To: T10 Committee
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Subj: SBC-3: Change to Background Medium Scan
Date: Aug. 30, 2005

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This document proposes a change in the definition of the BMS INTERVAL TIME that is defined in proposal 04-198r5. The wording change specifies that the interval time value go from the *start* (instead of end) of one background scan cycle to the start of the next one. The advantage is better predictability of how often a background scan operation occurs.

For example, suppose a drive in an idle system takes 3 hours to complete a scan, but a drive in a busy system takes 5 days to complete a scan. If the system wants to have a background scan every 7 days, it would have to set the BMS INTERVAL TIME to 48 hours to handle the case of a busy system, but the cycle time would become every 51 hours when the system was idle. With the new definition, the system could set the BMS INTERVAL TIME to 168 hours and predictably get one complete scan every 7 days regardless of how busy the drive was.

There also needs to be wording to cover the case when the actual scan time takes longer than the desired BMS interval. In this case we want to complete the current scan before starting a new one. If we use the same drive scan example from above, suppose the system wants a complete scan every 4 days (96 hours). If the bms interval time is set to 96 hours but the system is busy and takes 5 days to complete a scan, the current scan will continue to completion (taking 5 days) and the next scan will start immediately after that scan completes.

Editorial conventions – added text is underlined, deleted text is struck through, changes to tables are not specifically marked.

Change for page 4 of proposal 05-198 rev. 5:

The BMS INTERVAL TIME field specifies the minimum time, in hours, between the end start of one pre-scan or background medium scan operation and the start of the next background medium scan operation. If the current background medium scan operation takes longer than the specified BMS INTERVAL TIME value, it continues until completion and the next background medium scan operation starts immediately afterwards.