

Erasure failing with Lenovo machines with NVMe drives

Created date	Updated date	Affects version	Fix version
09 Aug 2018	07 Jun 2021	Drive Eraser - All versions	N/A

There is an on-going issue with multiple Lenovo machines equipped with NVMe drives where the erasure fails due to failing firmware erasure commands. The root cause of this issue is a security feature enabled within Lenovo's firmware which prevents executing required erasure commands successfully. This being the case, the issue occurs in all versions of Blancco Drive Eraser and any erasure tools using the Purge Level Erasure Standard.

This issue has been identified for the following machines (with NVMe drives):

- Lenovo Thinkpad E590, L480, L580, P51, P52, T14, T460s, T470, T470s, T570, T580, X270, X280, X390
- Lenovo Yoga 370, L380, X380, X390
- Lenovo ThinkCentre M715q, M910
- Lenovo X1 Carbon
- Lenovo X1 Carbon Yoga

As this issue prevents Blancco from running the firmware erasure commands, Purge-level erasure cannot be achieved when erasing the drive on its original host machine. Clear-level erasure result can be achieved with the traditional overwriting. If Purge-level result is required, the NVMe drive should be erased by connecting it to another host machine which allows Blancco software to execute needed firmware based erasure commands.

As Blancco continues to work with Lenovo support, it is also recommended that our customers engage Lenovo directly to report such an issue if impacting production environments. If you are experiencing this issue, please submit a [new support ticket](#) with the details of the affected machines and [issue reports](#) from the machines, and we will continue to collect all customer reports.

Update May, 2021:

Drive Eraser 6.17.0 allows running Purge-level erasure on some of these Lenovo devices equipped with NVMe drive. Depending on the machine configuration Blancco SSD Erasure method or NIST 800-88 Purge should be capable of purging the drive.

In case both of the erasure methods fail on purging the drive, the Purge-level erasure result can still be achieved by connecting the drive to another host machine for erasure.

Update Dec 5, 2019:

Good news! We have found some alternatives allowing to purge successfully **some Lenovo models** with Blancco Drive Eraser. The list of models (non-exhaustive) is below:

- ThinkCentre M720t, M720s, M720q, M710q, M710t, M710s
- ThinkPad L470, T570, X270, Yoga 370, L480, L380, X280, X380 Yoga, 13

If your Lenovo model is identical or falls under the same family of machines, please contact your Blancco Support for additional information.

Update Nov 2, 2018:

Thus far, Lenovo has been unwilling to make changes to this feature. We still recommend customers to create a support case with Lenovo if possible.

Workarounds:

1. Remove the drive from the unit, then erase using NIST Purge Level
2. Erase using NIST Clear Level
3. BDE 6.6 will include a feature with fallback functionality specific to NIST. If NIST Purge fails, the customer can automate the workflow to subsequently run NIST Clear.