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SAM21 Shelf Controller Performance Management

What's new for SN06

Shelf Controllers with ATM interfaces provide Operational Measurements (OM). These records are stored in comma separated value (CSV) format on the host that provides the CS 2000 Management Tools. Nortel Networks recommends viewing and analyzing these records with an OSS tool. Contact your Nortel Networks account representative for an OSS tool recommendation.

Strategy

With the exception of the ATM interface OMs, the Shelf Controllers do not generate performance data. However, software on the Shelf Controller monitors the status of itself and generates a log report or alarm to record trouble conditions.

The Shelf Controllers do not require periodic hardware exercise tests or SWACTs to reduce faults or improve reliability.

Review ATM interface operational measurements

If the SNMP Poller application is configured to retrieve ATM interface operation measurements (OM) from the Shelf Controller, the data is retrieved and stored in the `/data/oms` directory on the host that provides the CS 2000 Management Tools. These OMs are best viewed and analyzed with an OSS tool.

Operational measurement	Value and possible action
cellDropCount	This integer value indicates the cumulative number of dropped cells.
cellDropCountEvent Timestamp	This integer value indicates the timestamp for the most recently dropped ATM cell. This integer is expressed in seconds since January 1, 1970.
totalBytesSent	This integer value indicates the cumulative number of bytes sent over the interface during a 15 minute interval. If an ATM connection becomes unavailable during an interval, the statistics related to that connection are not recorded. For example, the reported value for an interval is 156739 bytes. One connection is lost, and the reported value for the next interval is 124398. The reported number of bytes sent in the second interval decreased because the statistics related to the dropped connection were not included in the total number of bytes sent.
bytesSentPerSec	This integer value represents the totalBytesSent value for the previous 15 minute interval subtracted from the totalBytesSent value for the current 15 minute interval, and then divided by 900. $\frac{\text{current totalBytesSent - previous totalBytesSent}}{\text{900 seconds}} = \text{bytesSentPerSec}$
totalBytesRxed	This integer value indicates the cumulative number of bytes received by the interface during a 15 minute interval. The behavior described for totalBytesSent also applies to this statistic.
bytesRxedPerSec	This integer value reports the same information as bytesSentPerSec, except that the statistics are for the recieving direction.

Operational measurement	Value and possible action
oversizedPDUCount	This integer value indicates the cumulative number of oversized protocol data units (PDU).
rxedTimeoutCount	This integer value indicates the cumulative number of timeouts received at the far end node.
omUpdateTime	This integer value indicates when the operational measurements were last updated. This integer is expressed in seconds since January 1, 1970.