



IEEE-ISTO PWG

Web-based Imaging Management System

WIMS Working Group

Chicago PWG Meeting
27 October 2005

Agenda - Morning

- **Morning Meeting – WIMS/CIM**

- **9:00** **Introductions and Attendance**
- **9:15** **WIMS/CIM WG Origination, Purpose & Activities**
- **9:30** **Situation and Tentative Next Steps**
- **9:45** **Rick's Presentation to CIM Core**
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimscimalign-intro1-20050929.ppt>
- **10:00** **Break**
- **10:15** **Ira's Analysis**
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimscimprint10-20050804.htm>
- **11:15** **Rick's Alignment Suggestions**
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimscimalign-20050822.pdf>
- **12:00** **Discussion of Objectives of and Impact on PWG with respect to CIM and Web Services Management to be held on Friday**

WIMS/CIM WG Origination, Purpose & Activities

- **Alliance with DMTF:**
“Together, the groups will work to review and update the DMTF’s Common Information Model (CIM) with input based on the latest Printer Management Information Base (MIB) and the PWG Common Semantic Model.”

June 14, 2005 DMTF Press release

PWG Rational

- The PWG Semantic Model, enhanced with WIMS-developed elements for device management, is the basis for the management of imaging services, devices and jobs, regardless of application or protocol
- CIM is a prevalent management models mechanism and has been identified to provide the management models for various Web Services- oriented Management approaches.
- Ergo: CIM should embody the PWG Semantic model with respect to imaging

DMTF/CIM –Web Services

- Sept 17: Web Services for Management (WS-Management) specification submitted to the DMTF for further refinement and finalization as a Web services-based management standard.
 - <http://xml.coverpages.org/ni2005-09-17-a.html>
- Sept 12: DMTF to expose CIM and WBEM standards via the leading Web services management technologies (WS_Management) Web Services Distributed Management (WSDM) specification from OASIS will be mapped to CIM and other DMTF technologies
 - http://www.dmtf.org/newsroom/releases/2005_09_12b
- Proposal for a CIM mapping to WSDM
 - <http://www-128.ibm.com/developerworks/webservices/library/specification/w-s-wsdm>

Agreement

- **Work Register (July 2005)**
 - <http://www.dmtf.org/about/register/PWG-DMTFWorkRegister.pdf>
- **Mission**
 - review and update the CIM model based on the updated Printer MIBv2, the PWG Semantic Model and web services protocols
- **Schedule**
 - Education period (July through August, 2005)
 - Content evaluation period (September through October, 2005)
 - Mapping (November, 2005)
 - Draft review / revision(s) (December, 2005)
 - Last Call (December, 2005)
 - Formal Approval (January, 2006)

PWG Actions

- CIM Alignment WG formed as subgroup to WIMS
 - Weekly Phone Conferences
- Existing CIM Model Studied
 - ftp://ftp.pwg.org/pub/pwg/wims/cim/CIM_Device_Printing.pdf
- Areas of Inconsistency Documented and Changes Proposed
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimscimprint10-20050804.htm>
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimscimalign-20050822.pdf>
- Update Process Considered –Change Request?
- Attempts made to establish CIM liason
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimscimalign-intro1-20050929.ppt>

Comments on CIM “Printer”

- **Structural problems:** blends Printer MIB and IPP “printer” models, mixing device and job properties
- **Vague or meaningless properties:** contains properties that cannot be implemented reliably or interoperably.
- **MappingStrings or ModelCorrespondence attributes:** some MappingStrings point to the wrong MIB; need additional MappingStrings or ModelCorrespondences to help implementers and future editors.
- **Read/write attributes:** CIM properties by default are read-only. Writable attributes are not identified
- **Mutable and Modifiable attributes:** to be added
- **Incompleteness:** CIM_Printer class includes small number of Printer MIB properties. Additionally, the other printing-related objects (PrintService, PrintQueue, PrintJob) should be aligned

Situation with DMTF/CIM

- Except for some suggestions from individuals, there has been no co-operative effort from the DMTF
- The CIM-Alignment group did get some time to present ideas to CIM-Core, but:
 - There was no direction,
 - There was apparent reluctance to change
- The DMTF/CIM Process for change is at best long, arduous and labor intensive.

Tentative Next Steps

- Work Product 1: CR #1 – “Pipe cleaner” , an “Editorial CR” addressing description issues only.
 - Primary intent is to develop the relationship and the process for alignment- Changes are useful but non-contentious
- Work Product 2: CR #2 – The “Technical CR” will add new elements and deprecate wrong elements
 - This would be attempted only if there is usable CIM support and a reasonable process developed in implementing CR#1
- Work Product 3: – Introduce new “imaging” classes either in conjunction with CIM or as a private PWG vender extension .
- Work Product 4: DMTF Standard Profile for Printing. This is a much bigger effort specifically aimed at WEBM and of more limited utility.

Summary Comments

- Is a consistent Management Model for imaging desirable?
- Is the PWG Semantic Model the best existing basis for such a model?
- Is DMTF/CIM the best vehicle for establishing this model within the general context of Management, and of Web Services based Management?
- Can PWG Membership encourage CIM Co-operation?
- Will PWG Membership participate in the effort?
- What is a reasonable goal?
- Subject for Friday's Planning Meeting

Agenda – Afternoon

- **Afternoon Meeting – WIMS**
 - **1:00** **Introductions and Attendance**
 - **1:10** **Acceptance of Last F-F Minutes –**
 - ftp://ftp.pwg.org/pub/pwg/wims/minutes/wims_050714.pdf
 - **1:15** **Summary of WIMS WG Activities**
 - Counter Spec PWG Approval
 - CIM Subgroup
 - Updated WIMS Schema
 - WIMS Protocol Document
 - **2:00** **Identification and Discussion of Schema**
 - <ftp://ftp.pwg.org/pub/pwg/wims/schemas/>
 - **3:00-3:15** **Break**
 - **3:15-5:00** **Page-Turner on WIMS Protocol Draft**
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wims10-20051019.pdf>

Counter Spec/Counter MIB

- Counter Spec approval as Candidate Standard 27 September
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimscount10-20050824.doc>
 - (not yet posted as Candidate Standard)
- Counter MIB – MIB Mapping of Counter Spec
 - <ftp://ftp.pwg.org/pub/pwg/wims/wd/lcrc-wimscountmib10-20050616.pdf>
 - needs prototype before Vote for Candidate Standard
 - Steering Committee suggests submitting for Formal Vote as PWG Informational Document
- Counter XML Schema
 - Incomplete
 - Soliciting more members to contribute and to prototype

CIM Alignment Subgroup

- **CIM Alignment Activity made subgroup**
 - **Aggressive Schedule**
 - **Subject Commonality**
- **Craig Whittle as Co-Chair**
- **Distinguished from WIMS “Protocol”**
 - **Separate Weekly Phone Conferences**
 - **Mailings on WIMS list, but designated with CIM headering the subject line**

WIMS Schema

- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/wimsmmsg-20051004.xsd> - WIMS Message
- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/wimsbase-20050912.xsd>
- WIMS Base v0.30 - Agent, Device, Manager, Service, System
- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/wimstype-20050912.xsd> - WIMS Type v0.30
- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/alert-20050912.xsd> - Alert v0.50
- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/events-20050912.xsd> - Events v0.80
- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/report-20050912.xsd> - Report v0.50
- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/resource-20050912.xsd> - Resource v0.70
- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/schedule-20050912.xsd> - Schedule v0.93
- <ftp://ftp.pwg.org/pub/pwg/wims/schemas/subunits-20050912.xsd> - Subunits v0.40

WIMS Protocol Document

- At <ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wims10-20051019.pdf>
- Revamped to make more general
- All sections updated and aligned with updated Schema
- Addressed suggestions for conventional Manager-initiated and Immediate modes
- Submitted to Working Group for Last Call
- Intend PWG Last Call to Start in December for conclusion at January Plenary meeting
- Prototyped by IBM – Intend to go to vote for Candidate Standard after PWG Last Call

WIMS Protocol Document Changes

- High-level definition of Management Operations and Actions
- Bindings Removed to Normative Appendix
- Agents now referenced by enterprise-specific name, asset number etc. as well as URI, to protect security at agent site
- New Management Operations
 - **BeginManagment & EndManagement**
 - **Allows managment to be initiated by Manager**