

知 ONEStor产品+LSI 9361阵列卡下关闭SSD硬盘缓存

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问题描述

硬盘缓存开启的时候，如果机器意外掉电，有概率出现缓存内数据丢失的情况。为避免此类情况ONEStor开局指导中建议关闭硬盘缓存。

过程分析

LSI 9361阵列卡，SSD硬盘缓存默认提示为Disk's Default，且无法使用阵列卡指令进行调整，而9361阵列卡下此回显可能为开启了SSD硬盘缓存，因此需要按照本案例的方法进行核对。

解决方法

步骤1: lsblk确定要关闭的ssd盘符, 根据ONEStor缓存盘加速架构可知本环境中SSD盘符为sdb、sdc

```
[root@NODE2 ~]# lsblk
NAME        MAJ:MIN RM   SIZE RO TYPE MOUNTPOINT
sda         8:0    0 558.4G  0 disk
├─sda1      8:1    0   512M  0 part /boot/efi
├─sda2      8:2    0    1G    0 part /boot
├─sda3      8:3    0    2G    0 part
├─sda4      8:4    0    2M    0 part
├─sda5      8:5    0 504.9G  0 part /
├─sda6      8:6    0    50G   0 part /var/log
sdb         8:16   0   3.5T   0 disk ←
├─sdb1      8:17   0    16M   0 part
├─sdb2      8:18   0    65G   0 part
├─sdb3      8:19   0    33G   0 part
├─sdb4      8:20   0    2G    0 part
├─sdb5      8:21   0    65G   0 part
├─sdb6      8:22   0    33G   0 part
├─sdb7      8:23   0    2G    0 part
├─sdb8      8:24   0    65G   0 part
├─sdb9      8:25   0    33G   0 part
├─sdb10     8:26   0    2G    0 part
├─sdb11     8:27   0    65G   0 part
├─sdb12     8:28   0    33G   0 part
├─sdb13     8:29   0    2G    0 part
├─sdb14     8:30   0    65G   0 part
├─sdb15     8:31   0    33G   0 part
└─sdb20    259:3   0    65G   0 part
```

步骤2: 使用lsscsi指令确定逻辑阵列号 (第一列的第三位数字为逻辑阵列号)

```
[root@NODE2 ~]# lsscsi
[0:0:8:0]    enclosu MSCC      SXP 68x12G      RevB  -
[0:2:0:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sda
[0:2:1:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sdb
[0:2:2:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sdc
[0:2:3:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sdd
[0:2:4:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sde
[0:2:5:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sdf
[0:2:6:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sdg
[0:2:7:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sdh
[0:2:8:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sdi
[0:2:9:0]    disk      AVAGO    MR9361-8i      4.68  /dev/sdj
[0:2:10:0]   disk      AVAGO    MR9361-8i      4.68  /dev/sdk
[0:2:11:0]   disk      AVAGO    MR9361-8i      4.68  /dev/sdl
[0:2:12:0]   disk      AVAGO    MR9361-8i      4.68  /dev/sdm
[0:2:13:0]   disk      AVAGO    MR9361-8i      4.68  /dev/sdn
```

步骤3: 根据阵列号确定硬件DID号 /opt/MegaRAID/storcli/storcli64 /c0/v1 show all (v后编号为逻辑阵列号), 由图可知DID为26

```
PDs for VD 1 :
=====
-----
EID:SlT DID State DG      Size Intf Med SED PI SeSz Model      Sp
-----
8:18  26 Onln  1 3.492 TB SATA SSD N   N  512B INTEL SSDSC2K8038T8 U
-----

EID-Enclosure Device ID|SlT-Slot No.|DID-Device ID|DG-DriveGroup
DHS-Dedicated Hot Spare|UGood-Unconfigured Good|GHS-Global Hotspare
UBad-Unconfigured Bad|Onln-OnLine|OfFln-Offline|Intf-Interface
Med-Media Type|SED-Self Encryptive Drive|PI-Protection Info
SeSz-Sector Size|Sp-Spun|U-Up|D-Down|T-Transition|F-Foreign
UGUnsp-Unsupported|UGShld-UnConfigured shielded|HSPShld-Hotspare shielded
CFSHld-Configured shielded|Cpybck-CopyBack|CBSHld-Copyback Shielded
```

步骤4: 使用指令smartctl -g wcache -d megaraid,DID编号/dev/sdx, 查询硬盘缓存状态

如: smartctl -g wcache -d megaraid,26 /dev/sdb, 回显enable则为硬盘缓存开启, 需要进行关闭操作

```
[root@NODE2 ~]# smartctl -g wcache -d megaraid,26 /dev/sdb
smartctl 6.5 2016-05-07 r4318 [x86_64-linux-4.14.0-49.15.x86_64] (local build)
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```