ENDL
TEXAS

Date: 14 March 2008
To: T10 Technical Committee
From: Ralph O. Weber
Subject: Bogus Sense Key in SPC-4 SA Creation Parameter Data Error Handling

## Introduction

SPC-4 r13 table 375 does not implement the model for handling denial of service attacks described in table 58 (a portion of which is shown here for reference).

**Table 58 — IKEv2-SCSI command terminations that do not abandon the CCS, if any**

| IKEv2-SCSI CCS Command | Status (Sense Key) | Additional Sense Code | Description |
|---|---|---|---|
| … | … | … | … |
| SECURITY PROTOCOL OUT | CHECK CONDITION (ILLEGAL REQUEST) | SA CREATION PARAMETER VALUE REJECTED | To adapt to possible denial of service attacks, a condition for which the optimal response includes an additional sense code of SA CREATION PARAMETER VALUE INVALID and the abandonment of the CCS is not causing the CCS to be abandoned |

The NOT READY sense key must be changed to ILLEGAL REQUEST in table 375 (see below).

## Revision History

r0 Initial revision

Unless otherwise indicated additions are shown in blue, deletions in ~~red strikethrough~~, and comments in green.

## Proposed Changes in SPC-4 r13

(SPC-4 r14 will have the same text but the table numbers may change)

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### 7.6.3.4 IKEv2-SCSI parameter data format

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**Table 375 — IKEv2-SCSI header checking of SAIs**

| Contents of SECURITY PROTOCOL SPECIFIC field in SECURITY PROTOCOL OUT CDB | Expected contents for … | | Device server action if expected field contents not received |
|---|---|---|---|
| | IKE_SA APPLICATION CLIENT SAI field | IKE_SA DEVICE SERVER SAI field | |
| 0102h<br>(i.e., Key Exchange step) | any value | reserved | No actions taken based on expected field contents |
| 0103h<br>(i.e., Authentication step) | A match with the SAI values maintained for an IKEv2-SCSI CCS on the I_T_L nexus on which the command was received | | a) The SECURITY PROTOCOL OUT command shall be terminated with CHECK CONDITION status, with the sense key set to ILLEGAL REQUEST ~~NOT READY~~, and the additional sense code set to SA CREATION PARAMETER VALUE REJECTED; and<br>b) The device server shall continue the IKEv2-SCSI CCS by preparing to receive another Authentication step SECURITY PROTOCOL OUT command |
| 0104h<br>(i.e., Delete operation) | If at least one IKEv2-SCSI CCS is being maintained for the I_T_L nexus on which the command was received, then:<br>a) A match with the SAI values maintained for an IKEv2-SCSI CCS; or<br>b) A match with the SAI values maintained for any active SA | | a) The SECURITY PROTOCOL OUT command shall be terminated with CHECK CONDITION status, with the sense key set to ILLEGAL REQUEST ~~NOT READY~~, and the additional sense code set to SA CREATION PARAMETER VALUE REJECTED; and<br>b) The device server shall continue the IKEv2-SCSI CCS by preparing to receive another Authentication step SECURITY PROTOCOL OUT command |
| | If no IKEv2-SCSI CCS is being maintained for the I_T_L nexus on which the command was received, then a match with the SAI values maintained for any active SA | | The SECURITY PROTOCOL OUT command shall be terminated with CHECK CONDITION status, with the sense key set to ILLEGAL REQUEST, and the additional sense code set to INVALID FIELD IN PARAMETER LIST |