

# WIMS Working Group

2009-04-27 Face-to-Face Meeting Minutes

## 1. Attendees

Lee Farrell	Canon
Rick Landau*	Dell
Glen Petrie*	Epson
Ira McDonald*	High North
Harry Lewis	InfoPrint
Jerry Thrasher	Lexmark
Dave Whitehead	Lexmark
Nancy Chen	Oki Data
Joe Murdock	Sharp
Bill Wagner	TIC
Pete Zehler	Xerox

\* via telephone

## 2. Administrivia

Bill Wagner led the Workgroup for Imaging Management Solutions (WIMS) Working Group meeting. He provided the planned agenda:

- Proxy CIM Provider – Conclusion
- Update on CIM Class efforts
- Futures Discussion
- Register new Interpreter Languages with IANA
- Power Management BOF
- Wrap-up

## 3. Minutes Taker

Lee Farrell

## 4. PWG Operational Policy

It was noted that all attendees should be aware that the meeting is conducted under the PWG Membership and Intellectual Property rules. There were no objections.

## 5. Proxy CIM Provider – Conclusion

Bill reported that Rick Landau has basically completed the SNMP to CIM Provider prototype. He explained that the primary purposes of the prototype are to:

- Validate the updated Printer CIM Schema
- Provide one implementation of the CIM Schema to help advance the new elements from the experimental state

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The CIM Provider effort has had a secondary benefit in highlighting some of the problems that will be encountered in Web Services translators because of improper MIB implementations.

Rick Landau then presented several slides that provided information on the Status of the Proxy Provider:

- Code
  - \* Translation code is complete, except perhaps for a few bugs
- Tests
  - \* Interactive tests to translate the management data for one printer or for one class of one printer
  - \* Batch test to translate all printers in the current set
  - \* "Analysis" of the batch test output to group results, property by property, across all printers
- Docs
  - \* Internal structure of the prototype
  - \* How to run tests
  - \* Comments in the code

He explained that the test data used was from the MIB dumps of various printers:

- 3 Dell
- 4 HP
- 3 Konica
- 1 Lexmark
- 1 Oki
- 1 Sharp
- 5 Xerox

Some of the inconsistencies uncovered had to do with the fact that there are multiple properties containing something like "name":

- Name
- ElementName
- Caption
- Description
- InstanceID
- LocalizedDescription

He noted that there are varying requirements for uniqueness or friendliness, and asked the question, "What SNMP variables to map to these?" He suggested that we should examine the requirements for uniqueness and establish better rules.

He encountered a similar issue with "status", noting that there are many status variables:

- PrimaryStatus, DetailedStatus, OperatingStatus, CommunicationStatus, OperationalStatus, AvailabilityStatus
- PrinterStatus, HealthState
- Deprecated: Status, LastErrorCode, ErrorDescription, ErrorCleared, Availability, StatusInfo

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Rick said that these were mostly derived from subunit status of components, hrDeviceStatus, hrPrinterStatus, and hrPrinterDetectedErrorState.

He believes that a policy should be established to define what should be considered as the “overall status” for printer-level roll-ups. Otherwise it is doubtful that implementations will be interoperable with clients.

Rick then reviewed several sample output result examples, and noted the values captured. He pointed out that many Printer properties have been deprecated; they could not be implemented interoperably. Many of the other values have not been computed because there is no consensus on an algorithm to do so. To address this issue, he feels that the group needs to establish a policy.

The results for generating a Printer Name show that there is a need for a somewhat more sophisticated calculation of “Name.” He noted that sysName is used, but some printers will not have an assigned IP name

Rick identified some of the next steps that he plans to focus on:

- Remove the last few bugs
- Edit license and copyright into all the files
- Package the content
- Submit to PWG

And he suggested some tasks for the other attendees:

- Examine the output files
- Find bugs, suggest improvements
- Suggest naming and status algorithms

NOTE: It would help Rick a lot if he could receive more feedback on the output. Please send Rick a [public] MIB dump and he will attempt to process it. Numeric OIDs and numeric enum values are requested.

Rick plans that this effort will be complete within a month or so.

Bill pointed out that the output shows how CIM would see the data from the Printers. He was surprised at the number of “holes” in the output samples.

He mentioned that Rick’s tool output samples could be used for both verifying Rick’s translation as well as the completeness and accuracy of MIB implementations.

### **6. Update on CIM Class efforts**

Bill explained that the original Printer CIM Schema included elements that more properly belong under Print Service. However, the update of Printer could not eliminate them until they were relocated in Print Service.

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Ira McDonald is aligning Printer Service elements with “mandatory” elements selected for IPP 2.0 by the IPP2.0 Working Group—plus Media Names.

Ira indicated that he plans to do Print Job and Print Service—Settings and Capabilities—as some follow-up work to the CIM. Then CIM Printer will be cleaned up to remove some deprecated properties that are now included under Print Service. Of course, all of this work will need to be done in steps.

Pete asked whether a transformation of schema would be possible to help the effort. Ira said it might be possible, but he (and the DMTF) does not have the tools to do so.

Perhaps a first draft might be ready some time in May.

### **7. Futures Discussion**

Bill explained that mechanisms for the effective monitoring and managing of imaging equipment and services are important to vendors as well as users:

- In developing standards, we must better understand the larger requirements of and environments under which the equipment is used
- We need a two-way dialog with the user/manager community
  - \* We must address real problems with practical solutions
  - \* They must know of the solutions and how to apply them

Bill said that he hopes to establish a liaison with the Managed Print Services Association. He asked people to suggest any other user organizations that would be useful to contact.

There was a discussion about the current gap in the market between actual management solutions and the implementation of standards. Customers apparently are less concerned with requesting the support of standards, but are more concerned with saving money through the use of third-party management contracts—regardless of how things are implemented.

He also gave a list of topics for consideration of possible projects:

- Imaging Power Management Project
- CIM Printer Profile Effort
- Printer Port Monitor MIB Advancement
- Identify Printer MIB Problems
- Resume work on MFD Alerts Document
- MDF MIB or MIB extensions

### **8. Power Management BOF**

Of the items listed, Bill said that the Hardcopy Imaging Device Power Management Elements gained consensus as the highest priority. The intended activity is to defined management elements—the semantics of power management that may be applied to various transport mechanisms (including walkup.)

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He explained that there are many factors of regulation and compatibility that apply to this activity, as well as the unique power and use characteristics of hardcopy imaging equipment. Bill feels that binding to some mechanism (probably a MIB) would be necessary to allow the creation of prototypes for verification of specification clarity and workability. Prototyping is necessary to allow advancement to PWG Candidate Standard.

A survey has been issued to obtain more information about the perceived level of interest in the Power Management activity. To date, there have been 16 responses—all of which are indicating positive feelings about the importance of the topic. Although there were some respondents that indicated a willingness to provide technical contribution, there were no volunteers to actually lead the effort. Bill wonders if this might be related to the current economic situation.

Of the responses, there seems to be a preference for defining the Power Management elements for compatibility with Advanced Configuration and Power Interface (ACPI).

Bill said that he will distill the responses soon and distribute the results for general review.

He identified several problems that need to be addressed for the Power Management activity:

- Recruiting Project Leadership and Contributors
- Defining Scope
  - \* Degree
  - \* Environment
  - \* Class of Device
- Identifying not just existing uses cases but realistic and beneficial uses that will be applied by the users and managers
- Establishing compatibility with existing standards
- Addressing Security issues (denial of service)

WIMS meeting adjourned.