



IPP Everywhere / Cloud Printing New Operations for Mobile Printing

19 October 2010

Lexington, KY – PWG F2F Meeting

Rationale for New Operations for Mobile Printing



- IPP Everywhere and Cloud Printing models often use Print Services in the public Internet
 - But corporate firewalls all block incoming connections
 - So notifications from public Print Services to Printers of available new jobs are a problem
 - Email notifications are slow and require configuration
 - Instant messaging and other similar solutions may not be cost effective
- New operations should use outgoing connections from the Printer to the public Print Service
 - Printer takes Client role to send connections and operation requests to the (peer) Print Service
 - Print Service takes Printer (Server) to accept connections and send operation responses

Proposed New Operations for Mobile Printing – 1 of 2



- Fetch-Print-Job
 - Fetch-Print-Job Request (request-id, printer-uuid)
 - wait for new Print Job from Server (similar to 'ippget')
 - Fetch-Print-Job Response (request-id, status-code, [Print-Job Request or Print-URI Request])
- Accept-Print-Job
 - Accept-Print-Job Request (request-id, printer-uuid, Print-Job Response or Print-URI Response)
 - accept valid Print Job
 - Accept-Print-Job Response (request-id, status-code)
- Reject-Print-Job
 - Reject-Print-Job Request (request-id, printer-uuid, Print-Job Response or Print-URI Response)
 - reject invalid or malformed Print Job
 - Reject-Print-Job Response (request-id, status-code)

Proposed New Operations for Mobile Printing – 2 of 2



- Report-Print-Job
 - Report-Print-Job Request (request-id, printer-uuid, job-uuid, job-state, [job-state-reasons])
 - report job state changes (pending, processing, etc.)
 - Report-Print-Job Response (request-id, status-code)
- Report-Printer
 - Report-Printer Request (request-id, printer-uuid, printer-state, [printer-state-reasons])
 - report printer state changes (idle, processing, etc.)
 - Report-Printer Response (request-id, status-code)

New Operations for Mobile Printing – Next Steps



- Review proposal on mailing list and IPP WG calls
 - Consensus – November 2010
- Write up RFC 2911-style full operation definitions
 - First draft – November 2010
- Add operations to new IPP JPS3 spec
 - First draft – December 2010 / January 2011
- Open issues that should be addressed
 - New operations for registration of Printer w/ Print Service
 - Required mutual authentication of Printer and Print Service during connection setup
 - Federation of Print Services across Mobile/Cloud environments