

T10/05-070r0-070r1 SMC-3 OPEN/CLOSE **IMPORT/EXPORT** ELEMENT command

To: T10 Technical Committee
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Subject: T10/05-070r0 SMC-3 OPEN/CLOSE **IMPORT/EXPORT** ELEMENT command

Revision History

Revision 0 (11 February 2005): initial revision
Revision 1 (8 March 2005): incorporated March SMC-3 WG comments

Related Documents

smc2r07 - SCSI Media Changer Commands - 2 revision 2

Overview

Many media changers with an import/export element implement a vendor specific command to open and or close the import/export element (mail-slot) **to facilitate the user with the import cartridge procedure. And some media changers have an electric door, but no SCSI command exists to open and close this door.** This document proposes a SCSI command to standardize this functionality.

Suggested Changes to SMC-3

Table 3 - Commands for independent media changers

[Add a row for:]
OPEN/CLOSE **IMPORT/EXPORT** ELEMENT, 1Bh, O, 6.x

Table 5 – SMC commands allowed in the presence of various reservations

[Add a row for:]
OPEN/CLOSE **IMPORT/EXPORT** ELEMENT, Conflict, Conflict, Conflict, Allowed, Conflict, Conflict

5.3.4

[Add paragraph]

An import/export element can be opened and closed by means of the OPEN/CLOSE **IMPORT/EXPORT ELEMENT command.**

6.x OPEN/CLOSE **IMPORT/EXPORT** ELEMENT command

The OPEN/CLOSE **IMPORT/EXPORT** ELEMENT command (see table X) provides a method for the application client to change the open/closed state of the specified element address. The ELEMENT ADDRESS field specifies the element address and the ACTION CODE field specifies the requested action to the device server.

Support for this command is optional for independent media changers. This command has no command parameter data. No command response data is returned.

Table X. OPEN/CLOSE **IMPORT/EXPORT ELEMENT command**

Bit	7	6	5	4	3	2	1	0	
Byte									
0	OPERATION CODE 1Bh								
1	Reserved				ACTION CODE			Obsolete	
2	(MSB)	ELEMENT ADDRESS							
3								(LSB)	
4	Reserved								
5	CONTROL								

The ACTION CODE field specifies the requested action for the specified element within the media changer. If the device server supports the OPEN/CLOSE IMPORT/EXPORT ELEMENT command, it shall support one or more of the listed action codes. ~~If the value of the action code field is not supported, the device server shall return CHECK CONDITION status. on not supported ACTION CODE values.~~ The sense key shall be ILLEGAL REQUEST and the additional sense code INVALID FIELD IN CDB.

Table X+1. Supported Action Codes

ACTION CODE	Description
0h	Reserved
10h	Open import/export element for operator access
24h	Close import/export element
32h-7h	Reserved

If ACTION CODE is set to 10h (Open import/export element for operator access) the media changer shall open the specified import/export element. It is not considered an error when the import/export element was already open.

If ACTION CODE is set to 24h (Close import/export element) the media changer shall close the specified import/export element. It is not considered an error when the import/export element was already closed.

~~If the requested element address is locked with the PREVENT ALLOW MEDIA REMOVAL command, and ACTION CODE is set to "Open element", the device server may shall return CHECK CONDITION status when the ACTION CODE is set to "Open import/export element for operator access".~~ The sense key shall be set to ILLEGAL REQUEST and the additional sense code to MEDIUM REMOVAL PREVENTED.

If the address specified in the ELEMENT ADDRESS field has not been assigned or has been assigned to an element type other than import/export element, the device server shall return CHECK CONDITION status. The sense key shall be set to ILLEGAL REQUEST and the additional sense code to INVALID ELEMENT ADDRESS.

After a state change of the import export element the device server may establish a unit attention condition with the additional sense code set to IMPORT OR EXPORT ELEMENT ACCESSED for the initiator port associated with all I_T nexuses other than the I_T nexus on which the OPEN/CLOSE IMPORT EXPORT ELEMENT command was received.