

SACK-IMMEDIATELY extension for SCTP

draft-tuexen-tsvwg-sctp-sack-immediately-00.txt

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The Problem

- The SCTP receiver normally delays SACKs.
- This might result in reduced performance due to
 - The sender has not enough queued user data to send the remaining DATA chunks due to the Nagle algorithm.
 - The sending of a DATA chunk fills the congestion or receiver window.
 - The sender is in the SHUTDOWN-PENDING state.
 - The sender has reduced its RTO.Min such that a retransmission timeout will occur if the receiver would delay its SACK.
- To overcome this limitation the sender has to indicate to the receiver that it needs a SACK immediately.

Considerations

- On reception of a DATA chunk with I-bit set the sending of the corresponding SACK SHOULD NOT be delayed.
- If the receiver does not support this extension, it just ignores the I-bit as specified in RFC 4960. Therefore interoperability between a node supporting this extension and one not supporting it is not a problem.

Questions

- Comments?
- Acceptable as a WG item for TSVWG?