adic   # Product Alert #1 StorNext File System

Summary: If you are a StorNext Management Suite (SNMS) customer exporting the StorNext File System (StorNext FS) with multiple Network File System (NFS) clients, there is a possibility you could encounter data corruption.

Product: StorNext File System®

Versions: 2.2

Operating Systems: SGI IRIX®, RedHat Linux, and SuSE Linux

Date: February 2004

Notification

Data corruption may occur in the event that multiple NFS clients are accessing the same data within the StorNext FS.

Problems/Solutions

This section describes specific problems encountered in the identified product and release, and solutions to resolve these issues.

Problem 1:

- **Operating Systems** - SGI IRIX, Red Hat Linux, and SuSE Linux

- **Problem** - If a StorNext FS client is set up as an NFS file server and a StorNext file system is exported with asynchronous writes enabled, close-to-open cache consistency or file syncing is not guaranteed. For example:

    An NFS client writes and closes a file. Immediately afterward, a different NFS client connected to a different NFS server attempts to read the file and sees stale data or old data within the file.

- **Linux Solution** - Modify the /etc/exports file to use the "sync" export option. For example:

    /snfs   (sync)   Note: where /snfs is the mount point

- **IRIX Solution** - Modify the /etc/exports file to use the "wsync" export option. For example:

    /snfs   (wsync)   Note: where /snfs is the mount point

Problem 2:

- **Operating Systems** - Red Hat Linux and SuSE Linux

- **Problem** - If a Linux StorNext FS client acts as an NFS file server and experiences memory pressure, files written over NFS can be corrupted. Typically, the corruption takes the form of streaks of unexpected zeros found when the file is later read. These streaks are usually 4KB to 32KB in size.

- **Solution** - Upgrade to StorNext File System Version 2.2.1, build 50 or greater, which will be available 2/21/2004.

- **CRs Addressed** - 22163, 20960, 22456, and 24698