

## **IPP Fax Telecon – 5/30/01**

Notes by John Pulera and Tom Hastings

File: <ftp://ftp.pwg.org/pub/pwg/QUALDOCS/minutes/IPPFAX-010530-telecon-minutes.doc>

### **Participants:**

Bob Herriot  
Tom Hastings  
Ira McDonald  
John Pulera  
Gail Songer  
Bill Wagner

We reviewed the first two of the three papers on the agenda:

1. Review John Pulera's updated UIF spec with changes highlighted:

`<ftp://ftp.pwg.org/pub/pwg/QUALDOCS/uif-spec-04.doc>`

2. Review John Pulera's white paper on additions to the UIF spec with my comment/issues interspersed:

`<ftp://ftp.pwg.org/pub/pwg/QUALDOCS/white-sheets/default_conneg_etc-th-comments.doc>`

3. Review the updated IFX spec. It is just editorial improvements on the IFX spec:

`<ftp://ftp.pwg.org/pub/pwg/QUALDOCS/ifx-spec-04.doc>`

Next telecon:

The third document will be reviewed at the next telecon, one week hence:

Time: Wednesday, June 6, 10-12 PDT (1-3 EDT).

Phone: (712) 271-3216 (Xerox folks: 8\*534-6413)

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### **Issues discussed**

*New issues:*

- ISSUE A: (Ira) Should we change “Sender” to “IPPFAX client” and change “Receiver” to “IPPFAX Printer” (which is short for IPPFAX Printer object), i.e., the software that accepts IPPFAX requests and returns IPPFAX responses, everywhere in the UIF spec? Ira felt that using “Sender” and “Receiver” is too vague and that IPP Printer means the software entity, not necessarily the hardware, in IPP, so why not continue this precedence in IPPFAX.
- Resolution: Leave for a larger group to decide.

*‘uif-spec-04.doc’ issues:*

- ISSUE B: Should we use the MIME media type: ‘image/tiff; application=faxbw’ to indicate support for monochrome and both values ‘image/tiff; application=faxbw’, ‘image/tiff; application=faxcolor’ to indicate support for both monochrome AND color?
- Resolution: It seems like there is consensus on doing so. If the value of the “uif-profiles-supported” Printer Description attribute is one of the profiles, this would indicate support for the heightened requirements of the UIF spec (vs. TIFF-FX) .
- ISSUE C: Change “uif-scale” attribute name to “uif-reduce”?
- Resolution: Group agreed it is not good practice to scale up, as the image quality is degraded, so a ‘true’ value reduces the image, if necessary, but **MUST NOT** increase the image size. A ‘false’ value **MUST** tile the image on as many sheets as necessary to preserve all parts of the image, including the side and bottom, if necessary. Re-iterate that the aspect ratio **MUST** be preserved (reject related change in section 4.1 of UIF spec). We also agreed that reducing or increasing by 2% (the A versus A4 factor) would not be considered scaling, as long as the aspect ratio is maintained.
- ISSUE D: (Lloyd) We should clarify the “uif-scale” (now to be called “uif-reduce”) attribute to reflect proper “default” behavior (i.e., a printer **MUST NOT** apply scaling unless the client explicitly allowed it).
- Resolution: There was consensus that the printer **MUST** be configurable to allow reducing to occur by default **AND** that the Sender **MUST** query the “uif-reduce” Printer Description attribute and warn the user so that the user never gets reduction without a warning before sending the document and a chance to indicate that no reduction is to take place.
- ISSUE E: Should the “ImageWidth” and “ImageLength” TIFF tags choose the media size? If not, then how should we choose paper sizes in the middle of a job (e.g., pages 1-75 are Size A and page 76 is Size B)? TIFF (unlike Postscript or other PDLs) does not have a means of indicating media. Relegate media selection to IPP page-level overrides?
- Resolution: We agreed that for now, the TIFF “ImageWidth” and “ImageLength” tags do **NOT** select the media, but that the IPPFAX “media” Job Template attribute does. This decision works fine for documents where the image size is the same for all pages in the document. For documents that have differing image sizes within the same document, we’ll wait for a future requirement/extension to see whether to add another Job Template attribute so that the client can request that the TIFF image tags be used to select media (or not). We also agreed **NOT** to bring in the IPP “page-overrides” attribute to allow the protocol to select media on a page by page basis (though an IPP Printer implementation might support such a thing).
- ISSUE F: Rename “uif-conneg” IPP attribute to “uif-receiver-capabilities”?
- Resolution: There was consensus that we should.
- ISSUE G: It is not clear to me whether or not variable drawing surfaces are supported by TIFF-FX. For example can I say that I support 2000x3000 pixels? We have definitely agreed that we need to be able to do this as well as to include the TIFF-FX defined, named set of drawing surfaces. It is not supported by TIFF-FX and we need to create a

profile that does support it. Profile U was added to this document, but we need to confirm with Lloyd if this is the best way to proceed.

- Resolution: Still need to discuss with Lloyd.

*white paper issues:*

- ISSUE01: Or is it so easy for a Receiver to support the “uif-conneg” Printer attribute (its just a canned constant string) that the UIF spec should REQUIRE an IPP FAX Receiver to support the “uif-conneg” Printer attribute?
- Resolution: Receiver support of “uif-conneg” (to be renamed “uif-receiver-capabilities”) is already mandatory. Make note in UIF spec that any well-formed CONNEG string (rather than just the canonical form) is acceptable.
- ISSUE02: Should the UIF spec be made independent of IPP FAX by moving the discussion about an IPP attributes to the IFX spec? Then UIF could be used with any protocol.
- Resolution: There was consensus that the UIF spec should be made independent of IPP FAX by moving the discussion about IPP attributes to the IFX spec so that UIF can be used with any protocol. The UIF should still include a description of how the capabilities discovery should take place (only the details on IPP attributes and its specific usage will be moved to an Appendix of the IFX spec).
- Now the IPPFAX document will include two levels of conformance: ‘uif-only’ and ‘authenticated’. The level being used needs to be reflected in a Printer Description attribute, and we should allow for more than just levels in the future. So change “ippfax-receiver” (integer) to “ippfax-receiver” (1setOf type2 keyword) with values ‘none’, ‘uif-only’, and ‘authenticated’.
- ISSUE03: Should IPPFAX use the Media Size Self Describing Names from the PWG Media Standardized Names standard somehow?
- Resolution: There was consensus that IPP-Fax SHALL require EXCLUSIVE support for Media Size Self Describing Names from the PWG Media Standardized Names standard for the keyword values of the “media” attribute. Then all “media” keyword values will contain the explicit dimensions as well as the name.
- ISSUE04: Moot.
- ISSUES 05-10: Resolution requirements for the B&W UIF profiles.
- Resolution: There was consensus on the following:  
  
Support for the following XResolution values SHALL be mandatory for Profiles S, F, and J: 200, 300, 600  
  
Support for the following YResolution values SHALL be mandatory for Profiles S, F, and J: 200, 300, 600.
- ISSUES 11-12: Resolution requirements for the color UIF profiles

- Resolution: There was consensus on the following:  
Support for the following XResolution values SHALL be mandatory for Profiles C and L: 200, 300  
Support for the following YResolution values SHALL be mandatory for Profiles C and L: 200, 300
- ISSUE 13-14: Resolution requirements for the UIF Profile M binary mask layer
- Resolution: There was consensus for the following:  
For the binary mask layer, support for XResolution = 200, 300 and YResolution = 200, 300 SHALL be required. All other mask layer XResolution and YResolution values are optional.
- ISSUE 15: Resolution requirements for the UIF Profile M foreground and background layers.
- Resolution: There was consensus for the following:  
For the foreground and background layers, support for the following XResolution values SHALL be mandatory for Profile M: 200, 300  
For the foreground and background layers, support for the following YResolution values SHALL be mandatory for Profile M: 200, 300
- ISSUE L1: There was consensus for changing the default coding method for Profile F to MMR. The `image-coding` values shown in the CONNEG strings for each profile should be changed to reflect this.
- ISSUE L2: There was consensus for changing the default color space for Profile C to 'full' (instead of 'gray'). The 'color' tag values shown in the Profile C default Conneg string should be changed to reflect this.
- ISSUE TH: The term "default conneg" is a different meaning for "default", than used in IPP. In IPP, "default" means what the Printer does if the client doesn't supply some attribute. The "default conneg" is what the implementation MUST support for a given profile if the implementer doesn't choose to do more.  
Resolution: Agreed that we need a new term to describe the CONNEG Strings that an implementation MUST support for each profile that it supports. John and Tom to come up with a new term. Possibilities include: "Basic" or "Required" or "Minimum".  
Suggestions welcome.