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To: T10 Committee (SCSI)

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Subject: Limiting 3rd-party reservations to a single protocol

1 Overview

The current definition of 3rd-party reservations does not have any method for indicating the protocol of the initiator to be reserved. This makes the use of 3rd-party reservations impossible on SCSI devices with multiple protocols on different ports. This is a proposal to state in ISO SPC-2 that 3rd party reservations are not allowed across protocols.

2 Glossary changes

2.0.1 3.1.85 third-party: An EXTENDED COPY command issued to one SCSI device to perform a copy operation between two other SCSI devices; or a RESERVE or RELEASE command issued by one initiator to manage a reservation on behalf of another initiator within the same domain that has the same protocol (e.g., a processor device requests that a direct-access device reserve itself for use by a sequential-access device).

3 Section 5.5.1 changes

Reservations may be further qualified by restrictions on types of access (e.g., read, write, control). However, any restrictions based on the type of reservation are independent of the scope of the reservation. In addition, some methods of reservation management permit establishing reservations on behalf of another device in the same SCSI domain that use the same protocol (third-party reservations).

4 Section 5.5.2 changes

The reserve/release management method commands, RESERVE(6), RESERVE(10), RELEASE(6), and RELEASE(10) are used among multiple initiators that do not require operations to be protected across initiator failures (and subsequent hard resets). The reserve/release reservations management method also allows an application client to provide restricted device access to one additional initiator within the same domain that uses the same protocol (a third-party initiator), usually a temporary initiator performing a service for the application client sending the reservation command.

5 Section 7.18.3 changes

~~Third-party reservation release is mandatory if the RELEASE(10) command is implemented.~~ Third-party release allows an application client to release a logical unit that was previously reserved using third-party reservation (see 7.25.3). ~~Third-party release shall be implemented.~~ Third party release ~~It~~ is intended for use in multiple-initiator systems that use the ~~COPY and~~ EXTENDED COPY ~~commands~~ command.

6 Section 7.25.3 changes

~~Third-party reservations are mandatory if the RESERVE(10) command is implemented.~~ The third-party reservation for the RESERVE(10) command allows an application client to reserve a logical unit within a logical unit for another SCSI device. The SCSI port through which the SCSI device being reserved shall be within the same domain and use the same protocol as the SCSI port through which the RESERVE(10) command is received. If the SCSI ports are not within the same domain or do not both have the same protocol the device server shall return a CHECK CONDITION status with a sense key of ILLEGAL

REQUEST. This is intended for use in multiple initiator systems that use the ~~COPY or~~ EXTENDED COPY command.