



# PWG-CIM Alignment

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# PWG Membership

- 366 Software
- Agfa Monotype
- Apple Computer, Inc.
- Canon, Inc.
- Dell
- Easy Software Products
- Epson
- Fuji Xerox
- Hewlett-Packard
- IBM Corporation
- Intermate A/S
- Konica Minolta
- Kyocera Corporation
- Lexmark International
- Microsoft
- MPI Tech
- Nexpress
- Northlake Software, Inc.
- Oasis Semiconductor
- Peerless Systems
- Ricoh
- Samsung Electronics
- Sharp Labs of America
- Silex Technology
- Software Imaging
- Xerox Corporation
- Zoran Imaging Division

- Printer MIB (IETF Charter)
- Internet Printing Protocol (IETF Charter)
- X-HTML Print (W3C Charter)
- CSS Print Profile (W3C Charter)
- Character Repertoires (for lightweight clients)
- PDF/s (partner with Adobe)
- Common Semantic Model
  - Formally or informally aligned with
    - Microsoft UPnP
    - Bluetooth Print SIG
    - CIP-4 JDF
    - PODi PPML
- Web services print protocol

# PWG Alliances (formal and informal)

- DMTF
- IETF
- W3C
- IEEE P2600 Hardcopy Security
- Trusted Computing Group
- Bluetooth
- Universal Plug and Play
- Java Community Process
- IEEE P1394 (Firewire)
- Others...
  - Some formal, some informal, several we would like to strengthen

# Work Register to Align CIM Printing Model with PWG Model

- Goal: Refresh CIM model as it pertains to printers
- Initiated May 2005
  - Expect PWG results January 2006
- DMTF approval process to follow

- PWG DMTF relationship reaches back to the “Printer MIF”
- PWG and DMTF have realigned periodically
- CIM printing-related classes first appeared in CIM schema v2.2
  - Modified as recently as schema v2.8
  - All in Device\_Printing.mof
  - Classes: CIM\_Printer, PrintService, PrintQueue, PrintJob, and other related
- PWG relevant specifications
  - SNMP Printer MIB (printer device): 1995 - 2004
  - Internet Printing Protocol (IPP) (print service, job): 1999 - 2005
  - Semantic Model (print service, job): 2002 -2004
  - Currently broadening management model for imaging and MFD

# Current Landscape

- Migration from MIF to CIM model occurred with little PWG guidance
- Existing CIM\_Printer model is a somewhat awkward combination of PWG Print Service and Printer
  - Many properties of printers (and related classes) are currently not represented in CIM
- PWG has highly evolved models for
  - Printer (as a hardware device)
  - Print Service
  - Print Job
- Ideally, CIM would be realigned according to these industry accepted categories.
  - However, this alignment may need to be accomplished in stages

## 2-Step Approach to updating CIM Printing classes

1. Changes to current CIM Printing classes which are editorial, benign or non controversial will be formed into an initial DMTF Change Request
  - Editorial changes will improve descriptions and align references with proper source documents
  - Technical changes are likely to include updates to mapping, addition of new enums, deprecation of blatant, misleading errors and addition of some useful new elements.
2. Introduce a new set of “imaging” classes either in conjunction with CIM or as a private PWG vender extension.
  - Existing printing classes may be kept or could be deprecated.
  - Due to the size of this effort it would be considered a follow-on effort
  - This will ultimately result in the most robust and useful set of CIM print and imaging classes.



## Process Going Forward

- Agree on scope of changes to be addressed in each phase
- Agree on content of changes
- Draft CRs in appropriate phases
- Review, revise, approve

# Questions & Concerns

- Better understanding of current industry use of CIM printing classes
- Identify users who desire CIM\_Printer update (or prefer no change)
- Understand which management applications are increasing reliance CIM and whether or not these apps will include print/imaging management
- Concern – Schedule and Process
  - To complete significant work by January, we suggest limiting the scope of near-term work to CIM\_Printer class
    - Need review and buy in for 2-step process
  - PWG needs guidance writing our first CR and managing through the DMTF process

# Questions?

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