



Product Alert 17

Product	StorNext® 3.1 or 3.1.1
Summary	Possible metadata corruption.
Date	May 2008

Overview

Customers may experience metadata corruption if they run applications that have enough extended attribute (EA) data to overflow the space that's built into the inode, which is 128 bytes. (Note that StorNext uses some of the EA space internally, depending on whether certain features such as Data Migration, Quotas, and Windows Security are enabled.) This issue is limited to StorNext 3.1 and StorNext 3.1.1.

Symptoms

- 1 The FSM process panics with one of the following messages:

```
PANIC: /usr/cvfs/bin/fsm "alsplaytree_insert: CvSplayInsert(sblk) failed!" file alloc.c, line 454
```

```
PANIC: /usr/cvfs/bin/fsm ASSERT failed "(((alloc_blockp[byteoffs] >> nextbit) & 1) && 1) == 0" file trans_abm.c, line 1688
```

- 2 Running cvfsck shows doubly allocated blocks or other inconsistencies.

Cause

When large or numerous extended attributes are used by applications, a software defect in the StorNext file system may cause user data to be freed from files before they are deleted. This freed space can be re-used by newly created files and thus cause data corruption.

Solution

Run cvfsck to resolve any existing metadata inconsistencies. Upgrade to StorNext 3.1.2 to prevent the issue from recurring. Upgrading all MDCs is sufficient to avoid the issue.