PMP MINUTES - SAN DIEGO - AUGUST 29, 1996

Attendees

See PWG0896

Agenda

New Projects (Ray Lutz - MIME registration for PDLs)
Outstanding MIB issues
Bakeoff review
IETF re-charter issues and status
IANA enum registration

New Projects

MIME registration for prtInterpreterLangFamily

Cognisys / MFPA - Ray Lutz

See Ray's proposal for prtInterpreterLangFamily enumerations to MIME media types registry mapping, which he will resurrect and post to the PWG for further discussion. Ray will review the MIME registration process and report to the PWG.

If we are to endeavor into internet printing territory, such as print spooling to e-mail which ends up at another (remote) print spool for printing, then we need MIME to prtInterpreterLangFamily mapping. MIME has a more structured registration method than PWG, but not as detailed if you consider the PWG scheme describes language level and version.

Try to reference the MIME registry name in the printer MIB prtInterpreterLangFamily enumerated list. Is it possible to put the MIME type (string) into the MIB description and do a string match? Why couldn't the mapping from prtInterpreterLangFamily enumerations to MIME types be submitted independently, as a separate RFC?

Some clean up may be necessary. Careful here, however, we tend to mix the issue of prtChannelType with prtInterperterLangFamily. The two main areas of interest to MFPA are chFAX (18) and langCCITT (26). So, if we're talking about fax related printer interpreters, there is only one that needs better definition. By mapping to MIME, are we really getting closer to being more specific? Yes, with respect to MIME because PS is the only printer languages currently registered. But, don't expect the MIME registry of printer languages to result in absolute fidelity with respect to printer emulations. Due to the nature of printing subsytems reliance on drivers, there is really no truly printer independent data stream.

How long does it take to get MIME types registered once we submit them? That's quick, but we need to think it through first - printer file formats etc. How concise the MIME types need to be. Should there be a separate RFC? Should we change the MIB descriptions by associating MIME types?

Bob Setterbo motioned for formation of a PWG MIME tag working group with Ray Lutz as Chair but no one wanted to 2nd because Ray said he would name the group the Internet Printing standards group ;-). Therefore, Ray will do the prtInterpreterLangFamily to MIME type mapping and then, with Ray, the PWG will collectively decide if it goes in the MIB , separate RFC, or what.

PMP MINUTES - SAN DIEGO - AUGUST 29, 1996

Outstanding MIB Issues

Note: Closed issues are resolutions arrived at in the SanDiego meeting. Status of these issues is still subject to change based on timely review by those who may not have been able to attend.

Channels Group

If one Channel type maps to many Interfaces, how does an administrator disable a particular Channel without disabling more than one table row. How does he know all the required channels have been disabled?

For UNIX TCP/IP it would be a port number. For other protocols it might be something else.

One proposal for the channel description object boils down to just adding a single object, the port number to the Channel table. This would work for TCP/IP, but what about other protocols? Do we need a more robust definition? Neither Jay Martin or David Kellerman were present to discuss these issues or the proposals, which they were both very involved with. In general, the current proposal is viewed as too limiting and has not been immediately adopted. If we don't do this, however, what do we do? It seemed to fit the Unix space.

Open.

Evolution of the Interfaces Group

The Printer MIB Channels group relies on MIB-II Interfaces group ifIndex. Even though the Printer MIB references MIB-II RFC1213, there is ongoing debate whether we are tied to the evolution of the Interfaces MIB or not since RFC 1573 has been in existence for 2 years. See ftp://ftp.ietf.org/internet-drafts/draft-ietf-ifmib-mib-03.txt. The Interfaces group is active (unlike the hrMIB), but has not progressed. Will this stop the printer MIB from moving to draft? What are the real differences in the evolution of the Interfaces group that matter to the printer MIB? One very useful addition is a longer list of Interface types. Is it possible to just adopt this as a "registry" of interfaces but still keep the Printer MIB tied to MIB-II?

Closed - The next Printer MIB will reference MIB-2 not MIB-3.

Conformance Statements - Conditionally Mandatory

There is a new way to look at Optional groups. If you have the function in your box you MUST manage it! This is an enforcement statement more than anything. Today, we could just ask for grandfather but what if the IETF reacts by resetting our clock? We need to know how current implementations line up with respect to implementation of function but not MIBs.

Open - Everyone who implemented the MIB determine if there are any functions in the printer for which optional groups exist but were not implemented.

Serial Number and Administratively Assigned Printer Name

Are these outside the criteria for adding new objects? No. The printer MIB really is broke when we have S/N for subparts but not for the printer!

Closed - We will add the object with syntax octet string with length 32 as recommended by Jay Martin. Verified against Lexmark S/N of 7 characters and HP 10 characters. We agree to min access read-only (the service person can update via op panel, parallel cable etc.). A printer is free to implement R/W if it wants. Also agreed to add administratively assigned name with syntax octet string with length 32. Some wanted length 128 or more, but embedded controllers will not want to incur the extra flash storage. Both S/N and Admin name are required to be maintained across power cycles. Min access for admin name is r/w. This name does not pertain to printing (Apple name, Netware name...) but does pertain to administration.

Localization

Bill Wagner (not present) had voiced a concern over e-mail that the use of localization is not well described. Harry Lewis pointed out that every localized description in the printer MIB explicitly indicates which localization (prtGenral or prtConsole) pertains to it. We're not sure if Bill might have missed this or we may not be understanding his concern properly.

Closed - On pg. 39 of the current draft, change the last sent of description the of prtGeneralCurrentLocalizaton to read: "Note that this object does not apply to localized strings in the prtConsole group or any object that does not explicitly state it is localized by prtGeneralCurrentLocalization".

Colorant Value

Closed - Increased prtMarkerColorant range from 127 to 255 octets per discussion on the reflector.

InputMedia Form Parts

Closed - As editor, Randy will adjust grammar.

Manual Feed Timeouts

Closed - (-1) means infinite switching timeout, not that manual feed is unsupported.

MISC Clarifications

- Closed - prtGeneralReset - If a device does not have NVRAM the device will, nonetheless respond to a set with a warm reset. This response is undefined and specific to the device.
- Closed - Media Path group - Recommendation to clarify logical media paths accepted with editorial license applied by the editor to shorten the description. ...For example, a device may have a single physical media path, however, when used for duplex printing, the printer can...
- Closed - Cover vs Interlock - The prtCoverStatus object does not attempt to place a semantic on the effect on printing of the cover or interlock status. This will be handled by the alert table. This is just the state of the door or interlock. Maybe it would have been better to have defined an Interlock table, prtInterlockType and a simple status of OPEN/CLOSED. Since we can't really fix it without ripping up the MIB, we'll live with what we have. Someone asked, do low-end printers really have interlocks and Bob Pentecost gave the example of a unit mailbox that isn't pushed up against the printer - interlock - which prevents printing on a HP5si. Don Wright pointed out that, even though we called it the "Cover Table", careful reading reveals that we intentionally included interlocks in this table. Also Door open/closed will be changed to Cover open/closed in the TC's.
- Closed - prtInputDefaultIndex range - recommendation adopted.
- Closed - prtInputDefaultIndex for no system wide default input tray - Do not use index 0 to mean no default. The MIB convention is to use -1 (other) and -2 (unknown), not 0. Actually, the instantaneous default is the tray associated with the default PDL, so -1 (other) is the correct value for prtInputDefaultIndex when there is no overriding system wide default..
- Closed - prtOutputDefaultIndex - same as for input.
- Closed - Status definitions - accepted. Note that busy pertains to the Printer or sub-unit. Move 2.2.13.2 start down to "The Host MIB provides three....). Have to change definition of available to not-broken.

PMP MINUTES - SAN DIEGO - AUGUST 29, 1996

Alert Table

Closed - Add Counter 32 - R/O - to counts changes made to alert table in a manner similar to prtGeneralConfigChanges so the NMS may quickly determine when the alert table has changed. If anything is added, removed or otherwise changed in the alert table, the counter bumps. One counter for critical and one for all alerts. Where to add the object was debated - prtGeneral, Alert Table or deprecate prtGeneralConfigChanges and structure a new Statistics group. We decided to add the object to the Alert group, making it prtAlert.2 (critical) and prtAlert.3 (all).

Min Access

Open - Should we specify Min access? MinAccess = MaxAccess by definition so any implementation that backed down from Max access is wrong by the book. Bob Setterbo will initiate a review of Min/Max access including a R/W object audit on the printer MIB.

Channel Type TC

Closed - Port 9100 and AppSocket clarifications accepted.

New Interpreter - JCL

Open - Xerox proposal to add prtInterperterLangFamily langJCL (like PJL). Request from Harry Lewis to name the registration XJCL to avoid conflict with IBM's JCL.

Problem of referencing hrMIB when it hasn't progressed.

Open - Alternatives

- Take over the hrMIB, deprecate all but what we want. Others will have to come out of the woodwork if they care.
- Bring needed hrMIB objects inside the printer mib, don't change but assign new OIDs.
- Blow off the hrMIB, do status the way we wanted to from the start and duck.

Bakeoff Results

Reviewed Bakeoff DeviceStatus, PrinterStatus, PrtDetectedErrorState results. Discussion about Offline, some don't have it, some may not feel their printer is down when it's offline. We'll never get out of this until we mandate definition of offline. Circular... Available is not-broke, but unavailable is down. Down is not the same as broke.

Reviewed Genoa results. HP and Lexmark are identical. IBM is identical in most cases except the prtDetectedErrorState bit order is reversed. Everyone had RUNNING and PRINTING ok. There are various other discrepancies that we did not review rigorously. There are gray areas such as Paper Tray. Should prtDetectedErrorState be noPaper or serviceRequested or both? Is the hrMIB definition of Service to be taken as the same as the printer MIB definition (screwdriver)? What if a tray is out of paper but tray linking is on?

Will we have another bakeoff? IWL has mentioned some interest in hosting via e-mail. Will they? Does someone else wish to host? The next bakeoff needs to be more formally defined and conducted and greater in depth. We should probably report the results to HardCopy Observer. We'd like to do it Dec 6/7 at the tail end of the IETF plenary.

PMP MINUTES - SAN DIEGO - AUGUST 29, 1996

IETF Re-charter Status

Open - Lloyd is handling. Implementation Experience Reports are needed from everyone. Lloyd will solicit a sample from IETF, what to write up.

IANA Enum Registration

Open - Binnur already had some work in process with IANA. Lloyd will check to see if this has resulted in action. See ftp://ftp.isi.edu/in-notes/iana/assignments.

Printer MIB draft Status

Open - Randy has 9/20 target for server. (prior to NYC).