



Workgroup for Imaging Management Solutions

**Workgroup Session
and
Imaging Power Management BOF**

**Printer Working Group
Face-to-Face Meeting**

**April 28, 2009
Mt. Laurel, NJ**

Intellectual Properties Policy Statement



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

WIMS Agenda



- 9:00 – 9:15 Startup and Introduction
 - Give Intellectual Property Statement
 - Identify Minute Taker
 - Introduce Participants
- 9:15 Consider Agenda
- 9:20 – 9:50 Proxy CIM Provider –Conclusion
- 9:50 Update on CIM Class efforts
- 9:55 – 10:10 Futures Discussion
- 10:10 – 10:25 Power Management BOF
- 10:25 Wrapup
- 10:30 – 10:45 Break

Dell CIM Provider Prototype



- Rick Landau has basically completed the SNMP to CIM Provider prototype. The primary purposes of this 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.
- This 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

Dell CIM Provider Prototype



- Outline of the Approach
- The “code”
 - Structure
 - Availability
 - Caveats
- Discussion of Results & Analysis File
 - <ftp://ftp.pwg.org/pub/pwg/wims/cim/proto-testlogs-allfiles-20090406.zip>
 - Significance of the files and how to read them
- Rick>>

Print Services CIM Schema



- Original Printer CIM Schema included elements that more properly belong under Print Service. However update of Printer could not eliminate them until they were relocated in Print Service.
- Status of the CIM Printing set.
- Ira is aligning Printer Service elements with “mandatory” elements selected for IPP 2.0 by IPP2.0 WG (plus Media Names).
- Ira>>

Futures Discussion



- 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.
- We plan to establish a liaison with the Managed Print Services Association
- Are there other user organizations to contact?

Futures Discussion Possible Projects



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

CIM Network Printer Profile



- The significant work done to date has been in the updating and alignment of the CIM Printer with the PWG Semantic model.
- This defines the elements necessary to manage a simple printer device. However, a network printer (or what could be considered a Networked Imaging Device) is modeled as a special purpose computer driving a simple printer.
- Most of the management elements necessary for a computer already exist within the CIM library. A Network Printer Profile is necessary to identify these elements and correlate them to existing objects defined or referenced in the Printer MIB

Printer Port Monitor MIB



- This is defined in a PWG Candidate Standard
- Extensively implemented both in OS and in Devices.
- Existing applications (reportedly including latest version of HP WebJetAdmin) use this MIB.
- Potential that PPM MIB be expanded to address MFP services, not just Print .
- However, some ambiguous sections may be the cause for variations in implementation.
- Update of the spec and interoperability testing is desirable to ensure consistent implementation.
- Also, this provides the opportunity to get first full PWG standard.

MFD Management



- Resuming work on MFD Alerts
 - Extends scope of Printer MIB Alerts mechanism
 - Fairly stable documents exist, and perhaps some implementations
- Expanding management considerations to MFDs
 - MFD WG is developing semantics for the imaging services associated with Multifunction Devices
 - Distinction necessary between System/Service orientation of MFD WG effort which considers subunits primarily in terms of the capabilities they have to execute service functions; and management orientation which is concerned with the configuration, maintenance, serviceability and utilization statistics of the device and its components.
 - Some overlap in:
 - Identification of capabilities
 - Selection of configuration
 - Use counters

Hardcopy Imaging Device Power Management Elements



- Consensus that this is of highest interest priority
- Intent is to defined management elements, that is semantics of power management that may be applied to various transport mechanisms (including wakeup)
- Many factors of regulation and compatibility apply, as well as unique power and use characteristics of hardcopy imaging equipment
- Binding to some mechanism (probably SNMP) would be necessary to allow prototypes for verification or specification clarity and workability
- Prototyping necessary to allow advancement to PWG candidate standard

Power Management Survey



[Summary of Survey Results]

Power Management Project Problems



- Recruiting Project Leadership and Contributors
- Defining Scope

Wrapup



- Summary of Conclusions
- Schedule Estimates
- Action Items

Thanks for your participation!