DMTF Printer Management Working Group
Nashua, New Hampshire
October 25, 1994 - October 26, 1994

Attendees:

Don Wright - Lexmark
Lloyd Young - Lexmark
Mike Timperman - Lexmark
Andy Davidson - Tektronix
Steve Zilles - Adobe
Bill Wagner - DPI
Stan McConnell - Xerox
Joel Gyllenskog - HP
Rick Landau - DEC
Gaylord Miyata - Underscore
Jay Martin - Underscore
Stewart Walker - IBM (Wednesday Only)
D.R. Palmer - IBM (Wednesday Only)
Tom Hastings - DEC (Wednesday Only)
Larry Stein - FarPoint Communications (Wednesday Only)

The meeting began at 8:55 AM.

Joel Gyllenskog reviewed the planned agenda for the two days.

The first topic of discussion was the ordering of the tables. The enumerations for prtAlertGroup should correspond to part of the OID for the corresponding group.

~~~~~.8.2.1.a.b.c

In the above partial OID, we may have a problem with the "8.2" partial OID which may (together) be redundant and in fact might need to be "8.1" in order to pass through the MIF to MIB translator.

- Andy Davidson will check out how the MIF to MIB creates the OID, i.e. will it always insert a .1. rather than the .2.
- Joel will call Pete Grillo and ask basically the same question.

?? - What trap type should we send in SNMP V1??

An issue was raised over the use of 0 in the following:

printerV2AlertPrefix OBJECT IDENTIFIER ::= { printer V1Alert 0 }
~~~~~

According to Waldbusser and others of the inner sanctum, this usage is OK.

Once we are resolved the issue today, Joel expects to see a numbered RFC in approximately one month.

Do we need all the different marker supply enumerations? The group will bring to the reviewer that the list of marker supply alerts might be a little long. The group would go along with removing them from the alert list.

Harry Lewis suggested the addition of several common media names. The media names in the appendix come from the DPA (ISO10175). To get other names added, the DPA will have to update that list.

Harry Lewis suggested a less granular unit for CounterUnits used for prtMarkerPowerOnCount rather than just hours. The group felt that using sheets, feet, etc. are better measurers of marker usage. Adding more time units was not felt to be appropriate.

The issue of "On Request" versus "Critical" was raised by a reviewer. The group felt that we could live without "On Request" in the list a states in the MIB. Further discussion was held on the printer status. Steve Waldbusser made a suggestion (via fax) that a sub-unit status be added for each sub-unit which would provide more information about that units state.

We need to make Display Buffer Group and Console Lights Group into two separate groups in the MIB so they can be reflected in the MIF correctly.

Based upon directorate review, we should state the enums are type 1, 2 or 3 in the object COMMENTS not in the DESCRIPTION field for the object.

We will strike "Hillary's" from "Hillary's pink presidential letterhead"

An issue was raised over the definitions of the various types of resets. Specifically, resetToNVRAM is a warm start which is equivalent to a front panel reset.

powerCycleReset causes a reset of the printer as closely as possible to a reset which would have occurred during a power-off/power-on cycle. Contents of RAM are not saved. The SNMP agent(s) is reset. A power-on self test is executed. Printing in progress is aborted.

warmReset (was resetToNVRAM) is a restart of the printer which does not attempt to simulate a full power-off/power-on cycle. In most cases, the printer does no or minimal power-on self test. Resetting of any SNMP agent(s) is manufacturer determined activity. Printing is progress is aborted.

resetToFactoryDefaults means to return the NVRAM in the printer to the factory default state. These parameters will be use the next time the printer is

reset (either cold or warm). This command may cause power-on, a warm start, or no other reset of the printer; however, that action is manufacturer determined.

Change the "standby" state from "warning/other" to "running/warm-up."

Broke for lunch at 12:35.
Resumed at 1:45

The following changes were suggested to be made to the MIB:

- 2.2.13.2 heading for section should say Status Definitions
- 2.2.13.3 Overall Printer Status heading should be inserted line 3 of pg 15
- 2.2.13.2.1 changes to 2.2.13.3.1
- 2.2.13.2.2 changes to 2.2.13.3.2
- 2.2.13.3 changes to 2.2.13.4
- 2.2.13.4 changes to 2.2.13.5

Changes to tables on page 15:

- On Request is removed from table
- serviceRequested (detected error state) moved to critical alert active.

change- coverOpen to doorOpen

pg 14, section 2.2.13.2

- drop "overall" and change "status of a printer" to "status of a printer or a sub-unit"
- non-Critical Alert Active: delete verbiage and "For the printer this means that one or more sub-units have a non-critical alert active. For a sub-unit this means that the sub-unit is in a state the transition into which would cause a non-critical alert entry in the alerts table if the table has room for the entry."
- Critical Alert Active: delete verbiage and add "For the printer this means that one or more sub-units have a critical alert active. For a sub-unit this means that the sub-unit is in a state the transition into which would cause a critical alert entry in the alerts table if the table has room for the entry."
- moving on-line or off-line: change "sub-unit" to "printer"
- unavailable: add "the printer or" preceding "sub-unit"
- on request: change "printer" to "sub-unit"
- busy / temp ...: add "the printer or" preceding "sub-unit"
- standby: add "the printer or" preceding "sub-unit"

Definition of "on-request": A sub-unit is not currently available to service requests but could be made available (brought to the ready state) with some operator intervention. For example, if an input tray not currently being used by the printer has been removed its status will be "on-request".

On page 95, in the description for prtConsoleDisplayBufferEntry insert "or logical "

between "physical" and "line" on the first line of the description.

Discussion on the real usability of the lights and console groups because of their limited ability to represent more complex implementations. The group reiterated that it was by design to provide a simplistic model and allow manufacturers to extend to functionality in their provide MIBs.

MIF Issues:

1) Current Operator and Service Personal are optional in the MIB. Since they are numbered before some required items, should we renumber to put these optional items at the end? -- NO

2) There is really no console group in the MIF since the Console localization are tied to general printer. Thus there is a display buffer group and a console lights table but no console group as such. -- The MIB will be rearranged.

3) The way to get numbering to align is to add an interfaces group to the top. What effect will this have on a MIB. -- NO

4) Alerts table time ticks reference sysUpTime. Where does this come from in MIF-land? -- We will add a sysUpTime to the MIF in the same group which has the hrDeviceStatus, etc. objects.

5) Only time unit available for Power-on count in the marker table is hours. What about adding mins or secs? -- NO (previously discussed under MIB)

6) What about MIB II? -- Steve Zilles will provide a proposed MIF table to correspond to the interface table in the MIB.

7) What about the storage and device groups in the Host Resources MIB? -- Defer until Wednesday.

8) What about the status objects from the Host Resources MIB? -- Defer until Wednesday.

Adjourned for the day at 5:30PM.

Meeting started at 8:20 am

Larry Stein given floor to present on IEEE P1284.3; distributed draft D1.20 dated 10/18/94

Discussed some of the concerns that we had with the MIF that his group is creating such as: why is this PC centric?; host centric?

Zilles wanted to know how well the MIF that Larry is creating for host parallel port match up with the parallel port components of the printer MIF. Larry said that he didn't know.

Don noted that the definition of the P1284.3 document says that it is for both peripheral and host adapter ports.

Are we really concerned with P1284.3 since its perspective is from the host adapter's perspective. --- Opinion is no.

Working Group Committee Work --- started 8:40

Joel provided feedback from Steve Waldbusser says that our status is arbitrary (device & sub-unit status)
Steve Zilles modeled his thoughts on all the combinations of status to address Steve W's concerns:
Orthogonal Sub-Unit Status

Axis 1	no critical alerts
	critical alert
Axis 2	no non-critical alerts
	non-critical alert
Axis 3	available
	standby
	idle
	active
	busy
	on request -- requires operator but trivial task
	un-available -- non-trivial task to bring back to available status
Axis 4	moving off-line
1-bit for target state the other for whether there or not	offline
	moving on-line
	online

Should we replace the current sub-unit status with this module for sub-unit status or go with the Waldbusser model? Yes let's propose the following to Waldbusser.

Bit(s)	Description	
2,1,0	xx1	Unavailable/Unknown
	001	Unavailable/On Request
	011	Unavailable because broken
	101	Unknown
	111	Reserved
	xx0	Available
	000	Available Idle
	010	Available Standby
	100	Available Active
	110	Available Busy
3	0	No non-critical alerts
	1	Non-critical alerts
4	0	No critical alerts
	1	Critical alerts
6,5	1x	Target state is off-line
	0x	Target state is on-line
	x1	Transitioning to target state
	x0	At target state

Andy faxed the preceding proposal to Waldbusser at 9:35 AM

Reviewed the comments once again to insure closure.

break at 9:45, resumed 9:55

Tom Hastings distributed two papers: Print Job Model and ISO DPA Model.
Tom then presented the ISO DPA Model of jobs and documents.

Have the attributes but currently there is no basic way to communicate those attributes to the printer unless the printer supports DPA.

Next Tom presented the Print Job Model (Started 11:30)

Finished presentation on types of attributes possibly to be included in a MIB for jobs at 12:10pm.