# Third-Party Commands in SCSI-3 SPC

## A Working Proposal
### X3T9.2/93-038 R0

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# Premises

- ► Existing third-party commands are basically good

  - ◆ Block to stream
  - ◆ Stream to block
  - ◆ Block to block

- ► Device addressing is the problem to solve

- ► Try Dal's idea of a THIRD-PARTY SETUP command

- ► Changes as little as possible

# What about old baggage?

▶ Reserve COPY functions codes 00h thru 04h

    ○    Compatible with SCSI-2

    ○    Segment descriptors do not fit SCSI-3

▶ Obsolete COPY function codes 05h thru 09h

    ○    Used in approved document 90-048R7

    ○    Still do not fit SCSI-2

    ◆    Reserve these COPY function codes too

    ◆    Ignore this aspect of 90-048R7

# THIRD-PARTY SETUP Command Format

| Byte | Bit | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | Operation code (..h) | | | | | | | |
| 1 | | (MSB) | | | | | | | |
| 2 | | | | | Parameter list length | | | | |
| 3 | | | | | | | | | (LSB) |
| 4 | | Control | | | | | | | |

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# THIRD-PARTY SETUP Parameter List

| Byte | Bit | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | Third-party descriptor ID | | | | | | | |
| 1 – 8 | | (MSB) Source SCSI identifier | | | | | | | (LSB) |
| 9 – 16 | | (MSB) Source SCSI LUN | | | | | | | (LSB) |
| 17 – 24 | | (MSB) Destination SCSI identifier | | | | | | | (LSB) |
| 25 – 32 | | (MSB) Destination SCSI LUN | | | | | | | (LSB) |

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# Things that do not change

- ► COMPARE, COPY, and COPY AND VERIFY commands

- ► COPY parameter list

# Sample Segment Descriptor

▸ Based on current 00h / 01h segment descriptor

| Byte | Bit | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
|------|-----|---|---|---|---|---|---|---|---|
| 0 | | Reserved | | | Reserved | Cat | Reserved | | |
| 1 | | Third-party descriptor ID | | | | | | | |
| 2 | | (MSB) | | | | | | | |
| 3 | | Stream device block length | | | | | | | (LSB) |
| 4 | | (MSB) | | | | | | | |
| 7 | | Block device number of blocks | | | | | | | (LSB) |
| 8 | | (MSB) | | | | | | | |
| 11 | | Block device logical block address | | | | | | | (LSB) |

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