

Minutes of the PWG *Web-based Imaging Management Services*

Face to Face

Vancouver, B.C

May 24, 2004

Harry Lewis
06/08/04

Attendees

- Lee Farrell, Canon
- Grant Gilmore, 366 Software
- Harry Lewis, IBM
- Ira McDonald, High North
- Jerry Thrasher, Lexmark
- Bill Wagner, NetSilicon
- Peter Zehler, Xerox

General Discussion

We reviewed and accepted previous minutes from the Washington D.C. face to face.

Discussed the topic of "views" and how to represent them in both XML and MIBs.

Discussed the need to work with DMTF to subclass printer to network printer and import PWG semantics

Input from new attendee, Grant Gilmore, 366 Software (Printer management and monitoring software) that he would like the PWG to address color, MFP, enhanced eventing and stronger compliance to our standard management protocol and semantics.

Revised Charter Discussion

The revised charter is up for PWG last call. Charter was reviewed with no major comments at the f2f. Some questions were raised regarding PWG Process clarification for charter revisions (should they require w/g approval with steering committee review?). In this case (WBMM - WIMS) the charter revision is considered a clarification with no special requirements.

MIBs and Schema

Reviewed PWG Imaging Counter MIB v0.30 updates based on comments at WIMS telecons and the previous WBMM f2f in Washington, DC.

<ftp://ftp.pwg.org/pub/pwg/wbmm/white/counter-mib-20040428.txt>

Machine-translated Schema derived from Counter MIB v0.30

Need input from finisher experts, UP3i. Need to deal with work units such as STACKS and number of folds, cuts etc.

Need to address UP3i additions to Fin MIB and/or WIMS counter MIB.

We will plug in finishing counters based on existing IPP and what OCE sent and bounce it back to them. We will not extend the finishing MIB.

Finishing types are already in the SM. We need to enum these into the Counter MIB.

Lead to discussion for need to model System, Service, Device, Job, Resource in the context of an overall Imaging Systems (MFP) model.

Pete will submit hand written schema that shows services better and for comparison with machine translated schema in terms of usability.

Notification minimum requirement includes attributes, format of notification in machine-readable form... not in IPP. Make a schema for over the wire deliverable format of an IPP notification, essentially. This is the alert file. Alert Basic, what all alerts have. Definition of

Plan is a term in Schedule. Plan Status and Plan Action shows the status of a restart, for example.

All W3 specs use UTF8. This means notify charset is redundant. Notify natural language is definitely necessary to enable translation of text etc. for any string element, which happens to be human readable text. For subscription we need to leave notify charset IN because the charset needs to be in the correct charset for the receiving application.

What are Alerts for? Most Actions, except GetElements, will result in Alerts rather than Reports. Conditionally result in alerts. If no one has subscribed... then no Alert is generated.

For monitoring actions there is always a send report. For management actions there can be a alert change if sub. For config changes there can be alert and report. (see spec).

Subscription is based on IPP but do not have lease, necessarily. ISO 8609 Date is preferred. Lease is blown away. Subscriptions, like jobs, like docs have lifetime and go away etc.

Alert when subscription expires? Like config change alert that tells you what changed. Get list of elements in the object that changed. The emitter knows that a change occurred so should be able to bind in what changed to the notification.

We have events for created and completed but not expired.

Ira, rather than eliminate Lease, change Lease to date and time at which it will expire, created, last access and modified. Don't mimic the requested - granted stuff from IPP. Lease needs persistence... across reboots including indication of persistence (same element in resource object). Make available in all schema.

Is it a waste to write two different data models (one for MIB and one for XML)? Some developers feel there is too much SNMP creeping into the WIMS schema (ex. indexes).

Report schema. Substituted elements. List of requested elements. Could be entire objects like a job or they could be job description group inside a job or be a specific job attribute etc.

Imaging System Model

Review the initial draft of PWG Imaging System Model.

<ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimsismod10-20040517.htm>

Model section 3. No relation between imaging service (1) and imaging device (1). Either or both can be absent. N is not meant to be the same among the diagram components.

Imaging system can accept jobs directly. Or can also contain services and present them together services and/or devices downstream.

Object oriented. So "input tray" may refer to Printer object or Scanner object.

Interpreter is synonymous with "transformer".

No local scanning without creating a job a-priori

Channel discussion. Treat console as a channel in the printer mib? Channel may be thought of as ANY way to submit a job sch as start job by wakeup.

Channel doesn't have to point to the interface.. it can be 0 (is this stretching the original intent of the Printer MIB?)

Counter is not on the channel... it is on the service. Channel could send small number of bytes (via channel) then there could be print by reference (large job).

Do we need to define the analogy of an "output channel"? Yes. But "channel" is already defined as "input only". So we need to abstract further and qualify "channel" and say there are Input Channels and Output Channels (forwarded and/or where data is forwarded).

Clarify difference between input and output channel.

Interpreter will be changed to "transformer" because it can do imaging processing and/or PDL interpretation

Recalculating input tray (scanner) will be modeled as separate input/output because no good way otherwise

Function of the imaging systems model is to Extend PWG SM spec for multifunction.

Lot of discussion over how the PWG should approach modeling the MFP. Unresolved but likely to require a future MFP w/g.

Latest WIMS spec Review

Reviewed Latest Spec Draft

<ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wbmm10-20040519.pdf>

Need to revise naming to reflect PWG-wims-version...

Need to develop WSDL Wims/wsdI/wims10

Eliminate substituted elements

Every action will have a predefined return. Exception is implicit in the status string. Status string is an enumeration.

Actions supported, operations supported etc. ... String.

Atomic sets. Set of elements, which must all succeed.

Bill recorded changes in the spec on the fly.

No silent actions. Delayed management ops hidden in a schedule... dangerous.

Need to generate report or alert.

Question if subscribe/unsubscribe for alerts is part of monitoring or management? (Answer - Monitoring)

Vendor - should extensions be at all levels? Or keep monitor and mgt pure? (Would like to keep pure for interoperability)

Monitoring is just monitoring and recording

Management can change the value of an element or configuration of existing objects, services, and devices.

Administration is changing the state, starting, restarting etc.

Action Items

1. Pete and Harry check with UP3i reps and Christian (Oce) regarding Finishing.
2. Pete issue and compare counters schema for different views
3. Ira update alert schema for lease based on date and indication of persistence
4. Alert obj delete notify charset and substituted elements
5. Subscription obj add lease and perst
6. Remove substituted elements from report schema
7. Update model diagram in imaging systems to clarify "n" and device service relationships
8. Update imaging system model to expand simple printer channel to be input channel and separate subunit output channel and designate it as the outbound channel from ex. a spooler or scanner.
9. Decision to proceed with imaging system model so as to support standard imaging events for PSI etc.... needs to be updated and made WORD friendly.
10. Update the WIMS spec per discussion at f2f as recorded in mins and on the fly by Bill.
11. Mandatory SET elements. Fidelity. Atomicity. Parameter of set elements action. Behaves like Job Mandatory attributes in JobX.

Next Steps

What is our roadmap? Do counters live in the service or device or system that they pertain to? How fine grained are counter?

Next Conference Call

The next WBMM conference call will be Wednesday June 9, 2004.

Time: Noon Eastern (9am Pacific)

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