MIB for the UDP-Lite protocol

draft-renker-tsvwg-udplite-mib-01

Presentation to TSV WG

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MIB for UDP-Lite [RFC 3828]

- Linux 2.6.20 UDP-Lite for IPv4/IPv6
- MIB shares basics with UDP-MIB (RFC 4113):
  - `InDatagrams`, `NoPorts`, `InErrors`, `OutDatagrams`
- **New** in UDP-Lite MIB:
  - `InPartialCov` – `InDatagram` with partial coverage
  - `InBadCoverage` – `InError` with bad coverage value
  - `InBadChecksum` – `InError` due to failed checksum
  - `OutPartialCov` – `OutDatagram` with partial coverage
  - A new endpoint table
Changes in rev -01

All counters are now 64-bit counters

Fixed minor NiTs with formatting and definitions
Figure 1 Update

- Received Datagrams
  - |  
  - |    +-- Full Coverage -------------------------+-+  Deliver  
  - |    |  
  - |    +-- InDatagrams +-- >= Rec Coverage ---+  
  - |    |  
  - |    +-- InPartialCov-+  
  - |    |  
  - |    +-- < Rec Coverage ---+  
  - |    |  
  - |    (EndpointViolCoverage)  
  - |    +-- InBadChecksum ------------------------------+-+  Discard  
  - |    |  
  - |    (InErrors)  
  - |  
  - |    +-- NoPorts -----------------------------+-+  Discard  
  -
Changes proposed for rev -02

Correction to Figure 1

Use of only one MIB identifier (Bill Fenner)

Extended MIB to track multiple processes with same open port
   Not clear if this is a current major issue
   Adds <some> complexity to the MIB

   Not a unique problem to UDP-Lite MIB
      - do we attempt to solve for each MIB or consistently for all transport MIBs?

Any more comments?
Conclusions & Further Work

- Make rev-02
- Finished?

- Can we make this a tsvwg work item?
NiTS

- **Section 1**
  - the addition of a single (socket) option, which
  - value. At
- **Section 1.1**
  - not include datagrams that are
  - mention noports, specifically does not increment Inerrors as in RFC4113?
  - perhaps a short bullet list of standard counters would be good?
  - additionally counted by InErrors. (Note: InBadCoverage does not include datagrams that are
  - a more recent protocol
  - Figure 1 nit (see next)
  - InBadCoverage has been removed
- **Section 1.3**
  - (a wrong value
  - A non-zero counter value of InBadCoverage
  - In all other cases, <-- not sure about these words, can we omit them?
  - "both the link bit error rate " (or path bit error rate, if there are more than two error-prone links)
  - a setting may then be found that is more
  - sends that is less than
- **Section 2**
  - and YYY with IANA values) --- replace YYY etc, following Bill Fenner
  - value (as defined in RFC 3828).
  - The minimum checksum coverage expected by this endpoint (as defined in RFC 3828).
  - checksum coverage were strictly smaller than the minimum, as defined in RFC 3828)."
- **Section 5**
  - IANA considerations replace YYYY with XXXX.

- [RFC4113] is informative