**T10/02-345r0**

Date:       September 10, 2002
To:         T10 Technical Committee (SCSI)
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Subject:  REPORT LUNS Command Interpretations


## Revision  History

Revision 0 (July 2002), first revision


## Related Documents

SPC-3r08  –  SCSI Primary Commands – 3, revision 8


## Overview

Section 7.20 of the SPC-3 r08 text states, in part:

 The REPORT LUNS command (see table 118) requests that the peripheral
device logical unit inventory accessible to the initiator via the addressed SCSI
target port be sent to the application client. The logical unit inventory is a list that
shall include the logical unit numbers of all logical units having a PERIPHERAL
QUALIFIER value of 000b (see 7.4.2). Logical unit numbers for logical units with
PERIPHERAL QUALIFIER values of 100b, 101b, 110b, or 111b may optionally
be included in the logical unit inventory.

and:

 The default report of the logical unit inventory shall contain at least LUN 0.

Question number 1 is this:

   If, at the time the REPORT LUNS command is issued, the device does
   not presently have a peripheral device connected to LUN 0, so that
   the PERIPHERAL QUALIFIER value for LUN 0 does not presently have a
   value of 000b, must the device nevertheless include LUN 0 in its
   response to the REPORT LUNS command?

Suggested interpretation is this but it's not explicitly stated in the standard:

   We do have to report a LUN 0 and place the correct
   Peripheral qualifier in the returned information.

Question number 2:

Can the peripheral qualifier be 001b and can we still return that LUN 0 in the inventory list?

Can we change the LUN 0 PQ to 001b and leave it type 0 if a device is not configured/connected?

When LUN 0 is not configured as a LUN with disk storage behind it, can we report it as a  type "ses" node with PQ 000b.  When it gets configured as a disk, can we change the report to device type 0 node (with PQ 000b).

Question number 3:

How does the spec define a configurable storage target should behave before it has been configured to have storage allocated to any of its LUNs?

After the array gets configured, LUN 0 will become type 0 PQ 000b.

Before the array gets configured, it is clear that LUN 0 must respond to REPORT LUNS, but what should LUN 0 report itself as on INQUIRY, and what should appear in the REPORT LUNS response before any LUNS have been configured?

Does it make more sense for LUN 0 to report itself as a type 0, with a PQ of 001b?

Or does it make more sense for LUN 0 to report itself as, say, a "ses", with a PQ of 000b?

**Suggested Changes**