ANSI/AIIM MS59-199X

Proposed American National Standard for Information Systems

Media Error Monitoring and Reporting Techniques for
Verification of Information Stored on Optical Digital Data Disks

W. S. Pott

AIIM

(Association for Information and Image Management)

- ANSI accredited standards org.
- Document image systems standards
  - started with micrographics
  - now addressing optical disk and scanners
- Over 100 standards and projects

AIIM C21: Optical Disk Applications

- Media error monitoring and reporting (EMR) techniques for optical disk
- Description and use of optical disk media standards for workplace
- Guidelines on the use of EMR for the verification of information on optical disk-based information systems

"Archival" Storage

- Different meanings for different folks
  - Computer usage typically 5 to 10 years
    - media obsolete by then anyhow
    - still lots of data on 5 inch open reel tape
  - Records managers want many decades
    - often need records for a human lifetime
  - Real archivists want many centuries
    - good quality paper can last centuries
    - photographic materials may last centuries

Optical Storage is Becoming Archival Medium of Choice

- Digital
  - many records today are digital
  - noiseless replication
- High capacity removable media
- Direct access
- Relatively long media life claimed
  - probably is better than tape
  - still is uncertain

Optical Media Impermanent

- Don't know media lifetime accurately
  - few convincing studies
    - optical media is relatively new
  - media changes rapidly
    - media formulations change frequently, even for the same product from the same vendor
    - new technologies are introduced
- ECC may mask deteriorating media
MS59 Inquiry Command
(Vital Product Data Page Codes)

<table>
<thead>
<tr>
<th>Page Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTh</td>
<td>Current Threshold Values Page for SCSI-2 (this code is Vendor Unique in SCSI-2)</td>
</tr>
<tr>
<td>ATh</td>
<td>Current Threshold Values Page for SCSI-3 (this code is Reserved in SCSI-3)</td>
</tr>
</tbody>
</table>

MS59 Status

- C21 Letter ballot passed
- AIIIM Standards Board ballot passed
- AIIIM membership ballot closed Mar. 4
- editorial comments
- Scheduled to be submitted to ANSI for further processing

ISO TC 171

- MS59 is base working document for Error Monitoring and Reporting (EMR)
- CD 12142

Requested SCSI-3 Page Codes
for Media Error Monitoring and Reporting in Optical Memory Devices

<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
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<tbody>
<tr>
<td>Mode Page Code: Media Errors</td>
<td>CTh</td>
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<tr>
<td>Device Parameters Page</td>
<td></td>
</tr>
<tr>
<td>Inquiry Vital Product Data Page Code: Media Error Log Page</td>
<td>ATh</td>
</tr>
<tr>
<td>Inquiry Vital Product Data Page Code: Current Threshold Values Page</td>
<td>ATh</td>
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