FCP-4: FC-4 Features object and device type support

(T10/08-127r0) David Peterson, Brocade

The working group discussed the benefits of discovering specific peripheral device types via the name server and agreed to entertain a proposal to provide the desired functionality. This proposal uses the existing FC-4 Features object versus creating a new object.

Further discussion with interested parties and feedback from the FCP-4 editor results in the following concerns:

- 1. using up the remaining two bits in the FC-4 Features object;
- 2. providing SCSI level information in a FC-4 specific name server object;
- 3. providing the required information in the FC-4 Features object; and
- 4. overlap with the desired goal (see 08-122r0) of reduced discovery time.

Proposal:

7.3 FC-4 Features object

The FC-4 Features object (see FC-GS-6) defines a 4-bit field for each possible FC TYPE code. The object is a 32-word array of 4-bit values. The 4-bit FC-4 Feature field for FCP is inserted in bits 3 - 0 of word 1. The format of the 4-bit FC-4 Feature field for FCP is shown in table Table 112 -.

Word 1 bit	Description of bit
3	Direct-access peripheral device type (00h) that operates as a boot device.
2	Sequential-access peripheral device type (i.e. 01h).
1	FCP initiator function supported
0	FCP target function supported

Table 112 - FCP definition of FC-4 Feature bits

An FCP_Port shall register its FC-4 Features object with a Name Server using the RFF_ID request CT_IU.

The FC-4 Features object may be obtained by any N_Port or NL_Port from a Name Server using a GFF_ID request CT_IU, which requests the FC-4 Features object for a specified Port Identifier. The object is provided in the GFF_ID accept CT_IU.

A list of all the Port Identifiers matching the domain and area addressing and a specified FC-4 Features object may be obtained by any N_Port or NL_Port from a Name Server using the GID_FF request CT_IU. The FC-4 Features object is a parameter in the GID_FF request CT_IU.