

Minutes of the PWG *Web Based Monitoring and Management* Conference Call

March 03, 2004

Harry Lewis
03/03/04

Attendees

- Harry Lewis, IBM (WBMM Secretary)
- Ira McDonald, High North
- Jerry Thrasher, Lexmark
- Bill Wagner, NetSilicon (WBMM Chairman)
- Peter Zehler, Xerox

General Discussion

We reviewed and accepted minutes from the San Jose meeting with a clarification that time counters represent elapsed time (possibly obtained by subtracting start time or ticks from end time or ticks and normalizing to the unit seconds). We do not want to give the impression that time counters need to tally each second that a particular process is actively engaged but, rather, the amount of time that elapsed from start to completion of a process. Also, while the time counter unit is seconds, counters may be updated and reported on a coarser level (ex. 10 seconds) in many cases. This probably needs work and clarification going forward.

Semantic Model and PWG Process

WBMM will extend the PWG Semantic Model with new schema elements. FSG Japan is already eager to reference our Printer MIB schema. The PWG needs to develop a common method of developing, documenting and referencing schema. To be discussed at the PWG Process meeting, Thursday, March 4, 2004.

Use Counters

Pete Zehler will update the metric counters [ftp://ftp.pwg.org/pub/pwg/wbmm/white/PWG-Usage-Counters-Table-0.10.pdf](http://ftp.pwg.org/pub/pwg/wbmm/white/PWG-Usage-Counters-Table-0.10.pdf) based on changes arrived at in San Jose.

High Water Mark

In San Jose, the concept of a “high water mark” for local storage was introduced. The goal is to provide an indication of how close and how frequently the local storage has come to being “maxed out”. We decided on the need for 4 independent metrics (two counters, one r/o gauge and one r/w threshold value).

1. StorageSize - the overall size of local storage to which this meter applies. We need more definition, here, to clarify whether we are treating various types of storage and/or file systems separately or lumping them together. It is likely we can model StorageSize after attributes in the RFC 2790 Host Resources MIB storage group (ex. hrStorageSize)
2. StorageUsed - Instantaneous allocated capacity (aka hrStorageUsed) from which remaining capacity can be derived
3. StorageHighWaterMark - Essentially a gauge that stores the max value achieved by StorageUsed. We need to make sure this is a feasible measure w/o becoming too computationally intense.
4. StorageAlmostFull - This is either a counter for the number of times a threshold has been exceeded or a series of entries in an event table (like the Printer MIB alert table). The threshold should be adjustable by the admin tool (which is different from the rest of our counters, so far). The goal is for administrators to be able to set a threshold that will help them analyze system behavior w.r.t. storage. This will require further modeling. It is noted that the Printer MIB already has the alert table enum “subUnitAlmostFull” and that this may be instrumented to storage, already, in some devices.

MIBs

Ira has proposed three alternatives to representing our counters as a MIB.
<http://www.pwg.org/hypermil/wbmm/0292.html>

A brief review and discussion led to a preference for the Hybrid model (2) but this warrants further review and discussion as not many participants had time to review the proposal.

Next Steps

More work on counters for network activity. Resolution of storage counters. Resolution of counter MIB alternatives. Completion of usage counter table.

Next Conference Call

The next WBMM meeting will be conducted via conference call.

Time: Noon Eastern (9am Pacific) **March 24, 2004**

Call-in US Toll-free: 1-877-874-5524

Call-in International/Toll: 1-712-455-8420

Participant Identification number: 497478