

To: T10 Technical Committee
 From: Rob Elliott, Compaq Computer Corporation (Robert.Elliott@compaq.com)
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 Subject: SRP Alias entry designation formats

Revision History

Revision 0: 15 June 2001 - first revision, taken from 01-028r4 (SRP InfiniBand annex)

Revision 1: 19 June 2001 - incorporated comments from June SRP WG

Related Documents

T10/srp-r05 - SCSI over RDMA protocol revision 5 (by Ed Gardner)

T10/00-425r3 - Long Identifiers in SPC-3, SAM-2, SBC-2 and other XOR issues (by Jim Hafner)

InfiniBand Architecture Volume 1 – General Specifications, Release 1.0

Overview

This is based on Jim Hafner's T10/00-425r3, which is new and subject to change. The current direction is to put this information in the protocol standards like SRP rather than in SPC-3. SRP uses protocol code 04h (from SPC-3's protocol-specific target port mode page table). SRP needs to define all the format codes. The SRP InfiniBand annex needs to define the format codes that are InfiniBand specific.

Proposed changes

Annex A (normative)

Alias entry designation formats

A.1 Overview

This annex defines the SRP protocol specific alias entry formats and codes used in the CHANGE ALIASES and REPORT ALIASES commands (see SPC-3) to designate SCSI devices or ports on an SRP service delivery subsystem.

For an SRP protocol specific alias entry, the PROTOCOL IDENTIFIER is set to 04h (as defined in SPC-3) and the FORMAT CODE values are defined in Table 1.

Table 1 - SRP specific FORMAT CODE values and DESIGNATION formats

Format code	Designation Description	Designation Length
00h	Target port identifier	16 bytes
10h	InfiniBand GID with target port identifier checking	32 bytes
All others	Reserved	

A.2 Target port identifier designation format

Table 2 describes the SRP target port identifier designation format applicable to all underlying transports.

Table 2 - SRP target port identifier designation format

Byte Bit	7	6	5	4	3	2	2	0
0	TARGET PORT IDENTIFIER							
..								
15								

The TARGET PORT IDENTIFIER field contains an SRP target port identifier.

A.3 InfiniBand GID with target port identifier checking designation format

Table 3 describes the SRP InfiniBand GID with target port identifier checking format, applicable when the underlying transport is InfiniBand (see Annex B).

Table 3 - SRP InfiniBand GID with target port identifier checking designation format

Byte Bit	7	6	5	4	3	2	2	0
0	INFINIBAND GID							
..								
15								
16	TARGET PORT IDENTIFIER							
..								
31								

The INFINIBAND GID field contains an InfiniBand global identifier (GID) of an InfiniBand port connected to an SRP target port.

The TARGET PORT IDENTIFIER field contains the SRP target port identifier.

When a third party data manager first processes a segment descriptor that references this target descriptor, it shall confirm that the target port identified by the target port identifier is accessible via the InfiniBand GID. If the third party data manager is not capable of confirming the association, the alias shall be treated as invalid. The third party manager shall track configuration changes that affect the InfiniBand GID value for the duration of the third party commands. An application client generating the third party commands is responsible for tracking configuration changes between commands.