

To: T13

Attached is a note from Adaptec RAID development providing support for a WRITE LONG or a WRITE WRONG (e02126r0) command in ATA/ATAPI-7.

Ron Roberts, Adaptec, Inc.

From: Treadway, Tom

Sent: Wednesday, October 23, 2002 10:04 AM

To: Roberts, Ron

Subject: Write Long for ATA/SATA

We need a Write Long command in ATA/SATA to force a sector as bad in a RAID rebuild. For example, during a copy from one drive to another, if the source drive gets a media error, we need to force a media error on the destination drive. If not, then if the host reads that data from the destination drive we will give them garbage data. It is better to give the host an error. The alternative is keep track of these bad blocks and look them up before every read command. This has too much overhead.

This is a feature that we have in SCSI, and I believe it used to be in ATA. We need it back. Alternative, instead of a Write Long, we need a command that says "kill this sector". How the drive does it doesn't matter to us. We just want to get an error every time we read the sector. However, if we write the sector, we want it to become "good" again.

Make sense? Let's talk if you're not sure what I'm talking about.

Thanks,

Tom Treadway

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