Intel® Cache Acceleration Software (Intel® CAS) Version 2.0 for Linux*

Release Notes

February 2013

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Contents

Tables

Revision History

Date	Revision	Description
January 2013	001B	Initial Beta release of document.
February 2013	001	Initial public release of document.
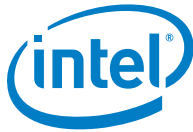
1 Release Description

This document describes extensions and deviations from the release functionality described in the Intel® Cache Acceleration Software (Intel® CAS) Version 2.0 for Linux* Administrator's Guide (document number: 328496).

1.1 Features

The features of Intel® Cache Acceleration Software Version 2.0 for Linux* are:

- Product name change from NEVEX* CacheWorks to Intel® Cache Acceleration Software (Intel® CAS)
- Support for caching to a remote (shared) flash volume
- General improved caching and eviction performance

1.2 Supported Hardware

Intel® CAS for Linux* is supported on the following hardware:

- Intel® SSD 910 Series
- Intel® SSD DC S3700 Series

1.3 Limitations

There are no limitations in this release.

1.4 Supported Platforms

Intel® CAS for Linux* supports the platforms listed below.

Table 1. Supported Platforms

Platform	Notes
Red Hat* Enterprise Linux* (RHEL*) 5.6	Built and configured with x86_64
Red Hat* Enterprise Linux* (RHEL*) 6.1	Built and configured with x86_64
SUSE* Linux* Enterprise Server (SLES*) Version 11 Service Pack 1	Built and configured with x86_64

2   *Known Issues*

The following table lists issues known to be present in the current release.

Reference	Short Description	Impact/Status/Workarounds
CASL-4758069	Uninstall not successful when attempted with Intel® CAS device mounted.	Uninstall attempted with a mounted cache filesystem will return an error. Workaround: Users should ensure all their critical data is secure and then fully unmount the `/dev/intelcas1` drive before attempting to uninstall Intel® CAS.
CASL-4758054	Misleading "Disk Device size mismatch!" message generated in /var/log/messages	Issue is related to errant comparison of sizes of a core and an "uninitialized" cache device. This error is caught and a message should instead warn of an "uninitialized" cache device. Issue has been documented and is under investigation.
CASL-4758050	Non-root users using the CLI can access "intelcas help" command in RHEL but not for SLES11 SP1 distributions.	Issue has been documented and is under investigation.
CASL-4758046	Cannot create ext3 filesystem with block size smaller than 4096.	Issue has been documented and is under investigation. Status: any block size less than 4096 is not supported for ext3 filesystem. Also see issue CASL-4756404.
CASL-4758045	Intel® CAS installer may build incorrect version number for kernel module (intelcas.ko)	Issue has been documented and is under investigation.
CASL-4758044	Install script, in some cases, prints an "Unexpected end of file" message during install process.	Issue has been documented and is under investigation.
CASL-4758035	Write Thru Performance is considerably slower when using disk partitions on Intel® CAS with Intel® SSD 910 Series device.	Issue has been documented and is under investigation. Interim workaround: Use the entire SSD as a raw device and do not use disk partitioning. Please see Intel® CAS Administrator's Guide for further implementation details.

Reference	Short Description	Impact/Status/Workarounds
CASL-4758019	In lab testing, during stacked cache device vbench tests, the removal of top level tier using the "intelcas remove 2" command may cause a kernel panic.	Issue has been documented and is under investigation.
CASL-4757995	Thread names are limited to a maximum of 16 characters strings.	Issue has been documented and is under investigation. Impact: Longer thread names will get truncated after 16 chars.
CASL-4757963	In limited cases, an unexpected "error opening ATTR" message can be found in Linux system /var/log/messages.	Issue has been documented and is under investigation. Current Status: Issue appears to be related to incorrect modification of an I/O scheduler which does not exist in Intel® CAS.
CASL-4757952	Intel® CAS CLI does not check input for correct number or mixed alphanumeric parameters.	Issue has been documented and is under investigation. Interim Workaround: CLI users should ensure that the correct number of parameters are being used and avoid using mixed alphanumeric characters/numbers as they may be incorrectly recognized.
CASL-4756426	Intel® CAS sometimes takes a long time (>=10 mins) to read a file from a degraded RAID volume.	Issue has been documented and is under investigation.
CASL-4756404	Non-cached core drive block size limited to 4096 only.	Non-cached core drive block size is limited to 4096 only in this release.

3   Resolved Issues

The following issues have been fixed since the previous release:

Reference	Short Description	Impact/Status/Workarounds
CASL-4758003	In some limited cases, when using the CLI 'add' command, both the cache and the core device may be allowed to be assigned to the same device.	Issue has been resolved.
CASL-4757977	In some limited cases, the locking system references an unprotected variable causing large conflicts for the same cache line resulting in a WRITE RACE DETECTED message to be logged in var/log/messages.	The unprotected variable has been protected and the issue has been resolved.
CASL-4757960	Error when adding and removing cache in rapid succession.	Issue has been resolved.