Minutes of the PWG

Web Based Monitoring and Management Face to Face – October 6, 2003

New York City

Harry Lewis, 10/21/03

Attendees

- Lee Farrell. Canon
- Harry Lewis, IBM (Secretary)
- Ira McDonald, High North (By Phone Conference)
- Fumio Nagasaka, Epson
- Alain Regnier, Ricoh
- Hiroshi Shiraku, Fuji Xerox Printing Systems
- Jerry Thrasher, Lexmark
- Bill Wagner, NetSilicon (Committee Chairman)
- Peter Zehler, Xerox

General

Face to face meeting held at the Grand Hyatt in NYC, October 6, 2003. Meeting took place from 9:30am to 5:00pm.

Review Of Last Face to Face minutes

Minutes of the Portland face to face were reviewed. Comparisons were made

Clarification of Goals

We established that WBMM will narrow its focus on the succinct goal of facilitating fleet management of MFP devices through firewalls.

WBMM will target solutions that address

- Leasing with billing on a usage basis
- Service level agreements for downtime
- Consumables management and inventory control
- Policy enforcement
- Multifunction devices (Print, Scan, Copy, Finish)
- Legacy devices

Design Review

Current design was reviewed with minor changes.

- a. The heart of our design is a "**Schedule**" consisting of an XML document that contains elements which represent *straightforward* instructions or "Actions" such as a request for elements or a pause/resume effect. Complex tasks will be accomplished with **verbose schedules** (rather than via standardization of complex operations).
- b. We define a set of operations
 - i. Most of which initiate from the device or proxy being "managed"
 - 1. GetSchedule
 - 2. SendReport
 - 3. SendAlert
 - ii. One of which is initiated by the management application
 - 1. Execute
 - iii. And two of which relate to discovery
 - **1. Register** (A managed entity associating with a manager. This is distinct from the *action* "Subscribe" see below).
 - 2. Unregister
- c. A set of "Actions" are identified in the Schedule which is sent from the manager to the managed entity (device or proxy).
 - i. **Subscribe/Unsubscribe** (with attributes describing the events of interest, and how timely notifications must be sent).
 - ii. **Wake** (with attributes such as Immediate, TimeOfDay, Frequency, Delay)
 - iii. Enable/Disable
 - iv. Resume/Pause
 - v. **Activate/Deactivate** (Activate is simultaneous Resume+Enable; Deactivate is Pause+Disable)
 - vi. **Reset** (to current defaults)
 - vii. **Restore** (to factory defaults)
 - viii. **Purge** (all jobs)
 - ix. **Restart** (need more discussion)
 - x. **Shutdown** (need more discussion)
 - xi. **List** (a list of URLs of printers, MFDs, print services etc which are available to be managed via this WBMM interface. Intended to facilitate proxies. Resolves to the same URL as the WBMM interface, itself, when managing a single device).
 - xii. **Get/SetElements** (ex. Where the elements might represent configuration parameters)
 - xiii. **Get/SetResource** (ex. Where the resource might be a code flash)
 - xiv. **None** (No-Op)
 - xv. **Other** (Vendor extensions)
- 2. To traverse firewalls, most operations will be initiated by the managed entity once it receives a Schedule of actions to perform. The Schedule is delivered via the

WBMM Execute operation. A manager initiated "tickle" may allow unscheduled transactions. The "tickle" is nothing more than an Execute operation delivered by any means such as via WBMM over VPN or via MIME encoded e-mail.

- 3. Sample typical flow
 - a. GetSchedule -----→

 - c. SendReport -----→
- 4. Some actins (ex. Resume, Get, Set) should cause a SendReport
- 5. Actions that change state should cause an Event
 - a. Events should be sent in response to state change or alarm conditions (threshold exceeded). These are not necessarily every Printer MIB alert (ex. Cover open).

Schedule MIB schema

We reviewed Ira's schema for the WBMM "Schedule" which is derived directly from the IETF Schedule MIB.

Additional Work Items

We recognize that we need to investigate other standards activities which my overlap with WBMM. Specifically, IETF XML Config and DMTF CIM/WBEM. We acknowledge that CIM has a foothold, mainly in the area of PC management, but also addressed printers. If we harmonize with CIM we may have a better chance of client support... something we will need for WBMM to become successful. We must at least attempt to harmonize semantics with CIM. Harry to contact DMTF and arrange discussion.

The PWG WBMM group will continue to pursue WBMM unless we discover an existing standards effort that is addressing this topic in a timelier manner.

Next meeting – (note... time differs from ordinary conference call schedule)

Time:3:00 PM Eastern (Noon Pacific) Wednesday 22 October 2003

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