

Date: September 11, 2002

To: T10 Committee (SCSI)

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Subject: WWNs for WLUNs

## **1 Overview**

As a result of all W-LUNs being required to support the INQUIRY command every W-LUN will have to have a name. The current definition of W-LUNs is silent on this issue and as a result implementations will not doubt go from having no name to having a different name for each W-LUN within a target device. In the interest of keeping things simple this proposal requests that all W-LUNs within a single target device be assigned the name of that target device.

This works because there can be no more than one of each kind of W-LUN within a given target device.

This has the side benefit of being able to find out the target device's name if the target device supports any W-LUN.

## **2 SPC-3 Additions in section 9.1**

Add the following text into section 9.1 of SPC-3:

All W-LUNs within a single target device shall have the same name as that target device. A target device may have more than one name if the target supports multiple protocols. The name of the W-LUN may be determined by issuing an INQUIRY command requesting the Device Identification VPD page.

All W-LUNs shall support the Inquiry commands Device Identification VPD page (83h) and, at a minimum, support the Identify Descriptor with the identifier type set to the NAA identifier (3h) or the EUI-64 identifier (2h). The contents of the IDENTIFIER field shall be equal to one of the SCSI target device's name. The returned Device Identification VPD page (83h) shall contain all the SCSI target device names and all W-LUNs within a SCSI target device shall return the same list of SCSI target device names.

The following needs to be added to the Association table (Table 267 SPC-3 rev 8):

Add-in a new association type (2h) described as: The IDENTIFIER field is associated with the SCSI target device that contains the addressed well-known logical unit.

Change the type 0h description from: The IDENTIFIER field is associated with the addressed physical or logical device. To: The IDENTIFIER field is associated with the addressed logical unit.

The paragraph after table 268 (SPC-3 rev 8) needs to be changed from:

At least one identification descriptor shall contain 1h, 2h, or 3h in the IDENTIFIER TYPE field and 0h in the ASSOCIATION field. At least one identification descriptor should contain 2h or 3h in the IDENTIFIER TYPE field and 0h in the ASSOCIATION field.

to:

At least one identification descriptor shall contain 1h, 2h, or 3h in the IDENTIFIER TYPE field and a 0h or 2h in the ASSOCIATION field. At least one identification descriptor should contain 2h or 3h in the IDENTIFIER TYPE field and a 0h or 2h in the ASSOCIATION field.

In table 265 (SPC-3 rev 8) add in the following field and bit and the descriptions of the field and bit:

In Byte 0 bits 7-4 place a PROTOCOL TYPE field.

The PROTOCOL IDENTIFIER field (see 8.5.1) indicates the SCSI transport protocol to which the name in the IDENTIFY field applies. The device server shall set the PROTOCOL IDENTIFIER field to one of the values shown in table 233 to indicate the SCSI transport protocol to which the name is assigned.

In Byte 1 bit 7 place a PTV bit.

A protocol type valid (PTV) bit of zero indicates the PROTOCOL IDENTIFIER field should be ignored. A PTV bit of one indicates the PROTOCOL IDENTIFIER field contains a valid protocol identifier.