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Technologies de l'information — Interface de petit système d'ordinateur (SCSI) —

Partie 346: Commandes de blocs de zones - 2 (ZBC-2)

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Foreword (This foreword is not part of American National Standard INCITS 550-2023.)

This purpose of this standard is to define the model and command set extensions to be used in conjunction with the SCSI Primary Command Set standard – 6 (SPC-6) and the SCSI Block Commands standard – 5 (SBC-5) to facilitate operation of zoned block devices.

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Information technology — Small computer system interface (SCSI) —

Part 346:
Zoned Block Commands - 2 (ZBC-2)

1 Scope

This standard defines the model and command set extensions to facilitate operation of zoned block devices. The clauses in this standard, implemented in conjunction with the applicable clauses of SPC-6 and SBC-5, specify the standard command set for zoned block devices.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

T10/BSR INCITS 546, *SCSI Architecture Model - 6 (SAM-6)* (planned as ISO/IEC 14776-416)

T10/BSR INCITS 557, *SCSI / ATA Translation - 5 (SAT-5)* (under national consideration)

T10/BSR INCITS 566, *SCSI Primary Commands - 6 (SPC-6)* (planned as ISO/IEC 14776-456)

T10/BSR INCITS 571, *SCSI Block Commands - 5 (SBC-5)* (planned as ISO/IEC 14776-325)

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3 Definitions, symbols, abbreviations, and conventions

3.1 Definitions

3.1.1 access pattern requirements
requirements, in addition to requirements in SBC-5, that apply to read operations, verify operations, and write operations performed by the device server in a zoned block device

3.1.2 activate
cause a write pointer zone to become an active zone

3.1.3 active zone
write pointer zone that has a Zone Condition other than INACTIVE

3.1.4 additional sense code
combination of the ADDITIONAL SENSE CODE field and the ADDITIONAL SENSE CODE QUALIFIER field in sense data

Note 1 to entry: See SPC-6.

3.1.5 application client
object that is the source of SCSI commands

Note 1 to entry: See SAM-6.

3.1.6 byte
8-bit construct

3.1.7 cache
temporary data storage area that is capable of containing a subset of the logical block data stored by the logical unit and is either volatile or non-volatile

Note 1 to entry: See 4.13.

3.1.8 close zone operation
device server process that makes zone resources non-volatile, releases open zone resources, and results in the Zone Condition becoming CLOSED or EMPTY

Note 1 to entry: See 4.5.3.2.3.

3.1.9 command
request describing a unit of work to be performed by a device server

Note 1 to entry: See SAM-6.

3.1.10 command descriptor block (CDB)
structure used to communicate commands from an application client to a device server

Note 1 to entry: See SPC-6.

3.1.11 conventional zone
zone that is not associated with a write pointer

Note 1 to entry: See 4.5.2.

3.1.12 deactivate
cause a write pointer zone to become an inactive zone

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