Printer Working Group
Miami, Florida
January 24/25, 1996

Attendees:

Jay Martin - Underscore
Don Wright - Lexmark
Mike Timperman - Lexmark
Tom Hastings - Xerox
Harry Lewis - IBM Pennant
Steve Zilles - Adobe
Randy Turner - Sharp
Ron Bergman - Dataproducts
Craig Whittle - Novell
Pat Hill - Dazel
Binnur Al-Kazily - HP
Bob Pentecost - HP
Bill Wagner - DPI
Luis Cubero - HP
Paul Reilly - Apple
Shige Kanemitsu - Kyocera
Lee Farrell - Canon
Jay R. Cummings - Novell

Binnur opened the meeting at 8:45AM.

The group reviewed the currently available WEB site at http://www.teleport.com/~rturner/pwg.htm.

The agenda for the day was reviewed:

General Discussions

- Web site
- MIB Bakeoff
- MIF Changes
- Next Meeting
- July Meeting
- Roundtable
- Introductions

RFC1759

- Markup document
- prtInterpreterLang Family proposal
- print impression proposal
- new proposed objects
- MIB split
- interoperability
- other

The group discussed a potential MIB bake off. Currently there are no management packages that show off the capability of the MIB. Therefor trying to do a bake-off at Spring Interop doesn't look promising. The group is therefore hoping to perhaps do something at Fall Interop in Atlanta.

The group discussed the next meeting in Denver at the Denver West Marriott on March 13th and 14th.

The group then discussed the July meeting which the IEEE is planning to have in London. Many in the group were ambivalent to having the meeting in London due to the perceived lack additional attendees.

The group was informed that the DMTF annual meeting was moved from March 19-21 to March 11-13 which conflicts with the next PWG meeting. No change was planned to the date of the PWG meeting.

After a short break, the group began going through Binnur's mark-up of the RFC1759 document.

1) Binnur added section 2.2.13.5 "Transversing the Alert Table"
   - Randy Turner will be collecting this information
2) Section 2.2.13.3 should be renamed "Alert Table"
3) Section 2.4 needs to be updated in regards to moving the textual conventions to the beginning of the document.
4) Binnur has added several annotations to page 23
5) Page 25 - Binnur has moved some of the textual conventions towards the front.
6) There was some confusion over the naming of the textual convention. Textual Conventions must start with a capital letter. In some cases the textual convention has the same name as an object with the exception of the capitalization of the first letter. Steve Zilles proposed append "TC" to the end of a textual convention to differentiate it. The consensus of the group was to add the TC to the end of the name.

*** Action item for Steve Zilles - Send IANA editor procedures document to IANA.
*** Action item for the group - added clarifications to the enums for PrtChannelType and PrtInterpreterLangFamily.
*** Binnur will take the action to see that PrtChannelType is registered with IANA.

7) The group will be reviewing the Host Resources MIB and its interaction with the printer MIB. The group will attempt to push Steve Waldbusser to get the needed changes into the Host Resources MIB.
8) The issue of whether we take all the enums and not just reused enums and make them textual conventions was decided at a previous meeting. The group still has some reservations about doing that for enums that are only used once.
9) The group discussed the addition of several other enums to the prtMarkerSuppliesType. Some people wanted more generic names which could cover a wide variety of types; others wanted more specific items. It was decided to add "fuseroiler" as 22 and change "cleanerUnit" to "fuserCleaner" as 18.
10) Change the description of prtMarkerSuppliesClass by deleting the word "container."
11) A lively discussion of the channel concept occurred, again.
12) One proposal is to update the third paragraph of the introduction to the Channel Group to read: "The Channel table describes the installed capabilities of the printer."

*** Action item: Binnur will take this issue, i.e. channel table clarifications, to the distribution list.

The group took a lunch break at 12:05PM and resumed at 1:20PM.

The group continued through the marked-up MIB and reviewed the changed and highlighted objects.

*** Action item: Jay Martin will be re-writing Appendix D to clarify and generally fix-up the prose to be consistent with RFC language.

13) A significant discussion occurred on the issue of whether prtAlertGroup should be a type 1 (as currently defined) or be changed to a type 2. The group discussed the overall philosophy of the three types of enums.

*** Action item: Harry Lewis will distribute the "Associated MIB" to the group in order for the group to determine whether all or some of the objects defined there need to be added to the prtAlertGroup.

The group discussed the chartering of a group to do a job monitoring MIB and/or a finishing MIB and the re-activation of group to move the MIB forward.

14) We will add an appendix with a table of global units.

*** Action item: Steve Zilles will document the reasoning behind the original creation of enum types.

*** Action item: Tom Hastings will communicate with Steve Waldbusser on the alert group enumeration and how we should add new groups to it from other MIBS, whether it should type 1, 2, or 3; where counting should start, etc.

The group moved on to discussing the issue of textual conventions and whether to create a separate MIB of textual conventions, move all the enums to textual conventions at the front of the printer MIB or do nothing.

Don Wright moved not to split the MIB into a textual conventions MIB and the printer MIB. The motion passed 10 to 1, abstentions were not recorded.

*** Action item: Via e-mail, the group should review all the enums to determine which ones should be converted into textual conventions and moved to the front of the document.

*** Action item: Steve Zilles and Randy Turner will be talking with Diedre Kostick at the IETF meeting in March about the interoperability testing.

The group moved on to Tom Hastings' paper entitled "Proposed additions to the Printer MIB for Impression Limit Control." Several issues were raised:
1) Security or lack thereof?
2) On a network, where do the cookies (command/data to allow printing) come from?
3) Does this function really belong in a Job submission protocol?

The group came to the conclusion that the solution proposed does not achieve the intended goals. Other means including protocols with Job submission and control such as IEEE P1284.1 or IPDS could provide a solution. At this point, the group feels that this proposal is not workable.

*** Action item: Tom Hastings will communicate this discussion back Jeff Slater.

The group moved on to discuss a proposal from Ray Lutz to changing the way prtLanFamily information is reported. This document is entitled "Service Triplet Assignment Guidelines." A lively discussion ensued. The group did not want to encode multiple version information (i.e. family and version) in the same object and rather prefers two separate objects. As such a proposal was submitted to add a new object called prtInterpreterLangRegistry which would be controlled by IANA and would be an ascending series of numbers (enum type 3) where each is assigned to a vendor for each version of an interpreter needed. The discussion did not conclude and will be moved to the e-mail list. Regardless of the result of this discussion, the group does not want to deprecate langAutomatic.

The discussion moved to Tom Hastings' document entitled: "Proposed additional objects for Printer MIB." The group went through the paper one object at a time.

prtGeneralCurrentOperatorPhoneNo and prtGeneralServicePersonPhoneNo were rejected. The group recommended that the description for prtGeneralCurrentOperator and prtGeneralServicePerson be enhanced to include recommended formats for phone, fax and e-mail contacts.

*** Action item: Tom Hastings will write up a proposal for these recommendations.

Based on a motion made by Jay Martin, the following was approved by the group:

Auxiliary Sheet Group - approved, optional
- prtGeneralStartupPage - approved - large majority
- prtGeneralErrorPage - approved - small majority
- prtGeneralBannerPage - approved - small majority

There are still open issues on these objects and some clarifications are needed in the descriptions. The vote was 7 to 4 with 6 abstentions.

The meeting adjourned due to the hotel's need of the room at 6PM.
The meeting resumed at 8:20AM.

The group began by discussing the philosophy of adding more objects to the MIB. Some of the members believe we should not add more objects to the MIB, others believe we should close the proposals after this meeting. A lively discussion ensued over the philosophy the group should adopt to justify adding any objects at all. Concern over a schedule was raised and the perception that adding additional objects would have on the stability of the MIB.

Tom Hastings proposed a three tiered schedule:

- ? deadline to freeze any additional objects
- ? deadline to freeze enums
- ? deadline to freeze clarifications

By consensus, the group agreed not to add additional objects after today's meeting unless a glaring oversight is uncovered.

Tom Hastings resumed going through his additional object proposals:

prtInputManualFeedTimeout - approved 6 to 4
prtInputAutoSwitch - approved 6 to 4
prtInputNextIndex - approved 6 to 4

These will be added to the existing optional Extended Input Group (vote was 8 to 4)
(Note: some clarifications need to be made to the descriptions.)

prtGeneralOutputAutoSwitch - disapproved 2 to 4
prtOutputNextIndex - disapproved 2 to 4

prtInterpreterDefaultFontName - disapproved unanimously
prtInterpreterErrorPageType - disapproved 2 to 7
prtInterpreterBannerPageType - disapproved 3 to 7

To clarify, the group revisited two of the objects approved yesterday:
prtGeneralErrorPage - disapproved 2 to 7
prtGeneralBannerPage - approved 6 to 5

The group took a mid-morning break.

Upon returning, Tom Hastings began presenting his proposals to clarify alerts. The group discussed the pros and cons of adding trailing edge alerts. The group re-examined the underlying assumptions of alerts in the context of the MIB.

The group voted 10 to 1 to not add trailing edge alerts as a standard part of the MIB.

By consensus the group approved leaving "binary change event" as it was and to change "simple change event" to "unary change event."

The group voted 10 to 1 clarify the descriptions as to unary or binary.

After more discussion, the group voted 8 to 2 to not update the descriptions with binary versus unary information.

The group voted 11 to 2 to encode unary/binary into the severity code of prtAlertSeverityLevel.

The group approved Hastings' proposals #5 and #6.

The group voted 7 to 4 to add an end-time tick object to indicate end of an event. There is some concern about how these time objects relate to the SNMP V2 & MIB-II time object. Harry Lewis will write up the object and its description. Randy Turner will investigate the possible interaction between the SNMP V2 & MIB-II time tick.

The group approved 7 to 0 to add generic sub-unit codes.
The group voted 9 to 2 to leave the current alert codes in place.

Proposals #8 and #9 were dealt with previously.

After further discussion, the group decided that since according to the way the Alert Table is suppose to operate, when an alert goes away, the entry in the table is remove so there is no place to record the end time, thus rescinding the above 7 to 4 vote.

The group then discussed Hastings' proposal 10, alternative 1 and rejected it 7 to 4.

Further discussion on correction and typos in the description section of the alert section will occur on e-mail.

Binnur kicked off the discussion on the charter for the group. Her proposal was not to have a charter for the group but to develop smaller, focused charters for each project to be considered. The group does; however, need a set of objectives or a mission statement.

Binnur announced that she will be going back to school and would be unable to continue in her role as chair. Anyone interested in being chair should contact Binnur.

Lunch break - 12:30 until 1:20

Jay Martin of Underscore started the afternoon session with a presentation on SENSE. (The charts will be posted to the FTP server.)

Tom Hastings presented a short tutorial on the architecture and model of ISO DPA focusing on the accounting model.

Mike Timperman presented a short tutorial on the TIPSI job submission and job accounting model.

Jay K. Martin presented the CPAP accounting model. The group then had a short discussion on PJL, and how it could be used for accounting purposes.

The IDP (Imaging Device Protocol) accounting model was present by Paul Reilly of Apple and discussed. IDP includes a password capability which provides security. This security includes a password security mechanism which, on a system with no hard disk storage drives, has the ability to store up to 10 passwords for security validation. Questions were raised as to whether there was a need to provide security in order to do the accounting MIB properly.

After the discussions on the accounting model, the group discussed the issue as to whether it makes sense to work on the Job Monitoring MIB objects without knowing the Job Monitoring MIB requirements for end-users and administrators. An action item for the PWG is to refine and establish the job monitoring requirements, and how the Job Monitoring MIB will be used by end-users and administrators. Discussion on this subject is to be taken to the PMI distribution list.

The meeting adjourned at 5:40pm.