PWG Web-based Imaging Management Services

Minutes - October 5, 2004

Amended

Lexington, KY

Harry Lewis 10/25/04

Attendees

- Lee Farrell, Canon
- Rich Gray, Plus Technologies
- Peter Hansen, Intermate
- Harry Lewis, IBM
- Ira McDonald, High North
- Jerry Thrasher, Lexmark
- Bill Wagner, NetSilicon
- Peter Zehler, Xerox

General Discussion

Reviewed and accepted minutes from Montreal meeting in August 2004.

Overview provided by WIMS Chairman Bill Wagner, NetSilicon, for the benefit of any new members.

Action items reviewed

- 1. Specs to accompany schemas.
 - 1. Ira has been editing schema as changes have been requested based on prototype findings.
 - 2. We still need to write specifications related to our schema, starting with a WIMS object spec.
 - 3. Target t.b.d.
- 2. Define counters conformance subset.
 - 1. Counters definition is ongoing in the PWG Semantic Model. This work continues via teleconferences. This provides the basis for addressing a conformance set.

- When counters definition is complete we will select a subset of counters which are must useful for feet management purposes. The goal is to define a small subset that will be implemented in all hardcopy devices and MFDs so a management application can depend on these elements being instrumented and reported.
- 3. Target December, following Counters spec final review in San Antonio.
- 3. Build sub-schemas tailored to compliance subset
 - 1. Target 1Q 2005
- 4. Define equations of interest.
 - 1. Completed. Pete Zehler added diagrams and equations to the counter specification to clarify totaling of counters and other counter relationships.
- 5. WIMS spec terminology updates
 - 1. Completed. All known terminology updates have been incorporated into the WIMS specification
- 6. WIMS spec change order of ops RegisterForMgt first.
 1. Target November
- 7. Change ReportSoureURI
 - 1. Completed
- 8. Revise Schedule schema to handle last day of month
 - 1. Completed
- 9. Requirements doc
 - Initial extensive consideration of requirements was done but no formal document resulted.
 - 2. Target November
- 10. Prototype demo requested by Apple
 - 1. Status of demo uncertain. IBM investigating. Others encouraged to prototype and consider demo'ing as well.
- 11. UML sequence diagrams
 - 1. Some high-level UML sequence diagrams would be helpful
 - 2. At least one diagram from IBM will be incorporated
 - 3. Target November
- 12. Develop agentSchema
 - 1. Moral equiv of Printer Object schemas
 - 1. Like a "GetElements" against the agent
 - 2. Used to determine what services the agent offers and which devices it knows how to manage.
 - 2. Target January 2005
- 13. Implementers Guide
 - 1. Target March 2005
- 14. Call for interest in Printer MIBv2 and Counters MIB interop test
 - 1. Do we really need Printer MIB and Counter MIB interop testing more than anything else we are doing in WIMS?

2. Target - Discuss at November Plenary, following completion of Counters spec.

Use of SOAP

Lack of interop between IMPLEMENTATIONS of SOAP v1.1(as demonstrated during PWG PSI interop testing) leads to consideration of alternate bindings, the use of HTML Forms or creation of a PWGWIMS media type for use over raw TCP/IP. Should we bite the bullet and reference SOAP 1.2 and WSDL 2.0? WSDL 2.0 is still in last call and there will be a time lag before we see tool-sets. We agreed binding should separate from the model and semantics. There should be a normative definition of elements in the abstract specification, a normative binding and one or more optional bindings. We agreed the binding specs should be documented as appendix to the protocol spec and at least one binding should be SOAPv1.2 and WSDL 2.0. It is still open exactly which binding will be normative.

Prototyping

Harry presented an overview of IBM WIMS prototype which uses RegisterForManagement, SendReport and a schedule including multiple plan Ids.

Counters

We reviewed Pete Zehler's updated counters spec and schema.

In the PWG Semantic Model, the Printer (object) represents a service not a device. Each Printer contains 0 or more jobs represented by the Job class. Each Job contains 0 or more documents represented by Doc class. Service counters have been defined to facilitate accounting for work performed in the enterprise via various services (typically found packaged in the form of a MFD).

One key thing left to do is to get subunits defined and device counters into the Semantic Model. So far counters are all service related. Services subcontract with sub-units to perform their work. Subunit definition is in process. We started with services counters because these will facilitate charging on service basis (fax vs print, color vs black et.). Subunits is a Semantic Model todo related to WIMS.

Doc data impressions / aux impressions / waste impressions / maint impressions are all separable

Section 5. Per service... which counters apply to each service? Out of all the svcs, which counters apply to each svc? Inbound and Outbound counters are different. This is still being reworked.

- Pete to add back in optional counters e-mail in and e-mail out service add back in images counter.
- Count number of destinations? No. Covered in underlying service jobs. Just adding gross usage of the service now... not user based. Number of connections, number of transmissions? Pushed into vendor specific now.

Conformance section. Like to hear which counters are most important. Conformance has to be service by service (including totals). Anticipate conditionally mandatory. Totals are aggregate across all services.

*Interested parties send short e-mail to Pete, id counters you find most interesting. Arrive at subset.

Question about color coverage. Even at a coarse level. Percent magenta, percent cyan etc. Just low, med, hi?

What about complexity of page? Processing time?

Another approach would be to just look at color the way we look at monochrome only boost from 5% to 15% etc... just charge more for color.

This falls into the vendor extension arena right now.

WIMS Specification Protocol spec review

Bill has updated based on prototype findings and developments from f2f discussion.

Need WSDL 1.1 SOAP 1.1 binding appdx.

Accepting multiple schedules will be mandatory. Enabling the WIMs agent to be managed by multiple managers may become optional.

Well behaved agent should cease after some time (10min?)... when trying to contact an obviously "dead manager"... maybe just probe now and then... and register with redundant mgr (implementer's guide material).

Schedule lease has been added

Lots of discussion about subscription ID. Manager assign? Agent assign? Role of IPP based subscription definition? Settled on AGENT defines subscription ID.

Subscribe for alerts should be an immediate action. Confirm with SendReport. The real best of subscription ID is for unsubscribe. The SendReport caused by an alert will always contain the Scheule ID and planID...

GetResources - what about rights management? Make GetResources optional?

Monitoring, Management, Admin (order) not Mon, Adim and Mgt.

Monitoring is the only mandatory one set of operations and actions.

Schema

Reviewed Schema What if agent can't find manager... should it shut down devices? (open topic).

Next Conference Call

NO CALL OCTOBER 13!

The next WIMS conference call will be Wednesday October 20, 2004.

Time: Noon Eastern (9am Pacific)

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

Call-in International/Toll: 1-712-455-8420

Participant Identification number: 497478