The Printer Working Group

IPP Job Storage 2.0: Fixing JPS2

Smith Kennedy, HP Inc.

2018-11-16

- Job Save → Feature solution did not fully satisfy the requirements from the use cases

- Proof Print → Retention time duration for Proof Print Jobs is ambiguous

- "job-password" feature is incompatible with both the Job Save and Proof Print features

- Issues identified at August 2018 F2F:
  - job-save-disposition does not create a Saved Job as defined in JPS2, it saves the output to the specified destination (which may or may not be sufficient to recreate the original Job - all implementation-specific, determined by output mimeMediaType)
  - No way to specify a serialized IPP object representation (application/ipp is a message format, not a serialization format)
  - proof-print asks for a Job to be retained but does not guarantee it is retained indefinitely

1. Develop a system of attributes that can be used together to support the Job Storage, Proof Print, and Reprint Job use cases from 5100.11-2010 along with those in this deck and other relevant additions. The system MUST resolve all the ambiguity and incompatibility issues described earlier.

2. Clean up and deprecate whatever attributes are displaced by this new solution

3. Resolve any errata / editorial issues

- Hold Job Until User Release
  - Using User authentication
  - Using Job authentication
    - "job-password" or new "job-print-password"

- Job Save With Password

- Proof Print
  - Job Retention Duration (new "job-retain-until" and "job-retain-until-time" attributes)

- Use Cases in 5100.11 (Proof Print, Job Save, Reprint Job)
  - Mostly adequate but not clearly satisfied by the IPP attribute semantics

System Requirements

- Hold a Pending Job (not really a "stored job")
  - Submitted Job stays in 'pending-held' or 'pending' until "released"
    - Release via IPP
    - Release via non-IPP (control panel, management console)
  - Release <u>MAY</u> be guarded by a password (alphanumeric or numeric-only) but not required

- Store a Job for later re-printing
  - Store Only or Print-and-Store (latter different than Proof Print)
  - Associate with user identity

- Proof Print
  - Print one copy of a multiple copy job for review; release remaining copies, to be printed potentially from other input source

5100.11 – Deprecations

- "job-save"
  - Doesn't satisfy all the use case requirements
  - Existing definition has polluted semantics and expectations

- "proof-print"
  - Intersects with "job-save" in certain ways that are vaguely defined
  - Retention duration is not clearly defined (implementation-specific)

- "job-password" / "job-password-encryption"?
  - Does this need to be deprecated? Or does it do what we want it to do for the Hold Job case?

5100.11 – Additions

- "job-password-repertoire"
  - Defined in [IPP Job Password Repertoire](#)
  - Should be deprecated if "job-password" is deprecated
- "job-retain-until" (dateTime)
  - Discussed at the August F2F
- Replacement for "job-save" and "proof-print"

Next Steps

- Email discussion to discuss proposals for new attributes and semantics
- New draft to be produced for review in January