

1)CPU.

Intel(R) Xeon(R) Silver 4110 CPU @ 2.10GHz

2)1X Intel P4610 SSD roles as a cache device.

SSD is directly inserted into the PCIe card slot of the motherboard through the riser card

3)1x HDD roles as a core device.

HDD module name : SEAGATE ST8000NM000A-2KE101

4)run DD.

(File_A and File_B are two files with the same size and different content)

dd if=File_A of=/dev/cas1-1 iflags=direct oflags=direct

dd if=File_B of=/dev/cas1-1 iflags=direct oflags=direct

5) unplug the power cord of the server to simulate unexpected power lose.

Forced power off via BMC before all dirty data is flushed to the core device.

Power on and wait for system to start.

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-- the start-up result is done.
9月 24 13:35:35 localhost.localdomain kernel: qla2xxx [0000:af:00.0]-8038:7: Cable is unplugged...
9月 24 13:35:37 localhost.localdomain kernel: qla2xxx [0000:af:00.1]-8038:16: Cable is unplugged...
9月 24 13:35:48 localhost.localdomain kernel: cachel: OCF metadata self-test PASSED
9月 24 13:35:51 localhost.localdomain kernel: cachel: Loading cache state...
9月 24 13:35:51 localhost.localdomain kernel: Thread cas_clean_cachel started
9月 24 13:35:51 localhost.localdomain kernel: cachel: Policy 'always' initialized successfully
9月 24 13:35:51 localhost.localdomain kernel: cachel: Attached core 1 from pool
9月 24 13:35:51 localhost.localdomain kernel: cachel: Disk lines = 2930053632
9月 24 13:36:24 localhost.localdomain systemd-udev[1027]: worker [1128] /devices/pci0000:85/0000:85:00.0/0000:86:00.0/nvme/nvme0/nvme0n1 is taking a long time
9月 24 13:36:43 localhost.localdomain kernel: cachel: ERROR: Cache device did not shut down properly!
9月 24 13:36:43 localhost.localdomain kernel: cachel: Initiating recovery sequence...
9月 24 13:37:21 localhost.localdomain systemd[1]: systemd-udev-settle.service: main process exited, code=exited, status=1/FAILURE
9月 24 13:37:21 localhost.localdomain systemd[1]: Failed to start udev Wait for Complete Device Initialization.
-- Subject: Unit systemd-udev-settle.service has failed
9月 24 13:38:10 localhost.localdomain kernel: cachel: Done loading cache state
9月 24 13:38:23 localhost.localdomain systemd-udev[1027]: worker [1128] /devices/pci0000:85/0000:85:00.0/0000:86:00.0/nvme/nvme0/nvme0n1 timeout; kill it
9月 24 13:38:23 localhost.localdomain systemd-udev[1027]: seq 8411 '/devices/pci0000:85/0000:85:00.0/0000:86:00.0/nvme/nvme0/nvme0n1' killed
9月 24 13:38:23 localhost.localdomain systemd-udev[1027]: worker [1128] terminated by signal 9 (Killed)
9月 24 13:39:15 localhost.localdomain kernel: INFO: task cas_cache_rol1b:1438 blocked for more than 122 seconds.
9月 24 13:39:15 localhost.localdomain kernel: Tainted: G OE 5.4.40-2005.11.el7a.x86_64 #1
9月 24 13:39:15 localhost.localdomain kernel: "echo 0 > /proc/sys/kernel/hung_task_timeout_secs" disables this message.
9月 24 13:39:15 localhost.localdomain kernel: cas_cache_rol1b D 0 1438 2 0x80004000
9月 24 13:39:15 localhost.localdomain kernel: Call Trace:
9月 24 13:39:15 localhost.localdomain kernel: ? __schedule+0x2c1/0x6a0
9月 24 13:39:15 localhost.localdomain kernel: schedule+0x39/0xa0
9月 24 13:39:15 localhost.localdomain kernel: kthread+0xc7/0x130
9月 24 13:39:15 localhost.localdomain kernel: ? cache_mngt_lock_complete+0x40/0x40 [cas_cache]
9月 24 13:39:15 localhost.localdomain kernel: ? kthread_bind+0x10/0x10
9月 24 13:39:15 localhost.localdomain kernel: ret_from_fork+0x35/0x40
9月 24 13:39:37 localhost.localdomain kernel: cachel: Finished rebuilding ACP metadata
9月 24 13:40:01 localhost.localdomain kernel: cachel: Done saving cache state!
9月 24 13:40:01 localhost.localdomain kernel: cachel: Cache attached
9月 24 13:40:01 localhost.localdomain kernel: cachel: Successfully loaded
9月 24 13:40:01 localhost.localdomain kernel: cachel: Cache mode : wb
9月 24 13:40:01 localhost.localdomain kernel: cachel: Eviction policy : lru
9月 24 13:40:01 localhost.localdomain kernel: cachel: Cleaning policy : acp
9月 24 13:40:01 localhost.localdomain kernel: cachel: Promotion policy : always
9月 24 13:40:01 localhost.localdomain kernel: cachel:core1: Successfully added
9月 24 13:40:01 localhost.localdomain kernel: cachel: Cache added successfully, but waiting interrupted. Rollback
9月 24 13:40:01 localhost.localdomain kernel: cachel: Stopping cache
9月 24 13:40:01 localhost.localdomain kernel: Thread cas_clean_cachel stopped
9月 24 13:40:23 localhost.localdomain kernel: cachel: Done saving cache state!
9月 24 13:40:23 localhost.localdomain kernel: Thread cas_io_cachel_1 stopped
9月 24 13:40:23 localhost.localdomain kernel: Thread cas_mu_cachel stopped
9月 24 14:05:05 localhost.localdomain casctl[1009]: Open CAS initialization failed. Couldn't set up all required devices
9月 24 14:05:05 localhost.localdomain casctl[1009]: Couldn't add device /dev/disk/by-id/wm-0x670053395b56825126b681b808c5d783 as core 1 in cache 1
9月 24 14:05:05 localhost.localdomain systemd[1]: open-cas.service: main process exited, code=exited, status=1/FAILURE
9月 24 14:05:05 localhost.localdomain systemd[1]: Failed to start opencas initialization service.
-- Subject: Unit open-cas.service has failed
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