DMTF/IETF Printer Management Working Group
San Jose, California
June 28, 1994 - June 29, 1994

The meeting began at 8:50AM, PDT

Attendees:

Joel Gyllenskog - Hewlett-Packard
Steve Zilles - Adobe
Ron Smith - TI
Bill Wagner - DPI
Mike Timperman - Lexmark
Don Wright - Lexmark
Harry Lewis - Pennant Systems
Jay Martin - Underscore
Barry Kelman - Microsoft
Steve Waldbusser - CMU
Stan McConnell - Xerox
Charles Kimber - DataProducts
Liang-Tsern Pan - Sun
Gerald Hsu - Sun
Koji Tashiro - NEC Technologies
Bob Herriot - Sun
Pete Grillo - Intel/DMTF
Shannon Gray - DMTF
Rod Gerhart - Ricoh

The meeting began with introductions followed by a discussion of the agenda for the next two days.

A short discussion occurred on the "end plan" of the MIB and the procedures used to get the draft into final form.

Discussions:

1) Bob Herriot identified a need to better document critical versus non-critical alerts in the SubUnitStatus textual convention. Better explanation is needed to indicate for example that critical means there is a critical event pending on the subunit. To resolve this, additional text will be added to the PRINTMIB to better defined the states.

2) In the media path group, the prtMediaPathMaxSpeedTimeUnit has only "Hours" as a valid value. Should we simply incorporate the time unit into the PathMaxSpeed object? We will incorporate the time unit (hour) into the prtMediaPathMaxSpeedPrintUnit object. We will remove the prtMediaPathMaxSpeedTimeUnit.

3) Remove eitherEdgeDuplex enum from prtMediaPathType.

4) Is DefaultOrientation a characteristic of the printer or of an interpreter? Do we need reverse portrait and reverse landscape? We will remove the "reverse" modes and move the object to the interpreter table changing its name appropriately.

5) Discussion generally on read-write variables and specifically on prtInputName as to whether it is a post-it object. Some clarification of the reasons for read-write MAX-ACCESS will be added.

Pete Grillo spoke about the current status of DMTF:

1) SDK General availability for Win 3.1, OS/2 2.x, and DOS 3.3+ is July 31st.
2) Overview of DMTF MIF hierarchy.
3) DMTF standardized on Unicode.

The group recessed for lunch at 12:45pm and resumed at 2:00pm.

Harry Lewis presented a partial implementation of a print MIF. This is work in progress and will track the Common MIB/MIF document and the draft MIB.

The group worked with Pete Grillo and Steve Waldbusser to develop a methodology to insure that the MIF and MIB for printer management are fully aligned. We reopened the issue of distinguishing the hostmib objects from the PC versus the hostmib objects from the printer. The group also discussed unique requirements mapping MIB to MIF and vice versa. Final resolutions were not reached during the meeting. Steve Waldbusser took a "homework" assignment to try to make a proposal to resolve the issues of multiple hostmibs in a PC. Optional tables in the MIB are always included in the MIF and the object is "unknown" if those "optional" objects are not supported. Vendors may choose to omit the optional tables from the MIF that is shipped with the product.

Discussion on the use of the printer status objects in the hostmib as a part of printer management. Steve Waldbusser expressed that should we identify demonstrable advantages to adding status object(s) to the printer MIB then it would be OK to do so. The group was divided on the need to replace or at least augment the status provided in the HOST MIB. No changes were made.

Steve Zilles summarized the group's opinion on the host mib's printer status:
"We agree that having device independent status of the RED/GREEN/YELLOW kind is a useful concept. We are unhappy with having additional printer status in the HostMIB but accept that is has to be there. We would like to recommend additional enumerated values for printer status but we don't have a coherent recommendation for the PrinterDetectedErrorState."

Discussion on some corrections suggested by Barry Kelmen:
- Changed a comment from "DOS" to "MS-DOS/PC-DOS"
- Changed channel #27 to "chServerMessageBlock"
- Changed channel #29 to chDLLapiCall
- Changed channel #30 to chVxDapiCall
- Interpreter TIFF is "Tagged Image File Format"

Other changes agreed to:
- Added chNPAP as a channel type
- Prefix interpreter languages with "lang"
- Prefix channels with "ch"

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Configuration change counter records additions/deletions to the printer's configuration. Removal/reinsertion of the same paper tray should not cause a configuration change.

Clarifications were made to the section describing the recommended ways of dealing with the alert table when it overflows.

Discussion on the need for distinguished values for integers (-1, -2, -3) in the case of objects like prtInputCurrentLevel. We removed the -1 value from prtInputMediaWeight.

Discussion on a way to standardize the character set description string - should it be the common names for the character sets, ISO9070 names, other? Clarifications were added to several of the character set related objects. We will collect potential names.

AddressabilityUnits was clarified as .0001 inches, etc.

"Other" was removed from StackingOrder and PageDeliveryOrientation.

LifeCounter and PowerOnCounter cannot be negative. We will not allow -1, -2 values.

CurrentOperator and ServicePerson will be added as optional objects.

The meeting adjourned at 10:30PM.
The meeting resumed Wednesday morning at 8:45AM.

Began discussion on issues identified by Steve Zilles:

Discussion (again) on using printer status from the HOST MIB in the light of a lack of equivalent printer status objects in the DMTF world. If the DMTF does not provide a host resources MIF translated from the host resources MIB then this group will have to translate the need parts of the host resources MIB (devices, storage, status) and include in our MIF.

Steve Waldbusser presented his solutions to the problem identified in distinguishing "host" resources in the host MIB versus printer resources also contained in the host MIB. His solution will be in the next draft of the MIB and he will be reviewing this with Pete Grillo for DMTF concurrence.

Discussion on the issue of the "need" for a distinguished value to indicate "unitialized" for object where the printer may not be able to sense. Tom Hastings had sent several e-mail messages calling for this type of distinguished value. The group respects Tom Hasting's opinion but the group doesn't feel this is a complete solution for this problem because once an object has been written you lose the information that this object is "inviting" initialization. The group will not add another distinguished value but recommends an algorithmic determination of writeability.

Discussion on the inclusion of Appendix B/C which might imply that the printer actually changes its behavior if an ISO MediaName is written. The description text will be changed to insure MediaName and MediaType are known to be clearly "post-it."

Delete object prtOutputJobCollated from prtOutputTableAugment.

Delete object prtOutputSlipsheet from the prtOutputTableAugment.

Delete object prtInterpreterDefaultIndex because the channel group requires a default interpreter for each channel that overrides any printer default interpreter.

Change some text on the ConsoleDisplayBufferText to indicate that writing a zero length string clears the text written to the buffer. Other events may also cause the text to be cleared but that is manufacturer dependent.

Clarified the naming and usage of the declared/granted input media objects. Bob Herriot presented the DPA's solution to the paper size snapping problem. No object changes were made.

Some editorial changes were made to clarify some of the textual information found at the front of the internet draft. These changes will be reflected in PRTSPEC3 and in draft #3 of the MIB.

Steve Waldbusser suggested the addition of a expiration-time-based lock for the localization to allow get requests to be properly returned in the desired language. No additional objects will be added as the group agreed to ignore this fringe area.

prtConsoleLock changed to prtConsoleDisable and appropriate text added.

The working group agreed that the MIB, with all agreed to changes made, should be taken forward to the area directorate.

The meeting adjourned at 4:15pm.