

Workgroup for Imaging Management Solutions

Workgroup Session

Printer Working Group/WIMS Face-to-Face Meeting

August 19, 2009 Microsoft - Redmond, WA



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

WIMS Agenda



- 8:30 8:45 Startup and Introduction
 - Give Intellectual Property Statement
 - Identify Minute Taker
 - Introduce Participants
- 8:45 Consider Agenda
- 8:50 10:00 Proxy CIM Provider Presentation
- 10:00 10:15 Break
- 10:15 10:45 Updates
 - Printer and Fin MIB new Enums
 - PPM Device Id Command Set
 - CIM Printer Cleanup Items
- 10:45 11:55 Imaging Power Management Project
- 11:55 12:00 Futures Discussion & Wrap-up

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- Rick Landau has completed the Printer Proxy CIM Provider code and has posted the code and documentation package on:
 - <u>ftp://ftp.pwg.org/pub/pwg/wims/cim/DellPrinterProviderProxyPrototype_README.txt</u>
 - <u>ftp://ftp.pwg.org/pub/pwg/wims/cim/DellPrinterProviderProxyPrototype_v10.zip</u>
- This program is donated by Dell, Inc., to the Printer Working Group, and through PWG to the open source community, in the hope that it will be useful. The program is provided under the terms of the license stated in the README file and all of the original contributed files. Some additional files included are copyrighted by DMTF and IETF, and are redistributed as permitted by those parties.



- Rick is interested in feedback on user's experiences with the package
 - problems in running the package or bugs in the code
 - difficulty following the code or making customizations.
- It is hoped that any modifications or additions made to the code to improve usability or functionality will also be made publically available.
- Rick will provide a full presentation of the Proxy Provider functionality and code package.

>>Rick

Printer and Fin MIB new Enums



Additions and modifications to Printer-related IETF MIBS are done via the IANA versions of the MIBs accessible at the IANA Maintained MIBs group at <u>http://www.iana.org/protocols/</u>

Current Requests/Suggestions for additional enums:

- Harry Lewis (Infoprint) has requested that plasticMultiRing be added to the FinBindingTypeTC in the Finisher MIB (<u>http://www.iana.org/assignments/ianafinisher-mib</u>)
- It has been observed that Microsoft langXPS should be added to the PrtInterpreterLangFamilyTC in the Printer MIB (<u>http://www.iana.org/assignments/ianaprinter-mib</u>)



The text in RED is the proposed addition.

```
FinBindingTypeTC ::= TEXTUAL-CONVENTION
STATUS
             current
DESCRIPTION
 "The defined binding type enumerations."
             INTEGER {
SYNTAX
                 -- More information in other attributes
  other(1),
  unknown(2),
  tape(4),
  plastic(5),
  velo(6),
  perfect(7),
  spiral(8),
  adhesive(9),
  comb(10),
  padding(11),
  plasticMultiRing(12)
   }
```

XPS Language



A possible addition is in RED. Microsoft may offer appropriate info.

```
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.
```

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

- langXPS(66) -- Not in RFC 3905 -- XPS = XML Paper Specification, Microsoft Corporation, ECMA OpenXPS Standard (June 2009) (see <u>http://www.ecma-</u> <u>international.org/publications/standards/Ecma-388.htm</u>)
- Or XPS Specification and Reference Guide (see http://www.microsoft.com/whdc/xps/xpsspec.mspx)

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IEEE Device Id - Command



- The IEEE1284 Device Id is a standard element for identifying printing devices, not just in IEEE1284 but in other interfaces and protocols including USB and, via the Port Monitor MIB, Ethernet.
- The IEEE 1284 spec identified three necessary keys, MANUFACTURER, COMMAND SET, and MODEL.
- Identifying the Command Set is important in understanding how to communicate with the printer. However, there is inconsistency in how information is presented in this field, making automatic identification difficult.
- 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).
 - <u>ftp://ftp.pwg.org/pub/pwg/pmp/white/tb-ppm-1284-cmd-20090803.htm</u>

Printer Port Monitor – PPM Device Id Command Set



- Suggested as normative appendix for the PWG Printer Port Monitor MIB to standardize the content of "COMMAND SET" (CMD)
- Content and Form <u>ftp://ftp.pwg.org/pub/pwg/pmp/white/tb-ppm-1284-</u> <u>cmd-20090803.htm</u> >>Ira
- Other Considerations
 - Since the use of this Id goes beyond PPM, should it be a PPM addition or an independent document?
 - If PPM appendix, should it be part of PPM update and advance?
 - Should IEEE1284 be updated...and how?
 - The Device Id was created to identify a Printer device.
 - $_{\odot}\,$ How might this be extended to an MFD?
 - Some applications use Id to identify a Print Service within an MFD (or a virtual Printer Device)?
 - Based on existing use, should "Service" Id's of same form be created to identify other MFD Services/Virtual Devices?
 - Should a true MFD ID format be identified?

CIM Printing Classes Items



Clean-up of CIM Printer

- Residual Problems
- Ira and Rick have approach
- Print Services
 - PrintService Class will reflect updated standards from IPP group



- Ira McDonald has generated a draft specification of the Imaging Power Elements
 - ftp://ftp.pwg.org/pub/pwg/wims/wd/wd-wimspower10-20090726.pdf
- WIMS is soliciting comments, additions, suggestions and general participation of all interested parties in the development of this specification
 - Responders to the Imaging Power Management Survey were alerted to the draft spec.
 - Notices have been put out on interest groups such as Linked-In Managed Print Systems.
- A MIB binding of these abstract elements is also being generated, with a CIM implementation for Web Services use to follow.

≻ Ira>>

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: 11 AM ET 31 August

Thanks for your participation!