PWG Web-based Imaging Management Services

Camas, WA

Minutes - January 11, 2005

Harry Lewis 01/11/2005

Attendees

- Ron Bergman, Ricoh
- Lee Farrell, Canon
- Andy Ferlitsch, Sharp Labs
- Harry Lewis, IBM
- Ira McDonald, High North (by phone)
- Bogdan Plewnia, Sharp Labs
- Stuart Rowley, Kyocera
- Jerry Thrasher, Lexmark
- Bill Wagner, NetSilicon
- Craig Whittle, Sharp Labs
- Pete Zehler, Xerox (briefly by phone)

General Discussion

Made introductions around the room. Reviewed and approved previous minutes.

<u>Discussion</u> - Printer MIB v2, Port Mon MIB and Counter MIB interop test call for interest. Need prototype(s) before we can include Counter MIB. Consider using MIB walks with manual or automated analysis of results. Should the PWG engage in certification testing? If people aren't doing MIBs correctly they probably won't be able to do WIMS correctly.

Need to devise methodology, define criteria, identify standard test software, and indicate acceptable results. Members can run tests and post results. PWG technical volunteers can check, validate and correlate resulting in a "virtual bakeoff" to be conducted remotely or during a subsequent f2f.

<u>Action</u> - Bring up interop at the Camas Plenary and address this in the Steering Committee.

Counter MIB

We started with overview of Counter MIB using Ira's e-mail note from 12/05/2004 "Overview and Diagram of Counter MIB v0.40" as a guide.

Clarification - Highlight color images are not specified for Scanners (image count) but are specified for printers (impression count). This is by design because a scanner can't distinguish highlight color.

Decision - Ron Bergman suggested combining one and two-sided counters. We left them separate so as not to disrupt the structure of the existing Counters Schema.

The following 3 traffic counter elements counters are in the MIB but not in the Counters spec or schema.

icTrafficJobOutputKOctets, icTrafficJobInputMessages, icJobOutputMessages Need to correct this in the subsequent reviews of the Counter spec and schema.

Bert Wijnen comments reviewed and accepted and will be incorporated.

Action - Ira will go through latest IETF MIB guidelines internet draft and check MIB for conformance.

Action - For the Counter MIB to become a PWG standard, we need to add the proper front matter and explain relation to other MIBS, Security and Internationalization. See the Port Mon MIB as an example. There should also be a machine readable version.

Action - Submit for Last Call no later than Mar 1.

Counter Spec

Reviewed Jan 5 version with many updates made live, at the meeting.

Schema is about 5 months out of date. Some containment changes are needed. New element (JOB) above service counters. Name changes of lower level counter elements. Some naming conflicts between schema and counter MIB. The spec is in working group consensus. Final review and edits prior to Last Call are needed. Last Call to be targeted for the April f2f.

Life-time, reset and power-on counters still need to be addressed.

Request to remove scan to e-mail and scan to file (storage) in favor of just "scan".

Discussed Job.KOctets from the Work counters, Job counters table. Keeps up with amount of data processed rather than data in/out. How does this map to the MIB? The MIB has only one KOctet counter which can apply to Service or Job (JobInputKOctets in the MIB in the Traffic table). Change Job.KOctets to Job.InputKOctets.

Need to align names between MIB and Specification. Impressions are Imp in the MIB. 2-sided is in the spec but not in the MIB.

We need a widespread very careful review of the Counters specification to try and catch any remaining inconsistencies.

We planned to complete Last Call at the f2f plenary in Japan. But nether Ira or Pete, two main contributors, will be present. Need a follow-up phone plenary.

Clarification - Discussion about Copy Job.KOctets. Why have copy? Because some MFDs have a scanner that only supports copies... does not advertise a scan service.

Job and Traffic Octet counters are redundant under Services. Consider removing one or the other (preferably traffic).

Action - Need to remove MFD references throughout the device.

Clarification - In the Scan counters, do we need to change DataStream.Images to DataStream.InputImages and DataStream.OutputImages. Note that, for scan, we are charging by the number of images scanned (input) and for output we capture impressions. So we can derive n-up from that. Need to add some inline rational statements.

What about thumbnail images?

What is traffic? All other counters that are not images, impressions. The only place to get octets is supposed to be traffic. This is the way it is in the MIB. Seems like there is fairly widespread confusion over the use of traffic.

Issue. Section 4 identifies counters. Each element is a different counter. So... should traffic counters be in section 4 if they are actually a different name for the same counter? Are we doing this so the MIB will align? How much should we flex the Counter spec to align with MIB indexing?

Discussion of Mandatory elements for compliance.

Terminology change - reference Fig 3.

ServiceTotals.xxx should be SystemTotals.xxx. System is a first class object added to SM by WIMS for counters. Has same meaning as in HR and MIBII - top level object. Action - Fig 3. Change BOX to "server" and server circle to system. Issue - replace ServiceTotals with System? See revised figure and require follow-on discussion. We postponed Mandatory totals and focused on Services.

7.2.1 - clarify that copiers can not distinguish a blank impression.

We had a discussion about removing blank impressions because it may be hard to implement and we resolved to consensus that we should KEEP blank impressions for all hardcopy devices because it represents one of the highest priority and most requested metrics from customers in the fleet managed used based billing environment.

Action - need to complete mandatory counters work that we did not have time for at the f2f.

Changes handled at meeting:

- 1. In Monitoring, TrafficInputJobChannelKOctest changes to TrafficInputJobInputKOctets.
 - a. Further rearrange name to TrafficJobInputKOctets
 - i. Need to follow-up with global change search
 - b. Added TrafficJobOutputKOctets
 - c. TrafficJobInputMessages
 - i. Messages received by all supported Job channels by the service (ex. e-mail in, fax in, netFax in)
 - d. TrafficJobOutputMessages
 - i. Messages sent by all supported Job channels by the service (ex. e-mail out, fax out, netFax out)
- 2. Change section 5.10 from "ScanToStorage" to simply "Scan" per previous agreements. Need to follow-up with global search on "storage" and make sure documentation is correct.
- 3. In section 4.1.1 we removed Job.KOctets and, in it's place, we added Job.InputKOctets and Job.OutputKOctets and realigned terminology for each input or output service.
- 4. We eliminated Waste. KOctets and Aux. KOctets throughout the specification.
- 5. Under Maintenance, we added Maintenance.InputKOctets and Maintenance.OutputKOctets.

- 6. Removed the word "processed" from the definition of Job, DataStream, input and output counters
- 7. Table 4.2 Changed MediaUsed.Media to MediaUsed.MediaSizeName
- 8. Table 4.2 Add MediaUsed.MediaName (user friendly name)
- 9. Terminology section Added top level definitions for Aux, Maint, Waste and Unknown and removed the sub-classes currently under "Impressions" and "Jobs". (Blank entries added only... needs follow-up editing) (Action).
- 10. Revised our posture on TrafficJobInputKOctets and TrafficJobOutputKOctest counters and removed them from Monitoring (Action - need to do same Input/Output Messages in Monitoring). Put them into job and take them out of monitoring. Define them only for services.
- 11. Remove the word traffic from storage octet counters. Action Ira will similarly align the MIB.
- 12. Edited fig 3 to clarify the nature of Services and System.
- 13. Agreed that availability counters should not be mandatory on services rather, the top level system totals is a more appropriate place for these. We dropped them from services. Vendors can implement them if the SLA mandates.
- 14. We got rid of service totals within all individual services. These were redundant with System counters.
- 15. 7.2.4 we added full color impressions as mandatory
- 16. Added in/out message counters as mandatory for all e-mail and fax services.
- 17. We agreed that there should be no distinction between Monochrome and Color for e-mal out or fax-in and made appropriate changes.
- 18. Remove black images as mandatory for all fax out products.

WIMS Spec

We did not have time to review the updated WIMS spec. People should review the latest spec as revised by Bill Wagner.

Sequence diagram is damaged in the PDF. Need to convert to TIFF and update PDF. Use the WORD document in the meantime.

Standards harmony

WSDM, DMTF/CIM/OMG, WS-Management.

Progressively more important to add SM to CIM because they are aligned with XMI and OMG.

Need to finish our work first. Then need to evangelize. Approach DMTF first since WS-Management and WSDM seem to be basing off CIM.

What do we offer? Our schema? They want us to add to the CIM model in CIM model terms. Is CIM really becoming XML. Seems like we will have to provide CIM objects not schema. Note that our schema makes zero elements mandatory. IPP makes very few mandatory attributes. We need to decide what would be mandatory for mapping to CIM.

Action - Harry to talk with W. Bumpus. Find out if WSDM would rather work through CIM or directly use the PWG semantic model?

CIM Printer Object is almost entirely composed of attributes with normative reference to HR MIB or Printer MIB. Already aligned. Need to start writing some hand fragments.

Problem is there are no tools to help do this job. It is not a machine translate. It will likely all be done by hand.

Next Conference Call

The next WIMS conference call will be Wednesday January 26, 2005.

Time: Noon Eastern (9am Pacific)

Call-in US Toll-free: 1-877-874-5524

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