MIB for the UDP-Lite protocol

draft-renker-tsvwg-udplite-mib-01

Presentation to TSV WG

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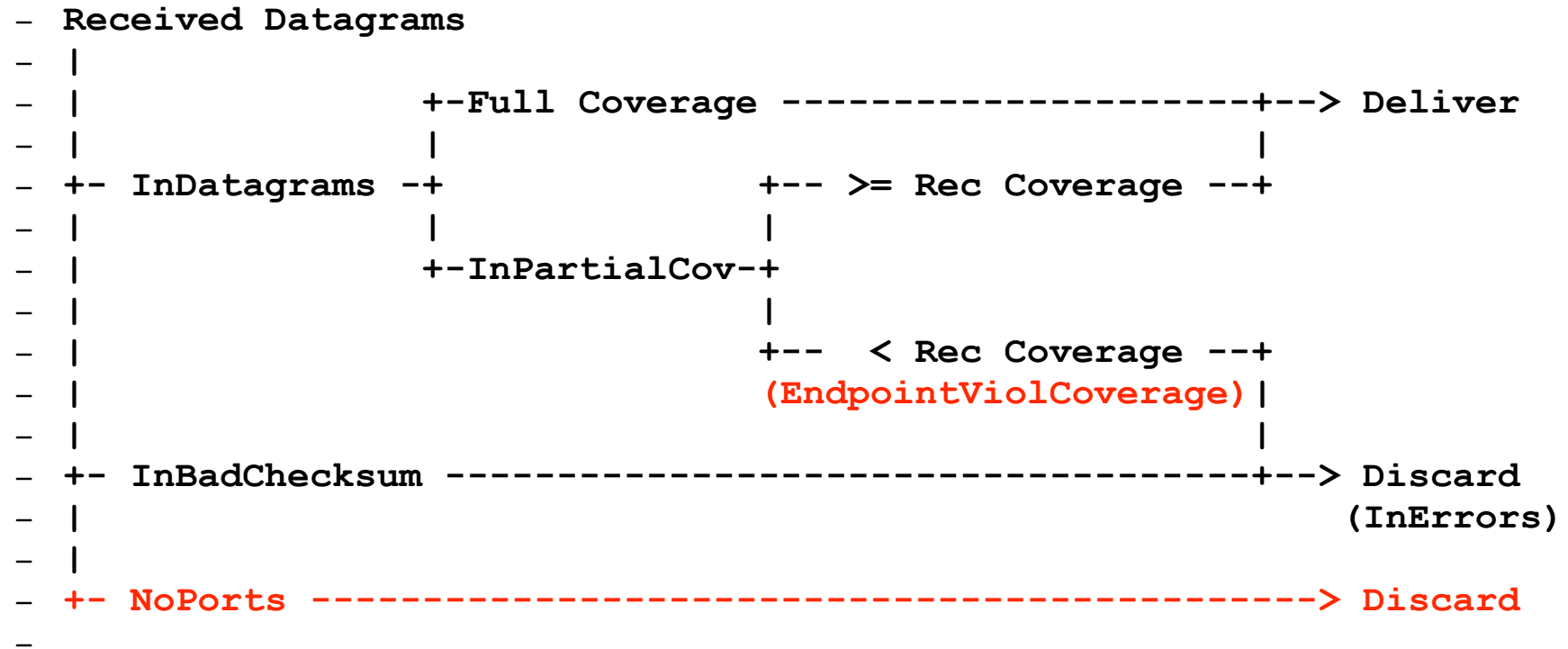
MIB for UDP-Lite [RFC 3828]

- 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

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