

SS6000[™]

Enclosure Processor Error Message

Issue Description

SCSI Enclosure Services (SES) is firmware that runs on the storage enclosure processor (SEP) in each I/O module (IOM) of the SS6000 disk enclosure. SES monitors and manages each drive in the enclosure, as well as non-SCSI elements such as fans, power supplies, temperature sensors, and LEDs. This real-time monitoring and management generates diagnostic data that is stored locally on the IOM in SES diagnostic pages. SES supplies the contents of one or more of these pages whenever SFA OS sends a RECEIVE DIAGNOSTIC RESULTS command. SFA OS polls all enclosure IOMs with this command every 30 seconds.

Due to a bug in SES firmware version C03.030 and earlier, diagnostic page 04h may be unavailable when SFA OS asks for it. When this occurs, SFA OS posts a LOG_ES_SES_COMMAND_QUERY_FAILURE message to the event log and repeats the request. The second request is almost always successful, so the initial failure to retrieve page 04h does not affect storage system operation. This may not be evident, however, because successful commands do not generate messages in the event log.

In some system environments (but not all), LOG_ES_SES_COMMAND_QUERY_FAILURE messages appear at regular 30-minute intervals in the event log. This is due to underlying periodicity in the SEP processor conditions that trigger the firmware bug.

Products Affected

SS6000 disk enclosures running enclosure IOM firmware versions C03.030 and earlier are affected. These enclosures may be installed in S2A6620 or SFA10K storage arrays running SFA OS.

Resolution

The SS6000 enclosure is no longer in production. With products at this stage in their lifecycle, DDN will only fix defects which are deemed sufficiently severe to materially impact the function or data integrity of the system. Since this issue has no functional impact on the operation of the storage subsystem, and it does not affect data integrity in any way, DDN has determined that an enclosure firmware upgrade to address this issue will not be implemented.

Contacting DDN Technical Support

Please contact DDN Technical Support at any time if you have questions or require assistance. Support can be reached by phone, by email, or on the web as listed below.

Web

*DDN Community Support Portal
Portal Assistance*

<https://community.ddn.com/login>
webportal.support@ddn.com

Telephone

DDN Support Worldwide Directory

<http://www.ddn.com/support/contact-support>

Email

Support Email

support@ddn.com

Bulletins

Support Bulletins

End-of-Life Notices

Bulletin Subscription Requests

<http://www.ddn.com/support/technical-support-bulletins>
<http://www.ddn.com/support/end-of-life-notices>
support-tsb@ddn.com