FCP-4: FC-4 Features object and device type support
(T10/08-127r2)
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 112.

<table>
<thead>
<tr>
<th>Word 1 bit</th>
<th>Description of bit</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Reserved</td>
</tr>
<tr>
<td>2</td>
<td>Contains one or more peripheral devices that are not peripheral device type 00h (i.e. direct access block device).</td>
</tr>
<tr>
<td>1</td>
<td>FCP initiator function supported</td>
</tr>
<tr>
<td>0</td>
<td>FCP target function supported</td>
</tr>
</tbody>
</table>

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.