To: INCITS Technical Committee T10
From: Kevin Butt, IBM
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Subject: SSC-3: TapeAlert Delineation

1. Revisions
Incorporated feedback from SSC Working Group. Complete rewrite.

2. Introduction
In response to the ISV Feedback this is a proposal for how to modify the TapeAlerts and specify which are hardware, which are media, and which are firmware. I am also taking this opportunity to specify when the device server will recognize the condition as having gone away and clear the specific tapealert.

3. Proposal

3.1 In 8.2.3 TapeAlert log page:

Table 59 specifies the format of a TapeAlert log parameter.

<table>
<thead>
<tr>
<th>Bit Byte</th>
<th>7</th>
<th>6</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>DU</td>
<td>DS(1)</td>
<td>TSD(1)</td>
<td>ETC</td>
<td>TMC</td>
<td>LBIN(0)</td>
<td>LP(0)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>CRITICAL</td>
<td>MIR</td>
<td>RETRY</td>
<td>INFO</td>
<td>HW</td>
<td>FW</td>
<td>MEDIA</td>
<td>FLAG</td>
</tr>
</tbody>
</table>

Table 59. TapeAlert parameter format
See SPC-3 for a description of the DU bit, DS bit, TSD bit, ETC bit, TMC field, LBIN bit, and LP bit. The DS bit, TSD bit, LBIN bit, and LP bit shall be set to the value specified in table 59.

A **CRITICAL** bit set to one when the **FLAG** bit is set to one indicates this error is critical. A **CRITICAL** bit set to zero when the **FLAG** bit is set to one does not indicate this error is critical. When the **FLAG** bit is set to zero, the **CRITICAL** bit is not valid.

A manual intervention required (MIR) bit set to one when the **FLAG** bit is set to one indicates this error requires manual intervention. A MIR bit set to zero when the **FLAG** bit is set to one does not indicate this error requires manual intervention. When the **FLAG** bit is set to zero, the MIR bit is not valid.

A **RETRY** bit set to one when the **FLAG** bit is set to one indicates this error is informational. A **RETRY** bit set to zero when the **FLAG** bit is set to one does not indicate this error is informational. When the **FLAG** bit is set to zero, the **RETRY** bit is not valid.

An **INFO** bit set to one when the **FLAG** bit is set to one indicates this error is informational. An **INFO** bit set to zero when the **FLAG** bit is set to one does not indicate this error is informational. When the **FLAG** bit is set to zero, the **INFO** bit is not valid.

A hardware (HW) bit set to one when the **FLAG** bit is set to one indicates this error is hardware related. A HW bit set to zero when the **FLAG** bit is set to one does not indicate this error is hardware related. When the **FLAG** bit is set to zero, the HW bit is not valid.

A firmware (FW) bit set to one when the **FLAG** bit is set to one indicates this error is firmware related. A FW bit set to zero when the **FLAG** bit is set to one does not indicate this error is firmware related. When the **FLAG** bit is set to zero, the FW bit is not valid.

A **MEDIA** bit set to one when the **FLAG** bit is set to one indicates this error is media related. A MEDIA bit set to zero when the **FLAG** bit is set to one indicates this error is not media related. When the **FLAG** bit is set to zero, the MEDIA bit is not valid.

An active TapeAlert flag has the **FLAG** bit set to one. An inactive TapeAlert flag has the **FLAG** bit set to zero.