

IETF 45 - IPP WG

July 14, 1999

- **Agenda**

- Update on project status
- Remaining work within the current charter
 - IPP Notifications
 - IPP Implementer's Guide for IPP/1.1
- IPP WG Charter Update
- Possible Future Work on IPP

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- IPP Notifications

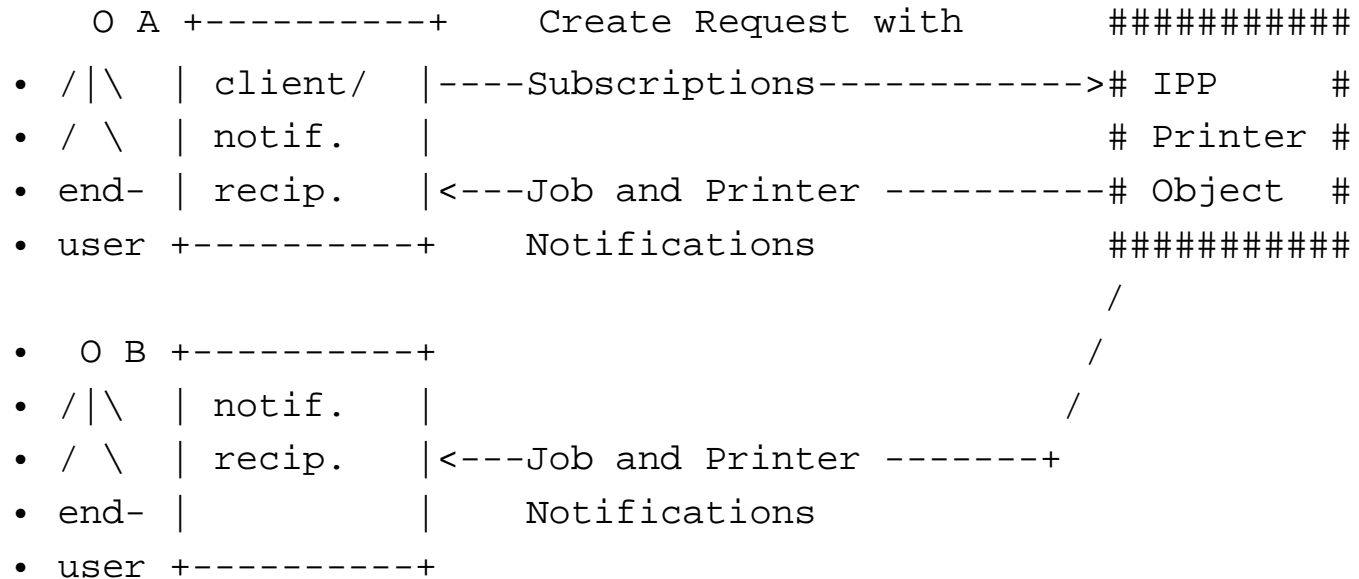
- **Notification requirements for IPP**
`<draft-ietf-ipp-not-02.txt>`
- **Notification solutions for IPP**
in progress - no I-D yet

IPP Notification Requirements

Overall Model

- Legend:

- A = Client and Notification Recipient
- B = Notification Recipient (subscription by some third party)



IPP Notification Requirements

Scenario 1

- I am sitting in my office and submit a print job to the printer down the hall. I am in the same security domain as the printer and geographically near. I want to know immediately when my print job is completed (or if there is a problem) because the document I am working on is urgent. I submit the print job with the following attributes:

Notification Recipient	- me
Notification Events	- all
Notification Attributes	- job-state-reason
Notification Type	- immediate

IPP Notification Requirements

Scenario 2

- I am working from home and submit a print job to the same printer as in the previous example. However, since I am not at work, I cannot physically get the print file or do anything with it. It can wait until I get to work this afternoon. However, I'd like my secretary to pick up the output and put it on my desk so it doesn't get lost or miss-filed. I'd also like a queued notification sent to my email so that when I get to work I can tell if there was a problem with the print job. I submit a print job with the following attributes:

Notification Recipient	- my secretary
Notification Events	- print complete
Notification Type	- immediate

Notification Recipient	- me
Notification Events	- print complete
Notification Type	- queued
Notification Attributes	- impressions completed

IPP Notification Requirements

Scenario 3

- I am sitting in my office and submit a print job to a client at an engineering firm we work with on a daily basis. The engineering firm is in Belgium. I would like my client to know when the print job is complete, so that she can pick it up from the printer in her building. It is important that she review it right away and get her comments back to me. I submit the print job with the following attributes:

Notification Recipient	- client at engineering firm
Notification Events	- print complete
Notification Type	- immediate
Notification Language	- French

IPP Notification Requirements

Scenario 4

- I am in a hotel room and send a print job to a Kinko's store in the town I am working in, in order to get a printed report for the meeting I am attending in the morning. Since I'm going out to dinner after I submit this job, an immediate notification won't do me much good. However, I'd like to check in the morning before I drive to the Kinko's store to see if the file has been printed. An email notification is sufficient for this purpose. I submit the print job with the following attributes:

Notification Recipient	- me
Notification Events	- print complete
Notification Type	- email

IPP Notification Requirements

Scenario 5

- I am printing a large, complex print file. I want to have some immediate feedback on the progress of the print job as it prints. I submit the print job with the following attributes:

Notification Recipient	- me
Notification Type	- immediate
Notification Events	- all state transitions
Notification Attributes	- impressions completed

IPP Notification Requirements

Scenario 6

- I am an operator and my duties is to keep the printer running. I subscribe independently from a job submission so that my subscription outlasts any particular job. I subscribe with the following attributes:

Notification Recipient	- me
Notification Type	- immediate
Notification Events	- all printer state transitions
Notification Attributes	- printer state, printer state reasons, device powering up, device powering down.

IPP Notification Requirements

Scenario 7

- I am an printer statistics application. I subscribe independently from a job submission so that my subscription outlasts any particular job. My subscription may persists across power cycles. I subscribe with the following attributes:

Notification Recipient	- me
Notification Type	- immediate
Notification Events	- job completion
Notification Attributes	- impression completed, sheets completed, time submitted, time started, time completed, job owner, job size in octets, etc.

IPP Notification Solutions

- Subscription:
 - As part of IPP Job Submission (for single Job)
 - As independent Operation (for Printer and all Jobs)
- Notification Format:
 - Machine friendly: application/ipp MIME format
 - Human readable: text format (email)

IPP Notification Solutions

- Notification Transport:
 - Simple UDP, without confirmation
 - Email, with or without confirmation
 - Other, such as HTTP
- Other Notification Criteria:
 - Reliability
 - Delay, Frequency, Repeatability
 - Security

IPP Notification Solutions

Content of Job Notification

- version-number
- status-code
- request-id
- job-printer-uri
- job-id
- job-trigger-events
- job-trigger-message
- job-trigger-time
- job-trigger-date-time
- job-state
- previous-job-state
- job-state-reasons
- previous-job-state-reasons
- subscription-id

IPP Notification Solutions

Content of Printer Notification

- version-number
- status-code
- request-id
- printer-uri-supported
- printer-trigger-events
- printer-trigger-message
- printer-trigger-time
- printer-trigger-date-time
- printer-state
- previous-printer-state
- printer-state-reasons
- previous-printer-state-reasons
- subscription-id

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- Charter Updates
 - Finalization of IPP/1.1 documents on:
 - Model and Semantics
 - Encoding and Transport Nov 1999
 - IPP/1.1 Implementer's Guide Sept 1999
 - Requirements for IPP Notifications Sept 1999
 - IPP Notifications Specification Dec 1999
 - Wrap up Current Charter Q1/2000

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- Future Work
 - Additional Operations for Administration
 - Additional Features for Production Printing