T10/06-447r0

Voting Results on T10 Letter Ballot 06-446r0 on Forwarding ADC-2 to First Public Review Ballot closed: 2006/10/25 12:00 noon MST

Organization	Name			Add'l Info
Adaptec, Inc.	Chris Fore	Р	Yes	
AMCC	Paul von Stamwitz			
Amphenol Interconnect	Michael Wingard	Р	Yes	
Brocade	Robert Snively	Р	Yes	
Dallas Semiconductor	James A. Lott, Jr. Kevin Marks	Ρ	Yes	_
Dell, Inc.	Kevin Marks	P	No	Cmnts
EMC_Corp.	Mickey Felton	Α	Yes	
Emulex	Robert H. Nixon			
ENDL	Ralph O. Weber	Ρ.	NO	Cmnts
FCI	Douglas Wagner Elwood Parsons	P	Yes Abo	Cmn+o
Foxconn Electronics				Cmnts
Fujitsu General Dynamics	Mike Fitzpatrick Nathan Hastad	P	Voc	
Hewlett Packard Co.	Rob Elliott	Р	No	Cmnts
Hitachi Cable Manchester	Zane Daggett			OIIIITES
Hitachi Global Storage Tech.	Dan Colegrove	ı P	Ves	
IBM Corp.	George O. Penokie	P	No	Cmnts
Intel Corp.	Robert Sheffield	Р	Yes	Omiti Co
Iomega Corp.	110001 0 01101 1 10114	•	DNV	
KnowledgeTek, Inc.	Dennis Moore	Р		
Lexar Media, Inc.	John Geldman			
LSI Logic Corp.	John Lohmeyer			
M-Systems	Avraham Shimor			
Marvell Semiconductor, Inc.	David Geddes	Ρ	Yes	
McDATA	David Peterson			
Microsoft Corp.	Mark Benedikt	Р	Yes	
Molex Inc.	Jay Neer	Ρ	Yes	
Network Appliance	Frederick Knight	Α	Yes	
Nvidia Corp.			DNV	
Oracle	James Williams			
Panasonic Technologies, Inc	Terence J. Nelson			
Philips Electronics	William P. McFerrin			_
Pivot3, Inc.	Bill Galloway	P	Abs	Cmnts
PMC-Sierra	Tim Symons			•
Quantum Corp.	Paul Entzel			Cmnts
Seagate Technology	Gerald Houlder		Abs	Cmnts
STMicroelectronics, Inc.	Stephen Finch		Yes	
Sun Microsystems, Inc.	Erich Oetting		Yes	
Symantec Texas Instruments	Roger Cummings Paul D. Aloisi		Yes Yes	
TycoElectronics	Ashlie Fan		Yes	
Vitesse Semiconductor	ASILLE I all	Г	DNV	
Western Digital	Curtis Stevens	Р	Yes	
Xiotech Corp.	Jeff Williams		Yes	
Xyratex	Rich Ramos		Yes	
·· y · ····	3	•		

Ballot totals: (33:5:4:3=45)

33 Yes

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5 No
  4 Abstain
 3 Organization(s) did not vote
 45 Total voting organizations
 1 Duplicate ballot(s) not counted
  9 Ballot(s) included comments
This 2/3rds majority ballot passed.
33 Yes are more than half the membership eligible to vote
  [greater than 20] AND
33 Yes are at least 26 (2/3rds of those voting YES or NO [38]).
Key:
Р
       Voter is principal member
       Voter is alternate member
Α
Abs
       Abstain vote
DNV
       Organization did not vote
       Comments were included with ballot
Cmnts
NoCmnts No comments were included with a vote that requires comments
[This report prepared by LB2 v1.9.]
Comments attached to No ballot from Kevin Marks of
Dell, Inc.:
Dell comment number 1
Page=5 Subtype=Text Author=Kevin Marks
Comment=
1 Revision History
Remove Revision History prior to forwarding
Dell comment number 2
Page=20 Subtype=Text Author=kevin marks
Comment=
2.3 References under development
There are no references to SAS-2, and SPC-4 so why are they referenced?
Dell comment number 3
Page=21 Subtype=Highlight Author=Kevin Marks
Comment=
3.1.15 data transfer device:
change "3.1.15 data transfer device:"
to
"3.1.15 data transfer (DT) device:"
Dell comment number 4
Page=21 Subtype=Highlight Author=Kevin Marks
Comment=
3.1.1 accessible state:
change
```

"3.1.1 accessible state: The state of a device server in which it is

capable of responding to a command with any combination of status and sense key other than CHECK CONDITION and NOT READY."

"3.1.1 accessible state: The state of a device server in which it is capable of responding to a command with any combination other than CHECK CONDITION status with the sense key set to NOT READY."

Dell comment number 5

Page=22 Subtype=StrikeOut Author=Kevin Marks

Comment=

3.1.21 I T L Q nexus:

remove

"This relationship extends the prior I_T nexus or I_T nexus." from definition, provides no value.

Dell comment number 6

Page=22 Subtype=Highlight Author=Kevin Marks

Comment=

In 3.1.24 logical unit number:

change

"3.1.24 logical unit number: An identifier for a logical unit." to

"3.1.24 logical unit number (LUN): An identifier for a logical unit."

Dell comment number 7

Page=22 Subtype=Highlight Author=Kevin_Marks

Comment=

In 3.1.29 not accessible state:

change

"3.1.29 not accessible state: The state of a device server in which it is capable of responding to a command with a status of CHECK CONDITION and sense key of NOT READY."

to

"3.1.29 not accessible state: The state of a device server in which it is only capable of responding to a command with a CHECK CONDITION status with the sense key set to NOT READY."

Dell comment number 8

Page=22 Subtype=Highlight Author=Kevin_Marks

Comment=

In 3.1.31 ready state:

change

"3.1.31 ready state: A state where a logical unit is able to accept an appropriate medium-access command without returning CHECK CONDITION status."

to

"3.1.31 ready state: A state where a logical unit is able to process an appropriate medium-access command without returning CHECK CONDITION status."

Dell comment number 9

Page=23 Subtype=Highlight Author=Kevin Marks

```
Comment=
In 3.1.42 vendor-specific:
change
"3.1.42 vendor-specific:"
"3.1.42 vendor-specific (VS):"
Dell comment number 10
Page=23 Subtype=Text Author=Kevin Marks
Comment=
3.2 Symbols and abbreviations
Add ADC-2 and ADT-2
Dell comment number 11
Page=24 Subtype=Highlight Author=Kevin Marks
Comment=
In 3.3.7 optional:
2nd Sentence
change
"...implemented, it shall..."
"...implemented, then it shall..."
Dell comment number 12
Page=25 Subtype=Highlight Author=Kevin Marks
Comment=
3.4 Conventions
2nd Paragraph after Table 1, 1st sentence
"...figures, the order..."
"...figures, then the order..."
Dell comment number 13
Page=26 Subtype=Highlight Author=Kevin Marks
Comment=
In 4.2.1 Automation/drive interface overview
2nd Paragraph, d) in a,b,c list.
d) An ADI port (see 3.1.2), through which the automation application client
transmits SCSI requests to and receives SCSI responses from the ADC device
server in the DT device.
Figure 2 implies that the ADI Port is optional, but this shows it as
required?
Additionally make first word in a),b) and c) lower case.
Dell comment number 14
Page=26 Subtype=Highlight Author=Kevin Marks
Comment=
In 4.2.1 Automation/drive interface overview
3nd Paragraph, c) in a,b,c list.
```

```
change
"c) An optional SMC device server and bridging manager (see 4.2.3);"
"c) Zero or one SMC device server and bridging manager (see 4.2.3);"
Additionally make first word in a),b) and d) lower case.
Dell comment number 15
Page=26 Subtype=Highlight Author=Kevin Marks
Comment=
In 4.2.1 Automation/drive interface overview
4nd Paragraph, ) in a,b,c, d list.
Make first word in a),b),c),d) lower case
Dell comment number 16
Page=27 Subtype=Highlight Author=Kevin Marks
Comment=
In 4.2.2 Device server interaction
2nd Paragraph, 2nd Sentence
change
"If the DT device contains an ADI port, then the RMC device server should
be accessible as a logical unit through an ADI port, and may be an
asymmetric logical unit (see SAM-3)."
to
"If the DT device contains an ADI port, then the RMC device server should
be accessible as a logical unit through an ADI port, and may support
asymmetric logical unit access (see SPC-3)"
SAM-3 does not define an asymmetric logical unit. My understanding of this
is that you may have different LUN presented on different target ports.
Dell comment number 17
Page=27 Subtype=Highlight Author=Kevin Marks
Comment=
In 4.2.2 Device server interaction
2nd Paragraph, 1st Sentence
change
"...6.2.2.4.2), the..."
"...6.2.2.4.2), then the..."
Dell comment number 18
Page=28 Subtype=Highlight Author=Kevin Marks
Comment=
In 4.2.2 Device server interaction
6th Paragraph, 2nd Sentence
"(e.g., pressing an eject button on the physical device)."
This e.g. does not seem like the best example considering this is an
automation device standard?
```

5

Dell comment number 19

Page=29 Subtype=Highlight Author=Kevin_Marks Comment= 4.2.3 ADI bridging 4.2.3.1 ADI bridging introduction 1st Paragraph, 4th sentence change

"The local SMC device server may be accessible as a logical unit through the DT device ADI port, and may be an asymmetric logical unit (see SAM-3)." to

"The local SMC device server may be accessible as a logical unit through the DT device ADI port, and may support asymmetric logical unit access (see SPC-3)"

SAM-3 does not define an asymmetric logical unit.

Dell comment number 20
Page=29 Subtype=Highlight Author=Kevin_Marks
Comment=
In 4.2.2 Device server interaction
9th Paragraph,3rd Sentence

change

"...additional sense code of NOT READY TO READY TRANSITION based on the readiness of the removable medium." $\frac{1}{2} \frac{1}{2} \frac{1}{2}$

"...additional sense code of NOT READY TO READY TRANSITION based on the transition from not ready to ready of the removable medium."

Dell comment number 21
Page=29 Subtype=StrikeOut Author=Kevin_Marks
Comment=
4.2.3 ADI bridging
4.2.3.1 ADI bridging introduction
3rd Paragraph, 2nd Sentence

remove

"low-cost"

Dell comment number 22
Page=29 Subtype=Highlight Author=Kevin_Marks
Comment=
4.2.3.2 Local SMC device server operation
2nd Paragraph, 1st Sentence
"Changer"
to
"changer"

Dell comment number 23
Page=29 Subtype=Highlight Author=Kevin_Marks
Comment=
4.2.3.2 Local SMC device server operation
2nd Paragraph, 2nd Sentence

"Because the transport protocol connecting the bridging manager and the

remote SMC device server may not carry information about which initiator port originated a command or task management request, the remote SMC device server is not able to implement the complete set of commands."

"If the transport protocol connecting the bridging manager and the remote SMC device server does not carry information about which initiator port originated a command or task management request, then the remote SMC device server is not able to implement the complete set of commands."

Dell comment number 24
Page=30 Subtype=Highlight Author=Kevin_Marks
Comment=
4.2.3.2 Local SMC device server operation
5th Paragraph, 1st Sentence in c) of a,b,c list

- "c) When a DT device primary port uses contingent allegiance (see SAM-2), save sense data on a per initiator port basis."
- "c) save sense data on a per initiator port basis, if a DT device primary
 port uses contingent allegiance (see SAM-2)"

Dell comment number 25
Page=30 Subtype=Highlight Author=Kevin_Marks
Comment=
4.2.3.4 Bridging manager operation

2nd Paragraph

change

"If the bridging manager receives a response from the remote SMC device server with a status of CHECK CONDITION and sense key of UNIT ATTENTION, the bridging manager shall discard the response and reissue the command. All other responses with a status of CHECK CONDITION, including those with a sense key of NOT READY, shall be returned to the local SMC device server for subsequent return via the DT device primary port. This shall have no effect onthe cached NOT READY sense keys (see 4.2.3.5)."

"If the bridging manager receives a response from the remote SMC device server with a CHECK CONDITION status with the sense key set to UNIT ATTENTION, then the bridging manager shall discard the response and reissue the command. All other responses with a CHECK CONDITION status, including those with a sense key set to NOT READY, shall be returned to the local SMC device server for subsequent return via the DT device primary port. This shall have no effect on the cached NOT READY sense keys (see 4.2.3.5)."

Dell comment number 26
Page=30 Subtype=Highlight Author=Kevin_Marks
Comment=
4.2.3.2 Local SMC device server operation
5th Paragraph, 1st Sentence in a) of a,b,c list

change

- "a) Check for reservation conflicts on all commands. Return RESERVATION CONFLICT on all commands that violate reservation rules (see SPC-3);" to
- "a) check for reservation conflicts on all commands. Return RESERVATION CONFLICT status on all commands that violate reservation rules (see

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SPC-3);"

Dell comment number 27
Page=30 Subtype=Highlight Author=Kevin_Marks
Comment=
4.2.3.2 Local SMC device server operation
5th Paragraph, 1st Sentence in b) of a,b,c list

change

"b) Manage unit attention conditions generated for multiple initiator ports. If the local SMC device server detects that a unit attention condition is pending for an initiator port when a new command is received, the local SMC device server shall return CHECK CONDITION for the command; and"

to

"b) manage unit attention conditions generated for multiple initiator ports. If the local SMC device server detects that a unit attention condition is pending for an initiator port when a new command is received, then the local SMC device server shall return CHECK CONDITION status for the command; and"

Dell comment number 28
Page=30 Subtype=Highlight Author=Kevin_Marks
Comment=
4.2.3.2 Local SMC device server operation
3rd Paragraph, 1st Sentence
change
"...supported, they shall..."
to
"...supported, then they shall..."
Dell comment number 29
Page=31 Subtype=Highlight Author=Kevin_Marks
Comment=

Comment=
4.2.3.5 Caching SMC data and status
2nd Paragraph, 3rd Sentence
change
"If caching is enabled, the automation..."
to
"If caching is enabled, then the automation..."

Dell comment number 30
Page=31 Subtype=Highlight Author=Kevin_Marks
Comment=
4.2.3.5 Caching SMC data and status
4th Paragraph, 2nd Sentence
change

to

"The remote SMC device server is not accessible if it responds to a command with a CHECK CONDITION status with a sense key set to NOT READY."

Dell comment number 31 Page=31 Subtype=Highlight Author=Kevin Marks Comment= 4.2.3.5 Caching SMC data and status 4th Paragraph, 4th Sentence "If the ready state indicates not accessible, the local SMC device server shall report a status of CHECK CONDITION to commands requiring that the remote SMC device server be accessible, including TEST UNIT READY." "If the ready state indicates not accessible, then the local SMC device server shall report a CHECK CONDITION status to commands requiring that the remote SMC device server be accessible, including the TEST UNIT READY command." Dell comment number 32 Page=31 Subtype=Highlight Author=Kevin Marks Comment= 4.2.3.5 Caching SMC data and status 2nd Paragraph, 1st Sentence change "...INQUIRY data, VPD, mode data,..." "...INQUIRY data, VPD data, mode data,..." Dell comment number 33 Page=31 Subtype=Highlight Author=Kevin Marks Comment= 4.2.3.5 Caching SMC data and status 2nd Paragraph, Last Sentence "...of the MDC, IDC, NRSC, and SOCC bits." "...of the MDC bit, IDC bit, NRSC bit and SOCC bit." Dell comment number 34 Page=31 Subtype=Highlight Author=Kevin Marks Comment= 4.2.3.5 Caching SMC data and status 3rd Paragraph, 1st Sentence change "If caching is disabled, then the ADC device server shall ignore the MDC, IDC, NSRC, and socc bits (see 5.2) in the NOTIFY DATA TRANSFER DEVICE command." "If caching is disabled, then the ADC device server shall ignore the MDC bit, IDC bit, NSRC bit and SOCC bit (see 5.2) in the NOTIFY DATA TRANSFER DEVICE command." Note: the socc in the sentence is not in SMALL CAPS Dell comment number 35 Page=31 Subtype=Highlight Author=Kevin Marks

Comment=

cache.

Comment=

Is this the asc from the last NOTIFY DATA TRANSFER DEVICE command? Dell comment number 36 Page=35 Subtype=Highlight Author=Kevin Marks Comment= In 4.2.5 Sense data masking 1st Paragraph, 3rd Sentence change "...server, the application..." "...server, then the application..." Dell comment number 37 Page=35 Subtype=Highlight Author=Kevin Marks Comment= In 4.2.5 Sense data masking 2nd Paragraph, 1st Sentence change "...loads, the automation..." "...loads, then the automation..." Dell comment number 38 Page=35 Subtype=Highlight Author=Kevin Marks Comment= In 4.2.5 Sense data masking 3rd Paragraph, 1st Sentence change "...enabled, the RMC..." "...enabled, then the RMC..." Dell comment number 39 Page=35 Subtype=Highlight Author=Kevin Marks Comment= In 4.2.5 Sense data masking 4th Paragraph, 1st Sentence change "...implemented, the..." "...sense data masking is implemented, then the..." Dell comment number 40 Page=35 Subtype=Highlight Author=Kevin Marks Comment= In 4.2.5 Sense data masking 4th Paragraph, a),b),c) list Make first word in a),b),c) low case Dell comment number 41 Page=36 Subtype=Highlight Author=Kevin Marks

4.2.6 TapeAlert application client interface 2nd paragraph, 2nd sentence "port events (e.g., port logins)." Is a HARD RESET not a port event? Would this then clear the flags as it implies a logical unit reset? Dell comment number 42 Page=38 Subtype=Highlight Author=Kevin Marks 4.2.7 Medium Auxiliary Memory attributes 1st Paragraph, 2nd sentence change "...attributes, the automation..." "...attributes, then the automation..." Dell comment number 43 Page=38 Subtype=Highlight Author=Kevin Marks Comment= 4.2.7 Medium Auxiliary Memory attributes 1st Paragraph, 2nd sentence change "the command (see SPC-3, WRITE ATTRIBUTE) to the" "the WRITE ATRIBUTE command (see SPC-3) to the" "a command (e.g., WRITE ATTRIBUTE (See SPC-3)) to the" Dell comment number 44 Page=38 Subtype=Highlight Author=Kevin Marks Comment= 4.2.8 Enabling and disabling DT device primary ports 2nd paragraph "accept" What does accept mean. It this transport dependent, i.e. in pSCSI would not allow selection? In SAS, disable the phy, so OPEN REJECT(NO DESTINATION) is returned? Or it this at the SCSI level, where is would return BUSY or NOT READY? Dell comment number 45 Page=38 Subtype=Text Author=Kevin Marks Comment= 4.2.9 Sequential mode operation Make first word in 1)-5) list lower case Dell comment number 46 Page=40 Subtype=Highlight Author=Kevin Marks

5.1 Summary of commands for automation/drive interface devices

in Table 6 - Command set for automation/drive interface (part 1 of 2)

In table note b change "accept" to "process"

Dell comment number 47

Page=40 Subtype=Highlight Author=Kevin Marks

5.1 Summary of commands for automation/drive interface devices in Table 6 - Command set for automation/drive interface (part 1 of 2) row LOAD UNLOAD

change

reference "SSC"

to

"SSC-2"

or add SSC as reference in section 2.

Dell comment number 48 Page=40 Subtype=Highlight Author=Kevin Marks Comment=

5.1 Summary of commands for automation/drive interface devices in Table 6 - Command set for automation/drive interface (part 1 of 2)

Why is Table Note a missing from:

CHANGE ALIASES READ MEDIA SERIAL NUMBER REPORT ALIASES

a This command is defined by a combination of operation code and service action. The operation code value is shown preceding the slash and the service action value is shown after the slash.

Dell comment number 49 Page=40 Subtype=Highlight Author=Kevin Marks Comment=

5.1 Summary of commands for automation/drive interface devices 1st Paragraph, 1st Sentence

The sentence below, implies to me that these are the only commands that can be implement, which blocks an ADI device from implement other commands such as vendor specific commands. Is this what was intended?

change

"The command set for automation/drive interface devices shall be as shown in table 6."

"The command set for automation/drive interface devices is shown in table 6., Commands specified as mandatory in table 6 shall be implemented by automation/drive interface devices.

Dell comment number 50

Page=40 Subtype=StrikeOut Author=Kevin_Marks Comment=these identified

Dell comment number 51
Page=41 Subtype=Highlight Author=Kevin_Marks
Comment=
5.1 Summary of commands for automation/drive interface devices
in Table 6 - Command set for automation/drive interface (part 2 of 2)
In table note b
change
"accept"
to
"process"

Is TEST UNIT READY really a medium-access command?

Dell comment number 52
Page=41 Subtype=Highlight Author=Kevin_Marks
Comment=
5.1 Summary of commands for automation/drive interface devices
in Table 6 - Command set for automation/drive interface (part 2 of 2)
row REPORT DENSITY SUPPORT
change reference
"SSC"
to
"SSC-2"

or add SSC as reference in section 2.

Dell comment number 53
Page=41 Subtype=Highlight Author=Kevin_Marks
Comment=
5.1 Summary of commands for automation/drive interface devices
in Table 6 - Command set for automation/drive interface (part 1 of 2)

Why is Table Note a missing from:

REPORT PRIORITY
SET MEDIUM ATTRIBUTE
REPORT TIMESTAMP
SET PRIORITY

a This command is defined by a combination of operation code and service action. The operation code value is shown preceding the slash and the service action value is shown after the slash.

Dell comment number 54
Page=41 Subtype=StrikeOut Author=Kevin_Marks
Comment=these identified

Dell comment number 55
Page=42 Subtype=Highlight Author=Kevin_Marks
Comment=
5.2 NOTIFY DATA TRANSFER DEVICE command
2nd Paragraph, 1st Sentence after Table 7

change

"The MDC, IDC, NRSC, and SOCC bits in byte 3 are used to indicate that cached SMC data may require refreshing (see 4.2.3.5)." to

"The MDC bit, IDC bit, NRSC bit, and SOCC bit in byte 3 are used to indicate that cached SMC data may require refreshing by the local SMC device server (see 4.2.3.5)."

Dell comment number 56
Page=42 Subtype=Highlight Author=Kevin_Marks
Comment=
5.2 NOTIFY DATA TRANSFER DEVICE command
4th Paragraph, 1st Sentence after Table 7
change

"An INQUIRY data changed (IDC) bit set to one indicates that the contents of the standard INQUIRY data

or of any VPD page reported by the remote SMC device server have changed."

"An INQUIRY data changed (IDC) bit set to one indicates that the contents of the standard INQUIRY data

or any VPD page data reported by the remote SMC device server have changed. $\!\!\!^{"}$

Dell comment number 57
Page=42 Subtype=StrikeOut Author=Kevin_Marks
Comment=or pages

Dell comment number 58
Page=42 Subtype=StrikeOut Author=Kevin_Marks
Comment=, per the description of caching SMC data and status

Dell comment number 59
Page=42 Subtype=StrikeOut Author=Kevin_Marks
Comment=n

Dell comment number 60
Page=43 Subtype=Highlight Author=Kevin_Marks
Comment=
5.2 NOTIFY DATA TRANSFER DEVICE command
7th Paragraph, 2nd Sentence after Table 7
change
"...resources, the device..."

"...resources, then the device..."

Dell comment number 61
Page=43 Subtype=Highlight Author=Kevin_Marks
Comment=
5.2 NOTIFY DATA TRANSFER DEVICE command
11th Paragraph, 1st Sentence after Table 7
change
"...CHECK CONDITION status), the ADC..."
to

"...CHECK CONDITION status), then the ADC..." Dell comment number 62 Page=43 Subtype=Highlight Author=Kevin Marks Comment= 5.2 NOTIFY DATA TRANSFER DEVICE command 7th Paragraph, 1st Sentence after Table 7 change "...asc and ascq..." "...ASC and ASCQ..." in SMALL CAPS Dell comment number 63 Page=43 Subtype=Highlight Author=Kevin Marks Comment= 5.2 NOTIFY DATA TRANSFER DEVICE command 7th Paragraph, 1st Sentence after Table 7 change "...its..." to "...the..." Dell comment number 64 Page=43 Subtype=Highlight Author=Kevin Marks Comment= 5.2 NOTIFY DATA TRANSFER DEVICE command 7th Paragraph, 2nd Sentence after Table 7 change "...Unit Attention..." "...unit attention..." Dell comment number 65 Page=43 Subtype=Highlight Author=Kevin Marks Comment= 5.2 NOTIFY DATA TRANSFER DEVICE command 7th Paragraph, 3rd Sentence after Table 7 change "When the additional sense data is NOT READY TO READY..." "When the additional sense data is set to NOT READY TO READY..." Dell comment number 66 Page=43 Subtype=Highlight Author=Kevin Marks Comment= In NOTE 1 -BUA bit does not appear to be in SMALL CAPS Dell comment number 67 Page=43 Subtype=Highlight Author=Kevin Marks Comment= 5.2 NOTIFY DATA TRANSFER DEVICE command 8th Paragraph, 2nd Sentence after Table 7 "not valid"

What does "not valid" mean?

Dell comment number 68
Page=43 Subtype=Highlight Author=Kevin_Marks
Comment=
5.2 NOTIFY DATA TRANSFER DEVICE command
9th Paragraph, 3rd Sentence after Table 7

"SOCC"

Does not appear to be in SMALL CAPS.

Dell comment number 69
Page=44 Subtype=Highlight Author=Kevin_Marks
Comment=
In Table 8 - SET MEDIUM ATTRIBUTE command
in Byte 1

Aren't bit 7-5 reserved and not part of the SERVICE ACTION (1Fh) field?

Dell comment number 70
Page=44 Subtype=Highlight Author=Kevin_Marks
Comment=
In 5.3.1 SET MEDIUM ATTRIBUTE command introduction

In 5.3.1 SET MEDIUM ATTRIBUTE command introduction
1st Paragraph, 1st Sentence after Table 8
change

"The PARAMETER LIST LENGTH field specifies the length in bytes of parameter data contained in the Data-Out Buffer. A parameter list length value of zero indicates that the Data-Out Buffer is empty." to

"The PARAMETER LIST LENGTH field specifies the length in bytes of parameter data that shall be transferred from the application client to the device server. A parameter list length value of zero specifies that no data shall be transferred. This shall not be considered and error.."

Unless you want to add Data-Out buffer to the definitions.

Dell comment number 71
Page=44 Subtype=StrikeOut Author=Kevin_Marks
Comment=

In 5.3.1 SET MEDIUM ATTRIBUTE command introduction 1st Paragraph, 2nd Sentence after Table 8 Remove

"This shall cause the attribute specified to be cleared in the device server."

If the PARAMETER LIST LENGTH is zero, then what attribute is supposed to be cleared. I assume this was supposed to be the ATTRIBUTE LENGTH as stated in the next section.

Dell comment number 72
Page=44 Subtype=Highlight Author=Kevin_Marks
Comment=
In 5.3.1 SET MEDIUM ATTRIBUTE command introduction

1st Paragraph, 3rd sentence after Table 8 "table Y for the attribute specified,"

Based on the original proposal 05-015r2 this should be Table 12, however since the PARAMETER LIST LENGTH is a defining the length of a list of attributes may be longer that that of one attribute. I suggest removing the sentence or rewording it to say that if the PARAMETER LIST LENGTH exceeds the length of all attributes then CHECK CONDITION

Dell comment number 73 Page=45 Subtype=Highlight Author=Kevin Marks Comment= In 5.3.2 SET MEDIUM ATTRIBUTE parameter list format 1st Paragraph, 2nd Sentence change "Attributes should be sent in ascending numerical order." "Medium attributes should be sent in ascending numerical order based on the ATTRIBUTE IDENTIFER field (see 5.3.3)." Dell comment number 74 Page=45 Subtype=Highlight Author=Kevin Marks In Table 9 - SET MEDIUM ATTRIBUTE parameter list format change "Medium attribute (first)" "Medium attribute (first) (see 5.3.3)" Dell comment number 75 Page=45 Subtype=Highlight Author=Kevin Marks Comment= In Table 9 - SET MEDIUM ATTRIBUTE parameter list format change "Medium attribute (last)" "Medium attribute (last) (see 5.3.3)"

Dell comment number 76
Page=45 Subtype=Highlight Author=Kevin Marks

In 5.3.2 SET MEDIUM ATTRIBUTE parameter list format 1st Paragraph, 1st Sentence after table 9

"The PARAMETER DATA LENGTH field should contain the number of bytes of attribute data and shall be ignored by the device server." to

"The PARAMETER LIST LENGTH field should contain the number of bytes of attribute data that follow and shall be ignored by the device server."

Or change table field to DATA instead of LIST.

Dell comment number 77
Page=45 Subtype=Highlight Author=Kevin_Marks
Comment=

In 5.3.2 SET MEDIUM ATTRIBUTE parameter list format 2nd Paragraph, 1st Sentence after table 9 change "The format of the attributes is described in 5.3.3." The format of the medium attributes is described in 5.3.3." Dell comment number 78 Page=45 Subtype=Highlight Author=Kevin Marks Comment= In 5.3.2 SET MEDIUM ATTRIBUTE parameter list format 3rd Paragraph, 1st Sentence after table 9 "No attributes shall be changed, the SET MEDIUM ATTRIBUTE..." "No medium attributes shall be changed and the SET MEDIUM ATTRIBUTE..." Dell comment number 79 Page=45 Subtype=Highlight Author=Kevin Marks Comment=LIST, if Dell comment number 80 Page=45 Subtype=Highlight Author=Kevin Marks Comment= In 5.3.2 SET MEDIUM ATTRIBUTE parameter list format 3rd Paragraph, 1st Sentence after table 9, a),b,)c) list change a) an attribute with incorrect ATTRIBUTE LENGTH field (see 5.3.3) contents; b) an attribute with an unsupported or reserved FORMAT field (see 5.3.3) value; or c) an attribute with unsupported ATTRIBUTE VALUE field (see 5.3.3) contents and a non-zero ATTRIBUTE LENGTH field value." a) a medium attribute with incorrect ATTRIBUTE LENGTH field (see 5.3.3) contents: b) a medium attribute with an unsupported or reserved FORMAT field (see 5.3.3) value; or c) a medium attribute with unsupported ATTRIBUTE VALUE field (see 5.3.3) contents and a non-zero ATTRIBUTE LENGTH field value." Dell comment number 81 Page=45 Subtype=Highlight Author=Kevin Marks In 5.3.2 SET MEDIUM ATTRIBUTE parameter list format 4th Paragraph, 1st Sentence after table 9 change "If the SET MEDIUM ATTRIBUTE command parameter data contains an attribute with an ATTRIBUTE LENGTH field (see 5.3.3) set to zero, then one of the following actions shall occur:

b) If the attribute is not supported, the attribute shall be ignored; this shall not be considered an error. $\mbox{\tt "}$

cleared: or

a) If the attribute is supported, the attribute's value shall be

to

"If the SET MEDIUM ATTRIBUTE command parameter data contains a medium attribute with an ATTRIBUTE LENGTH field (see 5.3.3) set to zero, then one of the following actions shall occur:

- a) the medium attribute's value shall be cleared, if the medium attribute is supported; or
- b) the medium attribute shall be ignored and this shall not be considered an error, if the attribute is not supported.

Dell comment number 82

Page=46 Subtype=Highlight Author=Kevin_Marks

Comment=

5.3.3 SET MEDIUM ATTRIBUTE attribute format 1st Paragraph, 1st Sentence after Table 10 change

"The ATTRIBUTE IDENTIFIER indicates the medium attribute to be set."

"The ATTRIBUTE IDENTIFIER field specifies the medium attribute to be set."

Dell comment number 83

Page=46 Subtype=Highlight Author=Kevin_Marks

Comment=

In Table 11 - ATTRIBUTE IDENTIFIER field values

change

"Attribute identifier"

to

"Code"

And this is a 2 byte field, so below make 0000h - FFFFh.

Dell comment number 84

Page=46 Subtype=Highlight Author=Kevin_Marks

Comment=

5.3.3 SET MEDIUM ATTRIBUTE attribute format

1st Paragraph, 1st Sentence after Table 12

"The s

"The ATTRIBUTE VALUE field contains the intended value of the attribute." to

The ATTRIBUTE VALUE field contains the intended value of the medium attribute. $\mbox{\tt "}$

Dell comment number 85

Page=47 Subtype=Text Author=Kevin Marks

Comment=Remove extra space between Section 6 header and 6.1 header

Dell comment number 86

Page=48 Subtype=Highlight Author=Kevin Marks

Comment=

Table 13 - Log page codes (part 2 of 2)

row "15h Service Buffers Information log page Optional"

Make Reference column 6.1.5

Dell comment number 87

Page=48 Subtype=Text Author=Kevin_Marks Comment= In 6.1.1 Log parameters overview 1st Paragraph after Table 13

The paragraph contains an i.e. that is a sentence and 1/2?

Dell comment number 88
Page=48 Subtype=Highlight Author=Kevin_Marks
Comment=
In 6.1.2.1 DT Device Status log page overview
1st Sentence after Table 14
change
"See SPC-3 for a description of the PAGE CODE and PAGE LENGTH fields."

"See SPC-3 for a description of the PAGE CODE field and PAGE LENGTH field."

Dell comment number 89
Page=49 Subtype=Highlight Author=Kevin_Marks
Comment=
In Table 16
change
"TMC (0)"
to
"TMC (00)"

Dell comment number 90
Page=49 Subtype=Highlight Author=Kevin_Marks
Comment=
In 6.1.2.2 Very high frequency data log parameter
5th Paragraph after Table 16

Move this paragraph below after Table 17.

"A DT device initialized (DINIT) bit set to one indicates that the DT device is able to return valid very high frequency data. A DINIT bit set to zero indicates DT device initialization is required or incomplete. The DINIT bit should be set to one before relying on any other bits in the very high frequency data log parameter."

Dell comment number 91
Page=49 Subtype=Highlight Author=Kevin_Marks
Comment=
In Table 15

Row "0100h - 0200h"

Should this not be 0101h-200h?

Dell comment number 92
Page=50 Subtype=Highlight Author=Kevin_Marks
Comment=
In 6.1.2.2 Very high frequency data log parameter
5th Paragraph, 3rd Sentence after Table 17
change

```
"...one, the ADC..."
"...one, then the ADC..."
Dell comment number 93
Page=50 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.1.2.2 Very high frequency data log parameter
5th Paragraph, 4th Sentence after Table 17
change
"supported the MACC"
"supported, then the MACC"
Dell comment number 94
Page=50 Subtype=StrikeOut Author=Kevin Marks
Comment=/
Dell comment number 95
Page=50 Subtype=StrikeOut Author=Kevin Marks
Comment=/
Dell comment number 96
Page=50 Subtype=Highlight Author=Kevin Marks
In 6.1.2.2 Very high frequency data log parameter
8th Paragraph, 2nd Sentence after Table 17
"with a status of GOOD, however"
"with a GOOD status, however"
Dell comment number 97
Page=51 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.1.2.2 Very high frequency data log parameter
5th Paragraph, 4th Sentence after Table 17
change
"with a CHECK CONDITON with the"
"with a CHECK CONDITON status with the"
Dell comment number 98
Page=51 Subtype=StrikeOut Author=Kevin Marks
Comment=/
Dell comment number 99
Page=51 Subtype=Highlight Author=Kevin Marks
Comment=
In NOTE 5
change
...with a status of GOOD to a"
...with GOOD status to a"
```

```
Dell comment number 100
Page=53 Subtype=Highlight Author=Kevin Marks
Comment=
In NOTE 8
"...(see ADT-2) the..."
"...(see ADT-2), then the..."
Additionally NOTE 8 makes no sense to me, as indicates that vendor-specific
log parameters or formats may be available?
Dell comment number 101
Page=53 Subtype=Highlight Author=Kevin Marks
Comment=
In Table 19
change
"TMC (0)"
"TMC (00)"
Dell comment number 102
Page=54 Subtype=Highlight Author=Kevin Marks
Comment=
In Table 20
change
"TMC (0)"
"TMC(00)"
Dell comment number 103
Page=54 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.1.2.4.1 DT device primary port status log parameter(s) overview
1st Paragraph, 2nd Sentence after Table 20
change
"...port, the PARAMETER CODE value..."
to
"...port, the parameter code value..."
Dell comment number 104
Page=55 Subtype=Highlight Author=Kevin Marks
Comment=
"...CURRENT SPEED..."
"...CURRENT SPEED field..."
Dell comment number 105
Page=57 Subtype=Highlight Author=Kevin Marks
Comment=
In Table 24
change
"TMC (0)"
"TMC (00)"
```

Dell comment number 106 Page=58 Subtype=Highlight Author=Kevin Marks Comment= In 6.1.4.2 Recovery procedures log parameter

Move text below to after Table 27

"See SPC-3 for descriptions of the DU bit, DS bit, TSD bit, ETC bit, TMC field, LBIN bit, and LP bit. These bits and fields shall be set to the values shown in table 27.

The PARAMETER LENGTH field indicates the number of recovery procedure bytes that follow.

The PARAMETER CODE field shall be set to 0000h to indicate the recovery procedures log parameter.

The recovery procedures specify a list of recovery procedures (see table 28) listed in order from the most preferred to the least preferred procedure. When multiple recovery procedures are available, the most preferred procedure shall be the first in the list (i.e., in byte 4), and the other procedures listed in decreasing order of preference. The automation device may select any recovery procedure, regardless of position in the list."

Dell comment number 107 Page=59 Subtype=Highlight Author=Kevin Marks In 6.1.4.2 Recovery procedures log parameter 1st Paragraph, 2nd Sentence after table 27 change "...procedure, an appropriate..." "...procedure, then an appropriate..." Dell comment number 108 Page=59 Subtype=Highlight Author=Kevin Marks Comment= In Table 27 - Requested recovery log parameter format change "TMC (0)" "TMC (00)" Dell comment number 109 Page=60 Subtype=Highlight Author=Kevin Marks Comment=

In 6.1.4.2 Recovery procedures log parameter 2nd Paragraph, 1st Sentence after table 28 change "...medium, the automation..."

to

```
"...medium, then the automation..."
Dell comment number 110
Page=60 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.1.4.2 Recovery procedures log parameter
5th Paragraph, 1st Sentence after table 28
change
"...(i.e., Do not insert medium), a non-recoverable..."
"...(i.e., Do not insert medium), then a non-recoverable..."
Dell comment number 111
Page=61 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.1.4.2 Recovery procedures log parameter
6th Paragraph, 1st Sentence after table 28
"...organization), a non-recoverable..."
"...organization), then a non-recoverable..."
Dell comment number 112
Page=62 Subtype=Highlight Author=Kevin Marks
Comment=
In Table 30 - Service buffer information log parameter format
change
"TMC (0)"
to
"TMC (00)"
Dell comment number 113
Page=62 Subtype=Text Author=Kevin Marks
Comment=
Should the buffer ID in this subclause be changed to
"...identified by the contents of the BUFFER ID field..."
Dell comment number 114
Page=65 Subtype=Highlight Author=Kevin Marks
In 6.2.2.1 ADC Device Server Configuration mode page overview
1st Paragraph, 2nd Sentence after Table 33.
change
"These bits and fields shall be set to the values shown table 33."
"The SPF bit and PAGE CODE field shall be set to the values shown table
33."
Dell comment number 115
Page=66 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.2.2.2 Target Device subpage
1st Paragraph, 2nd Sentence after Table 35
```

change

"These bits and fields shall be set to the values shown table 35." to

"The SPF bit, PAGE CODE field and SUBPAGE CODE field shall be set to the values shown table 35."

Dell comment number 116
Page=67 Subtype=Highlight Author=Kevin_Marks
Comment=
In Table 36 - MTDN field
Row 01b for MODE SELECT

"Use the logical unit identifier for logical unit 0 as the DT device SCSI target device name. The identification descriptors shall be ignored."

The text above would conflict with SAS, in that the DEVICE NAME shall be unique from the SAS PORT ID and LOGICAL UNIT name?

Dell comment number 117
Page=68 Subtype=Highlight Author=Kevin_Marks
Comment=
In 6.2.2.3 DT Device Primary Port subpage overview
1st Paragraph, 2nd Sentence after Table 37

change

"These bits and fields shall be set to the values shown table 37."

"The SPF bit, PAGE CODE field and SUBPAGE CODE field shall be set to the values shown table 37."

Dell comment number 118

Page=68 Subtype=Highlight Author=Kevin_Marks

Comment=

In Table 38 - DT device primary port descriptor format change

"RELATIVE TARGET PORT"

to

"RELATIVE TARGET PORT IDENTIFER"

if you are going to reference SPC-3.

Dell comment number 119

Page=68 Subtype=Highlight Author=Kevin Marks

Comment=

In Table 38 - DT device primary port descriptor format

Why is the PROTOCOL IDENTIFIER field a byte instead of a nibble?

Dell comment number 120

Page=69 Subtype=Highlight Author=Kevin_Marks

Comment=

In 6.2.2.3.2 DT device primary port descriptor format 1st Paragraph, 2Nd Sentence after Table 38 change

"RELATIVE TARGET PORT field"
to
"RELATIVE TARGET PORT IDENTIFIER field"

Dell comment number 121
Page=69 Subtype=Highlight Author=Kevin_Marks
Comment=
In 6.2.2.3.3 Fibre Channel descriptor parameter format
1st Paragraph after Table 39
change

"A DT device receiving a MODE SELECT command for an enabled DT device primary port, where the command attempts to change the value of the MPN, LIV, RHA, TOPLOCK, P2P, SPEED, SPDLOCK, FC-AL LOOP ID, or PORT NAME fields, shall return CHECK CONDITION. The sense key shall be ILLEGAL REQUEST, and the additional sense code shall be INVALID FIELD IN PARAMETER LIST. If the DT device primary port is disabled, the DT device may change the MPN, LIV, RHA, TOPLOCK, P2P, SPEED, SPDLOCK, FC-AL LOOP ID, or PORT NAME fields and enable the DT device primary port with the same MODE SELECT command."

"A DT device receiving a MODE SELECT command for an enabled DT device primary port, where the command attempts to change the value of the MPN field, LIV bit, RHA bit, TOPLOCK bit, P2P bit, SPEED field, SPDLOCK bit, FC-AL LOOP ID field, or PORT NAME field, shall return CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and the additional sense code set to INVALID FIELD IN PARAMETER LIST. If the DT device primary port is disabled, then the DT device may change the MPN field, LIV bit, RHA bit, TOPLOCK bit, P2P bit, SPEED field, SPDLOCK bit, FC-AL LOOP ID field, or PORT NAME field and enable the DT device primary port with the same MODE SELECT command."

Dell comment number 122 Page=70 Subtype=Highlight Author=Kevin Marks In Table 41 - Effect of LIV and RHA bits Row 1b 1b change "...initialization, the DT device..." "...initialization, then the DT device..." Dell comment number 123 Page=70 Subtype=Highlight Author=Kevin Marks Comment= In Table 41 - Effect of LIV and RHA bits Row 1b 1b change "...nonparticipating state, the DT device..." "...nonparticipating state, then the DT device..." Dell comment number 124 Page=70 Subtype=Highlight Author=Kevin Marks Comment= In 6.2.2.3.3 Fibre Channel descriptor parameter format

```
1st Paragraph, 2nd Sentence after Table 41
change
"...(see SPC-3), the P2P..."
"...(see SPC-3), then the P2P..."
Dell comment number 125
Page=70 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.2.2.3.3 Fibre Channel descriptor parameter format
2nd Paragraph, 2nd Sentence after Table 41
change
"...set to one, the RHA bit,..."
"...set to one, then the RHA bit,..."
Dell comment number 126
Page=70 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.2.2.3.3 Fibre Channel descriptor parameter format
3rd Paragraph after Table 39
change
"The modify port name (MPN) and PORT NAME fields are used to modify and
report modifications to the DT device primary port's name identifier (see
FC-FS), as defined in table 40."
to
"The modify port name (MPN) field and PORT NAME field are used to modify
and report modifications to the DT device primary port's name identifier
(see FC-FS), as defined in table 40."
Dell comment number 127
Page=70 Subtype=Highlight Author=Kevin Marks
Comment=
In Table 40 - MPN field
Rows 01b-11b (MODE SELECT column)
"Invalid value for a MODE SENSE command."
Why is this not just set to "Reserved"?
Dell comment number 128
Page=70 Subtype=Highlight Author=Kevin Marks
Comment=
In 6.2.2.3.3 Fibre Channel descriptor parameter format
1st Paragraph after Table 40
"The loop ID valid (LIV) and require hard address (RHA) bits are described
in table 41."
to
"The loop ID valid (LIV) bit and require hard address (RHA) bit are
described in table 41."
Dell comment number 129
Page=71 Subtype=Highlight Author=Kevin Marks
Comment=
```

In 6.2.2.3.4 Parallel SCSI descriptor parameter format 1st Paragraph after Table 43 change

"A DT device receiving a MODE SELECT command for an enabled DT device primary port, where the command attempts to change the value of the BUS MODE, BMQ, MINIMUM TRANSFER PERIOD FACTOR, or SCSI ADDRESS fields, shall return CHECK CONDITION. The sense key shall be ILLEGAL REQUEST, and the additional sense code shall be INVALID FIELD IN PARAMETER LIST. If the DT device primary port is disabled, the DT device may change the BUS MODE, BMQ, MINIMUM TRANSFER PERIOD FACTOR, or SCSI ADDRESS fields and enable the DT device primary port with the same MODE SELECT command."

"A DT device receiving a MODE SELECT command for an enabled DT device primary port, where the command attempts to change the value of the BUS MODE field, BMQ field, MINIMUM TRANSFER PERIOD FACTOR field, or SCSI ADDRESS field, shall return CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and the additional sense code set to INVALID FIELD IN PARAMETER LIST. If the DT device primary port is disabled, then the DT device may change the BUS MODE field, BMQ field, MINIMUM TRANSFER PERIOD FACTOR field, or SCSI ADDRESS field and enable the DT device primary port with the same MODE SELECT command."

Dell comment number 130 Page=72 Subtype=Highlight Author=Kevin Marks In 6.2.2.3.4 Parallel SCSI descriptor parameter format 3rd Paragraph after Table 43 change "...identifies..." "...Indicates..." Dell comment number 131 Page=72 Subtype=Highlight Author=Kevin Marks Comment= In 6.2.2.3.4 Parallel SCSI descriptor parameter format 1st Paragraph after Table 44 change "...identifies..." tο "...Indicates..." Dell comment number 132 Page=72 Subtype=Highlight Author=Kevin Marks Comment=

Comment=
6.2.2.3.5 Serial Attached SCSI descriptor parameter format
1st Paragraph after Table 45

"A DT device receiving a MODE SELECT command for an enabled DT device primary port, where the command attempts to change the value of the MPI field, shall return CHECK CONDITION. The sense key shall be set to ILLEGAL REQUEST with the additional sense code set to INVALID FIELD IN PARAMETER LIST. If the DT device..."

t۸

"A DT device receiving a MODE SELECT command for an enabled DT device

primary port, wherethe command attempts to change the value of the MPI field, shall return CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and the additional sense code set to INVALID FIELD IN PARAMETER LIST. If the DT device..."

Dell comment number 133

Page=73 Subtype=Highlight Author=Kevin_Marks

Comment=

6.2.2.3.5 Serial Attached SCSI descriptor parameter format 1st Paragraph continued after Table 45

Change

"primary port is disabled, the DT device may change the MPI field or PORT IDENTIFER field and enable the DT device primary port with the same MODE SELECT command."

to

"primary port is disabled, then the DT device may change the MPI field or PORT IDENTIFER field and enable the DT device primary port with the same MODE SELECT command."

Dell comment number 134
Page=73 Subtype=Highlight Author=Kevin_Marks
Comment=
In Table 46 - MPI field
Rows O1b-11b (MODE SELECT column)

"Invalid value for a MODE SENSE command."

Why is this not just set to "Reserved"?

Dell comment number 135
Page=73 Subtype=Highlight Author=Kevin_Marks
Comment=
In 6.2.2.4.1 Logical Unit subpage overview
3rd Paragraph

Move text below to after Table 47.

See SPC-3 for a description of the PS bit, SPF bit, PAGE CODE field, SUBPAGE CODE field, and PAGE LENGTH field.

and change

"These bits and fields shall be set to the values shown table 47. $^{\circ}$ to

"The SPF bit, PAGE CODE field, and SUBPAGE CODE field shall be set to the values shown table 47. "

Dell comment number 136

Page=76 Subtype=Highlight Author=Kevin_Marks
Comment=

In 6.2.2.4.2 RMC logical unit descriptor format

5th Paragraph, 3rd Sentence change

"...a CHECK CONDITION to a..."

"...a CHECK CONDITION status to a..."

29

Dell comment number 137 Page=76 Subtype=Highlight Author=Kevin Marks In 6.2.2.4.2 RMC logical unit descriptor format 4th Paragraph, a) in a),b) list change "a) The LUN..." to "a) the LUN..." Dell comment number 138 Page=76 Subtype=Highlight Author=Kevin Marks Comment= In 6.2.2.4.2 RMC logical unit descriptor format 4th Paragraph, b) in a),b) list change "b) The default..." "b) the default..." Dell comment number 139 Page=76 Subtype=Highlight Author=Kevin Marks Comment= In 6.2.2.4.2 RMC logical unit descriptor format 7th Paragraph change "If the OFFLINE bit is set to one, the RMC device server shall return CHECK CONDITION to all commands that require the RMC logical unit to be in the ready state. The sense key shall be NOT READY. The additional sense code shall be LOGICAL UNIT NOT READY, OFFLINE. If the OFFLINE bit is set to zero, the RMC device server shall respond normally to commands." to "If the OFFLINE bit is set to one, then the RMC device server shall returnCHECK CONDITION status with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, OFFLINE to all commands that require the RMC logical unit to be in the ready state. If the OFFLINE bit is set to zero, then the RMC device server shall respond normally to commands." Dell comment number 140 Page=76 Subtype=Highlight Author=Kevin Marks Comment= In Table 49 - MLUD field Rows 01b-11b (MODE SELECT column) "Invalid value for a MODE SENSE command." Why is this not just set to "Reserved"? Dell comment number 141 Page=77 Subtype=Highlight Author=Kevin Marks Comment= In 6.2.2.4.2 RMC logical unit descriptor format 1th Paragraph, 2nd Sentence after Table 49

change "...zero the AUTOLOAD MODE..." "...zero, then the AUTOLOAD MODE..." Dell comment number 142 Page=77 Subtype=StrikeOut Author=Kevin Marks Comment=SCSI Dell comment number 143 Page=77 Subtype=StrikeOut Author=Kevin Marks Comment=SCSI Dell comment number 144 Page=78 Subtype=Highlight Author=Kevin Marks In 6.2.2.4.3 SMC logical unit descriptor format 4th Paragraph after Table 51 in a) or a),b) list change "a) The LUN..." "a) the LUN..." Dell comment number 145 Page=78 Subtype=Highlight Author=Kevin Marks Comment= In 6.2.2.4.3 SMC logical unit descriptor format 4th Paragraph after Table 51 in b) or a),b) list change "b) The default..." to "b) the default..." Dell comment number 146 Page=79 Subtype=Highlight Author=Kevin Marks Comment= In 6.2.2.4.3 SMC logical unit descriptor format 5th Paragraph, 3rd Sentence after Table 51 "The ADC device server shall return a CHECK CONDITION to a MODE SELECT command when multiple descriptors with the ENABLE bit set to one have the same value in the LOGICAL UNIT NUMBER field. The sense key shall be set to ILLEGAL REQUEST and the additional sense code shall be set to INVALID FIELD IN PARAMETER LIST." to "The ADC device server shall return a CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and the additional sense code set to INVALID FIELD IN PARAMETER LIST to a MODE SELECT command when multiple descriptors with the ENABLE bit set to one have the same value in the LOGICAL UNIT NUMBER field. " Dell comment number 147 Page=79 Subtype=Highlight Author=Kevin Marks

In 6.2.2.4.3 SMC logical unit descriptor format

Comment=

7th Paragraph, 1st Sentence after Table 51 change

"If the ENABLE bit is changed from one to zero, the local SMC device server shall implicitly abort all commands in its task set and shall report a status of CHECK CONDITION with a sense key of COMMAND ABORTED and an additional sense code of LOGICAL UNIT COMMUNICATION FAILURE for each command."

to

"If the ENABLE bit is changed from one to zero, then the local SMC device server shall implicitly abort all commands in its task set and report a CHECK CONDITION status with the sense key set to COMMAND ABORTED and the additional sense code set to LOGICAL UNIT COMMUNICATION FAILURE for each command."

Dell comment number 148
Page=79 Subtype=Highlight Author=Kevin_Marks
Comment=
In 6.2.2.4.3 SMC logical unit descriptor format
8th Paragraph, 2nd Sentence after Table 51

change
"...return CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and an additional sense code of INVALID FIELD IN PARAMETER LIST."

"...return CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and the additional sense code set to INVALID FIELD IN PARAMETER LIST."

Dell comment number 149
Page=80 Subtype=Highlight Author=Kevin_Marks
Comment=

In 6.2.2.4.4 ADC logical unit descriptor format 4th Paragraph, a) in a),b) list change

"a) The LUN..."

to

"a) the LUN..."

Dell comment number 150

Page=80 Subtype=Highlight Author=Kevin_Marks
Comment=

In 6.2.2.4.4 ADC logical unit descriptor format 4th Paragraph, b) in a),b) list change

"b) The default..."

to

"b) the default..."

Dell comment number 151

Page=80 Subtype=Highlight Author=Kevin_Marks
Comment=

In 6.2.2.4.4 ADC logical unit descriptor format 5th Paragraph, 3rd Sentence change

"The ADC device server shall return a CHECK CONDITION to a MODE SELECT command when multiple descriptors with the ENABLE bit set to one have the same value in the LOGICAL UNIT NUMBER field. The sense key shall be set to

ILLEGAL REQUEST and the additional sense code shall be set to INVALID FIELD IN PARAMETER LIST." to "The ADC device server shall return a CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and the additional sense code set to INVALID FIELD IN PARAMETER LIST to a MODE SELECT command when multiple descriptors with the ENABLE bit set to one have the same value in the LOGICAL UNIT NUMBER field." Dell comment number 152 Page=80 Subtype=Highlight Author=Kevin Marks Comment= 6.2.2.5 Target Device Serial Number subpage 2nd Paragraph Move text below to after Table 53. "See SPC-3 for a description of the PS bit, SPF bit, PAGE CODE field, SUBPAGE CODE field, and PAGE LENGTH field." and change "These bits and fields shall be set to the values shown table 53." The SPF bit, PAGE CODE field, and SUBPAGE CODE field shall be set to the values shown in table 53." Dell comment number 153 Page=81 Subtype=Highlight Author=Kevin Marks Comment= In Table 54 - MPSN field Rows 01b-11b (MODE SELECT column) "Invalid value for a MODE SENSE command." Why is this not just set to "Reserved"? Dell comment number 154 Page=81 Subtype=Highlight Author=Kevin Marks Comment= In 6.2.2.5 Target Device Serial Number subpage 1st Paragraph after table 53. change "The modify product serial number (MPSN) and PRODUCT SERIAL NUMBER fields "The modify product serial number (MPSN) bit and PRODUCT SERIAL NUMBER field are..." Dell comment number 155 Page=82 Subtype=Highlight Author=Kevin Marks Comment= 6.3.3 Manufacturer-assign serial number VPD page 2nd Paragraph, 2nd sentence after Table 56 change "...not available, the ADC..."

"...not available, then the ADC..."

```
Dell comment number 156
Page=82 Subtype=Highlight Author=Kevin Marks
6.3.3 Manufacturer-assign serial number VPD page
2nd Paragraph, 3rd sentence after Table 56
change
"...field (see SPC-3), the manufacturer-assigned..."
"...field (see SPC-3), then the manufacturer-assigned..."
Dell comment number 157
Page=82 Subtype=StrikeOut Author=Kevin Marks
Comment=
6.3.3 Manufacturer-assign serial number VPD page
1st Paragraph, 2nd sentence after Table 56
Remove
"The PAGE LENGTH field shall be set to the value shown in table 56."
Table 56 does not show page length
*****************
Comments attached to Abs ballot from Robert H. Nixon of
Emulex:
The work of our organization is not affected by the subject matter of this
standard.
*******************
Comments attached to No ballot from Ralph O. Weber of
ENDL:
ENDL 1
PDF pg 1, pg i
NCITS [s/b] INCITS [Global]
ENDL 2
PDF pg 3, pg iii, Abstract, p1, s2
This standards permits the SCSI automation/drive interface device type to
attach to application clients and provides the definitions for their use.
[s/b] This standards permits the SCSI automation/drive interface device
type communicate with application clients and defines the commands and
data exchanged in such communications.
ENDL 3
PDF pg 3, pg iii, Abstract, p2, s1
any service delivery subsystem [s/b] the service delivery subsystem
ENDL 4 Technical
PDF pg 3, pg iii, Abstract, p2, s2
```

RE: For reference to delivery subsystems and transports, refer to the Automation/Drive Interface - Transport Protocol standard. [I was under the impression that ADC-2 commands could be carried by any SCSI Transport. Maybe this statement should be removed.] ENDL 5 PDF pg 5, pg v Revision History should be removed from dpANS ENDL 6 PDF pg 13, pg xiii, Foreword, p2, s1 the INQUIRY command response data [s/b] the standard INQUIRY data [this is the term used in SPC-3] ENDL 7 PDF pg 13, pg xiii, Foreword, p2, s2 SCSI Architecture Model - 2 standard [s/b] SCSI Architecture Model - 3 standard [unless ADC-2 prohibits autosense, in which case we have bigger issuesl ENDL 8 PDF pg 14, pg xiv, Foreword Sierra Logic has been purchased by Emulex. This membership list will be out of date after the November meeting. ENDL 9 PDF pg 17, pg xvii, Foreword Remove this blank page ENDL 10 PDF pg 18, pg 1, Clause 1, p1, s2 fully specify [s/b] fully specifies PDF pg 18, pg 1, Clause 1, a,b,c list, entry 2 INQUIRY command response data [s/b] standard INQUIRY data [this is the term used in SPC-3] ENDL 12 PDF pg 19, pg 2, 2.2 (SPC-3) [ANSI INCITS 405-2005] [s/b] (SPC-3) [ANSI INCITS 408-2005] ENDL 13 PDF pg 19, pg 2, 2.2 ANSI INCITS 403-2005, Automation/Drive Interface, Transport Protocol (ADT) [s/b] ISO/IEC 14776-191, Automation/Drive Interface, Transport Protocol (ADT), ANSI INCITS 406-2005 [N.B. BSR number corrected too] ENDL 14 PDF pg 20, pg 3, 2.3 T10/1742-D, Automation/Drive Interface, Transport Protocol - 2 (ADT-2) [s/b] ISO/IEC 14776-192, Automation/Drive Interface, Transport Protocol -2 (ADT-2), T10/1742-D

ENDL 15 Technical

PDF pg 20, pg 3, 2.3 Should FCP-4 be added to this list?

ENDL 16

PDF pg 21, pg 4, 3.1

[insert a new glossary entry] 3.1.2 additional sense data: The combination of values in an ASC field and an ASCQ field to produce an additional sense code (see SPC-3). [to support the nomenclature in 5.2 and elsewhere]

ENDL 17

PDF pg 23, pg 6, 3.2

MAM Medium Auxiliary Memory [s/b] MAM Medium Auxiliary Memory (see SPC-3)

ENDL 18 Technical

PDF pg 26, pg 9, 4.1, p1

This overview conflicts with the Abstract and the contents of clause 1. Make the three consistent. Perhaps this can be accomplished by identifying the application client and device server in the 4.1 text.

ENDL 19 Technical

PDF pg 26, pg 9, 4.2.1, a,b,c list for DT device, entry c I see an application client listed as a constituent of an automation device. I see device servers listed as constituents of a DT device. What I do not see is a specific identification of the 'application client contained within the DT device'. This phrase makes no sense.

ENDL 20

PDF pg 27, pg 10, 4.2.1, Figure 2

A gray line is missing on the right-hand side of figure 2. The line should connect the two Primary Port(s) to the Automation Device Primary Port.

ENDL 21

PDF pg 28, pg 11, 4.2.2, 3rd p on pg, s2

RE: The NOTIFY DATA TRANSFER DEVICE command (see 5.2) provides a mechanism for the application client to indicate that the load attempt has ended in a failure, such that the RMC device server that was masking sense data changes shall resume reporting sense data for the failure. [is another way to say this?] The NOTIFY DATA TRANSFER DEVICE command (see 5.2) provides a mechanism for the application client to indicate that the load attempt has ended in a failure and the RMC device server that was masking sense data changes has resumed reporting sense data for the failure.

ENDL 22 Technical

PDF pg 29, pg 12, 4.2.2, 1st line on pg

NOT READY TO READY TRANSITION [is not an additional sense code listed in SPC-4 ... maybe this s/b] NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED

ENDL 23 Technical

PDF pg 29, pg 12, 4.2.2, 2nd p on pg, s2 & s4 establish appropriate unit attention conditions [s/b] establish appropriate unit attention condition [unless it is intended that one LOAD UNLOAD command shall result in the establishment of multiple unit attention conditions] [twice in cited paragraph]

ENDL 24 Technical

PDF pg 30, pg 13, 4.2.3.2, 1st p after 1st a,b,c list, s2
RE: The local SMC device server shall not support the ELEMENT_SCOPE in the
PERSISTENT RESERVE IN and PERSISTENT RESERVE OUT commands. [The reference
for PERSISTENT RESERVE IN/OUT is SPC-3. SPC-3 does not define
ELEMENT_SCOPE. If this sentence is not removed, it will be necessary to
insert a '(see SPC-2)' in it somewhere.]

ENDL 25

PDF pg 30, pg 13, 4.2.3.2, 2nd a,b,c list, entry a RESERVATION CONFLICT [s/b] RESERVATION CONFLICT status

ENDL 26

PDF pg 30, pg 13, 4.2.3.2, 2nd a,b,c list, entry b CHECK CONDITION [s/b] CHECK CONDITION status

ENDL 27

PDF pg 30, pg 13, 4.2.3.3, p3, s1

RE: The remote SMC device server shall report unit attention conditions for all initiator ports to the ADC device server using the NOTIFY DATA TRANSFER DEVICE command (see 5.2). [As written, this sentence tells me that the device server sends a NOTIFY DATA TRANSFER DEVICE command to an initiator port. This is bass ackwards from the SCSI I know.]

ENDL 28

PDF pg 31, pg 14, 4.2.3.5, p1, s1 standard INQUIRY data [s/b] standard INQUIRY data (see SPC-3)

ENDL 29

PDF pg 31, pg 14, 4.2.3.5, p3, s3

the DT device [s/b] the ADC device server [lest a reader think the command could be sent to the RMC device server or SMC device server located in the DT device]

ENDL 30

PDF pg 32, pg 15, 4.2.4.1, 1st p after table 2, s2 States (b) through (h) should $\lceil s/b \rceil$ States (b) through (h) (i.e., all other states) should

ENDL 31

PDF pg 33, pg 16, 4.2.4.1, 2nd p on pg, 2 (see SSC) [s/b] (see SSC-2) [SSC is not a normative reference in this standard]

ENDL 32

PDF pg 33, pg 16, 4.2.4.1, Table 3, title Load example [s/b] Load states example

ENDL 33

PDF pg 34, pg 17, 4.2.4.1, 1,2,3 list, entry 4 has some final microcode preparations to make [s/b] makes final microcode preparations to access the medium

ENDL 34

PDF pg 34, pg 17, 4.2.4.2, 1st p after table 4, s2

States (b) through (h) should [s/b] States (b) through (h) (i.e., all other states) should

ENDL 35

PDF pg 35, pg 18, 4.2.5, p2

[Readers become confused when the most important statement in a paragraph is presented last.]

If the RMC device server's true status is not reported to the application client during automation device-initiated loads, the automation device may retry the load operation while the RMC device server reports that the load operation is still in progress to application clients. This behavior is termed sense data masking and its implementation is optional.

[s/b]

If the optional sense data masking feature is implemented, the RMC device server's true status may not be reported to the application client during automation device-initiated loads. Instead, the automation device may retry the load operation while the RMC device server continues to report that the load operation is still in progress to application clients.

ENDL 36

PDF pg 35, pg 18, 4.2.5, a,b,c list, entry b time of [s/b] time equal to

ENDL 37

PDF pg 36, pg 19, 4.2.6, 3rd p on pg, s2 time; application [s/b] time. Application

ENDL 38

PDF pg 38, pg 21, 4.2.6, 1st p after table 5

Since the paragraph is discussing load operations, it is not clear whether the reference to table 4 (i.e., the unload states table) is correct. Should the last '(see table 4)' in the paragraph be changed to '(see table 1)'?

ENDL 39

PDF pg 38, pg 21, 4.2.7, p1, s2

issue the command (see SPC-3, WRITE ATTRIBUTE) [s/b] send a WRITE ATTRIBUTE command (see SPC-3)

ENDL 40

PDF pg 38, pg 21, 4.2.8, p2, s1

task management requests [s/b] task management functions [or] SCSI command requests and task management function requests

ENDL 41

PDF pg 38, pg 21, 4.2.8, p3, s1 primary port, as specified in SAM-3 [s/b] primary port (see SAM-3)

ENDL 42

PDF pg 38, pg 21, 4.2.8, p3, s1-s2

Insert a paragraph break before 'If the command disabling...' This is a totally new thought, not a continuation of the topic previously discussed in this paragraph.

ENDL 43

PDF pg 38, pg 21, 4.2.9, p1, s3 A typical sequence of operations follows: [s/b] A typical sequence of operations is: ENDL 44 PDF pg 40, pg 23, 5.1, Table 6, heading Command name (part 1 of 2) [s/b] Command name ENDL 45 PDF pg 40, pg 23, 5.1, Table 6, heading Required [s/b] Support requirement ENDL 46 PDF pg 40, pg 23, 5.1, Table 6 Add table footnote a reference on CHANGE ALIASES operation code ENDL 47 PDF pg 40, pg 23, 5.1, Table 6, LOAD UNLOAD reference SSC [s/b] SSC-2 [SSC is not a normative reference for this standard] ENDL 48 PDF pg 40, pg 23, 5.1, Table 6 Add table footnote a reference on READ MEDIA SERIAL NUMBER operation code ENDL 49 PDF pg 40, pg 23, 5.1, Table 6 Add table footnote a reference on REPORT ALIASES operation codE ENDL 50 Technical PDF pg 40, pg 23, 5.1, Table 6, table footnote c Spellout what 'Same as (b)' means. [FYI - This comment is a reason for the ENDL No vote.] ENDL 51 PDF pg 40, pg 23, 5.1, Table 6, table footnote d See SSC-3 to provide support for medium types. [s/b] See SSC-3 for information about supported medium types. [Alternatively, chance the reference column for REPORT DENSITY SUPPORT to SSC-3 and remove this table footnote entirely] ENDL 52 PDF pg 41, pg 24, 5.1, Table 6, REPORT DENSITY SUPPORT reference SSC [s/b] SSC-2 [SSC is not a normative reference for this standard] ENDL 53 PDF pg 41, pg 24, 5.1, Table 6 Add table footnote a reference on REPORT PRIORITY operation code ENDL 54 PDF pg 41, pg 24, 5.1, Table 6 Add table footnote a reference on REPORT TIMESTAMP operation code ENDL 55 PDF pg 41, pg 24, 5.1, Table 6, SEND DIAGNOSTIC row Move table footnote e reference to Support requirement column because it

modifies Mandatory not the command name.

ENDL 56

PDF pg 41, pg 24, 5.1, Table 6

Add table footnote a reference on SET MEDIUM ATTRIBUTE operation code

ENDL 57

PDF pg 41, pg 24, 5.1, Table 6

Add table footnote a reference on SET PRIORITY operation code

ENDL 58

PDF pg 41, pg 24, 5.1, Table 6

Add table footnote a reference on SET TIMESTAMP operation code

ENDL 59

PDF pg 42, pg 25, 5.2, p1, s1 is used to notify [s/b] notifies

ENDL 60

PDF pg 42, pg 25, 5.2, 1st p after table 7, s1

[The current wording places a requirement on an application client] The load failed (LDFAIL) bit shall be set to one if... [s/b] A load failed (LDFAIL) bit set to one indicates that

ENDL 61

PDF pg 42, pg 25, 5.2, 2nd p after table 7, s1

Delete 'in byte 3' since this information is communicated by table 7.

ENDL 62

PDF pg 42, pg 25, 5.2, 3rd, 4th, & 5th paragraphs after table 7, various sentences

Upon receipt of this notification [s/b] Upon receipt of this command $[three\ times\ on\ this\ page]$

ENDL 63

PDF pg 42, pg 25, 5.2, 3rd p after table 7, s4 SMC Logical Unit descriptor is set to one $\lceil s/b \rceil$ SMC Logical Unit

descriptor is set to one (see 6.2.2.4.3)

ENDL 64

PDF pg 42, pg 25, 5.2, 5th p after table 7, s1

remote SMC device server has entered the not accessible state [s/b] remote SMC device server ready state has transition to indicate not accessible [for consistency with the wording in 4.2.3.5]

ENDL 65

PDF pg 42, pg 25, 5.2, 5th p after table 7, s1 per the description of caching SMC data and status (see 4.2.3.5) [s/b] (see 4.2.3.5)

ENDL 66

PDF pg 42, pg 25, 5.2, 5th p after table 7, s2

remote SMC device server was already in the not accessible state [s/b] remote SMC device server ready state has already transitioned to indicate not accessible [for consistency with the wording in 4.2.3.5]

ENDL 67

PDF pg 42, pg 25, 5.2, 5th p after table 7, s3 ASC and ASCQ fields $\lceil s/b \rceil$ ASC field and ASCQ field

ENDL 68

PDF pg 42, pg 25, 5.2, 5th p after table 7, s3 shall contain $\lceil s/b \rceil$ contain

ENDL 69

PDF pg 42, pg 25, 5.2, 5th p after table 7, s5 remote SMC device server has not entered the not accessible state [s/b] remote SMC device sever ready state has not transitioned to indicate not accessible [for consistency with the wording in 4.2.3.5]

ENDL 70

PDF pg 42, pg 25, 5.2, 5th p after table 7, s5 nor has the additional sense data changed [s/b] or the additional sense data has not changed

ENDL 71

PDF pg 42, pg 25, 5.2, 5th p after table 7, s5 if already in the not accessible state [s/b] if the remote SMC device sever ready state has already transitioned to indicate not accessible [for consistency with the wording in 4.2.3.5]

ENDL 72

PDF pg 43, pg 26, 5.2, 1st p on pg, s1 if ready state [s/b] if the ready state [or] if ready state information

ENDL 73

PDF pg 43, pg 26, 5.2, 2nd p on pg, s1 asc and ascq fields shall contain [s/b] <smallcaps>asc</smallcaps> field and <smallcaps>ascq</smallcaps> field contain

ENDL 74 Technical PDF pg 43, pg 26, 5.2, 2nd p on pg, s1 to be used [s/b] shall be used

ENDL 75

PDF pg 43, pg 26, 5.2, 2nd p on pg, last s in p the additional sense data is [s/b] the additional sense data in the <smallcaps>ASC</smallcaps> field and <smallcaps>ASCQ</smallcaps> field is

ENDL 76

PDF pg 43, pg 26, 5.2, 2nd p on pg, last s in p When the additional sense data is NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED, it indicates that the remote SMC device server [s/b] If the additional sense data is set to NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED, then the remote SMC device server

ENDL 77

PDF pg 43, pg 26, 5.2, 2nd p on pg, last s in p the remote SMC device server has entered the accessible state [s/b] the remote SMC device sever ready state has transitioned to indicate

accessible [for consistency with the wording in 4.2.3.5]

ENDL 78

PDF pg 43, pg 26, 5.2, Note 1, s1

A device server responding to a NOTIFY DATA TRANSFER DEVICE command with the BUA bit set to one with GOOD status [s/b] The return of GOOD status for a NOTIFY DATA TRANSFER DEVICE command with the BUA bit set to one

ENDL 79

PDF pg 43, pg 26, 5.2, 1st p after note 1, s3 ASCQ field is not zero [s/b] ASCQ field is not set to zero

ENDL 80

PDF pg 43, pg 26, 5.2, 1st p after note 1, s1 & s2

The first two sentences in this paragraph should be deleted because the replicate information that is more clearly stated in the third sentence.

ENDL 81

PDF pg 43, pg 26, 5.2, 2nd p after note 1, s2 Upon receipt of this notification [s/b] Upon receipt of this command

ENDL 82

PDF pg 43, pg 26, 5.2, 2nd p after note 1, s3 A SOCC bit set to zero indicates [s/b] A <smallcaps>socc</smallcaps> bit set to zero indicates

ENDL 83

PDF pg 43, pg 26, 5.2, 2nd p after note 1, last s in p is not cached $\lceil s/b \rceil$ are not cached

ENDL 84 Technical

PDF pg 43, pg 26, 5.2, 4th p after note 1

Is this requirement different than those specified for unit attention handling in SAM-3? If yes, justify the difference. If no, remove the paragraph. [N.B. Satisfactory resolution of this comment is required to change the ENDL No vote to Yes.]

ENDL 85 Technical

PDF pg 43, pg 26, 5.2, 5th p after note 1, s1

[requirements on application clients should be stated in terms of device server responses]

The automation application client shall send the NOTIFY DATA TRANSFER DEVICE command when any of the events that the NOTIFY DATA TRANSFER DEVICE command reports have occurred.

[s/b]

The automation application client should send the NOTIFY DATA TRANSFER DEVICE command when any of the events that the NOTIFY DATA TRANSFER DEVICE command reports have occurred. If the ADC device server does not return GOOD status for all such NOTIFY DATA TRANSFER DEVICE commands, there is a high probability of errors occurring in information reported by the local SMC device server, RMC device server, and ADC device server.

ENDL 86

PDF pg 44, pg 27, 5.3.1, p1, s1

the DT Device [s/b] the ADC device server [unless the intent is to allow

SET MEDIUM ATTRIBUTE to be sent to RMC device servers and/or local SMC device servers, in which case listing the allowed device servers is strongly urged]

ENDL 87

PDF pg 44, pg 27, 5.3.1, a,b,c list, entry c to application clients via SCSI commands [s/b] to application clients in response to SCSI commands

ENDL 88

PDF pg 44, pg 27, 5.3.1, a,b,c list, entry d insert a period at the end of this list.

ENDL 89 Technical

PDF pg 44, pg 27, 5.3.1, Table 8, byte 1 Bits 5,6, and 7 of byte 1 should be reserved. The service action field occupies only bytes 0-4.

ENDL 90 Technical

PDF pg 44, pg 27, 5.3.1, 1st p after table 8, s3
This shall cause the attribute specified to be cleared in the device server. [Delete this sentence or clearly demonstrate where the attribute specified is specified, because it is not specified in the CDB and it is not specified in the non-existent parameter data.]
[Changing the ENDL No vote to Yes is conditional on the resolution to this comment.]

ENDL 91

PDF pg 44, pg 27, 5.3.1, 1st p after table 8, s4 table Y $\lceil s/b \rceil$ table 11 $\lceil I \rceil$ guess

ENDL 92

PDF pg 44, pg 27, 5.3.1, 1st p after table 8, s4 [delete] for the attribute specified[because there is no attribute specification except in the parameter data itself]

ENDL 93 Technical

PDF pg 44, pg 27, 5.3.1, 1st p after table 8 It appears that the intent of this paragraph is to limit the parameter list length to that allowed for a single attribute. If this is truly the intent, then the first sentence of this subclause should have 'attributes' changed to 'an attribute'.

ENDL 94

PDF pg 45, pg 28, 5.3.2, p1, s1 should be sent [s/b] should be listed

ENDL 95

PDF pg 45, pg 28, 5.3.2, Table 9, bytes 0-3 PARAMETER LIST LENGTH [s/b] PARAMETER DATA LENGTH [to match the descriptive text and avoid name conflicts with the CDB field]

ENDL 96

PDF pg 45, pg 28, 5.3.2, Table 9, bytes 0-3 (n-4) [s/b] (n-3)

ENDL 97

PDF pg 45, pg 28, 5.3.2, 1st p after table 9, s1 of attribute data [s/b] of attribute data that follow [or] of medium attributes that follow

ENDL 98

PDF pg 45, pg 28, 5.3.2, 2nd p after table 9 the attributes [s/b] each medium attribute

ENDL 99

PDF pg 45, pg 28, 5.3.2

All of the references to 5.3.3 on this page are hardcoded. None are electronic cross references. This should be corrected to avoid future errors.

ENDL 100

PDF pg 45, pg 28, 5.3.2, 1st a,b,c list, entry a an attribute with incorrect ATTRIBUTE LENGTH field (see 5.3.3) contents [s/b] an attribute length that exceeds the value shown in table 11 [5.3.3 does not define an incorrect attribute length.]

ENDL 101

PDF pg 46, pg 29, 5.3.3, 1st p after table 10, s2 can $\lceil s/b \rceil$ may

ENDL 102

PDF pg 47, pg 30, 6.1.1, Table 13, heading Page Code [s/b] Page code [for consistency with table 6]

ENDL 103

PDF pg 47, pg 30, 6.1.1, Table 13, heading Required [s/b] Support requirement

ENDL 104

PDF pg 48, pg 31, 6.1.1, Table 13, page 2 of 2 Column headers should appear on every page. [Changing the ENDL No vote to Yes is contingent on this correction.]

ENDL 105

PDF pg 48, pg 31, 6.1.1, Service Buffers Information row Insert 6.1.5 in the Reference column

ENDL 106

PDF pg 49, pg 32, 6.1.2.2, 3rd p after table 16, s1 The PARAMETER LENGTH field shall be set to 04h to allow transfer of the complete parameter. [s/b] The PARAMETER LENGTH field shall be set to 04h.

ENDL 107

PDF pg 49, pg 32, 6.1.2.2, 4th p after table 16, s2 the DT device initialized [s/b] the DT device was initialized

ENDL 108 Technical

PDF pg 49, pg 32, 6.1.2.2, 4th p after table 16, s2

RE: Returned data shall reflect the last known values since the DT device

initialized.

I do not understand the relationship between the 'last known values' and DT device initialization. It seems like the last known values are invariant with respect to initialization (i.e., last known is last known is last known). This might intend to say the last known values before the last DT device initialization, but that seem weird. This might intend to say that if the values are not known since DT device initialization, then the last known values prior to initialization are used. In any case, some clarification is needed.

ENDL 109 Technical

PDF pg 49, pg 32, 6.1.2.2, 1st p after note 2, last s in p The DINIT bit should be set to one before relying on any other bits in the very high frequency data log parameter. [s/b] If the DINIT bit is set to zero, then the values of other bits in the very high frequency data log parameter are indeterminate. [Alternatively, explain how the DINIT bit can before ...]

ENDL 110 Technical

PDF pg 50, pg 33, 6.1.2.2, 1st p after table 7, s3

RE: The CRQRD bit shall take priority over the CRQST bit.

[Clarify 'shall take priority over'. Priority for whom (device server or application client)? Priority in what sense (beyond the 'normal operation may not be possible' situation already stated)? Since other statements in this paragraph make it clear that both bits may be set, the intent of this 'priority' is unfathomable.

ENDL 111

PDF pg 50, pg 33, 6.1.2.2, 3rd p after table 17, s1 & s2 any currently present medium [s/b] the current medium $[two\ instances\ in\ this\ paragraph]$

ENDL 112

PDF pg 50, pg 33, 6.1.2.2, 2nd p after note 3, s1
Medium Auxiliary Memory (MAM) [s/b] MAM [because MAM is defined in 3.2]

ENDL 113

PDF pg 50, pg 33, 6.1.2.2, 1st p after note 4, s1 command set standard [s/b] command standard

ENDL 114 Technical

PDF pg 51, pg 34, 6.1.2.2, 1st p after note 6

What does 'the remaining bits within byte 1' mean? All other bits in byte 1? All the bits to the left in byte 1, to the right? This statement is open to any convenient interpretation by the reader. It would be best to create a name for the bits as a collection, explicitly identify each bit in the collection and use the collective name thereafter.

ENDL 115 Technical

PDF pg 54, pg 37, 6.1.2.4.1

Other than parameter length, how does the application client differentiate between the various DT device primary port status data options that might appear in a DT device primary port status log parameter? Whatever mechanism is used needs to be documented.

[This comment must be satisfactorily resolved before the ENDL No vote will

10/25/2006

06-447r0.TXT change to Yes.] **ENDL 116** PDF pg 64, pg 47, 6.2.1, Table 32, heading Page Code [s/b] Page code [for consistency with table 6] **ENDL 117** PDF pg 64, pg 47, 6.2.1, Table 32, heading Mode Page Name [s/b] Description [left aligned] [for consistency with table 13] **ENDL** 118 PDF pg 67, pg 50, 6.2.2.2, Table 36 Add a period at the end of table footnote a. **ENDL 119** PDF pg 70, pg 53, 6.2.2.3.3, Table 40 Add a period at the end of table footnote a. ENDL 120 PDF pg 73, pg 56, 6.2.2.3.5, Table 46 Add a period at the end of table footnote a. **ENDL 121** PDF pg 76, pg 59, 6.2.2.4.2, Table 49 Add a period at the end of table footnote a. **ENDL 122** PDF pg 81, pg 64, 6.2.2.5, Table 54 Add a period at the end of table footnote a. ENDL 123 Technical PDF pg 82, pg 65, 6.3.1, Table 55 Because the Log Page and Mode Page tables list SPC-3 pages, the VPD Page table should follow that example. This is especially important because 6.3.2 references a VPD page which is otherwise defined in SPC-3. [This change needs to be made before the ENDL No vote will change to Yes.] **ENDL 124** PDF pg 82, pg 65, 6.3.1, Table 55, heading VPD Page Name [s/b] Description [left aligned] [for consistency with table 13] **ENDL 125** PDF pg 82, pg 65, 6.3.1, Table 55, heading Support [s/b] Support requirement **ENDL 126** PDF pg 82, pg 65, 6.3.1, Table 55

page tables. This table should have the same format.

The Reference column is on the right-hand edge in the Log page and Mode

Comments attached to Abs ballot from Elwood Parsons of Foxconn Electronics:

Comments attached to No ballot from Rob Elliott of Hewlett Packard Co.:

HPQ comment number 1
Page=3 Subtype=Text Author=relliott
Comment=
Abstract

Add something like:

Lack of expertise.

This standard maintains a high degree of compatibility with the Automation/Drive Interface Commands (ADC) command set, INCITS xxx-xxxx, and while providing additional functions, is not intended to require changes to presently installed devices or existing software.

(if that is true)

- - -

HPQ comment number 2
Page=4 Subtype=Highlight Author=relliott
Comment=
ANSI page
2003
s/b
2006

- - -

HPQ comment number 3
Page=10 Subtype=Text Author=relliott
Comment=
Table of Tables

Fix FrameMaker character tag usage so the field name small caps usage is retained in the table of tables

- - -

HPQ comment number 4
Page=13 Subtype=Highlight Author=mbanth
Comment=
Foreward

While I'm not 100% sure, I believe that IHS have changed the name of their Global Engineering business.

- - -

HPQ comment number 5
Page=13 Subtype=StrikeOut Author=mbanth
Comment=
Forward

Do not state conformance here. Clause 2 provides a single location for such statements.

- - -

HPQ comment number 6
Page=13 Subtype=Highlight Author=relliott
Comment=

Foreword

INCITS. ***: 200x

s/b

INCITS xxx-2006

- - -

HPQ comment number 7
Page=13 Subtype=Highlight Author=relliott
Comment=
Foreword

NCITS.***:200x

INCITS xxx-2006

- - -

HPQ comment number 8
Page=16 Subtype=StrikeOut Author=mbanth
Comment=

HPQ comment number 9
Page=16 Subtype=Highlight Author=mbanth
Comment=
Introduction
abbreviations
s/b

"abbreviations and conventions "

- - -

HPQ comment number 10
Page=18 Subtype=StrikeOut Author=mbanth
Comment=

- - -

HPQ comment number 11
Page=18 Subtype=Text Author=mbanth
Comment=

1

Insert a paragraph after the lettered list and before the paragraph that begins, 'Figure 1 shows' The new paragraph follows the format of a similar paragraph in SPC3r23, and it reads:

The following commands, parameter data, and features defined in previous versions of this standard are made obsolete by this standard: Linked commands.

```
HPQ comment number 12
Page=18 Subtype=Text Author=mbanth
Comment=
Table 1
FCP-3 shows the top two boxes of Figure 1 side-by-side. We should match
that example.
HPQ comment number 13
Page=18 Subtype=Highlight Author=relliott
Comment=
Page 1
INCITS. * * * : 200x
s/b
INCITS ***-200x
HPQ comment number 14
Page=18 Subtype=Highlight Author=mbanth
Comment=
Table 1
Change Transport Protocols to SCSI Transport Protocols
HPQ comment number 15
Page=18 Subtype=Highlight Author=mbanth
Comment=
Table 1
SPC-3 uses the term 'Primary' instead of 'Shared'. We should follow that
example.
HPQ comment number 16
Page=18 Subtype=Highlight Author=relliott
Comment=
Table 1
Both SPC-3 and SSC-3 use only the word 'Interconnects'. We should follow
that example.
HPQ comment number 17
Page=18 Subtype=Highlight Author=mbanth
Comment=
1
c) add
"and the operation of logical units of other specific device types that are
present in the same device as the automation/drive interface logical unit."
HPQ comment number 18
Page=18 Subtype=Highlight Author=relliott
Comment=
1
```

device type should be PERIPHERAL DEVICE TYPE in small caps

- - -

HPQ comment number 19

Page=19 Subtype=StrikeOut Author=mbanth

Comment=

2.2

Only one cross reference to FCP-2 exists (on PDF page 55). I believe that reference should change to FCP-3, and I've submitted a separate comment to that effect. If the group changes the reference from FCP-2 to FCP-3, then it should also remove FCP-2 from the list of approved references.

- - -

HPQ comment number 20

Page=19 Subtype=Highlight Author=relliott

Comment=

2.2

"ANSI INCITS 403-2005"

Use the ISO/IEC number and format like other references

- - -

HPQ comment number 21

Page=20 Subtype=Highlight Author=mbanth

Comment=

2.3

In this revision of ADC-2, no references exist to SPC-4. Consider removing SPC-4 from the list of references under development.

- - -

HPQ comment number 22

Page=20 Subtype=Highlight Author=mbanth

Comment=

2.3

In this revision of ADC-2, no references exist to SAS-2. Consider removing SAS-2 from the list of references under development.

- - -

HPQ comment number 23

Page=20 Subtype=Highlight Author=relliott

Comment=

2.3

"T10/1742-D"

Use the ISO/IEC number and format like other references

_ _ .

HPQ comment number 24

Page=21 Subtype=StrikeOut Author=relliott

Comment=

3.1.13

delete "Indicates"

```
HPQ comment number 25
Page=21 Subtype=Highlight Author=relliott
Comment=
3.1.2
automation device and a data transfer device.
automation device (see 3.1.9) and a DT device (see 3.1.15)
HPQ comment number 26
Page=21 Subtype=Highlight Author=relliott
Comment=
3.1.15
data transfer device:
s/b
data transfer (DT) device:
HPQ comment number 27
Page=21 Subtype=Highlight Author=relliott
3.1.16
data transfer device primary port:
data transfer (DT) device primary port:
HPQ comment number 28
Page=21 Subtype=Highlight Author=relliott
Comment=
3.1.2
data transfer device primary port
DT device primary port (see 3.1.16)
HPQ comment number 29
Page=21 Subtype=Highlight Author=relliott
Comment=
3.1.2
automation device primary port
automation device primary port (see 3.1.10)
HPQ comment number 30
Page=21 Subtype=Text Author=relliott
Comment=
3.1.x
Add definitions for:
ADC device server
RMC device server
SMC device server
```

HPQ comment number 31 Page=21 Subtype=Text Author=relliott Comment= 3.1.2 (and global) Add "ADI initiator port" and "ADI target port" and use them throughout as appropriate (comments are provided with those suggestions - there are not many changes required) HPQ comment number 32 Page=21 Subtype=Highlight Author=relliott Comment= 3.1.16 after device add "(see 3.1.15)" HPQ comment number 33 Page=21 Subtype=Highlight Author=relliott Comment= 3.1.10 after device add "(see 3.1.9)" HPQ comment number 34 Page=21 Subtype=Highlight Author=mbanth Comment= 3.1.7 s/b '... creates application client tasks each of which issues a single command or a task management function.' SAM-3, 4.3 describes the relationship between an application client, an application client task, and a command or task management function. HPQ comment number 35 Page=21 Subtype=Highlight Author=mbanth Comment= 3.1.8 s/b '... creates application client tasks each of which issues a single command or a task management request to' SAM-3, 4.3 describes the relationship between an application client, an application client task, and a command or task management function. HPQ comment number 36 Page=21 Subtype=Highlight Author=mbanth Comment= 3.1.11 s/b task management requests HPQ comment number 37 Page=21 Subtype=Highlight Author=mbanth

```
Comment=
3.1.12
s/b '... application client that creates application client tasks for
issuing commands and task management requests to ....'
HPQ comment number 38
Page=21 Subtype=StrikeOut Author=relliott
Comment=
3.1.3
Delete the unused "ADT initiator port: A SCSI initiator port that
implements ADT."
HPQ comment number 39
Page=21 Subtype=StrikeOut Author=relliott
Comment=
3.1.5
Delete the unused "ADT target port: A SCSI target port that implements
HPQ comment number 40
Page=21 Subtype=StrikeOut Author=relliott
Comment=
3.1.6
Delete the unused "ADT target/initiator port: A port that has all the
characteristics of an ADT target port and an ADT initiator port."
HPQ comment number 41
Page=21 Subtype=Highlight Author=relliott
Comment=
3.1.4
Change "An ADT initiator port, ADT target port, or ADT target/initiator
port." which relied on otherwise unused terms to
to: "An ADI port that implements ADT.'
HPQ comment number 42
Page=22 Subtype=Highlight Author=mbanth
Comment=
3.1.34
Update to SAM-3 definition.
HPQ comment number 43
Page=22 Subtype=Highlight Author=mbanth
Comment=
3.1.37
```

Update to SAM-4 definition.

```
HPQ comment number 44
Page=22 Subtype=Highlight Author=mbanth
Comment=
3.1.36
Update to SAM-3 definition.
HPQ comment number 45
Page=22 Subtype=Highlight Author=mbanth
Comment=
3.1.35
Update to SAM-4 definition.
HPQ comment number 46
Page=22 Subtype=Highlight Author=mbanth
Comment=
3.1.31
s/b status and sense key of CHECK CONDITION and NOT READY.
HPQ comment number 47
Page=23 Subtype=StrikeOut Author=mbanth
Comment=
3.1.41
SAM-3 has made contingent allegiance obsolete. Either remove it here or
change the reference to SAM-2.
HPQ comment number 48
Page=23 Subtype=Text Author=mbanth
Comment=
Add latest standard TLA's: ADC-2, ADT-2, SAM-4, and SPC-4.
HPQ comment number 49
Page=23 Subtype=Text Author=relliott
Comment=
3.2
Add
     Very High Frequency (e.g., VHF data)
VHF
HPQ comment number 50
Page=23 Subtype=Highlight Author=relliott
Comment=
3.2
Removable Medium Commands
removable medium commands (see 3.1.33)
```

- - -

```
HPQ comment number 51
Page=23 Subtype=Highlight Author=relliott
Comment=
3.2
In the acronyms, only use capital letters when appropriate.
For example,
Data transfer s/b data transfer
Most significant bit s/b most significant bit
etc.
HPQ comment number 52
Page=23 Subtype=Text Author=relliott
Comment=
Add:
storage element
(used several times in 4.2.1)
HPQ comment number 53
Page=23 Subtype=Highlight Author=relliott
3.2
After
"value"
add
(see 4.2.5)
HPQ comment number 54
Page=24 Subtype=Highlight Author=relliott
Comment=
3.3.10
s/b
. "
HPQ comment number 55
Page=26 Subtype=Highlight Author=mbanth
Comment=
4.2.1 (and global)
A device server does not receive or process a task management request.
That job belongs to the task manager within the logical unit (see SAM-3,
4.8). Switch from 'device server' to 'logical unit' where necessary.
HPQ comment number 56
Page=26 Subtype=Highlight Author=mbanth
Comment=
4.2.1
The DT device only contains an application client if bridging is enabled.
Is that the application client that this sentence mentions? If it is,
```

include some text making it clear that the application client may or may not exist, e.g. change '... the application client contained ...' to '... the application client possibly contained' If the application client mentioned in this sentence isn't the bridging manager, then change the sentence to eliminate it.

HPQ comment number 57 Page=26 Subtype=Highlight Author=mbanth Comment= 4.2.1 (and global) Another example where the text mentions a device server processing task management requests. Change 'device server' to 'logical unit' if the thing referenced has to process both commands and TMF's. HPQ comment number 58 Page=26 Subtype=Text Author=relliott Comment= 4.2 Get rid of nesting level 4.2 - upgrade 4.2.xx to 4.xx HPQ comment number 59 Page=26 Subtype=Text Author=mbanth Comment= 4.2.1 "DT device contains ... [row] d)" at end, add "One of these ports shall be an ADI port (see 3.1.2)." HPQ comment number 60 Page=26 Subtype=Highlight Author=relliott Comment= 4.2.1 DE device row d) data transfer device s/b DT device HPQ comment number 61 Page=26 Subtype=Text Author=relliott Comment= 4.2.1 Figures showing automation device and DT device contents (pictorial view of the a)b)c)d) lists) right above those lists would be helpful. HPQ comment number 62 Page=26 Subtype=Underline Author=mbanth Comment=

4.2.1

Change "may receive" to "receives"

```
(original comment by Michael, explanation by Rob)
The term "may" means permission is being granted. However, that's not the
meaning of this sentence. If there is an automation device primary port,
the SMP device server must accept commands through it.
HPQ comment number 63
Page=26 Subtype=Highlight Author=relliott
Comment=
4.2.1
Change
ADI port
to
ADI initiator port
HPQ comment number 64
Page=26 Subtype=Highlight Author=relliott
Comment=
4.2.1
DT device's primary ports
DT device primary ports
(since this is a defined term)
HPQ comment number 65
Page=26 Subtype=Highlight Author=mbanth
Comment=
4.1
Since the sentence introduces the two possibilities with 'either', this
word should be 'or'.
HPQ comment number 66
Page=26 Subtype=Text Author=relliott
Comment=
4.1
The standard is called "automation/drive interface commands". Automation
device is used everywhere. However, "drive" is used only 3 times, and
seems to have been overtaken by the "DT device" term.
In 4.1, some sentence should equate the two terms. For example, say
"and a data transfer (DT) device (e.g., a removable medium device such as a
tape drive)."
HPQ comment number 67
Page=27 Subtype=Highlight Author=relliott
Comment=
Figure 2
Change
ADI Port
```

```
to
ADI initiator port
HPQ comment number 68
Page=27 Subtype=Highlight Author=relliott
Comment=
Figure 2
Change
ADI Port
to
ADI initiator port
HPQ comment number 69
Page=27 Subtype=Highlight Author=relliott
Comment=
Figure 2
Change
ADI Port
ADI target port
HPQ comment number 70
Page=27 Subtype=Highlight Author=relliott
Comment=
Figure 2
Change
ADI Port
to
ADI target port
HPQ comment number 71
Page=27 Subtype=Highlight Author=relliott
Comment=
4.2.2
Change
ADI port
ADI target port
HPQ comment number 72
Page=27 Subtype=Highlight Author=relliott
Comment=
4.2.2
Change
an ADI port
the ADI target port
HPQ comment number 73
```

```
Page=28 Subtype=Highlight Author=relliott
Comment=
4.2.2
"PREVENT ALLOW MEDIUM REMOVAL commands (see SPC-3)"
The PREVENT ALLOW MEDIUM REMOVAL command was booted from SPC-4 into
individual command set standards, so SPC-n is not a good reference any
more.
HPQ comment number 74
Page=28 Subtype=StrikeOut Author=relliott
Comment=
4.2.2
Delete may. The ADC mode pages either do or do not override; there is no
granting of permission here.
HPQ comment number 75
Page=28 Subtype=StrikeOut Author=relliott
Comment=
4.2.2
Delete may. The ADC mode pages either do or do not override; there is no
granting of permission here.
HPQ comment number 76
Page=28 Subtype=Highlight Author=relliott
Comment=
4.2.2
Change
ADI port
to
ADI target port
HPQ comment number 77
Page=28 Subtype=Highlight Author=relliott
Comment=
4.2.2
Change
ADI port
ADI target port
HPQ comment number 78
Page=28 Subtype=Highlight Author=relliott
Comment=
4.2.2
Change
an ADI port
the ADI target port
```

HPQ comment number 79 Page=29 Subtype=Highlight Author=relliott Comment= 4.2.3.1 Change ADI port ADI target port HPQ comment number 80 Page=29 Subtype=Highlight Author=relliott Comment= 4.2.3.1 Change ADI port to ADI target port HPQ comment number 81 Page=29 Subtype=Highlight Author=relliott Comment= 4.2.3.1 Change ADI port ADI initiator port HPQ comment number 82 Page=29 Subtype=Highlight Author=relliott Comment= 4.2.3.2 Expand the details about "shall not respond to". If an INQUIRY command is sent to the LUN, should it return a Peripheral Qualifier of 001b (not there now) or 011b (never there)? Since bridging can be enabled/disabled at will, 001b seems appropriate. HPQ comment number 83 Page=29 Subtype=Highlight Author=relliott

Comment= 4.2.3.2

" Because the transport protocol connecting the bridging manager and the remote SMC device server may not carry information about which initiator port originated a command or task management request,"

Does the transport protocol always carry information about which target port received said commands? If not, then this needs to be worded in I_T nexus terms, not just initiator port terms.

- - -

HPQ comment number 84
Page=30 Subtype=Text Author=mbanth
Comment=

4.2.3.2

Consider creating a list of commands that may be processed by the local SMC device server and add REPORT SUPPORTED OPERATION CODES and REPORT SUPPORTED TASK MANAGEMENT FUNCTIONS to that list. Although these commands do not require knowledge of the initiator port, we have found them useful to implement in the local SMC device server for performance reasons.

- - -

HPQ comment number 85
Page=30 Subtype=Highlight Author=russellt
Comment=
4.2.3.4
to the initiator.

First paragraph in 4.2.3.1 states that SMC may be an asymmetrical logical unit. Therefore the initiator is not necessarily on the DT primary port.

- - -

HPQ comment number 86
Page=30 Subtype=Highlight Author=russellt
Comment=
4.2.3.4
"NOT READY sense keys"

Clarification require: Does this mean the ASC/ASCQ doesn't replace the cache NRSC ASC/ASCQ? Or does it mean it doesn't affect the cached Ready state, i.e. does the local SMC device server assume the remote SMC device server remains ready until a Notify Data Transfer Device with the NRSC set arrives?

- - -

HPQ comment number 87
Page=30 Subtype=Highlight Author=mbanth
Comment=
4.2.3.4
This sentence presents some difficulties.

- 1. How does the queue mentioned interact with the local SMC logical unit's task set? I would much prefer seeing this concept expressed in the language of task sets and tasks as those are well defined entities.
- 2. Although one can infer that the commands mentioned by this sentence are only those commands that result in a task routed to the local SMC logical unit, the sentence doesn't actually say that. The sentence only qualifies 'commands' with 'received via the DT device primary port.' Changing the sentence to include the task concept allows the inclusion of text limiting the sentence to tasks routed to the local SMC device server.

- - -

HPQ comment number 88

```
Page=30 Subtype=Highlight Author=relliott
Comment=
4.2.3.2
association value of 01b
ASSOCIATION field set to 01b (i.e., target port)
HPQ comment number 89
Page=30 Subtype=Highlight Author=relliott
Comment=
4.2.3.3
association value of 01b
ASSOCIATION field set to 01b (i.e., target port)
HPQ comment number 90
Page=30 Subtype=Highlight Author=relliott
Comment=
4.2.3.2
ELEMENT SCOPE did not survive in SPC-3, so if SPC-3 or SPC-4 is the
reference, this sentence is not needed. It is an SPC-2 feature only.
- - -
HPQ comment number 91
Page=30 Subtype=Text Author=relliott
Comment=
4.2.3.2
If bridging is enabled, then the remote SMC device server needs to have its
automation device primary port disabled.
If some application client makes a reservation directly on the remote SMC
device server, the local SMC device server and remote SMC device server
will not be in agreement about the state of the logical unit. The local
SMC device server could try to make a reservation of its own on behalf of
its application client, but that would be difficult to implement correctly.
HPQ comment number 92
Page=30 Subtype=Highlight Author=relliott
Comment=
4.2.3.2
initiator port
s/b
I T nexus
HPQ comment number 93
Page=30 Subtype=Text Author=relliott
Comment=
4.2.3.4
If the bridging manager receives a CHECK CONDITION/UNIT ATTENTION/<one of
```

the types of resets occurred>, it should clear all cached SMC data and status.

If it receives INQUIRY DATA HAS CHANGED, it should clear cached standard INQUIRY and VPD data.

If it receives MODE PARAMETER DATA CHANGED, it should clear cached mode parameters.

For the latter two, a NOTIFY DATA TRANSFER DEVICE command might show up from the automation device to the DT device, but why wait and continue to present staledata?

- - -

HPQ comment number 94
Page=31 Subtype=Highlight Author=relliott
Comment=
4.2.3.5

Include a table of everything that may be cached.

Include a column indicating whether caching of each such item is controlled by the SMC Logical Unit descriptor.

Consider including supported task management functions.

- - -

HPQ comment number 95
Page=31 Subtype=Highlight Author=relliott
Comment=
4.2.3.5
Change:

"the local SMC device server shall report a status of CHECK CONDITION to commands requiring that the remote SMC device server be accessible, including TEST UNIT READY. The local SMC device server shall set the sense key to NOT READY and the additional sense code to that contained in the cache."

to:

"the local SMC device server shall terminate commands that require the remote SMC device server to be accessible with CHECK CONDITION status, with the sense key set to NOT READY, and the additional sense code set to the additional sense code contained in the cache."

- - -

HPQ comment number 96
Page=31 Subtype=Highlight Author=relliott
Comment=
4.2.3.5
may have
s/b
has

- - -

HPQ comment number 97
Page=31 Subtype=Text Author=relliott

Comment= 4.2.3.5

What in SPC-3 indicates that supported operation codes might change? There is no unit attention condition additional sense code defined for it. CHANGED OPERATING DEFINITION might be interpreted that way, but that was last referenced by the CHANGE DEFINITION command, made obsolete in SPC-2.

HPQ comment number 98 Page=31 Subtype=Highlight Author=relliott Comment= 4.2.3.5 Change the command to the NOTIFY DATA TRANSFER DEVICE command HPQ comment number 99 Page=32 Subtype=Highlight Author=relliott Comment= 4.2.4.1 "in the very high frequency data log parameter in the DT Device Status log page during load operations (see 6.1.2.2)" s/b "in the VHF data descriptor (see 6.1.2.2) during load operations" HPQ comment number 100 Page=32 Subtype=Highlight Author=relliott Comment= Table 2 "Very high frequency data log parameter field" "Bit in the VHF data descriptor" HPQ comment number 101 Page=32 Subtype=Highlight Author=relliott Comment= 4.2.4.1 "very high frequency data log parameter" s/b "VHF data descriptor" HPQ comment number 102 Page=33 Subtype=Highlight Author=relliott Comment= Table 3 "Very high frequency data log parameter field"

"Bit in VHF data descriptor"

```
HPQ comment number 103
Page=33 Subtype=Highlight Author=mbanth
Comment=
4.2.4.1
SSC s/b SSC-2
HPQ comment number 104
Page=34 Subtype=Highlight Author=russellt
Comment=
Table 4
Looks like states (d) and (e) are in the reverse order since the MSTD is
set in (c), cleared in (d) and set again in (e). It also implies there's no
transition period going from seated to unseated, which is also resolved by
swaping (d) and (e).
HPQ comment number 105
Page=34 Subtype=Highlight Author=relliott
Comment=
4.2.4.2
"in the very high frequency data log parameter in the DT Device Status log
page during unload operations (see 6.1.2.2)"
s/b
"in the VHF data descriptor (see 6.1.2.2) during unload operations"
HPQ comment number 106
Page=34 Subtype=Highlight Author=relliott
Comment=
Table 4
"Very high frequency data log parameter field"
"Bit in the VHF data descriptor"
HPQ comment number 107
Page=34 Subtype=Highlight Author=relliott
Comment=
4.2.4.2
VHF data descriptor
VHF log parameter
(if change in 6.1.2.2 is accepted)
HPQ comment number 108
Page=34 Subtype=Text Author=relliott
Comment=
4.2.4.2
Add
"Unload states may not be reported in the order listed in table 4."
```

since a similar sentence appears after table 2. HPQ comment number 109 Page=34 Subtype=Text Author=relliott Comment= Table 2/4 Table 4 state a) and table 2 state i) should have the same name Table 4 state h) and table 2 state a) should have the same name HPQ comment number 110 Page=34 Subtype=Text Author=relliott Comment= Page 17 and global I recommend using ragged right edges, so text is not stretched like in the Unload state (c) paragraph compared to its peers. HPQ comment number 111 Page=35 Subtype=Highlight Author=mbanth Comment= 4.2.5 Consider moving this sentence into the lettered list above. They both discuss when to disable sense data masking. HPQ comment number 112 Page=35 Subtype=Highlight Author=relliott Comment= 4.2.6 "The ADC device server also provides a mechanism to notify an ADC application client whenever a TapeAlert flag changes value" Could this be rewritten to refer to the specific bit name? HPQ comment number 113 Page=35 Subtype=Highlight Author=mbanth Comment= 4.2.5 operation s/b load operation HPQ comment number 114 Page=35 Subtype=Highlight Author=mbanth Comment= 4.2.5 This s/b Retrying the load operation HPQ comment number 115 Page=35 Subtype=Highlight Author=relliott

```
Comment=
4.2.5
Ιf
s/b
While
HPQ comment number 116
Page=35 Subtype=Highlight Author=relliott
Comment=
4.2.5
"consistent with a normal loading operation" is a bit confusing.
Perhaps reword as:
"indicating the load is in progress, and not report any failure that is
encountered."
HPQ comment number 117
Page=35 Subtype=Text Author=relliott
Comment=
4.2.5
Does sense data masking apply to loads only, or does it also apply to
unloads?
HPQ comment number 118
Page=35 Subtype=Text Author=relliott
Comment=
4.2.5
Move the "if implemented" paragraph above the "if sense data masking is
enabled" paragraph.
HPQ comment number 119
Page=35 Subtype=Highlight Author=relliott
Comment=
4.2.6
TapeAlert Response log page
TapeAlert Response log page (see 6.1.3)
HPQ comment number 120
Page=35 Subtype=Highlight Author=relliott
Comment=
4.2.6 (throughout)
Since there seem to be two sets of TapeAlert flags - RMC ones and ADC ones
- giving them separate names:
RMC TapeAlert flags
ADC TapeAlert flags
might be helpful.
```

```
HPQ comment number 121
Page=36 Subtype=Highlight Author=relliott
Comment=
4.2.6
VHF data descriptor
s/b
VHF log parameter
(if change in 6.1.2.2 is accepted)
HPQ comment number 122
Page=36 Subtype=Highlight Author=relliott
Comment=
4.2.6
VHF data descriptor
s/b
VHF log parameter
(if change in 6.1.2.2 is accepted)
HPQ comment number 123
Page=36 Subtype=Highlight Author=relliott
Comment=
4.2.6
initiator port
s/b
I T nexus
HPQ comment number 124
Page=36 Subtype=Highlight Author=relliott
Comment=
4.2.6
Does "port events (e.g., port logins)"
simply mean "I T nexus loss"?
HPQ comment number 125
Page=36 Subtype=Highlight Author=relliott
Comment=
4.2.6
"when the device server sets" is worded from the device server perspective,
but the sentence is a rule for the application client. Reword in terms of
it receiving a DT Device VHF Data log parameter with the TAFC bit set to
one.
HPQ comment number 126
Page=38 Subtype=Highlight Author=relliott
Comment=
```

```
"see table 1" is not a hyperlink and is the wrong table number
HPQ comment number 127
Page=38 Subtype=Highlight Author=relliott
Comment=
4.2.7
automation device
automation application client
HPQ comment number 128
Page=38 Subtype=Highlight Author=mbanth
Comment=
4.2.8
Change
"return command completion status"
"send a SCSI transport protocol service response of TASK COMPLETE for the
associated task (see SAM-3)"
[additional comment by Rob: use "for the MODE SELECT command"]
- - -
HPQ comment number 129
Page=38 Subtype=Highlight Author=relliott
Comment=
4.2.7
is required
s/b
needs
or change "If the automation device is required to change these
attributes," to
"To change these attributes, "
HPQ comment number 130
Page=38 Subtype=Highlight Author=relliott
Comment=
4.2.7
see SPC-3, WRITE ATTRIBUTE
see the WRITE ATTRIBUTE command in SPC-3
HPQ comment number 131
Page=38 Subtype=Highlight Author=relliott
Comment=
4.2.8
An ADC device server...via MODE SELECT commands...
A DT device...via MODE SELECT commands to the ADC device server...
```

```
HPQ comment number 132
Page=39 Subtype=Highlight Author=relliott
Comment=
4.2.9
VHF data descriptor
s/b
VHF log parameter
(if change in 6.1.2.2 is accepted)
HPQ comment number 133
Page=40 Subtype=Highlight Author=relliott
Comment=
Table 6
CONTROLS
s/b
CONTROL
HPQ comment number 134
Page=40 Subtype=Highlight Author=relliott
Comment=
Table 6
CONTROLS
s/b
CONTROL
HPQ comment number 135
Page=41 Subtype=Highlight Author=relliott
Comment=
In the SPC-4 opcode table, A9h needs to be marked optional for ADC-2
HPQ comment number 136
Page=41 Subtype=Highlight Author=relliott
Comment=
Table 6
REPORT DEVICE IDENTIFIER
is changing names in SPC-4 to
REPORT IDENTIFYING INFORMATION
HPQ comment number 137
Page=41 Subtype=Text Author=relliott
Comment=
Table 6
How about SECURITY PROTOCOL IN and OUT?
HPQ comment number 138
Page=42 Subtype=Highlight Author=relliott
```

```
Comment=
5.2
VHF data descriptor
s/b
VHF log parameter
(if change in 6.1.2.2 is accepted)
HPQ comment number 139
Page=42 Subtype=Highlight Author=relliott
Comment=
5.2
indicates
s/b
specifies
HPQ comment number 140
Page=42 Subtype=Highlight Author=relliott
Comment=
5.2
indicate
s/b
specify
HPQ comment number 141
Page=42 Subtype=Highlight Author=relliott
Comment=
5.2
indicates
s/b
specifies
HPQ comment number 142
Page=42 Subtype=Highlight Author=relliott
Comment=
5.2
indicates
s/b
specifies
HPQ comment number 143
Page=42 Subtype=Highlight Author=relliott
Comment=
5.2
indicates
s/b
specifies
HPQ comment number 144
Page=42 Subtype=Text Author=relliott
```

```
Comment=
5.2
Add a MDC bit set to zero sentence
HPQ comment number 145
Page=42 Subtype=Text Author=relliott
Comment=
5.2
Add an IDC bit set to zero sentence
HPQ comment number 146
Page=42 Subtype=Text Author=relliott
Comment=
5.2
Add a NRSC bit set to zero sentence
HPQ comment number 147
Page=42 Subtype=Text Author=relliott
Comment=
5.2 (and global)
Refer to bits/fields in left-to-right, top-to-bottom order
- - -
HPQ comment number 148
Page=42 Subtype=Highlight Author=relliott
Comment=
5.2
may
s/b
shall
may implies there is permission to do something else - e.g. return CHECK
CONDITION? If the bit is ignored while caching is disabled, then it should
be ignored while enabled but irrelevant.
HPQ comment number 149
Page=42 Subtype=Highlight Author=relliott
Comment=
5.2
may
s/b
shall
may implies there is permission to do something else - e.g. return CHECK
CONDITION? If the bit is ignored while caching is disabled, then it should
be ignored while enabled but irrelevant.
HPQ comment number 150
Page=43 Subtype=Highlight Author=relliott
Comment=
```

```
5.2
asc and ascq fields
should use smallcaps
HPQ comment number 151
Page=43 Subtype=Text Author=relliott
Comment=NOTE 1 is not using the Note paragraph tag
HPQ comment number 152
Page=43 Subtype=Highlight Author=relliott
Comment=
Note 1
BUA
s/b
smallcaps
HPQ comment number 153
Page=43 Subtype=Highlight Author=relliott
Comment=
Note 1
initiator s/b initiator port
(or maybe I_T nexus?)
HPQ comment number 154
Page=43 Subtype=Highlight Author=relliott
Comment=
5.2
indicates
s/b
specifies
HPQ comment number 155
Page=43 Subtype=StrikeOut Author=relliott
Comment=
5.2
shall
HPQ comment number 156
Page=43 Subtype=Highlight Author=relliott
Comment=
5.2
indicates
s/b
specifies
HPQ comment number 157
Page=43 Subtype=Highlight Author=relliott
Comment=
```

06-447r0.TXT 10/25/2006 5.2 indicates s/b specifies HPQ comment number 158 Page=43 Subtype=Highlight Author=relliott Comment= 5.2 SOCC should use smallcaps HPQ comment number 159 Page=43 Subtype=Text Author=relliott Comment= 5.2 Add a BUA bit set to zero sentence HPQ comment number 160 Page=43 Subtype=Highlight Author=relliott Comment= 5.2 is s/b are HPQ comment number 161 Page=43 Subtype=Text Author=relliott Comment= move the last two paragraphs ahead of the table, since they're not related to any of the fields HPQ comment number 162 Page=43 Subtype=StrikeOut Author=relliott Comment= 5.2 Delete "See SAM-3 for a description of the CONTROL byte." as command descriptions typically never mention that. (or, add it to SET MEDIUM ATTRIBUTES so this standard is consistent) HPQ comment number 163 Page=43 Subtype=Highlight Author=relliott

Comment= 5.2 may s/b shall

may implies there is permission to do something else - e.g. return CHECK CONDITION? If the bit is ignored while caching is disabled, then it should be ignored while enabled but irrelevant.

HPQ comment number 164 Page=43 Subtype=Highlight Author=relliott Comment= 5.2 may s/b shall may implies there is permission to do something else - e.g. return CHECK CONDITION? If the bit is ignored while caching is disabled, then it should be ignored while enabled but irrelevant. HPQ comment number 165 Page=43 Subtype=Highlight Author=relliott Comment= 5.2 is s/b are HPQ comment number 166 Page=44 Subtype=Highlight Author=relliott Comment= 5.3.1 table Y s/b something else HPQ comment number 167 Page=44 Subtype=StrikeOut Author=relliott Comment= 5.3.1 Delete condition HPQ comment number 168 Page=45 Subtype=Highlight Author=relliott Comment= Table 9 n - 4 s/b n-3

HPQ comment number 169

```
Page=45 Subtype=Highlight Author=mbanth
Comment=
5.3.2
DATA s/b LIST
HPQ comment number 170
Page=45 Subtype=StrikeOut Author=relliott
Comment=
5.3.2
Delete "and shall be ignored by the
device server." It is very important that the device server only parse the
data received up to this limit. If the transport protocol delivered more
data than requested, it shouldn't be interpreting the excess.
- - -
HPQ comment number 171
Page=46 Subtype=Highlight Author=relliott
Comment=
Table 12
Format
s/b
Code
HPQ comment number 172
Page=46 Subtype=Highlight Author=relliott
Comment=
Table 11
Attribute identifier
s/b
Code
HPQ comment number 173
Page=46 Subtype=StrikeOut Author=relliott
Comment=
Table 12
values
HPQ comment number 174
Page=46 Subtype=StrikeOut Author=relliott
Comment=
Table 11
values
HPQ comment number 175
Page=46 Subtype=Text Author=relliott
Comment=
Table 11
use horizontal double line after header
```

HPQ comment number 176 Page=46 Subtype=Text Author=relliott Comment= Table 12 use horizontal double line after header HPQ comment number 177 Page=46 Subtype=Highlight Author=relliott Comment= 5.3.3 ATTRIBUTE IDENTIFIER indicates s/b ATTRIBUTE IDENTIFIER field indicates HPQ comment number 178 Page=47 Subtype=Text Author=relliott Comment= Table 13 SPC-4 log page code list needs to mark ADC as supporting pages 01h+ that are defined in SPC-4. Currently it only lists page 00h and the ADC-specific pages. HPQ comment number 179 Page=47 Subtype=Highlight Author=relliott Comment= Table 13 Self-test s/b Self-Test HPQ comment number 180 Page=47 Subtype=Highlight Author=relliott Comment= Table 13 Supported log pages s/b Supported Log Pages log page HPQ comment number 181 Page=47 Subtype=Text Author=relliott Comment= Table 13 Add a subpage column HPQ comment number 182 Page=48 Subtype=Text Author=relliott Comment= Table 13 Include table header on each page

HPQ comment number 189

HPQ comment number 183 Page=48 Subtype=Text Author=relliott Comment= Table 13 add 6.1.5 in references column for row 15h HPQ comment number 184 Page=48 Subtype=Text Author=relliott Comment= Table 14 Byte 0 bit 7 is DS Byte 0 bit 6 is SPF (0) Byte 1 is SUBPAGE CODE (00h) HPQ comment number 185 Page=48 Subtype=Text Author=relliott Comment= Table 13 How about the General Statistics and Performance log pages 19h/00h-1Fh from SPC-4? HPQ comment number 186 Page=48 Subtype=Text Author=relliott Comment= Table 13 How about Protocol Specific Port log page 18h? HPQ comment number 187 Page=49 Subtype=Text Author=relliott Comment= Table 16/17 Move all the bits in table 17 into table 16 and get rid of the "VHF DATA DESCRIPTOR field" level. Just treat the bits as being the log parameter. HPQ comment number 188 Page=50 Subtype=Highlight Author=relliott Comment= 6.1.2.2 "PREVENT/ALLOW MEDIUM REMOVAL command (see SPC-3 or the relevant command set standard)" The PREVENT ALLOW MEDIUM REMOVAL command was booted from SPC-4 into individual command set standards, so SPC-n is not a good reference any more.

```
Page=50 Subtype=Highlight Author=relliott
Comment=
6.1.2.2
PREVENT/ALLOW
s/b
PREVENT ALLOW
HPQ comment number 190
Page=50 Subtype=Text Author=relliott
Comment=
6.1.2.2 (and global)
Refer to bits/fields in left-to-right, top-to-bottom order
HPQ comment number 191
Page=50 Subtype=Highlight Author=relliott
Comment=
6.1.2.2
drive
s/b
DT device
HPQ comment number 192
Page=50 Subtype=Highlight Author=relliott
Comment=
6.1.2.2
drive
s/b
DT device
HPQ comment number 193
Page=50 Subtype=Highlight Author=relliott
Comment=
6.1.2.2
drives
s/b
DT devices
HPQ comment number 194
Page=51 Subtype=Highlight Author=relliott
Comment=
Note 6
RAA
should be in smallcaps
HPQ comment number 195
Page=51 Subtype=Highlight Author=relliott
Comment=
Note 6
```

The PREVENT ALLOW MEDIUM REMOVAL command was booted from SPC-4 into individual command set standards, so SPC-n is not a good reference any more.

- - -

HPQ comment number 196
Page=51 Subtype=Highlight Author=relliott
Comment=
Note 6
PREVENT/ALLOW
s/b
PREVENT ALLOW

- - -

HPQ comment number 197
Page=52 Subtype=Highlight Author=mbanth
Comment=

6.1.2.2

I'm not sure what this sentence means. Who does the processing, the ADC device server or the automation application client? If it's the ADC device server, then this sentence contradicts the first sentence in the paragraph which limits setting TAFC to one when 'at least one TapeAlert state flag has changed ... since the last retrieval of the ... log page'

- - -

HPQ comment number 198
Page=52 Subtype=Highlight Author=russellt
Comment=
6.1.2.2.

Does this mean the INTFC bit should not be set until after the I_T nexus has retrieved the DT device primary port status log page for the first time?

- - -

HPQ comment number 199
Page=52 Subtype=Highlight Author=relliott
Comment=
Table 18
Value

s/b Code

- - -

HPQ comment number 200
Page=52 Subtype=StrikeOut Author=relliott
Comment=
Table 18
Delete "values"

- - -

HPQ comment number 201
Page=52 Subtype=Highlight Author=relliott
Comment=
6.1.2.2
VHF DATA DESCRIPTOR

```
s/b
VHF log parameter
(if change in 6.1.2.2 is accepted)
HPQ comment number 202
Page=52 Subtype=Highlight Author=relliott
Comment=
6.1.2.1
Capitalization of "DT device primary port status log parameters" is
inconsistent
HPQ comment number 203
Page=53 Subtype=Highlight Author=relliott
Comment=
6.1.2.3
automation device
automation application client
HPQ comment number 204
Page=53 Subtype=Highlight Author=relliott
Comment=
6.1.2.3
another
s/b
the... again.
HPQ comment number 205
Page=53 Subtype=Text Author=relliott
Comment=
6.12.3
There should be some mention in the model clause (4.xx) that application
clients should use the polling delay log parameter.
HPQ comment number 206
Page=54 Subtype=Text Author=relliott
Comment=
Table 21
Since there is a length field covering this structure, expand it to include
the Node Name and Port Name as well.
HPQ comment number 207
Page=54 Subtype=Highlight Author=relliott
Comment=
6.1.2.4.1
are
s/b
is
```

HPQ comment number 208 Page=54 Subtype=Text Author=relliott Comment= 6.1.2.4.1 The PARAMETER CODE numbering rules imply that relative ports must be numbered from 01h to FFh. SCSI architecture defines the relative port identifier as being 2 bytes long, however. ADC ought to avoid placing artificial restrictions. The full range could be accommodated by defining a new page (subpage format is fine) just for DT Device Status, and letting the parameter code be equal to the relative port identifier. HPQ comment number 209 Page=55 Subtype=Highlight Author=relliott Comment= 6.1.2.4.2 **CURRENT SPEED** the CURRENT SPEED field HPQ comment number 210 Page=55 Subtype=Highlight Author=mbanth Comment= 6.1.2.4.2 FCP-2 s/b FCP-3 HPQ comment number 211 Page=55 Subtype=Highlight Author=relliott Comment= 6.1.2.4.2 in s/b at HPQ comment number 212 Page=55 Subtype=Highlight Author=relliott Comment= 6.1.2.4.2 operating currently currently operating HPQ comment number 213 Page=55 Subtype=Highlight Author=relliott Comment=

6.1.2.4.2

indicates s/b indicates that HPQ comment number 214 Page=56 Subtype=Text Author=relliott Comment= 6.1.2.4.4 In SAS, "ports" don't perform link reset sequences and have negotiated physical link rates - phys do. A port is a group of phys that all have the same SAS address (e.g. A) and are attached to another set of phys that all have the same SAS address (e.g. B). HPQ comment number 215 Page=56 Subtype=Highlight Author=relliott Comment= 6.1.2.4.4 I don't think this bit belongs here. SAS OOB signals are not long-lived; the chances are low that this log parameter would be read while the OOB signal is being received. If this is persistent after reception, then what is the purpose of it? SAS state machines are not architected to pass "COMINIT detected" up to the management application layer for use in this manner. HPQ comment number 216 Page=56 Subtype=Text Author=relliott Comment= 6.1.2.4.4 (and global) Field/bit paragraphs should be presented in order of their positions in the table: left-to-right, top-to-bottom. HPQ comment number 217 Page=56 Subtype=Highlight Author=relliott Comment= 6.1.2.4.4 "speed negotiation and the identification sequence" "the link reset sequence" HPQ comment number 218 Page=56 Subtype=Highlight Author=relliott Comment= 6.1.2.4.4

"receive an Open address frame."

s/b

```
"accept connection requests"
HPQ comment number 219
Page=56 Subtype=Highlight Author=relliott
Comment=
6.1.2.4.4
"hashed version of the SAS address"
There is a length field covering this data structure so it need not be
crammed into 4 bytes. Use the complete 8-byte SAS address, not the hashed
version.
HPQ comment number 220
Page=57 Subtype=Text Author=relliott
Comment=
Table 24
Byte 0 bit 7 is DS
Byte 0 bit 6 is SPF (0)
Byte 1 is SUBPAGE CODE (00h)
HPQ comment number 221
Page=58 Subtype=Text Author=relliott
Comment=
6.1.4.2
Table 27 should be after the first sentence in 6.1.4.2, not at the top of
the next page.
HPQ comment number 222
Page=58 Subtype=Text Author=relliott
Comment=
Table 25
Byte 0 bit 7 is DS
Byte 0 bit 6 is SPF (0)
Byte 1 is SUBPAGE CODE (00h)
HPQ comment number 223
Page=59 Subtype=Highlight Author=relliott
Comment=
6.1.4.2
of the VHF DATA DESCRIPTOR field
s/b
in the VHF data descriptor
or, if change in 6.1.2.2 is accepted,
in the VHF log parameter
HPQ comment number 224
Page=60 Subtype=Highlight Author=relliott
```

```
Comment=
6.1.4.2
bit
s/b
bit in the VHF data descriptor
or, if the 6.1.2.2 change is accepted,
bit in the VHF log parameter
HPQ comment number 225
Page=60 Subtype=Highlight Author=relliott
Comment=
6.1.4.2
bit s/b
bit in the VHF data descriptor
or, if the 6.1.2.2 change is accepted,
bit in the VHF log parameter
- - -
HPQ comment number 226
Page=60 Subtype=Highlight Author=relliott
Comment=
6.1.4.2
may cause
s/b
causes
There is no granting of permission here.
HPQ comment number 227
Page=60 Subtype=Highlight Author=relliott
Comment=
Table 28
Change
Logical Unit Reset request
LOGICAL UNIT RESET task management function
if that's what it means
HPQ comment number 228
Page=61 Subtype=Text Author=relliott
Comment=
Table 29
use horizontal double line after header
HPQ comment number 229
Page=61 Subtype=Highlight Author=relliott
Comment=
6.1.4.2
bit
s/b
bit in the VHF data descriptor
```

```
or, if the 6.1.2.2 change is accepted,
bit in the VHF log parameter
HPQ comment number 230
Page=62 Subtype=Text Author=relliott
Comment=
Table 31
use horizontal double line after header
HPQ comment number 231
Page=64 Subtype=Highlight Author=mbanth
Comment=
Table 32
Add column for sub-pages.
HPQ comment number 232
Page=64 Subtype=Highlight Author=mbanth
Comment=
Table 32
Add the Control Extension mode sub-page to the list of pages. Consider
adding the Power Condition mode page to the list of supported pages. SPC-3
defines both of these pages as common to all device types.
HPQ comment number 233
Page=64 Subtype=Highlight Author=relliott
Comment=
Table 32
Add "mode page" after each mode page name in this table
HPQ comment number 234
Page=64 Subtype=Highlight Author=relliott
Comment=
6.2
Parameters
s/b
parameters
HPQ comment number 235
Page=64 Subtype=Text Author=relliott
Comment=
Table 32
Mark mode page 15h/00h as restricted
and 15h/01h-FFh as reserved
HPQ comment number 236
Page=64 Subtype=Highlight Author=relliott
Comment=
Table 32
```

(valid only for the MODE SENSE command) Convert into a table footnote HPQ comment number 237 Page=65 Subtype=Text Author=relliott Comment= Table 34 Include 00h and All others in the table if it remains HPQ comment number 238 Page=65 Subtype=Text Author=relliott Comment= 6.2.2 (and global change to align with the new names) Get rid of the ADC Device Server Configuration mode page level. Don't refer to the subpages as such; promote them to be referred to as mode pages in their own right. OEh/OOh Reserved (only mentioned in 6.2.1) OEh/O1h DT Device Target Device mode page OEh/O2h DT Device Primary Port mode page OEh/O3h DT Device Logical Unit mode page OEh/O4h DT Device Target Device Serial Number mode page OEh/O5h-FFh Reserved (only mentioned in 6.2.1) HPQ comment number 239 Page=66 Subtype=Highlight Author=relliott Comment= 6.2.2.2 shown s/b shown in HPQ comment number 240 Page=67 Subtype=Highlight Author=russellt Comment= Table 36 Not if the MODE SENSE command is for changeable value! HPQ comment number 241 Page=67 Subtype=Text Author=relliott Comment= Table 36 use horizontal double line before footer

- - -

HPQ comment number 242
Page=67 Subtype=Highlight Author=relliott
Comment=
6.2.2.2
ASSOCIATION field set to 10b
s/b
ASSOCIATION field set to 10b (i.e., target device)

- - -

HPQ comment number 243
Page=67 Subtype=Text Author=relliott
Comment=
Table 36

Combine common cells

- - -

HPQ comment number 244
Page=67 Subtype=StrikeOut Author=relliott
Comment=
Table 36

Delete "Use the logical unit identifier for logical unit 0 as the DT device SCSI target device name. The identification descriptors shall be ignored."

Per SAM, a multi-ported device might need to have separate device names per transport protocol. This would let that rule be violated.

Per SAM, a transport protocol may demand a certain format for "its" device name. This would let that rule be violated.

- - -

HPQ comment number 245
Page=67 Subtype=Text Author=relliott
Comment=
6.2.2.2
Add:

"For the MODE SELECT command, if the identification descriptor list does not include the same number of identification descriptors with the same set of protocol identifiers as reported in the Device Identification VPD page, the device server shall terminate the command with CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and the additional sense code set to INVALID FIELD IN PARAMETER LIST."

- - -

HPQ comment number 246
Page=68 Subtype=Highlight Author=relliott
Comment=
6.2.2.3.1
shown
s/b
shown in

HPQ comment number 247 Page=68 Subtype=Highlight Author=relliott Comment= 6.2.2.3.1 Change ADI port ADI target port HPQ comment number 248 Page=68 Subtype=Text Author=relliott Comment= 6.2.2.3.2 RELATIVE TARGET PORT field SCSI architecture defines a two-byte relative target port value, not one-byte. ADC ought to avoid imposing artificial restrictions. I suggest increasing this to two bytes (make the header 8 bytes long). HPQ comment number 249 Page=69 Subtype=Text Author=relliott Comment= 6.2.2.3.2 Add: "For the MODE SELECT command, if the protocol identifier specified by the PROTOCOL IDENTIFIER field does not match the protocol of the target port specified by the RELATIVE TARGET PORT field, the device server shall terminate the command with CHECK CONDITION status with the sense key set to ILLEGAL REQUEST and the additional sense code set to INVALID FIELD IN PARAMETER LIST." HPQ comment number 250 Page=70 Subtype=Highlight Author=russellt Comment= Table 40 Not if the MODE SENSE is for changeable values! HPQ comment number 251 Page=70 Subtype=Highlight Author=relliott Comment= Table 40 Value s/b Code

HPQ comment number 252 Page=70 Subtype=Text Author=relliott Comment= Table 40

use horizontal double line before footer HPQ comment number 253 Page=71 Subtype=Highlight Author=relliott Comment= Table 42 Value s/b Code HPQ comment number 254 Page=71 Subtype=Highlight Author=relliott Comment= Table 42 Speed Values s/b SPEED field HPQ comment number 255 Page=71 Subtype=StrikeOut Author=relliott Comment= Table 42 Delete periods in the speed column HPQ comment number 256 Page=71 Subtype=Highlight Author=relliott Comment= Table 42 10Gb s/b 10 Gb HPQ comment number 257 Page=72 Subtype=Highlight Author=relliott Comment= Table 44 Value s/b Code and should be centered HPQ comment number 258 Page=72 Subtype=StrikeOut Author=relliott Comment= Table 44 Delete "Effect of" HPQ comment number 259

```
Page=72 Subtype=Highlight Author=relliott
Comment=
6.2.2.3.4
qualifies the effect (see table 44) that
s/b
(see table 44) qualifies the effect that
HPQ comment number 260
Page=72 Subtype=Highlight Author=relliott
Comment=
Table 45
SCISI
s/b
SCSI
HPQ comment number 261
Page=72 Subtype=StrikeOut Author=relliott
Comment=
Table 45
Delete (MSB)
HPQ comment number 262
Page=72 Subtype=StrikeOut Author=relliott
Comment=
Table 45
Delete (LSB)
HPQ comment number 263
Page=72 Subtype=Highlight Author=relliott
Comment=
6.2.2.3.5
"where the command attempts to change the value of the MPI field,"
The MPI field value itself not at issue; the fact that it is trying to
change the SAS address of a port that is enabled is the issue. Although
the MPI field always reads back as 00b and thus any write to change the SAS
address sets the MPI field to non-00b to do so. that doesn't count as
trying to change the valid of the MPI field (because it always reads back
as zero).
HPQ comment number 264
Page=73 Subtype=Highlight Author=russellt
Comment=
Table 46
Not if the MODE SENSE is for changeable values.
HPQ comment number 265
Page=73 Subtype=Highlight Author=relliott
Comment=
```

```
Table 46
Value
s/b
Code
HPQ comment number 266
Page=73 Subtype=Highlight Author=relliott
Comment=
6.2.2.4.1
shown
s/b
shown in
HPQ comment number 267
Page=73 Subtype=Text Author=relliott
Comment=Table 46 - use horizontal double line before footer
HPQ comment number 268
Page=73 Subtype=Text Author=relliott
Comment=
Table 46
Join common cells
HPQ comment number 269
Page=73 Subtype=Highlight Author=relliott
Comment=
6.2.2.3.5
"... with the same MODE SELECT command"
Since the MPI field is always OOb, this is the ONLY way to change the port
identifier field.
This probably is intended to say the port identifier may be changed
simultaneously with enabling the port.
HPQ comment number 270
Page=73 Subtype=Highlight Author=relliott
Comment=
Table 46
SPC-3
s/b
SAS-1.1
Any reference to SAS address format should only be to SAS itself. SAS can
then point to SPC-3 if it needs to.
```

HPQ comment number 271

```
Page=74 Subtype=Text Author=relliott
Comment=
Table 47
Add:
"(see table 48 in 6.2.2.4.1, table 51 in 6.2.2.4.2, or table 52 in
6.2.2.4.4)
HPQ comment number 272
Page=75 Subtype=Text Author=relliott
Comment=
Table 48
There should be an Identification descriptor list length or Number Of
Identification Descriptors field above the list. If all that is available
is the Additional Descriptor Length in bytes 2-3, this descriptor could
never be extended to end with anything else than the identification
descriptor list.
HPQ comment number 273
Page=75 Subtype=Text Author=relliott
Comment=
Table 48
Logical Unit Index should be the same size as the Logical Unit Number
HPQ comment number 274
Page=76 Subtype=Highlight Author=relliott
Comment=
Table 49
Value
s/b
Code
and centered
HPQ comment number 275
Page=76 Subtype=Text Author=relliott
Comment=Table 49 - use horizontal double line before footer
HPQ comment number 276
Page=76 Subtype=Highlight Author=relliott
Comment=
6.2.2.4.2
Change
ADI port
to
ADI target port
HPQ comment number 277
Page=77 Subtype=Highlight Author=relliott
Comment=
```

06-447r0.TXT 10/25/2006 Table 50 Value s/b Code HPQ comment number 278 Page=78 Subtype=Highlight Author=relliott Comment= 6.2.2.4.2 ASSOCIATION field set to 00bh ASSOCIATION field set to 00b (i.e., logical unit0 HPQ comment number 279 Page=78 Subtype=Text Author=relliott Comment= Table 51 Logical Unit Index should be the same size as the Logical Unit Number HPQ comment number 280 Page=79 Subtype=Highlight Author=relliott Comment= 6.2.2.4.3 Change ADI port ADI target port HPQ comment number 281 Page=79 Subtype=Text Author=relliott Comment= Table 52 Logical Unit Index should be the same size as the Logical Unit Number HPQ comment number 282 Page=80 Subtype=Highlight Author=relliott Comment= 6.2.2.5 shown s/b shown in

Comment=
6.2.2.4.4
Change

Page=80 Subtype=Highlight Author=relliott

HPQ comment number 283

ADI port to ADI target port HPQ comment number 284 Page=81 Subtype=Highlight Author=relliott Comment= Table 54 Value s/b Code HPQ comment number 285 Page=81 Subtype=Text Author=relliott Comment=Table 54 - use horizontal double line after header HPQ comment number 286 Page=81 Subtype=Text Author=relliott Comment=Table 54 - use horizontal double line before footer HPQ comment number 287 Page=81 Subtype=Text Author=relliott Comment= Table 54 Merge common cells HPQ comment number 288 Page=82 Subtype=Highlight Author=relliott Comment= 6.3.3 Manufacturer-assign serial number Manufacturer-assigned Serial Number HPQ comment number 289 Page=82 Subtype=Highlight Author=relliott Comment= 6.3.3 manufacturer-assigned serial number Manufacturer-assigned Serial Number HPQ comment number 290 Page=82 Subtype=Highlight Author=relliott Comment= 6.3.3 Manufacturer-assigned serial number

```
Manufacturer-assigned Serial Number
HPQ comment number 291
Page=82 Subtype=Text Author=relliott
Comment=Table 55 - use horizontal double line after header
HPQ comment number 292
Page=82 Subtype=Highlight Author=relliott
Comment=
6.3.2
association value of 00b
ASSOCIATION field set to OOb (i.e., logical unit)
HPQ comment number 293
Page=82 Subtype=Highlight Author=relliott
Comment=
6.3.2
association value of 00b
s/b
ASSOCIATION field set to OOb (i.e., logical unit)
HPQ comment number 294
Page=82 Subtype=Text Author=relliott
Comment=
6.3.2
Provide more background in 6.3.2 - something like "The Device
Identification VPD page is defined in SPC-4."
*****************
Comments attached to No ballot from George O. Penokie of
IBM Corp.:
IBM 1
PDF pg 5, pg v
The revision information needs to be removed before letter ballot
IBM 2
PDF pg 10, pg x, Tables
(KB) Field names in Titles that are small caps in the text do not show small
caps in the Table Title name. Tables (11, 12, 17, 18, 36, 40, 41, 44, 46,
49,
50, 54)
IBM 3
PDF pg 13, pg xiii, Foreword, 2nd paragraph
The reference to SAM-2 seems dated should it be referencing SAM-3.
```

IBM 4

PDF pg 15, pg xv, Foreword

(KB) Quantum should also list Rod Wideman in member list.

IBM 5

PDF pg 21, pg 4, 3.1.2 ADI port:

(KB) Comment - ADI Port: It is not clear from the first sentence structure that the clause begining with 'used to connect...' is not part of the 'not an

automation device primary port' Solution - ADI port: A port used to connect an automation device and a data transfer device that is not a data transfer device primary port and is not an automation device primary port.

IBM 6 Technical

PDF pg 21, pg 4, 3.1.9 automation device:

(KB) - Comment - the (e.g., an ADT port) implies it must be ADT. Solution - Change (e.g., an ADT port) to (e.g., an ADI port)

IBM 7

PDF pg 21, pg 4, 3.1.9 automation device:

There is no definition of what a DT device is. A definition needs to be added.

TBM 8

PDF pg 21, pg 4, 3.1.11 bridging:

There is no definition of what a DT device is. A definition needs to be added.

IBM 9

PDF pg 21, pg 4, 3.1.12 bridging manager:

This looks like a DT device is it? If so then define the DT device and then change this name to DT device for consistency.

IBM 10

PDF pg 22, pg 5, 3.1.16 data transfer device primary port:

What is an << appropriate medium-access command >>? as apposed to an in-appropriate medium-access command. I would delete the term << appropriate >>.

IBM 11

PDF pg 22, pg 5, 3.1.37 SCSI target port:

(KB) - Comment - SCSI target port references SAM-4 instead of SAM-3 Solution

Change reference to SAM-3

IBM 12

PDF pg 24, pg 7, 3.3.1 expected:

This is not a keyword as it is not in the T10 style guides list of authorized

keywords. If it needs to be defined for this standard then it should be added

to the list of definitions.

IBM 13

PDF pg 24, pg 7, 3.3.9 shall:

(KB) - should 'interpretability' really be 'interoperability'?

IBM 14

PDF pg 26, pg 9, 4.1 Overview, 1st paragraph

The term << data transfer device >> should be <<DT device >> ??

IBM 15

PDF pg 26, pg 9, 4.2.1 Automation/drive interface overview, 1st paragraph This << data transfer (DT) device >> should be << DT device >>.

IBM 16

PDF pg 26, pg 9, 4.2.1 Automation/drive interface overview, 2nd a,b,c list Item c << c) An optional SMC device server and bridging manager (see 4.2.3); >> should have an << and >> after the semicolon.

IBM 17

PDF pg 27, pg 10, 4.2.1 Automation/drive interface overview, Figure 2 This << Automation device and DT device relationship >> should be << Example of an automation device and DT device relationship >>

IBM 18

PDF pg 27, pg 10, 4.2.2 Device server interaction, 1st paragraph This << Figure 3 shows an automation device with an automation application client and a remote SMC device server, and a DT device with an RMC device server, an ADC device server, and an optional local SMC device server (see 4.2.3). >> should be made into an a,b,c list.

IBM 19

PDF pg 28, pg 11, 4.2.2 Device server interaction, 2nd paragraph after figure 3

The statement << This approach allows the automation application client to interact with the physical device via the ADC device server without a conflict

due to reservations on other device servers >> should be deleted as it contains no information that is relevant to the standard. It only, needlessly,

justifies the requirement in the previous sentence.

IBM 20

PDF pg 29, pg 12, 4.2.2 Device server interaction, 3rd paragraph from end This<< A LOAD UNLOAD command (see SSC-2) processed by the ADC device server may affect the ready state of the RMC device server. This shall cause the RMC $^{\circ}$

device server to establish appropriate unit attention conditions. >> should be << A LOAD UNLOAD command (see SSC-2) processed by the ADC device server may

affect the ready state of the RMC device server and shall cause the RMC device $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

server to establish appropriate unit attention conditions. >>

IBM 21

PDF pg 29, pg 12, 4.2.2 Device server interaction, A LOAD UNLOAD command

(see

SSC-2) processed by the ADC device server may affect the ready state of the RMC device server. This shall cause the RMC device server to establish appropriate unit attention conditions. A

IBM 22

PDF pg 29, pg 12, 4.2.2 Device server interaction, 3rd paragraph from end This<< A LOAD UNLOAD command processed by the RMC device server may affect the

ready state of the ADC device server. This shall cause the ADC device server to establish appropriate unit attention conditions. >> should be << A LOAD UNLOAD command processed by the RMC device server may affect the ready state of the ADC device server and shall cause the ADC device server to establish appropriate unit attention conditions. >>

IBM 23

PDF pg 29, pg 12, 4.2.2 Device server interaction, Last paragraph
This << The effect is that some or all commands and task management requests
>> should be << As a result some or all commands and task management requests
>>

IBM 24

PDF pg 29, pg 12, 4.2.2 Device server interaction, last paragraph The statement << This may be used in low-cost automation devices that do not have automation device primary ports. >> Should be deleted a it does not belong in a standard because a standard cannot determine what implementations can or do cost.

IBM 25

PDF pg 29, pg 12, 4.2.3.2 Local SMC device server operation, 2nd paragraph This statement << Thus, the local SMC device server shall service >> should be

<< As a result, the local SMC device server shall service >>

IBM 26

PDF pg 30, pg 13, 4.2.3.2 Local SMC device server operation, Last a,b,c list item a

This << commands. Return RESERVATION CONFLICT on all commands that violate reservation rules (see SPC-3); >> should be << commands; b) Return RESERVATION CONFLICT on all commands that violate reservation rules (see SPC-3); >>

IBM 27

PDF pg 30, pg 13, 4.2.3.4 Bridging manager operation, 3rd paragraph Delete the term << Moreover, >> as it has no value.

IBM 28

PDF pg 31, pg 14, 4.2.3.5 Caching SMC data and status, 3rd paragraph This << Thus the automation application client is not required >> should be <<

As a relult the automation application client is not required >>

IBM 29

PDF pg 31, pg 14, 4.2.3.5 Caching SMC data and status, 4th paragraph

This << not accessible if it would respond to a command with a status >> should be << not accessible if it responds to a command with a status >>

IBM 30

PDF pg 36, pg 19, 4.2.6 TapeAlert application client interface, 2nd paragarph

This << This approach facilitates accurate reporting of the conditions encountered by the DT device and allows the automation device to manage the information directly. >> should be deleted as it contains no information that

is useful in a standard. If you really want it then put in at the beginning of

the first paragraph as << To facilitate accurate reporting of the conditions

encountered by the DT device and allow the automation device to manage the information directly the ADC device server ...>>

IBM 31

PDF pg 36, pg 19, 4.2.6 TapeAlert application client interface, 4th paragraph

This << TapeAlert state flags at any time; application clients should retrieve

TapeAlert state flags when the ADC >> should be << TapeAlert state flags at any time. Application clients should retrieve TapeAlert state flags when the ADC >> should be. Get rid of the semicolon.

IBM 32 Technical

PDF pg 36, pg 19, 4.2.6 TapeAlert application client interface, Table 5 (KB) - Comment - TapeAlerts 19h and 20h specify 'Interface'. It is not clear

what 'interface' refers to Solution - Clarify what each 'interface' refers to

IBM 33

PDF pg 38, pg 21, 4.2.6 TapeAlert application client interface, 2nd to last paragraph

This statement << Many of the state flags are set to zero at the start of the

next medium load, >> is not accurate enough. How many is many? Five, ten, 20.

30, how is anyone supposed to know.? This needs to be more percise.

IBM 34

PDF pg 38, pg 21, 4.2.6 TapeAlert application client interface, last paragraph

This statement << Other state flags are set to zero following resolution through service intervention. >> is not precise enough. Which other? This needs to be made clearer.

IBM 35 Technical

PDF pg 38, pg 21, 4.2.7 Medium Auxiliary Memory attributes (KB) - Comment - This clause should contain text explaining that the ADC device server may set the VOLUME IDENTIFIER attribute of the Device Attributes

of MAM Solution - Add this paragraph: ADC device servers may modify the VOLUME

IDENTIFIER attributes of type Device.

IBM 36

PDF pg 39, pg 22, 4.2.9 Sequential mode operation, last paragarph This << medium in step 2 above.>> should be << medium in step 2 of the sequence of operation shown in this subclause.>> It would also be a good idea

to do a cross-reference to item 2 in the list.

IBM 37

PDF pg 42, pg 25, 5.2 NOTIFY DATA TRANSFER DEVICE command, 3rd paragraph This << The MDC, IDC, NRSC, and SOCC bits in byte 3 are used to indicate that

cached SMC >> should be << The MDC bit, IDC bit, NRSC bit , and SOCC bit in byte 3 are used to indicate that cached SMC >>

IBM 38

PDF pg 43, pg 26, 5.2 NOTIFY DATA TRANSFER DEVICE command, 6th paragraph This << but may ignore the bit if ready state is not cached. >> should be << but may ignore the <<insert name of bit >> bit if ready state is not cached. >>

IBM 39

PDF pg 43, pg 26, 5.2 NOTIFY DATA TRANSFER DEVICE command, 7th paragraph The << asc and ascq fields >> are not in small caps and should be << asc field

and ascq field >>

IBM 40

PDF pg 43, pg 26, 5.2 NOTIFY DATA TRANSFER DEVICE command, 7th paragraph In this statement << able to have a Unit Attention condition established by the device serve >> the unit attention should be not capitalized.

IBM 41

PDF pg 43, pg 26, 5.2 NOTIFY DATA TRANSFER DEVICE command, 1st paragraph after

note

This << are both set to one, or if both bits are set to zero and either the ASC field or the ASCQ field is not zero, >> should be << are both set to one or zero and either the ASC field or the ASCQ field is not zero, >>

IBM 42 Technical

PDF pg 44, pg 27, 5.3.1 SET MEDIUM ATTRIBUTE command introduction (KB) - Comment - The SET MEDIUM ATTRIBUTE command should state that host type

attributes shall not be modified by this command Solution - Add as paragraph number 2: The SET MEDIUM ATTRIBUTE command shall not be used to set any of the

following attributes: a) host type attributes b) medium type attributes, etc.

IBM 43

PDF pg 44, pg 27, 5.3.1 SET MEDIUM ATTRIBUTE command introduction, 1st abc

list - item a

This << add the attribute to log entries it creates; >> should be << add the attribute to log entries DT device creates; >>

IBM 44

PDF pg 44, pg 27, 5.3.1 SET MEDIUM ATTRIBUTE command introduction, 1st paragraph after table 8

This in statement << If the parameter list length exceeds the maximum length value from table Y for the attribute specified, then >> what is table Y and were is it? Change to a number and crossreference the real table.

IBM 45

PDF pg 45, pg 28, 5.3.2 SET MEDIUM ATTRIBUTE parameter list format, Last a.b.c

list item b

This << the attribute shall be ignored; this shall not be considered an error.

>> should be << the attribute shall be ignored and shall not be considered an

error. >>

IBM 46

PDF pg 46, pg 29, 5.3.3 SET MEDIUM ATTRIBUTE attribute format, 2nd paragraph This << Table 11 describes the attributes that can be set by the SET MEDIUM ATTRIBUTE command. >> should be Table 11 describes the attributes that may be

set by the SET MEDIUM ATTRIBUTE command. >>

IBM 47

PDF pg 46, pg 29, 5.3.3 SET MEDIUM ATTRIBUTE attribute format, Table 11 There needs to be a double line between the heading and the body in this table.

IBM 48

PDF pg 46, pg 29, 5.3.3 SET MEDIUM ATTRIBUTE attribute format, Table 12 There needs to be a double line between the heading and the body in this table.

IBM 49 Technical

PDF pg 53, pg 36, 6.1.2.2 Very high frequency data log parameter - (KB) - Comment - VS (in VHF data)? I do not see much explanation other than

in Note 8. Solution - Explain this in greater detail. I interpret this as a static condition.

IBM 50

PDF pg 53, pg 36, 6.1.2.2 Very high frequency data log parameter, Last NOTE 8

This note << When the VS bit is set to one, vendor-specific log parameters may

appear in a standard log page (e.g. the vendor-specific parameters in the Error Counter log pages, see SPC-3) or in a vendor-specific log page. If the device includes an ADT port (see ADT-2) the application client may be able to

retrieve vendor-specific log parameters using the vendor-specific protocol

of

ADT-2. >> should be normative text not a note.

IBM 51

PDF pg 61, pg 44, 6.1.4.2 Recovery procedures log parameter, Last paragraph The term << subsequently>> is not needed and should be deleted.

IBM 52 Technical

PDF pg 61, pg 44, 6.1.5 Service Buffers Information log page (KB) - Comment - Not sure the intent of Service Buffers. Also, are Service Buffers provided by the remote or local device server. Solution - Explain the

a) intent and b) life cycle of the service buffer. This should link to Recovery Procedure OEh (retrieve a DT device error log)

IBM 53

PDF pg 61, pg 44, 6.1.5 Service Buffers Information log page, Table 29 There needs to be a double line between the heading and the body in this table.

IBM 54

PDF pg 67, pg 50, 6.2.2.2 Target Device subpage, Table 36 There needs to be a double line between the footing and the body in this table.

IBM 55

PDF pg 67, pg 50, 6.2.2.2 Target Device subpage, table 36 row 2
This << Use the logical unit identifier for logical unit 0 as the DT device
SCSI target device name. >> should be << Use the logical unit identifier for
LUN zero as the DT device SCSI target device name. >>

TBM 56

PDF pg 69, pg 52, 6.2.2.3.3 Fibre Channel descriptor parameter format, 2nd paragraph

This << attempts to change the value of the MPN, LIV, RHA, TOPLOCK, P2P, SPEED, SPDLOCK, FC-AL LOOP ID, or PORT NAME fields, shall return CHECK CONDITION. >> should be << attempts to change the value of the MPN field, LIV

bit, RHA bit, TOPLOCK bit, P2P bit, SPEED field, SPDLOCK bit, FC-AL LOOP ID field, or PORT NAME field, shall return CHECK CONDITION. >>

IBM 57

PDF pg 69, pg 52, 6.2.2.3.3 Fibre Channel descriptor parameter format, 2nd pargarph

This << the DT device may change the MPN, LIV, RHA, TOPLOCK, P2P, SPEED, SPDLOCK, FC-AL LOOP ID, or PORT NAME fields and enable the DT device primary port with the same MODE SELECT command. >> should be << the DT device may change the MPN field, LIV bit, RHA bit, TOPLOCK bit, P2P bit, SPEED field, SPDLOCK bit, FC-AL LOOP ID field, or PORT NAME field and enable the DT device

primary port with the same MODE SELECT command. >>

IBM 58

PDF pg 70, pg 53, 6.2.2.3.3 Fibre Channel descriptor parameter format, Table 40

There needs to be a double line between the footing and the body in this table.

IBM 59

PDF pg 71, pg 54, 6.2.2.3.4 Parallel SCSI descriptor parameter format, 2nd paragraph

This << value of the BUS MODE, BMQ, MINIMUM TRANSFER PERIOD FACTOR, or SCSI ADDRESS fields, shall return CHECK CONDITION. >> should be << value of the BUS

MODE field, BMQ field, MINIMUM TRANSFER PERIOD FACTOR field, or SCSI ADDRESS field, shall return CHECK CONDITION. >>

TRM 60

PDF pg 71, pg 54, 6.2.2.3.4 Parallel SCSI descriptor parameter format, 2nd paragraph

This << change the BUS MODE, BMQ, MINIMUM TRANSFER PERIOD FACTOR, or SCSI ADDRESS fields and enable the DT device primary port with the same MODE SELECT

command. >> should be << change the BUS MODE field, BMQ field, MINIMUM TRANSFER PERIOD FACTOR field, or SCSI ADDRESS field and enable the DT device primary port with the same MODE SELECT command. >>

IBM 61

PDF pg 73, pg 56, 6.2.2.3.5 Serial Attached SCSI descriptor parameter format,

Table 46

There needs to be a double line between the footing and the body in this table.

IBM 62

PDF pg 76, pg 59, 6.2.2.4.2 RMC logical unit descriptor format, Table 49 There needs to be a double line between the footing and the body in this table.

IBM 63

PDF pg 77, pg 60, 6.2.2.4.2 RMC logical unit descriptor format, 5th paragraph

from end

The statement << mode upon detection of a vendor specific event. >> should be

<< mode upon detection of a vendor-specific event. >>. (i.e. there should be a

dash between vendor and specific to be consistent with the rest of the standard.

IBM 64

PDF pg 81, pg 64, 6.2.2.5 Target Device Serial Number subpage, Table 54 There needs to be a double line between the heading and the body and a double

line between the footing and the body in this table.

IBM 65

PDF pg 82, pg 65, 6.3.3 Manufacturer-assign serial number VPD page, Section title

(KB) - Manufacturer-assign should be Manufacturer-assigned

Comments attached to Abs ballot from Bill Galloway of Pivot3, Inc.:

Not materially affected by this proposal.

Comments attached to No ballot from Paul Entzel of Quantum Corp.:

QTM-1

Page=4, Copyright date. Comment=Should be 2006?

QTM-2

Page=5, Revision clause

Comment=This section needs to be removed for letter ballot

QTM-3

Page=8,TOC

Comment=The revision clause needs to be removed for letter ballot.

QTM-4

Page=10, TOC

Comment=Field names in this table are rendered in lower case, not in small caps as they are in the actual table captions.

QTM-5

Page=13, 2nd paragraph

Comment=Does the standard conform to SAM-2 or SAM-3 now?

QTM-6

Page=19, FCP-2

Comment=Remove this reference after changing the one occurrence in the standard to use FCP-3 instead.

QTM-7

Page=21, 3.1.2

Comment=Should "supports a transport" be "transport layer" or "transport protocol"?

QTM-8

Page=21, 3.1.2

Comment=A port that is not a data transfer device primary port and not an automation device primary port used to connect an automation device and a data transfer device. Reword for less ambiguity: A port used to connect an automation device and a data transfer device, that is not a data transfer device primary port and not an automation device primary port.

QTM-9

Page=22, 3.1.33

Comment=MMC-4 is not listed in the references (2.2). Suggest: Add to references.

QTM-10

Page=23, 3.2

Comment=If MMC-4 is added as a reference, add MMC-4 to abbreviations list.

QTM - 11

Page=23, 3.2

Comment=Remove FCP-2 abbreviation after changing the one occurrence in the standard to use FCP-3 instead.

QTM-12

Page=24, 3.4

Comment=Might be nice to use an example from this standard instead of "state of spare"

QTM-13

Page=25, 4th paragraph

Comment=I think the "e.g." s/b an "i.e."

QTM-14

Page=26, 4.2.1, first b)

Comment=s/b "SCSI commands or task"?

QTM-15

Page=26, 4.2.1, second c)

Comment=Add an "and" after this list item

QTM-16

Page=26, 4.2.1, second d)

Comment="the application client contained" Which client is this?

QTM-17

Page=26, 4.2.1, second d)

Comment=Can we say at least one port may/should be an ADI port?

QTM-18

Page=26, 4.2.1, first d)

Comment=Because ADI ports exclude primary ports, this prevents the ADI-port-less model we were trying for in 06-061r3. How about changing to: A SCSI initiator port through which the automation application client transmits SCSI requests to and receives SCSI responses from the ADC device server in the DT device. This may be an automation device primary port.

QTM-19

Page=26, last paragraph

Comment=Is "processing" needed here? These operations are performed by invoking various SCSI commands and processing task management requests on the ADC device server.

QTM-20

Page=27, 4.2.2 first paragraph

Comment=We don't have a definition for "physical device"; do we need one?

QTM-21 Page=28, third paragraph Comment="mechanism for the application client" s/b "automation application QTM-22 Page=28, last paragraph Comment=change to "A response to a TEST UNIT READY" QTM-23 Page=29, 4.2.3.1 first paragraph Comment=It says "the automation device shall report a logical unit to the automation device ADI port" but Figure 2 says they are optional. QTM-24 Page=29, 4.2.3.1 second paragraph Comment=Should "command or task management" be "SCSI command or task management" (appears several places). QTM-25 Page=29, 4.2.3.1 second paragraph Comment="Using the ADI ports", These are optional per figures 2 and 3. QTM-26 Page=29, last paragraph Comment=s/b "SCSI commands and task"? QTM-27 Page=29, 4.2.3.2 first paragraph Comment=change "...reported to a REPORT LUNS command (see SPC-3)." to "...included in the logical unit inventory (see SPC-4)." Page=29, second paragraph Comment=ready state (see 3.1.31) QTM-29 Page=30, second a) Comment=s.b. "...on all commands and return..." QTM-30 Page=30, second b) Comment="generated" s/b "established" QTM-31 Page=30, 4.2.3.4 second paragraph Comment=References to "the DT device primary port" s/b "a DT device primary port" to be consistent with 4.2.1 QTM-32 Page=30, 4.2.3.4 third paragraph Comment=References to "the DT device primary port" s/b "a DT device primary

port" to be consistent with 4.2.1

```
QTM-33
Page=31, 4.2.3.5 second paragraph
Comment="before issuing any commands" s/b "before processing any commands"
QTM-34
Page=31, 4.2.3.5 second paragraph
Comment=change to "... SOCC bits (see 5.2)."
QTM-35
Page=31, 4.2.3.5 third paragraph
Comment=Remove "(see 5.2)"
QTM-36
Page=31, last paragraph
Comment=change to "TEST UNIT READY (See SPC-3)."
QTM-37
Page=32, third paragraph after table 2
Comment=Add a space between "state. The"
QTM-38
Page=33, second paragraph
Comment=Remove "(see SSC)"
QTM-39
Page=36, fifth paragraph
Comment="that clear state flags.." s/b "that cause state flags to be set to
zero"
QTM-40
Page=36, table 5 caption
Comment=s/b "Additional conditions that cause TapeAlert state flags to be
set to zero"
QTM-41
Page=38, 4.2.7
Comment=change "...command (see SPC-3, WRITE ATTRIBUTE) to..." to "...WRITE
ATTRIBUTE command (see SPC-3) to..."
QTM-42
Page=38. 4.2.7
Comment=Should "RMC logical unit" be "RMC device server"?
QTM-43
Page=38, 4.2.9, item 1)
Comment=s/b "processes a LOAD UNLOAD command (see SSC-2) requesting the
medium be unloaded;"
QTM-44
Page=40, table 6
Comment=Add superscript "a" to the codes A4h/OBh, ABh/O1h, and A3h/OBh.
QTM-45
Page=40, LOAD UNLOAD reference
```

Comment=SSC-2 (?)

QTM-46

Page=40, table 6 Required column

Comment=SPC-3 and -4 title this column "Type" and use $\{0, M, Z\}$. Do we want to adopt that convention?

QTM-47

Page=41, table 6

Comment=Add superscript "a" to the codes A3h/OEh, A3h/OFh, A9h/1Fh, A4h/OEh, and A4f/OFh.

QTM-48

Page=41, table 6

Comment=Add to table 6 SECURITY PROTOCOL IN as optional and SECURITY PROTOCOL OUT as optional. Reference SPC-4 for both commands.

QTM-49

Page=41, table 6 REPORT DENSITY SUPPORT

Comment=This command should not be mandatory unless the RMC is of type SSC. Add a footnote explaining this.

QTM-50

Page=41, table 6 REPORT DENSITY SUPPORT Comment=SSC-2 (?)

QTM-51

Page=42, third paragraph below table 7

Comment=Add a reference (see 6.2.2.4.3) after "Logical unit descriptor"

QTM-52

Page=42, third paragraph below table 7 Comment=change to "An MDC bit..."

QTM-53

Page=42, last paragraph

Comment=change to "An NRSC bit..."

QTM-54

Page=43, second paragraph

Comment=Unit Attention s/b unit attention

QTM-55

Page=43, second paragraph

Comment=might help clarify to say "shall terminate the NOTIFY DATA TRANSFER DEVICE command"

QTM-56

Page=43, second paragraph

Comment=Is ILLEGAL REQUEST right? Wouldn't it be ABORTED?

QTM-57

Page=43, third paragraph

Comment=BUA needs to be small caps

```
Page=43, second to last paragraph
Comment="perform" s/b "process"
QTM-59
Page=43, second to last paragraph
Comment="initiator port" should be "I_T nexus"
QTM-60
Page=43, second paragraph
Comment=Change "...indicates that the asc and ascq fields shall
contain..." to "...specifies that the ASC field and ASCQ field
contain..."
QTM-61
Page=43, second paragraph
Comment=change "initiator ports" to "I T nexus"
QTM-62
Page=43, fifth paragraph
Comment=change "indicates" to "denotes" (2 places)
QTM-63
Page=43, second paragraph
Comment=asc -- small caps
QTM-64
Page=43, second paragraph
Comment=ascq -- small caps
QTM-65
Page=43, fifth paragraph
Comment=SOCC -- small caps, not all caps
QTM-66
Page=43, fifth paragraph
Comment=change to "An SOCC bit..."
QTM-67
Page=44, 5.3.1 first paragraph
Comment="DT Device" s/b "DT device"
QTM-68
Page=44, 5.3.1 item d)
Comment=Needs a period at end of item.
Page=44, first paragraph after table 8
Comment=Data-Out Buffer needs a reference (see SAM-3); I think "Buffer" s/b
"buffer".
QTM-70
Page=44, first paragraph after table 8
Comment="table Y" s/b "table 11".
```

Page=44, item b) after table 8
Comment=s/b "a logical unit reset condition occurs."

QTM-72

Page=44, first paragraph after table 8 Comment=change "indicates" to "specifies"

QTM-73

Page=45, table 9

Comment=The table has "parameter list length" as the field, but the paragraph has "parameter data length". Which is it?

QTM-74

Page=45, third paragraph after table 9
Comment=remove the second and third commas

QTM-75

Page=45, last paragraph

Comment=remove "(see 5.3.3)" as the reference was already provided in list item a) above.

QTM-76

Page=45, first paragraph after table 9
Comment=Why'd we put in a field and require that it be ignored?
[rehetorical question]

QTM-77

Page=46, first paragraph after table 10 Comment=s/b "The attribute identifier field specifies the medium attribute (see table 11) to be set."

QTM-78

Page=46, first paragraph after table 11 Comment=s/b "The FORMAT field specifies the format (see table 12) of the data in the attribute value field."

QTM-79

Page=46

Comment=What happens if I set the attribute identifier to 00h (i.e., volume identifier) and the format to 00b (i.e., binary)? Table 11 specifies that the format is ASCII.

QTM-80

Page=46, first paragraph after table 10 Comment=Change "indicates" to "specifies"

QTM-81

Page=48, table 13 page 15h

Comment=Needs reference for this log page. Add reference 6.1.5

QTM-82

Page=48, table 13

Comment=Should we repeat the column titles here?

```
Page=49, last paragraph
Comment=This paragraph should appear below table 17.
QTM-84
Page=51, second paragraph
Comment=change to "An MTHRD bit..."
QTM-85
Page=51, forth paragraph
Comment=change to "An MSTD bit..."
QTM-86
Page=51, fifth paragraph
Comment=change to "An MPRSNT bit..."
QTM-87
Page=51, sixth paragraph
Comment=change to "An RAA bit..."
QTM-88
Page=53, note 8
Comment="(e.g. the..." s/b "(e.g., the..."
QTM-89
Page=54, third paragraph below table 20
Comment=Change "specifies" to "contains"
QTM-90
Page=55, forth paragraph
Comment=Change "...process login (PRLI) with the DT device (see FCP-2)..."
to "... Process Login (see FCP-3) with the DT device..."
QTM-91
Page=55, forth paragraph
Comment=chanhge to "An LC bit..."
QTM-92
Page=56, second paragraph below table 23
Comment=Need a reference for COMINIT. Is this really an example, or should
it be an "i.e.,"?
QTM-93
Page=56, forth paragraph below table 23
Comment=Move reference to SAS-1.1 to after "SAS address"
QTM-94
Page=57, 6.1.3
Comment=Should there be a reference to SSC-2 for a description of the
TapeAlert flags?
QTM-95
Page=57, last paragraph
Comment=Change "specifies" to "indicates" (2 places)
QTM-96
```

Page=58

Comment=The last 4 paragraphs belong below table 27

QTM-97

Page=58, last paragraph

Comment=Change "specify" to "indicate"

QTM-98

Page=60, table 28 row 04h

Comment=Should all the LOAD and UNLOAD statements really be LOAD UNLOAD command with the load bit set to zero (or one)? Also appears in the text below the table. Would also need a reference to SSC-2 somewhere.

QTM-99

Page=61, 6.1.5 second paragraph

Comment="Service buffers Information" s/b "Service Buffers Information"

QTM-100

Page=61. table 29

Comment=bytes 4-n s/b "Service buffers information log parameters"

QTM-101

Page=61, 6.1.5 first paragraph

Comment=The second sentence is incomplete. Fix this by concatenating the two sentences as follows: "The Service Buffers Information log page (see table 29) describes the service buffers that are available from the device server that may be retrieved via a READ BUFFER command (see SPC-3)."

QTM-102

Page=62, third from last paragraph

Comment=This paragraph reads very awkwardly. Suggest rewording to "A no medium present (NMP) bit set to one indicates that the device server is unable to retrieve the service buffer identified by the buffer ID when medium is present in the DT device (see 4.2.4). An NMP bit set to zero indicates that the device server is able to retrieve the service buffer identified by the buffer ID when medium is present in the DT device."

QTM-103

Page=62, second from last paragraph

Comment=Same suggested re-wording as for the NMP paragraph.

QTM-104

Page=62, last paragraph

Comment=Same suggested re-wording as for the NMP paragraph.

QTM-105

Page=62, second paragraph after table 31 Comment=Change "specifies" to "contains"

QTM-106

Page=62, third from last paragraph Comment=change to "An NMP bit..."

QTM-107

Page=62, second from last paragraph

Comment=change to "An NMM bit..."

QTM-108

Page=63, third paragraph

Comment="concerning" s/b "describing"

QTM-109

Page=63, first paragraph

Comment=Same suggested re-wording as for the NMP paragraph.

QTM-110

Page=64, table 32 last row

Comment=need ref to SPC-3 after MODE SENSE command

QTM-111

Page=64, table 32

Comment=Reformat this table to include a Subpage Code column (see table 244 in SPC3r23).

QTM-112

Page=64, table 32

Comment=Add Control extension (OAh/O1h) page from SPC-3

QTM-113

Page=64, table 32

Comment=Border lines look inconsistent, i.e., thin-thin on left, thick-thick on bottom, thick-thin on top and right.

QTM-114

Page=65, table 34

Comment=Need table entries for code values 00h and 05h-FFh.

QTM-115

Page=65, last paragraph

Comment=Need ref to SPC-3 after MODE SELECT command

QTM-116

Page=65, first paragraph after table 33

Comment=The PS bit in table 33 does not have a value shown, but the paragraph below the table states that it shall be set to the value shown in the table.

QTM-117

Page=65, table 34

Comment=After converting table 32 to include a subpage column, this table can be merged into it.

QTM-118

Page=65, 6.2.2.1

Comment=After converting table 32 to include a subpage column, this subclause can be eliminated.

QTM-119

Page=table 33

Comment=Border lines

QTM-120

Page=65, table 34 Comment=Border lines

QTM-121

Page=66, first paragraph after table 35

Comment=The PS bit in table 35 does not have a value shown, but the paragraph below the table states that it shall be set to the value shown in the table.

QTM-122

Page=68, first paragraph after table 37

Comment=The PS bit in table 37 does not have a value shown, but the paragraph below the table states that it shall be set to the value shown in the table.

QTM-123

Page=69, first paragraph

Comment=The reference to SPC-3 is for what? None of the terms appear in SPC-3. The closest is relative target port, but SPC-3 has a relative target port identifier (which is a two-byte field).

QTM-124

Page=69, second paragraph

Comment=(also table 38). This one-byte field doesn't match SPC-3 (which is defined as the high-order nibble only).

QTM-125

Page=69, first paragraph after table 39

Comment=need a reference after MODE SELECT command. (see SPC-3)

QTM-126

Page=69, second paragraph

Comment=change "indicates" to "specifies"

QTM-127

Page=69, third paragraph

Comment=change "indicates" to "specifies"

QTM-128

Page=69, forth paragraph

Comment=Replace this sentence with a paragraph that says: "The DT device primary port descriptors vary based on the value in the PROTOCOL IDENTIFIER field (see table X)." Add a table X that has a column for the PROTOCOL IDENTIFIER field value, the descriptor name, and a reference to a subclause.

QTM-129

Page=70, second to last paragraph

Comment=change "indicates" to "specifies"

QTM-130

Page=70, last paragraph

Comment=change "indicates" to "specifies"

QTM-131 Page=71 Comment

Page=71, fifth paragraph

Comment="When the MPN field is set to 11b, " s/b "When the MPN field is set to 11b (see table 40), "

QTM-132

Page=71, fifth paragraph

Comment=Add a period after "(see SPC-3)"

QTM-133

Page=71, last paragraph

Comment=need a reference after MODE SELECT command. (see SPC-3)

QTM-134

Page=71, first paragraph

Comment=change "inidcates" to "specifies"

QTM-135

Page=71, second paragraph

Comment=Change "indicates" to "contains"

QTM-136

Page=72, last paragraph

Comment=need a reference after MODE SELECT command. (see SPC-3)

QTM-137

Page=72, last paragraph

Comment=Should a CHECK CONDITION also be returned if the port identifier field is changed in the command?

QTM-138

Page=72, last paragraph

Comment=second sentence s/b "..REQUEST and the additional sense code shall be set to"

QTM-139

Page=72, 6.2.2.3.4 last paragraph

Comment=change "indicates" to "specifies"

QTM-140

Page=73, first paragraph

Comment=I don't think the DT device changes the MPI field, nor may it "...change the MPI field or port identifier field" I think we mean just the port identifier field here.

QTM-141

Page=73, second paragraph

Comment="Port Enable" s/b "port enable"

QTM-142

Page=73, table 46

Comment=remove the period after Reserved (or make consistent with others, e.g., table 44).

Page=73, 6.2.2.4.1 first paragraph Comment=s/b "variable-length"

QTM-144

Page=73, 6.2.2.4.1 first paragraph

Comment=Add references after MODE SELECT command and MODE SENSE command, i.e., "(see SPC-3)"

QTM-145

Page=73, last 2 paragraphs

Comment=Both of these paragraphs need to move to below table 47.

QTM-146

Page=73, second to last paragraph

Comment=The PS bit in table 47 does not have a value shown, but the paragraph states that it shall be set to the value shown in the table.

QTM-147

Page=75, 6.2.2.4.2 first paragraph

Comment=s/b "(e.g., DEVICE TYPE field contains a value of 01h in the case of a sequential-access device (see SPC-3))" (with small caps of course - note this in other comments too)

QTM-148

Page=75, second to last paragraph

Comment=change "indicates" to "contains"

QTM-149

Page=75, last paragraph

Comment=change "indicates" to "specifies"

QTM-150

Page=76, second paragraph

Comment=The MODE SELECT command needs "(see SPC-3)" added following.

QTM-151

Page=76, third paragraph

Comment=The REPORT LUNS command needs "(see SPC-3)" added following.

QTM-152

Page=76. table 49

Comment=remove period after Reserved (or make others consistent).

QTM-153

Page=76, third paragraph

Comment=Change "... reported in any REPORT LUNS command." to "...included in the logical unit inventory (see SPC-3) for all I_T nexus associated with a DT device primary port."

QTM-154

Page=76, third paragraph

Comment=change "indicates" to "specifies" (2 places)

QTM-155

Page=76, third paragraph

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Comment="...that DT device primary port..." sounds like the LU can be associated with a subset of the primary ports, and we have no way to do that.

QTM-156
Page=77, first paragraph
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QTM-157

Page=77, fifth paragraph

unit, device server, or DT device?

Comment=Do we need "A wp bit set to zero shall not write protect the medium."? Do we need to specify then that it has no bearing on media that are physically write-protected?

Comment="...specifies action to be taken..." by whom/what? The RMC logical

QTM-158

Page=77, sixth paragraph

Comment=s/b "shall not operate in disaster recovery mode."

QTM-159

Page=77, last paragraph

Comment=Do we need "A MUE bit set to zero may not allow a DT device to prepare"?

QTM-160

Page=77, second paragrpah

Comment=Change "indicates" to "specifies" (2 places)

QTM-161

Page=77, third paragrpah

Comment=Change "indicates" to "specifies" (2 places)

QTM-162

Page=77, sixth paragrpah

Comment=Change "indicates" to "specifies" (2 places)

QTM-163

Page=77, seventh paragrpah

Comment=Change "indicates" to "specifies" (2 places)

QTM-164

Page=78, second paragraph

Comment="00bh" s/b "00b"

QTM-165

Page=78, second paragraph

Comment="status, setting" s/b "status. The sense key shall be set to" and "additional sense code shall be set to"

QTM-166

Page=78, second paragraph after table 51

Comment=s/b "(i.e., 08h, a medium changer device (see SPC-3))"

QTM-167

Page=78, first paragraph

Comment=change "indicating" to "associated with"

QTM-168

Page=78, third paragraph after table 51 Comment=Change "indicates" to "contains"

QTM-169

Page=79, first paragraph

Comment="field contain the first" s/b "field each contain the first"

QTM-170

Page=79, first paragraph

Comment=add (see SPC-3) reference after MODE SELECT command

QTM-171

Page=79, second paragraph

Comment=add (see SPC-3) reference after REPORT LUNS command

QTM-172

Page=79, third paragraph

Comment=might be nice to say "All remaining device servers (i.e., ADC device server and RMC device server) in..."

QTM-173

Page=79, second paragraph

Comment=Change "...reported in any REPORT LUNS command." to "...included in the logical unit inventory (see SPC-3) for all I_T nexus associated with a DT device primary port."

QTM-174

Page=79, second paragraph

Comment=Change "indicates" to "specifies" (2 places)

QTM-175

Page=79, forth paragraph

Comment=Change "indicates" to "specifies"

QTM-176

Page=79, forth paragraph

Comment=I'm not sure "shall" is correct here, maybe "may" instead?

QTM-177

Page=79, forth paragraph

Comment=Change "indicates" to "specifies"

QTM-178

Page=79, second paragraph

Comment=Change "...that DT device primary port(s)." to "...the DT device primary port(s)."

QTM-179

Page=80, first paragraph

Comment=When it says once assigned the logical unit index value shall not be changed, does that mean that the device server should respond with a CHECK CONDITION if an attempt is made to change it? Does it mean it can not be

changed after a reset event or power on? What is the duration of "shall not be changed"? (Also applies to the RMC and SMC logical unit index values).

QTM-180

Page=80, second paragraph

Comment=s/b "(i.e., 12h, an Automation/Drive Interface device (see SPC-3))"

QTM-181

Page=80, forth paragraph

Comment=add (see SPC-3) reference after MODE SELECT command

QTM-182

Page=80, sixth paragraph

Comment=add (see SPC-3) reference after REPORT LUNS command

QTM-183

Page=80, sixth paragraph

Comment=There is no statement on what happens when the enable bit is changed from one to zero. Do we need the same paragraph as in the SMC logical unit, whereby all commands are aborted and the remaining device servers report a change in logical unit inventory? (Probably also applies to the RMC logical unit subpage).

QTM-184

Page=80, 6.2.2.5 first paragraph Comment=s/b "variable-length"

QTM-185

Page=80, 6.2.2.5 first paragraph

Comment=s/b "...and the ADC device..."

QTM-186

Page=80, last paragraph

Comment=move this paragraph to below table 53.

QTM-187

Page=80, last paragraph

Comment=The PS bit in table 53 does not have a value shown, but the paragraph states that it shall be set to the value shown in the table.

QTM-188

Page=80, sixth paragraph

Comment=Change "...reported in any REPORT LUNS command." to "...included in the logical unit inventory (see SPC-3) for all I_T nexus associated with a DT device primary port."

QTM-189

Page=80, third paragraph

Comment=Change "indicates" to "contains"

QTM-190

Page=80, sixth paragraph

Comment=Change "indicates" to "specifies" (2 places)

QTM-191 Page=80, sixth paragraph Comment=Change "...that DT device primary port(s)." to "...the DT device primary port(s)." QTM-192 Page=81, table 54 Comment=remove period after Reserved (or make others consistent). ************** Comments attached to Abs ballot from Gerald Houlder of

Seagate Technology:

Seagate is not materially affected by this draft standard.