Introduction to HDD Field Assessable Reliability Metrics (FARM)
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Why FARM?

Better Visibility to HDD Health Condition

Support Accurate Fleet Management

Enable Proactive Reaction

Today SMART is not smart enough!
What is FARM?

Intent: Provide a data structure that enables Fleet Management and Failure Prediction with visibility and open access to device metrics

- FARM log provides access to metrics that capture HDD health, drive use and environmental parameters
- Monitoring FARM log data enables and supports HDD failure prediction (recommend daily/hrly)
- FARM is designed with ease of use in mind and all metrics are accessible and are readable by humans
FARM Basics

- Size: 96KB
- Log structure is based on pages (32 512-byte blocks)
- Log Structure has Five Pages Implemented and resolves security concerns on content visibility
- Includes HDD metrics at Device and Head level
- Statistical groups combined into single pages
- ~100 different metrics available to customers
- Data are self-describing
- All log pages are the same length
FARM Basics

- Available via SAS and SATA Interfaces
- Contain vendor unique log (address: 0xA6 (SATA))
- Enhancements to FARM Metrics will be reviewed on an ongoing basis to improve drive health monitoring and failure prediction
FARM Log Page Metrics

- Page 1: General Drive Information
- Page 2: Workload Statistics
- Page 3: Error Statistics
- Page 4: Environmental Statistics
- Page 5: Reliability Statistics
Next Step …

Useful?

Contact your Seagate Representatives!