

To: INCITS T10 Committee.
From: Halvard Eriksen, Tandberg Data ASA.
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Subject: ADT-2: Clarify the definition of the Offset parameter in the SCSI Data IU and the SCSI Transfer Ready IU.

Revision history.

Revision 0 – Initial proposal.

Revision 1 – The changes to section 7.1.5 shall refer to requested, not transferred data.

Two minor grammatical changes.

Background information.

The document T10/1742-D, defines two encapsulated SCSI IU's, the SCSI Transfer Ready IU and the SCSI Data IU, both with a Buffer Offset field. Additionally the SCSI Command IU has an implied SCSI Transfer Ready IU with the offset set to zero.

Data in or out, as a part of a SCSI command exchange, can be transferred in multiple SCSI Data IU's and in response to multiple SCSI Transfer Ready IU's.

My understanding is that the Offset parameter, in the first SCSI Data IU in an exchange, shall be set to zero. In the following SCSI Data IU's in the exchange, the Offset parameter shall be set to the Offset value from the previous SCSI Data transfer IU, plus the amount of data transferred in the previous SCSI Data IU.

The Offset Parameter in the first SCSI Transfer Ready IU in a SCSI command exchange shall be set to zero. In the following SCSI Transfer Ready IU's in the exchange, the Offset shall be set to the Offset value from the previous SCSI Transfer Ready IU plus the amount of data transferred in response to the previous SCSI Transfer Ready IU.

In short, the Offset is always relative to the first data byte in the first SCSI Data IU in the exchange and not to a receive buffer specified by the SCSI Transfer Ready IU.

Proposed changes to ADT-2.

Changes to section 7.1.2.

In the paragraph following Table 19, in the fourth line, DATA OFFSET shall replace BUFFER OFFSET.

Changes to section 7.1.5.

In Table 24, replace BUFFER OFFSET with DATA OFFSET.

Replace the first paragraph after Table 24 with the following:

The DATA OFFSET field shall indicate the offset from the first data byte in the requested transfer to the first data byte requested in the exchange. The data shall not be requested out of order.

Changes to section 7.1.6.

In Table 25, replace BUFFER OFFSET with DATA OFFSET.

Replace the first paragraph after Table 25 with the following:

The DATA OFFSET field shall indicate the offset from the first data byte in the SCSI Data IU to the first data byte transferred in the exchange. The data shall not be transferred out of order.