

CWMP BOF Face-to-Face Minutes

June 5, 2012

Meeting was called to order at approximately 9:00am local June 5, 2012.

Attendees

Nick Bartolotti	Pharos
Nancy Chen	Oki Data
Michael St. Laurent	PrinterOn
Ira McDonald	High North/Samsung (call-in)
Joe Murdock	Sharp
Glen Petrie	Epson (call-in)
Yogesh Rajaraman	PrinterOn
Anil Thakkar	Thinxtream (call-in)
Jerry Thrasher	Lexmark
Bill Wagner	TIC (KM consultant)
Jay Wang	Toshiba (call-in)
Rick Yardumian,	Canon
Pete Zehler	Xerox

1. IP Policy and Minute Taker

- a. Policy accepted with Nancy, Anil, Bill taking minimal notes and making audio recording.

2. Slides

<ftp://ftp.pwg.org/pub/pwg/BOFs/cwmp/cwmp-bof-june-2012.pdf>

3. CWMP Overview

- CWMP = CPE (Customer Premises Equipment) WAN Management Protocol : a BBF (Broadband Forum) standard (TR-069). It's a SOAP based protocol optimized for friendly firewall traversal. The managed device always initiates connections for management. Unlike many Managed Print Services, CWMP does not micro-manage, only does periodic monitoring and occasional diagnostics of all kinds and thousands of devices provisioned in a managed network, according to installed policies.

4. Activities

- Write guidance whitepaper for development of CWMP data model based on PWG Semantic Model, and for implementation of Proxies for CWMP data model.
- Incremental y prototype the data model in parallel with the whitepaper development
- Phase 1: CWMP data model for printers/print services only
- Phase 2: CWMP data model for MFDs

5. Old Status:

- Machine translation from PWG Semantic Model to CWMP data model is done by Thinxtream.

- Guidance white paper provided translation guidelines for PWG Semantic Model to CWMP data model, and from CWMP data model to IPP.
- Demonstrated mapping of some attributes of CWMP Printer/Print Service data model to IPP/SNMP/SM attributes and operations for proxy that collect data from existing printers/MFDs as well as a embedded CWMP printer emulator via IPP/SNMP/WS/CWMP.

6. New Status:

- The guidance white paper has been updated:
<ftp://ftp.pwg.org/pub/pwg/BOFs/cwmp/white-cwmpmfdmodel10-20120604.pdf>
- Review of the white paper:
 - Added note about the need for System Object and System Control Service in CWMP data model. This allows viewing of configured services, configured subunits, system totals, power management policies.
 - Added System Object and System Control Service XML schema diagrams of the PWG Semantic Model.
 - Added more mapping guidelines from PWG SM to IPP attributes for implementation of IPP proxy for data collections to CWMP data model. See the updated content in Table 1, Pages 36-44.
 - Completed mapping of Printer Service Capabilities and Print Service Defaults
 - How to map System Objects?
 - CWMP top-level object is Device that can have an array of services.
 - Map PWG SM's Imaging system to CWMP Imaging Device (equivalent to an Imaging Gateway Device model) that contains System Control Service, Resource Services, Print Services with stubs for all other services for Phase 1. I.e. Translate System.XXX to ImagingDevice.XXX
 - How to read Table 1:
 - In IPP Printer/Job Attribute column,
 - 'none' – means this attribute has no corresponding attribute in IPP
 - 'true' for PWG5100.5 – means if the attribute/feature in PWG5100.5 is in ipp-features-supported, it is implemented .
 - Does CWMP model for printer/MFD intend to use all attributes and operations in PWG SM?
 - All configurations, capabilities, counters, etc., the complete set of management elements are needed in CWMP model.
 - Not all IPP/SM operations are needed in CWMP management.
- Other Discussions:
 - Should we add in System Object an array of WorkTotal counts, each element maintains the WorkTotal of all service instances of a MFD service type (Print/Scan/Copy/Fax...)?
 - No. Don't want to add implementation cost of device for the convenience of a management application. The WorkTotal of each service instance of a MFD service type is available in each MFD Service object. To obtain the total of all service instances for a particular

service type, a management service app simply need to iterate through all instances to sum them up.

- Why are we looking at CWMP? Are there interests from Telcos or cable companies in managing MFDs and printers using CWMP?
 - There are two Telcos who are now leasing printers to customers. Especially in Europe this is widely done. There are now major US Telcos wanting to use CWMP to manage printers/MFDs, according to Thinstream. The alternative is to treat printers/MFDs as unmanaged devices by IT, which is not a good idea.
- Is a vendor setting up its own CWMP management network a potential use case for CWMP capability?
 - Yes.
- Next Steps:
 - Continue to update the white paper
 - How to map System Object and System Control Service into CWMP
 - More mapping from CWMP to IPP proxy
 - Continue to enhance the translator
 - Optimize duplicated names and add translation of System Object and System Control Service.
 - Continue incremental prototyping of CWMP data model and demo
 - Next Teleconference: June 29, Friday, 10am ET (tentative).

Minutes by Nancy Chen