Workgroup for Imaging Management Solutions

Workgroup Session

Printer Working Group
Face-to-Face Meeting
October 13, 2009
Apple –Cupertino, CA

Intellectual Properties Policy Statement

This meeting is being held in accord with the PWG Intellectual Properties Policy.

WIMS Meeting Agenda

- ***1:15 –1:30 Startup and Introduction***
  - *Give Intellectual Property Statement*
  - *Identify Minute Taker*
  - *Introduce Participants*
  - *Consider Agenda*
- ***1:30 –2:30 Action Items Review***
  - *XPS entry for IANA Printer MIB*
  - *PPM Device Id Command Set*
  - *CIM Print Service MOFs*
- ***2:30 –2:45 Break***
- ***2:45 –4:45 Imaging Power Management Project***
- ***4:45 –5:00 New Action Items & Wrap-up***

XPS Language

Suggested addition is in RED. Microsoft to suggest appropriate durable reference

PrtInterpreterLangFamilyTC ::= TEXTUAL-CONVENTION

-- This TC was extracted from prtInterpreterLangFamily in RFC 1759.

STATUS current

DESCRIPTION "This enumeration indicates the type of interpreter that is receiving jobs."

SYNTAX INTEGER{

other(1),

unknown(2), -- Not in RFC 1759

langPCL(3), -- PCL. Starting with PCL version 5, HP-GL/2 is included as part of the PCL language. PCL and HP-GL/2 are registered trademarks of Hewlett-Packard Company.

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langC4(65) -- Not in RFC 1759 -- US DOD C4 (see MIL-STD-1840) MIME type 'application/cals-1840'

langXPS(66) -- Not in RFC 3805 -- XPS = XML Paper Specification, Microsoft Corporation, ECMA OpenXPS Standard (June 2009) (see http://www.ecma-international.org/publications/standards/Ecma-388.htm)

Or XPS Specification and Reference Guide (see http://www.microsoft.com/whdc/xps/xpsspec.mspx)

}

IEEE Device Id -Command

- At the request of the PWG, Ira McDonald has proposed a normative appendix to the PWG Printer Port Monitor MIB, standardizing the content of "COMMAND SET" (CMD).

ftp://ftp.pwg.org/pub/pwg/pmp/white/tb-ppm-1284-cmd-20090803.htm

- Because this entry was originally defined in IEEE1284, and is current in used in several protocols in addition to the Port Monitor MIB, it was considered that this information should be an independent PWG standard.
- Ira has drafted this as a standard and has posted this at

ftp://ftp.pwg.org/pub/pwg/pmp/wd/wd-pmp1284cmdset10-20091001.pdf

- Since this information has been available for some time, it would be appropriate to consider any Workgroup objections at this time, and to initiate WIMS Last Call for this document.

>>Review of draft<<

- Post additional issues to the WIMS list. The intent is to resolve all issues over the next few weeks. The objective is to complete PWG Last call by the end of the next Face-to-face.

CIM Printing Classes

- Rick Landau has notified DMTF that Dell has implemented all but one of the printer-related classes that have been added to the CIM schema as part of the WIMS/CIM alignment activity.
- This implementation should count toward the two implementations required for promoting a class or property from Experimental to Final.
  - The implementation provides values for all non-deprecated properties that can be derived from the SNMP data in Printer MIB II, Host Resources MIB, and MIB-2.This includes properties inherited from parent classes.
  - The implementation also provides values for all the experimental properties in CIM_Printer.
- Rick remains interested in experience with the Proxy Provider Code
- If someone else will do another implementation --service or client-- that will be enough to promote the classes to Final status and put the results of this effort on a firmer basis.

CIM Printing Classes

Experimental concrete classes implemented:

- CIM_PrintAlertRecord
- CIM_PrintChannel
- CIM_PrintInputTray
- CIM_PrintInterlock
- CIM_PrintInterpreter
- CIM_PrintMarker
- CIM_PrintMediaPath
- CIM_PrintOutputTray
- CIM_PrintSupply
- CIM_PrinterComponent
- CIM_AssociatedPrintInterpreter
- CIM_AssociatedPrintSupply

Final concrete classes implemented

- CIM_Printer
- CIM_ConcreteComponent
- CIM_UseOfLog
- CIM_LogManagesRecord
- CIM_Dependency

Abstract and parent classes used by reference

- CIM_PrinterElement
- CIM_LogicalElement
- CIM_LogicalDevice
- CIM_LogEntry

CIM_Printerexperimental properties implemented

- CurrentOperator
- ServicePerson
- SerialNumber
- CriticalAlerts
- AllAlerts
- ConsoleDisabled
- ConsoleNaturalLanguage
- ConsoleDisplayBufferText

Classes not implemented

- CIM_Finisher

New and Updated Classes

- CIM_PrintJob.mof
- CIM_PrintService.mof
- CIM_PrintServiceCapabilities.mof
- CIM_PrintServiceSettings.mof

CIM PrintService Classes

- Print Services
  - Ira has generated PrintServiceClasses will reflect updated standards from IPP group
    - CIM_PrintJob.mof -major NEW version -adds all IPP/1.1 Job attributes
    - CIM_PrintService.mof -major NEW version -adds IPP/1.1 Printer attributes (description)
    - CIM_PrintServiceCapabilities.mof -NEW -adds IPP/1.1 Printer attributes (xxx-supported)
    - CIM_PrintServiceSettings.mof -NEW -adds IPP/1.1 Printer attributes (xxx-default)
  - With these additions, the CIM Printing classes support IPP/2.0. Still to be tweaked are PrintQueue, PrintSAP, and other small classes.
- Clean-up of CIM Printer
  - Deprecating of misplaced elements, Residual Problems
- Change Requests
  - Need volunteer to create Change Requests for submission to DMTF.
  - Need volunteer to diagram the extended CIM Printing classes

Imaging Power Management Project

- Ira McDonald has updated a draft specification of the Imaging Power Elements. More "real" use cases are requested.

ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspower10-20091007.pdf

- Some issues that have arisen during discussion are:
  - How much should be defined and how much mandated?
    - Must include sufficient elements to address fleet management of higher-end devices
    - Minimum must be just sufficient for low end monitoring
    - But having much optional leaves management applications unsure of what can be expected, and therefore interferes with interoperability and/or utilization of optional elements
  - Considering the informative nature of the PowerStateMessage, should it not be retained in the Power Log?
  - What is a more appropriate yet usable name for the Power Mode group? PowerModes? PowerStatesSupported? PwrStatesSupported?
  - Is the alternate three-part approach to PowerPolicypreferable to the original approach? Is it adequate? Is it excessive?

Imaging Power Management Draft

<<Review of Draft>>

Change Notices

- Technical – Global – Added REQUIRED persistency for Power Log, Power Timeout, Power Calendar, and Power Event groups to section 5, section 7, and section 8.1 (conformance)
- Editorial – Global – Expanded definition of each element group to clarify usage, per WIMS WG
- Editorial – Global – Replaced the phrase "power usage" (overloading the word "usage") with "power consumption", for clarity (but not in PowerUsageWatts element)
- Editorial – Added new section 1.3 Consistency of Power Terminology with clear warning and examples of misuse of standard power terminology in US Energy Star and other government documents
- Technical – Added new section 2.4 Power Terminology with clear definitions from DMTF CIM, IEEE 1621, and ACPI v4.0.
- Editorial – Clarified section 3.3 Design Requirements
- Technical – Global – Revised section 4 to make PWG SM/2.0 the clear *subject* of each conformance sentence

Imaging Power Management Draft

- Technical – Global – Improved PowerStateMessage in all examples and element definitions, adding explicit usage guidance
- Technical – Deleted PowerStateTimestamp from Power Monitor group
- Technical – Deleted LastLogID from Power Monitor group
  (association class would be too costly in DMTF CIM mapping)
- Technical – Deleted LogPolicyID from Power Log group
  (association class would be too costly in DMTF CIM mapping)
- Technical – Reduced PowerCapabilitites class from REQUIRED to RECOMMENDED (to preserve interoperability)
- Editorial – Renamed PowerMode group to PowerSupport group
- Editorial – Renamed IsAcceptingJobs to MayAcceptJobs, IsProcessingJobs to MayProcessJobs, and IsValidRequestPowerState to MayRequestPowerState in Power Support group
- Technical – Deleted PowerStateMessage from PowerSupport group (due to expanded usage and content of message – not a single, fixed message)
- Technical – Deleted StartRequestTimestamp and EndRequestTimestamp from Power Request group (not useful information)

Imaging Power Management Draft

- Technical – Deleted RequestStatusString from Power Request group (only useful in Semantic Model WSDL binding)
- Technical – Deleted former Policy Group and replaced with new Power Timeout, Power Calendar, and Power Event policy groups, all OPTIONAL
- Technical – Clarified required behavior of power states in section 9.1 according to IEEE 1621

Futures Discussion - Possible Projects

- CIM Printer Profile Effort
- CIM MFD Effort
- Printer Port Monitor MIB Advancement
- Identify Printer MIB Problems
- Resume work on MFD Alerts Document
- MFD MIB or MIB extensions

Wrapup

- Summary of Conclusions
- Schedule Estimates
- Action Items

- Next WIMS Conference Call:
  2 PM ET 26 October

Thanks for your participation!