PWG WIMS CIM Alignment
Camas Face-to-Face Minutes
August 14, 2008

Craig Whittle - PWG WIMS/CIM Co-chair

**Attendees**

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
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<tr>
<td>Bill Wagner</td>
<td>TIC</td>
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<td>Rick Landau</td>
<td>Dell</td>
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<td>Pete Zehler</td>
<td>Xerox</td>
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<td>Harry Lewis</td>
<td>IBM</td>
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<td>Lee Farrell</td>
<td>Canon</td>
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<td>Ron Bergman</td>
<td>Ricoh</td>
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<td>Jerry Thasher</td>
<td>Lexmark</td>
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<td>Nancy Chen</td>
<td>Okidata</td>
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<td>Dave Whitehead</td>
<td>Lexmark</td>
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<td>Glen Petrie</td>
<td>Epson</td>
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<td>Sha Bhatti</td>
<td>Samsung</td>
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<td>Nam Heo</td>
<td>Samsung</td>
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<td>Craig Whittle</td>
<td>Sharp</td>
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**General Discussion**

- Introductions made, patent policy reviewed
- Working group slides presented by Bill (see ftp://ftp.pwg.org/pub/pwg/general/presentations/WIMS_WG_Meeting_Aug_08.ppt)
- Minutes from the previous teleconference were accepted (see ftp://ftp.pwg.org/pub/pwg/wims/minutes/cim_080728.pdf)
- CIM Provider concept presented by Rick Landau (see ftp://ftp.pwg.org/pub/pwg/wims/cim/ProxyProviderPix-02.pdf)
  - Rick to try and implement all of the object in the printer class (80 – 90% may be sufficient)
  - Race conditions exists with simultaneous access. Proposals for a locking mechanism are being considered
  - Rick may include some caching capability
- Rick requested MIB dumps of MIB II, HR, and the Printer MIB from “interesting printers” for testing his proxy provider
  - Rick to post an example of the format desired for the MIB dumps
- Rick would like to see a printer profile for CIM which define how to bring in pieces like computer system and network components to guarantee interoperability.
- Rick’s proxy prototype will be Cygwin / Windows based
  - Code written in Perl and Python – very portable
  - Dell “secret sauce” mediates between the proxy provider and the CIMOM, rather than between the provider and the hardware instrumentation. The CIMOM-to-Provider interface is typically OS-specific, especially Windows vs Linux, and the secret sauce insulates the provider from the differences.
- A “good” management application is needed to provide views into printers.
  - Winrm is a CLI that mimics the protocol messages available in the protocol
  - Use for monitoring only – read only (for now)
  - Vendor extensibility supported (see diagram)
With WS-Manage all connections are authenticated and encrypted

CIM Proxy provider discussion
- Microsoft would not communicate plans for managing printers using WS-Manage
  - MS is interested in a low power mode monitoring / control using WS-Management / CIM
  - CIM power management already available for computing systems
    - May need to be extended for printers
- Dell’s prototype is not intended for product
- Bill presented alternatives for developing a proxy provider
  - Glen: Open printing – low on the priority list – resources (students) may become available next summer
- Most printer applications now are based on SNMP
- Do we want WS-Man support native in printers
  - Level Platforms (company) is working on WS-Man capability for printer management (application)
- Open Source – contribution by companies possible if there is strategic value
- Counters (widely implemented but proprietary)
  - Need “killer apps” to help drive embedded services
- Hardware becoming a commodity and consumables margins are low – Companies in mature market offering services
- Encouraging using Web services was original goal – could be considered by research project not strategic to company.
  - Web services done by other (non-printing) divisions in large companies – difficult for these divisions to adopt print services
- Tivoli implemented WIMS (not widely used)
- WS-Management becoming mainstream
- CIM attractive because it supports a better security model
- May need to get Tivoli and/or other large scale management application to come to a PWG meeting to see the need for print services
- Need stronger business value proposition – perhaps using the “green theme”
  - Microsoft has requested power management
- Conclusion: need a different approach by defining business rationale
  - What is our message and to whom
    - Bill to send e-mail announcing Wiki to encourage ideas
Green theme
  Application of counters
  Toner coverage?
    May need to involve the printer driver development teams
    Need volunteers for CIM printer profile
  Dell to release code to open source under BSD license (need pointer from PWG and Open Printing Web sites)

Next Steps / Open Actions:

  Group to provide MIB dumps from various printer to Rick for testing CIM proxy

  Need to contact Bill to get authentication code for next teleconference
  August 25th