memorandum

Hewlett-Packard Company
3000 Hanover Street
Palo Alto, CA 94304-1185
USA
www.hp.com

T10/05-129r0

To	From	Subject	Date
INCITS T10 Committee	Michael Banther, HP	ADC Notify DTD UA Creation Denied	18 March 2005

Revision history

Revision 0 – Initial proposal.

Reference Documents

ADC-2r00 *Automation/Drive Interface – Commands – 2 (ADC-2).* Rev: 00. 15 March 2005.

Background

Currently ADC-2 is silent about how the ADC device server should respond when sent a NOTIFY DATA TRANSFER DEVICE command that notifies it of a Unit Attention condition and the device server does not have sufficient resources to store the Unit Attention condition (e.g. it has stored a previous Unit Attention condition that initiators connected to the DT device primary port have not cleared). This proposal specifies that the ADC device server shall respond to the NOTIFY DATA TRANSFER DEVICE command with CHECK CONDITION status and shall set the sense key to ILLEGAL REQUEST and the additional sense code to INSUFFICIENT RESOURCES.

SPC-3 contains precedence for this sort of behaviour (see spc3r21d: 6.2.1 CHANGE ALIASES command introduction; 8.3.3.2.1 MANAGE ACL introduction; and 8.3.3.11 ASSIGN PROXY LUN service action).

Proposed changes

A broadcast unit attention (BUA) bit set to one indicates that the ASC and ASCQ fields shall contain the additional sense data to be used by the local SMC device server to establish a unit attention condition for all initiator ports accessible via its DT device primary ports. When the additional sense data is NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED, it indicates that the remote SMC device server has entered the accessible state.

When processing a NOTIFY DATA TRANSFER DEVICE command with the BUA bit set to one, if the device server has insufficient resources to store the Unit Attention condition, it shall terminate the command with a CHECK CONDITION status and set the sense key to ILLEGAL REQUEST and the additional sense code to INSUFFICIENT RESOURCES.

It is not valid for the NRSC bit and the BUA bit to both be set to one. If the NRSC bit and the BUA bit are both set to zero, then it is not valid for the ASC field or ASCQ field to be set to a non-zero value. If the NRSC bit and the BUA bit are both set to one, or if both bits are set to zero and either the ASC field or the ASCQ field is not zero, then the command shall be terminated with a CHECK CONDITION status. The sense key shall be set to ILLEGAL REQUEST and the additional sense code shall be set to INVALID FIELD IN CDB.