Black Screen when booting with Blancco Drive Eraser

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Problem

Booting Blancco Drive Eraser hangs or causes a black screen with machines with specific graphical configurations.
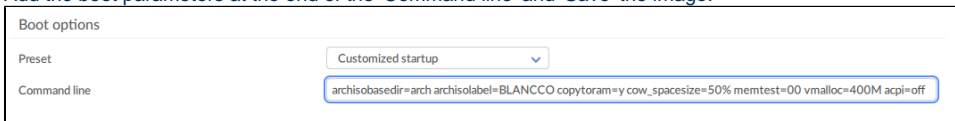
Resolution

To resolve issues that are caused by incompatibilities with the system and Blancco Drive Eraser, some parameters need to be entered into the kernel. The following steps are for entering parameters into Blancco Drive Eraser during boot-up:

1. Boot the machine, select the booting option (e.g. "FLR during startup"), press "e" to edit the option.
2. With arrow keys, move the cursor down to the line starting with: "linux /arch/boot/x86_64/vmlinuz img_dev=..."
3. Move the cursor after "flr" and include the required booting parameter(s)
   Booting parameters should be separated by a space, for example: "*flr=forced nouveau.modeset=0*"
4. Press Ctrl + "X" or F10 to continue booting

Once the correct boot parameters are identified for the system, they can also be permanently added to the Blancco Drive Eraser ISO boot image with the Blancco Drive Eraser Configuration Tool.

1. Load your Blancco Drive Eraser ISO image into the tool and select 'Customized startup' from the OS -tab > Boot options.
2. Add the boot parameters at the end of the 'Command line' and 'Save' the image.

With NVIDIA GPU

This issue has been identified at least for the following devices using an NVIDIA GPU, causing a black screen during boot-up:

System manufacturer	System model
HP	ZBook Studio G3
HP	ZBook 17 G3
HP	ZBook Studio G5
Dell	Precision 7540
Dell	Precision 7550

Pass the *nouveau.modeset=0* parameter to the kernel:

```
... flr=forced nouveau.modeset=0
```

In the Drive Eraser Configuration Tool:

If the issue still occurs with the "*nouveau.modeset=0*" booting parameter, additional booting parameters should be tested. Replace the "*nouveau.modeset=0*" parameter with the one of the additional parameters mentioned below:

```
rd.driver.blacklist=nouveau
modprobe.blacklist=nouveau
```

With AMD GPU

This issue has been identified at least for the following devices using an AMD GPU, causing a black screen during boot-up:

System manufacturer	System model
HP	ProBook 445 G6 (AMD Ryzen 3)

Pass the *rd.lvm=0 nvme_core.default_ps_max_latency_us=0* parameters to the kernel:

... flr=forced rd.lvm=0 nvme_core.default_ps_max_latency_us=0

In the Drive Eraser Configuration Tool:

Boot options

Preset	Customized startup ∨
Command line	archisobasedir=arch archisolabel=BLANCCO copytoram=y cow_spacesize=50% memtest=00 vmalloc=400M rd.lvm=0 nvme_core.default_ps_max_latency_us=0

With Apple computers

Information about booting with Intel/T2 Apple computers: Erasing Apple computers with Blancco Drive Eraser

With dual graphics (Intel + AMD/ATI)

Some systems with dual graphics, such as Intel paired with AMD/ATI causes the system to black screen as it can't be brought out of standby correctly.

This issue has been identified at least for the following devices:

System manufacturer	System model
Dell	Vostro 3350

Pass the *radeon.runpm=0* parameter to the kernel:

```
... flr=forced nouveau.modeset=0 radeon.runpm=0
```

In the Drive Eraser Configuration Tool:

Boot options

Preset	Customized startup ∨
Command line	archisobasedir=arch archisolabel=BLANCCO copytoram=y cow_spacesize=50% memtest=00 vmalloc=400M radeon.runpm=0

with Dell iDRAC

Booting Blancco Drive Eraser 7 fails on DELL servers with iDRAC virtual console. The user interface goes to a black screen during the boot process and the iDrac virtual console becomes inaccessible.

This issue has been identified at least for the following machines:

System manufacturer	System model
Dell	PowerEdge R630

Dell	PowerEdge R6515

Pass the *vga=791* parameter to the kernel:

```
... flr=forced nouveau.modeset=0 vga=791
```

In the Drive Eraser Configuration Tool:

Boot options

Preset	Customized startup ⌄
Command line	archisobasedir=arch archisolabel=BLANCCO copytoram=y cow_spacesize=50% memtest=00 vmalloc=400M vga=791

FLR Fails

If hard drives are freeze locked, Blancco Drive Eraser will attempt to remove the lock by power cycling the machine: The screen turns black for few seconds before returning. Depending on the booting option used to boot Blancco Drive Eraser or the configured erasure process ("Manual", "Semi-automatic" or "Automatic"), the Freeze lock removal may occur before the GUI starts or right before an erasure process starts. Unfortunately in some hardware configurations the screen might not turn back on, meaning that the freeze lock removal procedure is not properly supported by the machine. In these cases, the suggested procedure is the following:

1. Try booting Blancco Drive Eraser using the second booting option (Normal startup (native resolution))
2. If problems arise with the aforementioned booting option (black screen, machine is unresponsive), try booting Blancco Drive Eraser using the first option (Normal startup (safe resolution))
3. If problems arise during the booting phase, try booting Blancco Drive Eraser using the fourth option (Show startup messages).

More details about issues with the Freeze Lock Removal procedure can be found in this article.

Alternative solutions

- If the hard drive light starts blinking indicating the erasure is in progress, you should be able to monitor the erasure remotely via the Blancco Management Console.
- If the machine is on (lights are on, fan is running) but the drive light is not blinking, you may be able to control the erasure remotely via the Blancco Management Console.
- If the machine is unresponsive (light are off, fan not running), try in order:
  - Press any keyboard key or push the machine's power button for 1 second to wake up the machine and restart Blancco Drive Eraser.
  - Check from the BIOS/UEFI settings that the machine can be suspended and restarted, if the setting exists make sure that it is enabled.
  - Remove the drive from the machine and connect it to another machine that is properly supported.
  - Shut down the computer, unplug the drive's signal or power cable, power on the computer, boot Blancco, and then plug the drive's signal or power cable back in when you see the loading progress bar (Note: This method is not recommended by Blancco, as the drive may get damaged in the process).