Product Alert 19

Product	StorNext® releases 2,8, 3.1, 3.1.1, and 3.1.2
Summary	Possible data corruption
Date	November 2008

Overview

Customers running IRIX clients or metadata controllers using LSI Raid devices running in AVT mode may experience data corruption when doing I/O on the IRIX system. The problem occurs when there are non-StorNext based accesses to the LUN, specifically through the alternate controller. It is limited to LUNs labelled with a specific StorNext VTOC label format which was implemented starting with 2.8.1b40. (This issue is described in CR 24773.)

Symptoms

The detection of data corruption is the only symptom.

Cause

The StorNext disk labels were modified to satisfy Solaris 9 and 10 systems which started requiring more fields. If the fields weren't set, Solaris couldn't see the disks. However, setting these fields collides with part of the IRIX partition table. StorNext doesn't use the values in the partition table and its reads/writes are done to the entire LUN; however it seems to affect something in the system adversely.

While StorNext is using the LUNs, running a script which accesses the LUN through both controllers can cause data corruption. The script simply reads block 0 from the LUN while alternating between the paths such that both controllers are used.

Solution

Avoid running anything doing non-StorNext access to StorNext LUNs on IRIX. Avoid using AVT on LSI raids on IRIX. Relabel the LUNs using a cvlabel command that reverts to the old format unless a special option is supplied for Solaris. The cvlabel command's -r option must be used to force relabeling even though the label information isn't changing.

Contact Quantum Support if you think you might be affected by this issue. This problem will be corrected in a future StorNext release.