

Internet Printing Protocol Meeting Minutes

September 26, 2024

Meeting was called to order at 3:00pm ET.

Attendees

Charles Armstrong (Canon)
Benjamin Gordon (Google)
Smith Kennedy (HP)
Ira McDonald (High North)
Piotr Pawliczek (Google)
Chris Rizzo (Xerox)
Anthony Suarez (Kyocera)
Bill Wagner (TIC)
Uli Wehner (Ricoh)

Agenda Items

1. PWG IP policy, minute taker, administrivia
 - Smith recording for Mike to prepare minutes
2. Review IPP Firmware Update Extensions v1.0 (FWUPDATE)
 - <https://ftp.pwg.org/pub/pwg/ipp/wd/wd-ippfwupdate-20240911-rev.pdf>
 - <https://ftp.pwg.org/pub/pwg/ipp/slides/IPP-Firmware-Update-Extensions-Registration-Options-20240912.pptx>
 - Priotr: Model 1 is a rich environment for security problems
 - Smith: Yes, that's why firmware images need to be validated by the printer (signatures, etc.)
 - Probably need to add this to the security considerations section
 - Smith: Might also need to comment on local laws - automatic/forced updates may or may not be legal
 - Ira: There is standard wording for this
 - Bill: Models 2 and 3 have device accessing manufacturer site, which requires device to have internet access. Isn't that unusual?
 - Smith: Not for HP printers
 - Bill: Commercial or enterprise sites wouldn't allow printers to go on the Internet
 - Ira: Too many reports of documents being stolen, etc.
 - Smith: That's an unmanaged printer; a company managing the printer/network would probably be doing model 1 vs. model 2/3
 - Smith: Models 2 and 3 also need to validate firmware images in addition to the X.509 certificates used for the connections to the firmware repository
 - Smith: What about operations/attributes/values?
 - Ira: Use cases should show diagrams, model should name operations

- Smith: Mike and I worked on updated UML diagrams showing the operations and attributes
 - Ira: Section 4 should not have details, just high level semantics/model
 - Smith: In EPX we talked about operations/attributes in section 4
 - Ira: Will defer to Mike on the level of detail
 - Bill: Important for model to show how operations and some attributes/values are used, but the full detail can be deferred to the definitions/details after the model
 - Smith: EPX had sections for each of the high-level features with pointers to the attributes and operations, with the model section showing how they all go together
 - Ira: Some firmware operations may not be through IPP? Don't want to prescribe that IPP must be used, this is one method
 - Model 2: Autonomous Device
 - Smith: Manufacturer can do just about anything here, including using/abusing existing IPP operations, all of that is out of view/out-of-band
 - Bill: Lettered versions of numbered models confusing (3a, etc.)
 - Smith: Mike wasn't sure how we'd want to split/label variations of the models
 - Bill: Powerpoint shows two model 3's, but those map to model 3 and 4 in the text?
 - Smith: Correct
 - Smith: Also did some back-and-forth with UML diagrams on the IPP mailing list
 - Bill: Keep simple graphics "with options", add UML for details
 - Model 4: Cloud Directed
 - Smith: Pushed from cloud, may or may not use IPP, do we need more here?
 - Uli: Was wondering whether this is related to cloud printing/cloud management?
 - Bill/Smith: Might be a separate cloud providing management
 - Smith created a version of the model 1 diagram with a cloud management system in place of the laptop
 - Smith: Need to continue discussion of cloud directed updates
 - Add in a 4b with a laptop triggering the check in the cloud
 - Next steps:
 - Put simple model diagrams in use case sections
 - Put UML diagrams in model sections showing high level operations and attributes/values as needed
3. Review IPP minutes from previous meetings:
- <https://ftp.pwg.org/pub/pwg/ipp/minutes/ippv2-concall-minutes-20240912.pdf>
 - Approved as posted

Next Steps / Open Actions

- Next conference calls on October 10 and 24, 2024 at 3pm
- Talk about more "Strong Device Identity" at future (soon) concall, determine requirements/use cases
- Action: Mike to post IPP/2.x 4th Edition draft for IPP WG last call ending September 26 (DONE)
- Action: Mike to publish WIFI registration and submit to IANA (PENDING)
- Action: Mike to update the IPP How-To Guide and post to IPP list for discussion (PENDING)
- Action: Paul to review existing 3D use cases and identify any gaps (PENDING)
- Action: Mike to update IPP Everywhere 2.0 test files (PENDING - started work on it)