SSC-3 Revision 04a Letter Ballot Comment Database (08-095r1)

Company number	tech/edit	Page	Sec/table/fig locator	Comment	Proposed Solution	Resolution	Status
BRO-001	T	56	4.2.21.6	Resolve editors note. This editors note applies to the whole standard.	see note		
BRO-002	T	60	4.2.21.11	Resolve editors note. This editors note applies to the whole standard.	see note		
BRO-003	T	67	4.2.23.3	Resolve editors note. This editors note applies to the whole standard.	see note		
BRO-004	T	195	8.5.3.2.1	Resolve editors note.	see note		
EMC-001				From the spec it looks like if the SDK_C bit is set then the device supports supplemental decryption keys but the only way to determine how many is by setting the SDK's until you get a MAXIMUM NUMBER OF SUPPLEMENTAL DECRYPTION KEYS EXCEEDED error (Set Data Encryption Page for SECURITY PROTOCOL OUT - 8.5.3.2.1, p.192). It would be nice if SECURITY PROTOCOL IN could provide that info before the error occurs, perhaps in the Data Encryption Algorithm descriptor.			
ELX-001	e	2		The list of Physical Interconnects is significantly out-of-date concerning Fibre Channel	The list of Physical Interconnects should includethe following: Fibre Channel Arbitrated Loop 2nd Generation FC-AL-2 [ANSI INCITS 332-1999 R2004] Fibre Channel Arbitrated Loop 2nd Generation Amendment 1 FC-AL-2 AM [ISO/IEC 14165-122:2005]1[ANSI INCITS 332:1999 AM1-2003] Fibre Channel Arbitrated Loop 2nd Generation Amendment 2 FC-AL-2 AM2 [ISO/IEC 14165-122:2005 AM1] [ANSI INCITS 332:1999 AM2-2006] Fibre Channel Framing and Signaling Interface FC-FS [ISO/IEC 14165-251:2008] [ANSI INCITS 373 - 2003] Fibre Channel Framing and Signaling Interface 2nd Generation FC-FS-2 [ANSI INCITS 424 - 2007] Fibre Channel Framing and		

ELX-002	e	2		The list of Transport Protocols does not have current publication numbers for FCP-2 and FCP-3	The list of Transport Protocols should be amended to show these: SCSI-3 Fibre Channel Protocol - 2 FCP-2 [ISO/IEC 14776-222] [ANSI INCITS 350 - 2003 R2008] SCSI-3 Fibre Channel Protocol - 3 FCP-3 [ISO/IEC 14776-223] [ANSI INCITS 416 2006]		
SYM-001	tech	xviii	Foreword	In the second paragraph, the name of the field and the structure containing it are incorrect, and the reference should be to the published SAM-3.	This standard specifies the external behavior of a device server that defines itself as a sequential-access device in the PERIPHERAL DEVICE TYPE field of the standard INQUIRY data. This device type is known as a stream device. This standard conforms to ANSI INCITS 402-2005, SCSI Architecture Model - 3.		
SYM-002	tech	xviii	Foreword	The foreword contains a conformance statement that does not occur anywhere else in the text.	Add a sentence to the first paragraph of 1 Scope that reads "The definitions in this standard conform to the requirements of SAM-3."		
SYM-003	tech	1	Scope	The reference to the Inquiry field in item a) of the list is incorrect.	a) permit an application client to communicate over a SCSI service delivery subsystem, with a logical unit that declares itself to be a sequential-access device in the PERIPHERAL DEVICE TYPE field of the standard INQUIRY data (see SPC-3);		
SYM-004	edit	1	Figure 1	Correct the label "Shared Command Set (for all device types)" to match the text used in other standards.	Primary Command Set (for all device types)		
SYM-005	tech	3	2 Normative References	Add ADC-2, PKCS #1, ANSI X9.63, ISO/IEC 18033-2 to the list of references (ADC is referenced in 4.2.3 & Table 2, PKCS in 8.5.2.10.2, ECC & ANSI X9.63 in 8.5.2.10.3, ISO/IEC 18033-2 in 8.5.3.2.4.3)	Add references		
SYM-006	tech	5	3.1.3 Auxiliary memory	Delete the definition of auxiliary memory. Wherever the term is used in the document its preceded by "medium" and there's already a definition for that.	Delete the definition.		
SYM-007	tech	7	3.1.44 medium auxiliary memory (MAM)	This definition should reference the definition in SPC-4.	An auxiliary memory residing on a medium that is accessible to the device server (e.g., a tape cartridge). See SPC-4.		

SYM-008	tech	7	3.1.51 page	The page definition should be the same as, and should reference, SPC-3.	page: A regular parameter structure (or format) used by several commands. These pages are identified with a value known as a page code. (see SPC-4)		
SYM-009	edit	7	3.2 Acronyms	Add the following acronyms	ADC Automation Device Control, PEWZ , SDK, RSA, ECC		
SYM-010	edit	15	Figure 3	Ther terms BOM & EOM (and BOP & EOP) are used throughout this section, but are never fully defined.	Spell out acronym on first usage.		
SYM-011	edit	17	4.2.3 Physical Device	The reference SSC & ADC in item a) is very cryptic and needs to be expanded.	(e.g. where a physical device is associated with a auotmation device that can perform media movement, both a device server that implement the commands set defined in this standard and a device server that impements another command set such as ADC-2 may control the device);		
SYM-012	edit	18	Figure 8	The names in three of the boxes have been cropped.	Correct		
SYM-013	edit	20	4.2.5	Define PEWZ on first usage.			
SYM-014	edit	21	4.2.6 Partitions within a volume	Use (n) for the partition number to avoid confusion with Box & EOx.	Each partition (n) within a volume has a defined beginning-of-partition (BOP n), an early-warning position (EW n), and an end-of-partition (EOP n).		
SYM-015	edit	22	4.2.7.1 Logical objects within a partition	Use (n) for the partition number to avoid confusion with Box & EOx.	The area between BOP n and EOP n….		
SYM-016	edit	52	4.2.21.1 Data Encryption	Change the red text in this section to black.			
SYM-017	edit	52	4.2.21.1 Data Encryption	The first sentence of this section is prone to giving the erroneous impression that a device can decypt the contents of a logical block on the media and replace the block on the media with unencrypted information, and thus needs clarification.	A device compliant with this standard may contain hardware or software that is capable of encrypting the data within logical blocks as those blocks are stored on the media, and decrypting the data within logical blocks as those blocks are read from the media, to provide security against unauthorized access to that data.		
SYM-018	edit	53	4.2.21.3 Reading encrypted blocks	"shall be vendor specific" is oxymoronic	"is vendor specific"		
SYM-019	tech	54	4.2.21.5 Keyless copy	This section should identify: a) How an application client determines that a Logical Unit has the capability to act as a KCSLU or a KCDLU; b) How an application client enables or disables this capability;			
SYM-020	edit	57	4.2.21.7 Saved Information	This section needs to be moved to the end of section 4.21 so that it occurs after concepts such as lock & key instance counter have been defined.	Move section		

SYM-021	edit	58	4.2.21.8 Data encryption parameters	This section needs to be moved to the end of section 4.21 so that it occurs after concepts such as KAD & Nonce have been defined.	Move section		
SYM-022	edit	61	4.2.22 External data encryption control	This section should identify how an application client determines that a physical device has the capability for external data encryption control BEFORE it happens.			
SYM-023	tech	61	4.2.22 External data encryption control	The interaction between this feature and the encryption mode locking defined in 4.2.21.11 needs to be defined. Specifically, can a lock be placed when the data encryption paremeters are under external control?			
SYM-024	edit	66	4.2.22.5 External data encryption control error conditions	Change reference to ADC-2 for consistency with the rest of the document.	(see ADC-2)		
SYM-025	edit	175	8.5.2.4 Data Encryption capabilities page	I don't believe that this page "requests that information…." Us the same format as for the other pages.	Table 121 specifies the format of the Data Encryption Capabilities page. The page reports information on the set of data encryption algorithms supported by this device server. If external data encryption control is supported, then the set of data encryption algorithms reported by the device server may not include all of the algorithms in the set of data encryption algorithms supported by the physical device.		
SYM-026	edit	176	Table 124	There is a vertical divider missing between UKADF & AKADF	Insert		
SYM-027	edit	178	Table 127	Typo "ecryption"	Correct		
SYM-028	edit	178	Table 128	Show the code in this table using binary notation as per the other two tables on this page.	Correct		
SYM-029	edit	191	Table 142	Show the code in this table using binary notation as per the other two tables on this page.	Correct		
SYM-030	edit	201	8.5.4.1	typo "Pages in used"	Delete "in"		
HPQ-1		1	Title Page	At 2.32 in. down and 0.77 in. from left Set PDF page numbers to match printed page numbers			
HPQ-2		1	Title Page	At 9.87 in. down and 6.32 in. from left Global ANSI INCITS.***:200x s/b ANSI INCITS xxx-200x (space and dash instead of periods)			

HPQ-3		2	Points of Contact page	At 1.92 in. down and 3.95 in. from left George O. Penokie s/b Mark S. Evans with appropriate contact info			
HPQ-4		3	Changes	At 1.14 in. down and 0.95 in. from left Global Header and footer should use same font as rest of text.			
HPQ-5		3	Changes	At 1.61 in. down and 0.42 in. from left Global: use 0.9" margin on left and right			
HPQ-6		6	Abstract	At 6.12 in. down and 7.26 in. from left StrikeOut: stream			
HPQ-7		6	Abstract	At 6.29 in. down and 4.77 in. from left StrikeOut: stream			
HPQ-8		13	LIst of Tables	At 1.72 in. down and 0.61 in. from left Add PDF bookmarks for Tables and Figures			
HPQ-9		13	LIst of Tables	At 9.42 in. down and 0.50 in. from left many field names should be small caps in the table of tables, including: 40, 43, 92, 100, 101, 107, 109, 110, 112, 129, 133,			
HPQ-10		18	Foreword	At 2.50 in. down and 0.69 in. from left DEVICE TYPE field of the INQUIRY command response data. s/b PERIPHERAL DEVICE TYPE field of the Standard INQUIRY data (see SPC-4).			
HPQ-11		18	Foreword	At 2.51 in. down and 4.34 in. from left StrikeOut: This device type is known as a stream device.			
HPQ-12		18	Foreword	At 2.67 in. down and 2.02 in. from left SCSI Architecture Model - 3 (T10/1561-D) s/b SAM-4			

HPQ-13		18	Foreword	At 8.67 in. down and 1.23 in. from left Technical Committee T10 on Lower Level Interfaces s/b Technical Committee T10 - SCSI Storage Interfaces			
HPQ-14		19	Introduction	At 2.73 in. down and 3.35 in. from left definitions, symbols, and abbreviations s/b definitions, acronyms, keywords, and conventions			
HPQ-15		20	1 Scope	At 3.43 in. down and 0.44 in. from left StrikeOut: member of the SCSI stream device class			
HPQ-16		20	1 Scope	At 3.59 in. down and 1.56 in. from left the SCSI Primary Commands - 3 standard s/b SPC-4			
HPQ-17		20	1 Scope	At 3.76 in. down and 2.33 in. from left StrikeOut: member of the SCSI stream device class			
HPQ-18		20	1 Scope	At 4.59 in. down and 4.59 in. from left device type s/b smallcaps			
HPQ-19		20	1 Scope	At 4.75 in. down and 0.95 in. from left the INQUIRY command response data s/b the standard INQUIRY data (see SPC-3)			
HPQ-20		21	1 Scope	At 1.65 in. down and 0.95 in. from left StrikeOut: Delete this list: At the time this standard was generated, examples of the SCSI general structure included: ...			
HPQ-21		23	2.2	At 2.04 in. down and 0.95 in. from left StrikeOut: ISO/IEC 14776-411, SCSI-3 Architecture Model standard			
HPQ-22		23	2.2	At 2.20 in. down and 0.95 in. from left StrikeOut: ISO/IEC 14776-313, SCSI Primary Commands - 3 standard			

HPQ-23		23	2.2	At 2.26 in. down and 0.43 in. from left Add SPC-2 since the ONLY IF RESERVED (OIR) bit definition refers to it			
HPQ-24		23	2.2	At 2.61 in. down and 0.50 in. from left Add: ISO/IEC 18033-2 used in pg 219			
HPQ-25		23	2.3	At 4.14 in. down and 0.95 in. from left ISO/IEC 14776-xxx the xxx numbers are known: SAM-4 is 414 SPC-4 is 454			
HPQ-26		23	2.3	At 4.14 in. down and 3.36 in. from left Model - 4 s/b Model - 4 (SAM-4)			
HPQ-27		23	2.3	At 4.31 in. down and 3.10 in. from left Commands - 4 s/b Commands - 4 (SPC-4)			
HPQ-28		23	2.4	At 6.02 in. down and 0.71 in. from left Add: NIST SP800-56A□ which is used in: Table 152 - ECIES-HC requirements and parameters for ECIES-KEM			
HPQ-29		23	2.4	At 6.35 in. down and 0.70 in. from left Add: FIPS 140-2 FIPS 856-2 which are referred to in 8.5.3.2.4.3 Key wrapping with ECC 521			
HPQ-30		24	3.1.4	At 3.77 in. down and 0.44 in. from left StrikeOut: 3.1.4 BOx: Either beginning-of-medium (see 3.1.5) or beginning-of-partition (see 3.1.6).			
HPQ-31		24	3.1.5	At 4.25 in. down and 5.45 in. from left beginning-of-partition s/b BOP (see 3.1.6)			
HPQ-32		24	3.1.6	At 4.75 in. down and 3.32 in. from left beginning-of-medium s/b BOM (see 3.1.5)			

HPQ-33		24	3.1	At 5.07 in. down and 0.18 in. from left Global: use the BOM, BOP, EOM, EOP, and EW acronyms almost everywhere. Only spell them out the first time they are used in the text.			
HPQ-34		25	3.1.18	At 1.81 in. down and 1.22 in. from left end-of-partition s/b EOP (see 3.1.20)			
HPQ-35		25	3.1.19	At 2.31 in. down and 5.39 in. from left a s/b an			
HPQ-36		27	3.1.72	It would be helpful if references such as the (see 4.2.10) in this definition could be linked to the referenced section so you can follow them in the PDF with a click.			
HPQ-37		28	3.1.85	At 8.38 in. down and 4.85 in. from left In 3.1.85 volume, add "See 4.2.2."			
HPQ-38		28	3.1.85	At 8.39 in. down and 0.26 in. from left SPC-4 refers to SSC for its definition of "volume". One reference is: "The VOLUME NUMBER field specifies a volume (see SSC-2) within the medium auxiliary memory. The number of volumes of the medium auxiliary memory shall equal that of the attached medium. If the medium only has a single volume, then its volume number shall be zero." This doesn't seem to match the SSC definition. Either SPC-4 or SSC-3 should change.			
HPQ-39		28	3.2	It would be helpful if locations in the document that use these acronyms could be linked to their definition in this table so that the reader can select the acryonym in the text to get to the definition quickly.			

HPQ-40		29	3.2	At 2.41 in. down and 4.82 in. from left After each acronym that is a term defined in 3.1.xx, add (see 3.1.xx) BOM BOP EOD EOM EOP EW			
HPQ-41		29	3.2	At 5.81 in. down and 0.35 in. from left Add PEWZ programmable early warning zone			
HPQ-42		29	3.2	At 6.41 in. down and 0.34 in. from left Global: change SAM-3 to SAM-4			
HPQ-43		29	3.2	At 6.48 in. down and 0.95 in. from left StrikeOut: SBCSCSI-3 Block Commands			
HPQ-44		29	3.2	At 6.98 in. down and 0.95 in. from left StrikeOut: SCSI-3Small Computer System Interface - 3			
HPQ-45			3.4 Table 1	I think the American example for "1 323 462.95" should be "1,323,462.95"			
HPQ-46		33	4.1	At 2.95 in. down and 0.95 in. from left StrikeOut: The SCSI stream device class specifies the behavior of a logical unit that is primarily a streaming data device. Two device types are members of this class: sequential-access and printer devices. This standard addresses the sequential-access device type only.			
HPQ-47		33	4.1	At 3.45 in. down and 0.95 in. from left StrikeOut: (see SBC-2 for a description of a random-access device).			

HPQ-48		33	4.2	At 7.35 in. down and 0.69 in. from left Add a section 4.2.x Removable media Include these points: - the RMB bit is set to one in Standard INQUIRY data (see SPC-4) - a unit attention condition is established whenever the media changes (e.g. with an additional sense code set to NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED) - the LOAD UNLOAD command (see 7.2) is used to add or remove the medium			
HPQ-49		34	4.2.2	At 1.81 in. down and 0.45 in. from left Beginning-of-medium s/b BOM			
HPQ-50		34	4.2.2	At 1.81 in. down and 5.70 in. from left End-of-medium s/b EOM			
HPQ-51		34	4.2.2	At 2.98 in. down and 0.45 in. from left Mounted is the state of a volume when s/b A volume is defined as mounted when			
HPQ-52		34	4.2.2	At 3.14 in. down and 2.47 in. from left is demounted s/b is defined as demounted			
HPQ-53		34	4.2.2	At 3.64 in. down and 0.45 in. from left Ready is the state of the logical unit s/b A logical unit is defined as ready			
HPQ-54		34	4.2.2	At 3.81 in. down and 0.45 in. from left The logical unit is not ready s/b A logical unit is defined as not ready			
HPQ-55		34	4.2.2	At 4.14 in. down and 3.56 in. from left not mounted s/b demounted			
HPQ-56		34	4.2.2	At 4.14 in. down and 4.58 in. from left not mounted s/b demounted			

HPQ-57		34	4.2.2	At 4.81 in. down and 4.93 in. from left beginning-of-medium s/b BOM			
HPQ-58		34	4.2.2	At 4.98 in. down and 0.45 in. from left end-of-medium position s/b EOM			
HPQ-59		35	4.2.2	At 4.57 in. down and 0.95 in. from left beginning-of-medium s/b BOM			
HPQ-60		35	4.2.2	At 4.57 in. down and 2.82 in. from left end-of-medium s/b EOM			
HPQ-61		35	4.2.2	First paragraph last sentence is difficult to understand. There is a phrase "course of tracks" which is not used anywhere else.	Recommend: "The number of tracks written at one time is called a track group (TrkGrp). --The tape motion while writting a TrkGrp is called the course of tracks.--- Track groups may be used by any recording format. For recorded volumes, reading in the forward direction follows the same course of tracks -- that was used--when writing.		
HPQ-62		35	4.2.2	At 5.24 in. down and 6.66 in. from left end-of-medium s/b EOM			
HPQ-63		35	4.2.2	At 5.40 in. down and 0.95 in. from left beginning-of-medium s/b BOM			
HPQ-64		36	4.2.3	Pysical device introductory paragraph: "A physical device performs operations upon the medium" -- this wording implies that the physical device only performs operations but the physical device also contains modifiable settings that are shared between multiple device servers.	Recommend: "TA sequential-access device contains one or more physical devices. A physical device provides storage for values that are shared between multiple device servers and performs operations upon the medium"		
HPQ-65		37	4.2.3 figure 8	Both top boxes Device Serve s/b Device Server			
HPQ-66		37	4.2.3 figure 8	Under the top right box for the ADC device server The ADC device server is optional for SSC devices so the relationship should be 1 to 0..1 instead of 1 to 1.			

HPQ-67		37	4.2.3	At 4.52 in. down and 2.95 in. from left Physical Devic s/b Physical Device			
HPQ-68		38	4.2.3 figure 8	At 1.64 in. down and 4.43 in. from left in figure 8.. delete extra .			
HPQ-69		38	4.2.3 Table 2	At 7.60 in. down and 6.23 in. from left After "table 10" add "in 4.2.17.1 "			
HPQ-70		39	4.2.5	First paragraph in the section - ". . . enough space in the partition for the application client to write any buffered logical object in the application client buffer to the medium." - What is the application client buffer? Is that different from the object buffer? If so then a definition is needed.			
HPQ-71		40	4.2.6	At 4.48 in. down and 5.63 in. from left beginning-of-medium s/b BOM			
HPQ-72		40	4.2.6	At 4.64 in. down and 0.45 in. from left end-of-partition zero (EOP 0) s/b EOP 0			
HPQ-73		40	4.2.6	At 4.64 in. down and 3.92 in. from left end-of-medium s/b EOM			
HPQ-74		40	4.2.6	At 4.81 in. down and 4.67 in. from left beginning-of-partition s/b BOP			
HPQ-75		40	4.2.6	At 5.31 in. down and 5.28 in. from left beginning-of-partition s/b BOP			
HPQ-76		41	4.2.6	At 4.32 in. down and 0.95 in. from left beginning and ending points for a partition aligned with physical bounds of the medium s/b BOP and EOP aligned with BOM and EOM.			
HPQ-77		41	4.2.6	At 4.32 in. down and 2.20 in. from left a mandatory requirement s/b required			
HPQ-78		44	4.2.11	At 5.98 in. down and 3.80 in. from left end-of-partition s/b EOP			

HPQ-79		45	4.2.12.2	At 1.98 in. down and 2.15 in. from left streams s/b stream (to match the term used in SPC-4)			
HPQ-80		45	4.2.12.3	At 6.93 in. down and 3.20 in. from left generated s/b established			
HPQ-81		46	4.2.12.3 Table 4	At 4.73 in. down and 0.23 in. from left The information sense data descriptor needs to end with byte 11 not byte 10.			
HPQ-82		46	4.2.12.4	At 6.59 in. down and 1.20 in. from left following conditions s/b conditions listed in table 5			
HPQ-83		46	4.2.12.4	At 6.92 in. down and 0.45 in. from left the device server shall return CHECK CONDITION status. The appropriate sense key and additional sense code should be set. s/b the command shall be terminated with CHECK CONDITION status with the sense key set to the specified value and the additional sense code set to the appropriate value for the condition.			
HPQ-84		46	4.2.12.4	At 6.92 in. down and 3.53 in. from left illustrates s/b lists			
HPQ-85		46	4.2.12.4	At 7.09 in. down and 2.26 in. from left exhaustive enumeration s/b complete list			
HPQ-86		46	4.2.12.4 Table 5	At 7.99 in. down and 0.53 in. from left Keep table 5 on one page			
HPQ-87		48	4.2.13.1	At 5.15 in. down and 4.72 in. from left StrikeOut: MODE SELECT command with the			
HPQ-88		48	4.2.13.2	List of other conditions that may cause a DATA PROTECT sense key should add encryption errors	May add a new item d) for "the set of data encryption parameters in the physical device is not correct for the operation requested."		

HPQ-89		49	4.2.13.6	Third sentence - "The state of permanent write protection shall be recorded with the volume and the persistent write protection shall only affect the application client accessible medium."	The word "persistent" 2/3 through the sentence should be "permanent"		
HPQ-90		50	4.2.14 Note 1	At 7.54 in. down and 0.29 in. from left (Global) Add a - after the NOTE numbers			
HPQ-91		51	4.2.15.2 item e)	At 4.93 in. down and 1.45 in. from left an s/b the			
HPQ-92		51	4.2.15.2	At 4.94 in. down and 7.95 in. from left StrikeOut:			
HPQ-93		51	4.2.15.2 item f)	At 5.27 in. down and 1.45 in. from left an s/b the			
HPQ-94		52	4.2.16.2	When a reference is given such as the (see 4.2.10) in the middle paragraph in this section, it would be good to actually have a definition of the term in the referenced section rather than requiring following another reference to section 3.1.72 from 4.2.10 to find the definition.			
HPQ-95		61	4.2.17.1 Table 9	At 7.90 in. down and 0.83 in. from left (Global) In tables with more than 3 columns with rows labeled Reserved or Obsolete, join the rightmost columns together. This avoids leaving a blank cell or putting a "-" in the cell. Table 19h's last row would be: All others | Reserved			
HPQ-96		62	4.2.17.1 Table 10	At 2.79 in. down and 4.07 in. from left Table 10 needs a footnote describing the abbreviations for the severity column.			
HPQ-97		62	4.2.17.1 Table 10	At 9.97 in. down and 6.46 in. from left Straddle cells in the footing			
HPQ-98		66	4.2.17.2.4 item d)	At 2.48 in. down and 2.14 in. from left etc s/b smallcaps			

HPQ-99		66	4.2.17.2.4	At 3.43 in. down and 5.30 in. from left unit attention s/b unit attention condition			
HPQ-100		66	4.2.17.2.4	At 4.43 in. down and 4.92 in. from left generates s/b establishes			
HPQ-101		67	4.2.17.4	At 8.33 in. down and 0.38 in. from left The last paragraph of 4.2.17.4 should be b)			
HPQ-102		69	4.2.19 Note 10	At 5.07 in. down and 3.09 in. from left streaming device types s/b the sequential-access device type			
HPQ-103		70	4.2.20.1	At 9.36 in. down and 5.05 in. from left StrikeOut: s at end of sentence (devices server)			
HPQ-104		70	4.2.20.2	At 10.02 in. down and 0.45 in. from left What exactly is an archive tape? Should there be a definition in 3.1?			
HPQ-105		71	4.2.20.3	At 3.81 in. down and 5.14 in. from left Third paragraph first sentence if THE medium ?			
HPQ-106		numerous	4.2.21.n, 8.5.n	4.2.2.2 sentence 2 defines encryption control as being on an I_T_L nexus basis, but most references after this use I_T nexus	Change references to I_T_L Nexus for Encryption control as already marked in red in 4a draft.		
HPQ-107		71	4.2.21.1	Most encryption processing has been moved from the device server to the physical device but not all references to capabilities in the device server were updated. Several comments to follow will point out areas where device server should be changed to physical device. Those comments will all start with "Device Server -> Physical Device" to help identify them as all part of the same change. First paragraph second to last sentence - "encryption and decryption processes within the device server" - those processes were moved to the physical device	Change "device server" to "physical device"		
HPQ-108		72	4.2.21.3	Device Server -> Physical Device Second paragraph - "A device server that supports encryption should be capable of distinguishing encrypted . . ." Detection of blocks will occur in the physical device not the device server.	Change "device server" to "physical device"		

HPQ-109		72	4.2.21.3	Device Server -> Physical Device Second paragraph second sentence - "The device server reports it's capability of distinguishing encrypted blocks"	Should be "The device server reports that capability of the physical device for distinguishing encrypted blocks"		
HPQ-110		72	4.2.21.3	Device Server -> Physical Device Second paragraph third sentence "If the device server is capable of distinguishing"	Should be "If the physical device is capable of distinguishing"		
HPQ-111		72	4.2.21.3	Device Server -> Physical Device Second paragraph last sentence "The device server shall establish the logical position"	Should be "The physical device shall establish . . ."		
HPQ-112		72	4.2.21.3	At 6.78 in. down and 1.20 in. from left Note 11 not sure this is correct; it may attempt to decrypt data but it will not actually manage it. Better to say something like ".. to run the decryption process on data that was not encrypted"			
HPQ-113		72	4.2.21.3	Device Server -> Physical Device Note 11 "It is possible for a device server that is not capable of distinguishing"	Should be "It is possible for a physical device that is not . . ."		
HPQ-114		72	4.2.21.3	Device Server -> Physical Device Third paragraph first sentence "A device server that supports encryption"	Should be "A physical device that supports encryption"		
HPQ-115		72	4.2.21.3	Device Server -> Physical Device Third paragraph fourth sentence "If the device server is capable of determining that the encryption key is correct"	Should be "If the physical device is capable . . . "		
HPQ-116		72	4.2.21.3	Device Server -> Physical Device Third paragraph last sentence "The device server shall establish the logical position"	Should be "The physical device shall establish . . ."		
HPQ-117		72	4.2.21.3	Device Server -> Physical Device Fourth paragraph first sentence "A device server that supports encryption"	Should be "A physical device that supports encryption"		
HPQ-118		72	4.2.21.3	Device Server -> Physical Device Fourth paragraph second sentence "If the device server is capable of validating the integrity of the data"	Should be "If the physical device is capable . . . "		
HPQ-119		72	4.2.21.3	Device Server -> Physical Device Fourth paragraph last sentence "The device server shall establish the logical position"	Should be "The physical device shall establish . . ."		
HPQ-120		72	4.2.21.3	Device Server -> Physical Device Fifth paragraph first sentence "A device server that is capable of distinguishing encrypted blocks"	Should be "A physical device that is capable . . ."		
HPQ-121		72	4.2.21.3	Device Server -> Physical Device Sixth paragraph first sentence "A device server that is capable of both determining if the encryption key or"	Should be "A physical device that is capable . . ."		

HPQ-122		73	4.2.21.4	At 5.64 in. down and 1.77 in. from left SPECIFC s/b SPECIFIC			
HPQ-123		73	4.2.21.4	At 5.64 in. down and 5.20 in. from left DECRYPT field or ENCRYPT field s/b DECRYPTION MODE field or ENCRYPTION MODE field using smallcaps			
HPQ-124		73	4.2.21.4	At 5.98 in. down and 4.35 in. from left DECRYPTION If this is reported because the ENCRYPT field (should be ENCRYPTION MODE field) is set incorrectly, this name does not make sense. Add an additional sense code with ENCRYPTION in the name or delete the ENCRYPT field from the discussion.			
HPQ-125		74	4.2.21.5	At 1.65 in. down and 6.34 in. from left StrikeOut: is			
HPQ-126		74	4.2.21.5	At 2.48 in. down and 2.13 in. from left ENCRYPTION MODE s/b small caps			
HPQ-127		74	4.2.21.5	At 4.14 in. down and 2.84 in. from left ALGORITHM INDEX s/b smallcaps			
HPQ-128		74	4.2.21.5	Device Server -> Physical Device Fourth paragraph on the page "If the encryption algorithm provides this capability, the device server may support a feature to check during read and verify operations"	Should be "If the encryption algorithm provides this capability, the physical device may . . . "		
HPQ-129		74	4.2.21.5	Device Server -> Physical Device First lettered list on page - 1) "the device server shall verify that each encrypted block that is processed for read and verify. . . "	Should be "the physical device shall verify . . ."		
HPQ-130		74	4.2.21.5	Device Server -> Physical Device Second lettered list on page - 1) "the device server shall verify that each encrypted block that is processed"	Should be "the physical device shall verify . . ."		
HPQ-131		74	4.2.21.5	Device Server -> Physical Device Third lettered list on page - 1) "the device server shall check the format specific indication that disables . . . "	Should be "the physical device shall check . . ."		

HPQ-132		75	Editors Note 1	I don't see the ambiguity in "data encryption parameter"	Data encryption Parameters are already specified in 4.2.21.8.		
HPQ-133		76	4.2.21.6	At 2.98 in. down and 0.95 in. from left It would be clearer if the phrase "registered for encryption unit attentions state" (and where else it's referenced) was clearly marked out as a variable. Not sure of the right format - caps, bold, etc - but it would make it easier to read.			
HPQ-134		76	4.2.21.6	Paragraph following first a/b list last sentence at the physical device shall	Should be: "and the physical device shall"		
HPQ-135		77	4.2.21.7 item c)	At 1.81 in. down and 1.98 in. from left after NEXUS add a period			
HPQ-136		77	4.2.21.7	At 5.81 in. down and 1.19 in. from left registered for encryption unit attentions state Consider creating an acronym for this wordy name (REUA state?). Since it is in lowercase, it is hard to read.			
HPQ-137		77	4.2.21.7	At 5.98 in. down and 1.28 in. from left generate s/b establish			
HPQ-138		79	Editors Note 2	"data" replaced with "logical block"in numerous places	Substitution seems reasonable. Leave as substituted in 4a draft.		
HPQ-139		80	4.2.22.2.1	Second paragraph first sentence "data encryption capabilities"	It would be good to reference this to (see 4.2.21.9)		
HPQ-140		80	4.2.22.2.1	At 6.31 in. down and 3.71 in. from left nexus s/b nexuses			
HPQ-141		80	4.2.22.2.2	Next to last a/b list item b/B - "report the encryption algorithm in the Data Encryption Capabilities page with the DISABLED bit set to one.." - The DISABLED bit has been removed	Should be "report the encryption algorithm in the Data Encryption Capabilities page with the DECRYPT_C field set to No Capability and the ENCRYPT_C field set to No Capability."		

HPQ-142		80	4.2.22.2.2	In the last paragraph on the page the statement "If external data encryption control has been used to configure the physical device to prevent device server control of data encryption parameters" does not clearly state what conditions would cause this state.	Add an example at the end of the sentence (e.g., the device contains a device server that reports itself as an ADC device and the data encryption parameters control policy is set to a policy type where control of encryption algorithms by this device server is prevented, see ADC-3)		
HPQ-143		81	4.2.22.3.2	Last paragraph on the page "If external data encryption control is not being used, then the data encryption control policies shall be set to defaults." - Should use consistent naming.	Should be ". . . then the data encryption parameters request policies . . ."		