SONET-MIB and PerfHist-TC-MIB Status

o   Updated SONET-MIB <draft-ietf-atommib-rfc2558bis-00.txt>
    was posted to I-D repository on 14 January 2002. The only
    technical change relative to RFC 2558 was to add support
    for sts192cSTM64(6) and sts768cSTM256(7) in
    sonetPathCurrentWidth; all other changes were editorial.

o   Updated PerfHist-TC-MIB <draft-ietf-atommib-rfc2493bis-00.txt>
    was posted to I-D repository on 28 February 2002. The only
    changes relative to RFC 2493 were to update the boilerplate
    and references and to change the contact information.

o   In order to advance these MIB modules to Draft Standard there
    must be two independent implementations of each object group
    referenced by the SONET-MIB sonetCompliance2 statement and
    two implementations of each TC in PerfHist-TC-MIB.

o   An updated SONET-MIB implementation report was posted to
    the AToMMIB list by Faye Ly on 7 March 2002. It contains
    information about implementations from five vendors
    (Cisco, Nortel, Marconi, Corrigent, and Unisphere). Two
    implementations (Marconi's and Unisphere's) claim support
    for all object groups in sonetCompliance2.

o   The SONET-MIB implementations mentioned in Faye's report
    necessarily make use of PerfCurrentCount and
    PerfIntervalCount, but implementation reports for the
    other trunk MIB reports are needed for PerfTotalCount.

RFC 2558 Implementation Report

Evaluation of sonetCompliance2 (groups in left-hand margin, objects indented)

Vendor	Cisco	Nortel	Marconi	Corrigent	Unisphere
info as of	now	now	now	now	now
sonetMediumStuff2	yes	yes	yes	yes	yes
sonetSectionStuff2	yes	yes	yes	yes	yes
sonetMediumType	yes	yes	yes	yes	yes
sonetMediumLineCoding	ro	yes	ro	ro	ro
sonetMediumLineType	ro	yes	ro	ro	ro
sonetMediumCircuitIdentifier	ro	yes	ro	yes	yes
sonetMediumLoopbackConfig	ro	yes	yes	yes	yes
sonetSESthresholdSet	ro	ro	ro	yes	yes
sonetLineStuff2	yes	yes	yes	yes	yes
sonetFarEndLineStuff2	no	yes	yes	yes	yes
sonetPathStuff2	yes	yes	yes	yes	yes
sonetPathCurrentWidth	ro	ro	ro	ro	yes
sonetFarEndPathStuff2	no	yes	yes	yes	yes
sonetVTStuff2	no	no	yes	no	yes
sonetVTCurrentWidth	no	no	ro	no	yes
sonetFarEndVTStuff2	no	no	yes	no	yes

Legend: yes - implemented,
       no - not implemented,
       ro - implemented as read-only

o   Subrahmanya Hegde <subrah@cisco.com> proposed adding bit
    positions to sonetLineCurrentStatus for BER-based signal
    degrade (SD) and signal fail (SF) conditions. It was
    noted that this would actually require an SD/SF status
    object, as adding bit positions to sonetLineCurrentStatus
    would entail extending its range in violation of RFC 2578.
    It was further noted that GR-253-CORE requires a SONET NE
    to monitor SD and SF only if it supports linear APS, and
    the APS-MIB (see draft-ietf-atommib-sonetaps-mib-05.txt)
    already contains objects to set SD and SF thresholds and
    to report the number of SD and SF occurrences. On that
    basis it was suggested that that it is not necessary to
    add an SD/SF status object to the SONET-MIB.

o   David Zelig <Davidz@corrigent.com> suggested that it would
    be useful to have an object in SonetPathCurrentEntry to
    indicate the starting time slot for each path and to have
    a similar object in SonetVTCurrentEntry for each VT. In
    response it was noted that an implementation needs to
    address many other omissions in the SONET-MIB in order to
    fully specify the configuration of an NE -- indeed, some
    of the vendor implementation reports state that proprietary
    MIB extensions are being used to address such omissions.
    Since adding new objects to the SONET-MIB would entail
    recycling at Proposed Standard, it was suggested that if
    it is desired to standardize SONET configuration objects
    then it should be done via a supplemental MIB module.

o   Farzad Khosravi <farzad.khosravi@ca.kontron.com> pointed
    out numerous things that are mising from RFC 2558:

    - No objects to count SDH BBEs (background block errors)
    - No path trace configuration objects
    - No STS Path ERDI status or configuration objects
    - No objects or notifications for SONET/SDH failures
    - No objects or notifications to support SDH UAS state
    - No sonetSESthresholdSet enumerations for G.828 and G.829

    In subsequent discussions it was noted that the SDH BBE
    count at a given layer is closely analogous to the SONET
    CV count at that layer, the difference being that BBEs
    are counts of block errors while CVs are counts of BIP-N
    errors; at low error rates these are aproximately equal.
    It was suggested that it might be reasonable to add text
    to Section 4.5 stating that sonetXyzCurrentCVs and
    sonetXyzIntervalCVs are to be interpreted as BIP errors if
    sonetMediumType is set to sonet(1) and as block errors if
    sonetMediumType is sdh(2) (the text of Section 4.5 that
    deals with SES thresholds hints that this may have been
    intended); however, no interest was expressed for this
    proposal. It was also noted that the other omissions are
    well-known and can be handled either by proprietary MIB
    extensions or -- if there is sufficient interest -- by a
    supplemental SONET/SDH MIB module. Mr. Khosravi indicated
    that Kontron Canada has taken the former approach.