Drive Eraser shows "TCG LOCKED" and erasure fails

Created date	Updated date	Affects version	Fix version
22 Mar 2023		7.6.0 and older	7.7.0

Description

When a drive shows "TCG LOCKED" in the Drive Eraser user interface the previous user or owner has enabled the TCG feature and Drive Eraser can not access the drive to perform an erasure. The drive has to be manually unlocked via a separate tool To unlock the drive follow the steps listed below.

Manual steps to unlock the drive

- 1. Download RESCUE64.img.gz image from the sedutil page
- 2. Decompress the Rescue system
 - a. Linux: gunzip RESCUE64.img.gz
 - b. Windows: Use 7-Zip
- Transfer the Rescue image to the USB stick

 Linux: dd if=RESCUE64.img of=/dev/sdX
 - b. Windows: Use Win32DiskImager to write the image to the USB stick
- 4. Boot the USB stick.
- 5. You will see the login prompt, enter "root" there is no password and you will get a root shell prompt
- 6. Check for TCG Enterprise compliant drives using

```
sedutil-cli --scan
```

Output will look like this

```
Scanning for Opal compliant disks
/dev/sda E SAS ST600MP0015 NT03
```

7. Check Locking status of the drive using

```
sedutil-cli --query
```

Output will look like this

```
/dev/sda SAS ST600MP0015 NT03 SEAGATE
TPer function (0x0001)
    ACKNAK = N, ASYNC = N. BufferManagement = N, comIDManagement = N, Streaming = Y, SYNC = Y
Locking function (0x0002)
    Locked = Y, LockingEnabled = Y, LockingSupported = Y, MBRDone = N, MBREnabled = N, MediaEncrypt = Y
Geometry function (0x0003)
    Align = N, Alignment Granularity = 1 (528), Logical Block size = 528, Lowest Aligned LBA = 0
Enterprise function (0x0100)
    Range crossing = Y, Base comID = 0x07fe, comIDs = 2
```

If output shows "Locked = Y" then this drive shall be unlocked 8. Note PSID on the drive label

r	HGST uuu.hgst.com
	Country of Origin: China CAN ICES-3(B)/MMB-3(B) CAN ICES-3(B)/MMB-3(C) CAN ICES-3(C)/MMB-3(C) CAN ICES-3(C)/MMB-3(C)/CONTRACTOR
	D33373 MSIP-REM-HG2-HUSM1616AS20
	MARRANTY VOID IF ANY LABEL' SCREW IS REMOVED OR BROKEN MODEL:HUSMM1616ASS201 SAS RATED: 5V 0.7A. 12V 0.6A
	CAPACITY: 1.6 TB P/N : 0832142 F/W: 8250
	P/N: 0832142 S/N: 05WWH15A
	H9ST EUR.LTD. / MARIE CURIEWEG 20, ROERMOND, LIMBURG, 6045 GH, NETHERLANDS TYPE: UCMSSBIGM KCAWUM
	PSTD: JSPJKWA

- Note that every drive has its own unique PSID! 9. With the matching PSID the drive can be unlocked with following command, replace "sda" with the matching "sdX" number of the drive you want to unlock
 - a. For HGST and Western Digital drives i. For TCG Enterprise drives

sedutil-cli --PSIDrevertAdminSP PSIDpasswordPrintedOnLabel /dev/sda

ii. For TCG Opal/Pyrite/Ruby drives

sedutil-cli --yesIreallywanttoERASEALLmydatausingthePSID PSIDpasswordPrintedOnLabel /dev/sda

b. For Seagate drives

sedutil-cli --yesIreallywanttoERASEALLmydatausingthePSID PSIDpasswordPrintedOnLabel /dev/sdX

10. If multiple drives are used and to find the matching "sdX" and disk serial use following command

find -L /sys/class/block -maxdepth 4 -name vpd_pg80 -exec cat {} \; -exec echo {} \;

This will show a list of all connected drives, including the "sdX" and disk serial

W461R3VJ /sys/class/block/sde/device/vpd_pg8011. Repeat these steps with all drives which need to be unlocked.