the number-up, embellishments issues?	Model/Semantics		
17	Are we cleared up on the Job Retention time issues (cancel, etc.)?	Model/Semantics		
18	What is the status of the shortest-job-firsts smallest-job-first issue?	Model/Semantics	Change the name to smallest.	✓
19	Do we agree with the proposal to have no attributes that have no values?	General	Yes, all attributes will have a value.	✓
20	Should we change the name of IPP due to other "IPPs" being found?	General	No - use IPP	✓
21	I don't see any references to fan-fold paper anywhere.	Model/Semantics		
22	It appears there is currently no support for accounting. One can certainly argue that this is a function of security which you say will be addressed later.	Security		
23	How do you plan to support color calibration and other features like what is provided through PPD files?	Model/Semantics		
24	I suspect that PostScript printing control (like spooling, status queries, etc.) are not supported as part of the PostScript Content-Type, right? It probably should be spelled out.	Model/Semantics		
25	Wouldn't it make more sense to define a content-type: application/ipp (or similar), so that the request would be a valid HTTP request? (The print request is then part of the entity).	Protocol Spec		
26	Have we decided to NOT extend HTTP if we use HTTP? i.e., Have you considered the alternative of defining a new method, say, PRINT, with entity headers appropriate for the new task?	Protocol Spec	General consensus seems to be: do not extend HTTP if we use HTTP. If we don't, question is moot.	✓
27	On 11/25/96 Roger posted an attribute summary. Has this been reviewed?	Model/Semantics		
28	We need to clarify Job Templates. Who wants to write up a new summary? With examples?	Model/Semantics	We will not have Job Templates in IPP/1.0.	✓
29	Has anyone reviewed draft-mellquist-web-sys-01.txt? Tom suggests that there is some overlap with Management and IPP/2.0?	Model/Semantics		
30	Is driver download in scope of IPP/1.0?	Scenarios		
31	Is there a difference between "locating" and "selecting" Locating is finding a printer an end user may want to print to. Selecting a printer includes "installing" a printer into the desktop possibly including printer driver for some	Model/Semantics	Yes, there is a difference	✓

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	environments.			
32	Should we move to the Single Driver for all IPP printers or at least a Single Driver for each PDL for all IPP printers?	General	No	✓
33	Have we resolved the issue of whether or not to put all e-mail for the IPP subgroups on the IPP list or should we have rough private mailings for each of the subgroups and then bring more decisions forward to the IPP list for presentation?	General	Use TLA in subject field.	✓
34	Have we defined a standard for including nested messages and comments?	General	No, but it can't be done	✓
35	Are scenarios beyond the scope of IPP/1.0 included in the formal discussions and documents of the scenarios sub group?	Scenarios	Scenarios are all encompassing. IPP/1.0 may not support every requirement of every scenario.	✓
36	Comments on http://www.sirspeedy.com scenario? Who has contacts to invite them to participate in IPP? Kinkos too?	Scenarios	Reviewed and incorporated	✓
37	Do we need to drop all discussions of firewalls?	Security	No, we need to discuss.	✓
38	Where are we an accepting/rejecting/researching HTTP-lite? Keith comments: Several people have expressed interest in an "http-lite" protocol, that is, a generic http-like, text-over-tcp, request-response protocol which isn't adapted for any one particular application, but can take advantage of standard url types, security mechanisms, etc. In my mind, HTTPlite consists of: + a general syntax for commands (or if you prefer, method invocations), + a general syntax for responses, + a set of security flavors, and + a minimal set of error codes all of which are borrowed from HTTP, but with none of the methods, and only a couple of the header fields that are used in HTTP.	Protocol Spec	Need to ignore for right now. HTTPlite will be some time in the future if at all. Do not tie IPP to something yet to be implemented let alone yet to be defined!	✓
39	What are the developer issues associated with picking a transport for IPP?	Protocol Spec		
40	Is there a difference between Internet Printing Web Printing? (IPP or WPP: Internet Printing Protocol or Web Printing Protocol) Keith's comments: Having a relatively simple print protocol, that doesn't try to keep up with "all developments going on for the Web" makes even more sense.	General	Too vague. Not a trackable issue.	✓
41	Are there issues with proxies and caching if HTTP is used?	Prototyping		
42	If IPP is defined on top of full HTTP, do we have to go through every feature of HTTP and specify how it interacts with printing, just to make sure it doesn't cause any problems. You have to specify how printers and print clients interact with web cache servers, proxy servers, and web browsers.	Protocol Spec	Use robots.txt. This is some standard someplace that indicates to crawlers what to index and what not to index.	

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	You should probably also define how to keep Lycos, AltaVista, etc. from indexing your printer.			
43	Is the configuration of a Client talking directly to Printer (even if it is a low-end printer) still in the overall IPP model? Angelo's comments: I agree that a low-end printer can not be expected to provide the level of jobqueueing and manipulation that a full blown server can provide. But, ultimately one must transfer the job data to the "same old printer box". How then do you propose we get the data to the printer? Are you proposing that IPP be reserved for those customers who are lucky enough to have a spare NT server off of which to run a parallel cable to their printer? Bill's comments: Is an IPP Printer required to have a hard disk?	Model/Semantics	Yes, it is included in the Model	✓
44	If there is a mapping of IPP onto HTTP/1.1, is there anything in that mapping that would not allow it to work over HTTP/1.0?	Prototyping		
45	Are there any issues with "lost jobs" or "duplicated jobs" due to the use of any of the protocols? Larry's comments: If a printer cannot spool and prints while it is receiving the job, then the HTTP responses might be different: if another job is already printing, a print request (POST) might result in an immediate error (503) with a Retry-After response. The current Proposed Standard HTTP has no particular timeouts defined for delays, but there are probably proxy implementations that timeout if they can't transmit a POST in a reasonable amount of time (Minutes).	Protocol Spec.		
46	Are there OMG interoperability issues? Paul's comments: Just to catch up on the conversation here, could someone fill me in on - What have the IPP folk been thinking of doing for implementing asynchronous print server error messages through HTTP? - Is the IPP protocol being designed as a simple client-to-server protocol. Will print server to print server communications issues be considered later as a separate standard. - Taking say the windows 95 environment as an example, where would the IPP protocol be positioned? How about in Unix. - What are the thoughts as to local spooling before submission (responding to server down errors etc.) - Has there been any discussion of doing print pre-presentation (like print preview)	Model/Semantics		
46	What is the conformance relationship with: - OMG - Posix			

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	- ISO DPA			