Open Source compliance: Technical must-knows for legal experts

Open Source Automation Development Lab (OSADL) eG

What is “booting a computer”?

Booting a computer (example: Linux)

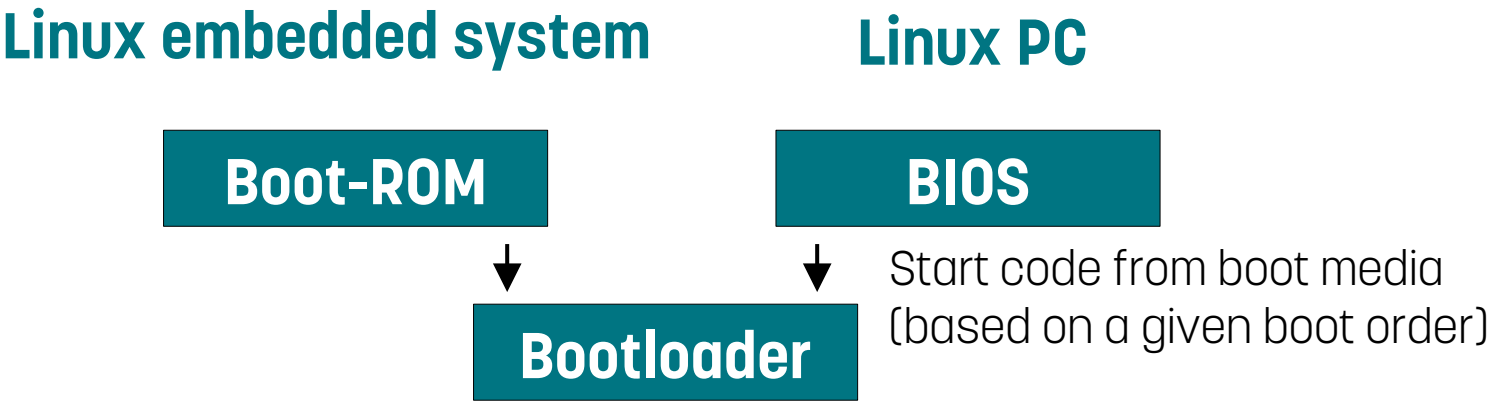
Linux embedded system

Boot-ROM

Linux PC

BIOS

Booting a computer (example: Linux)



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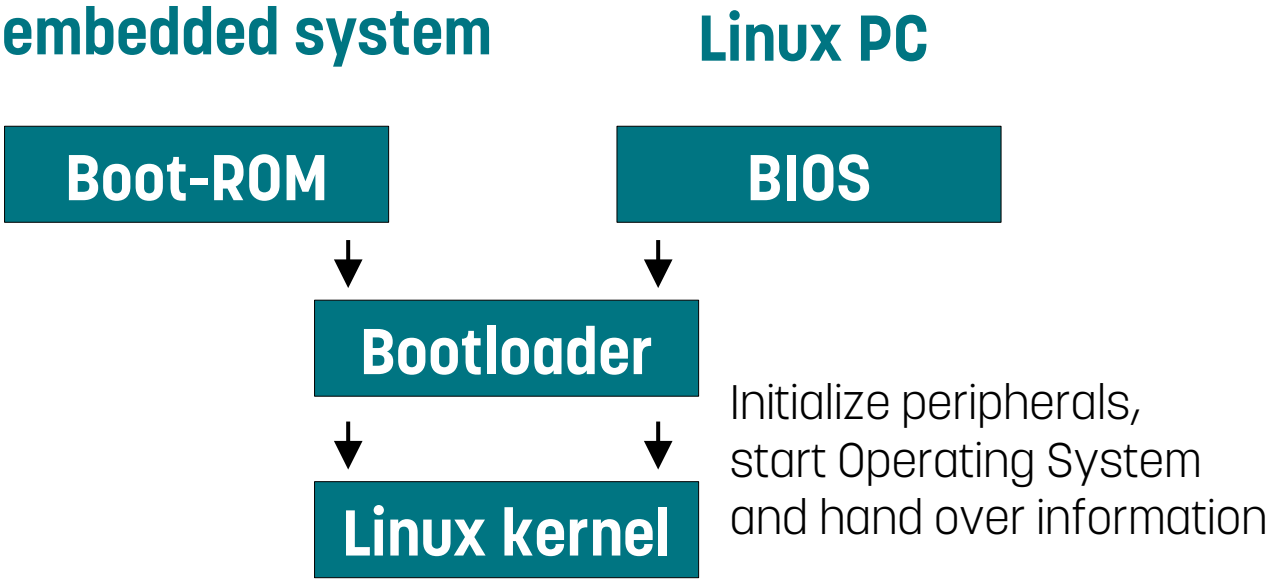

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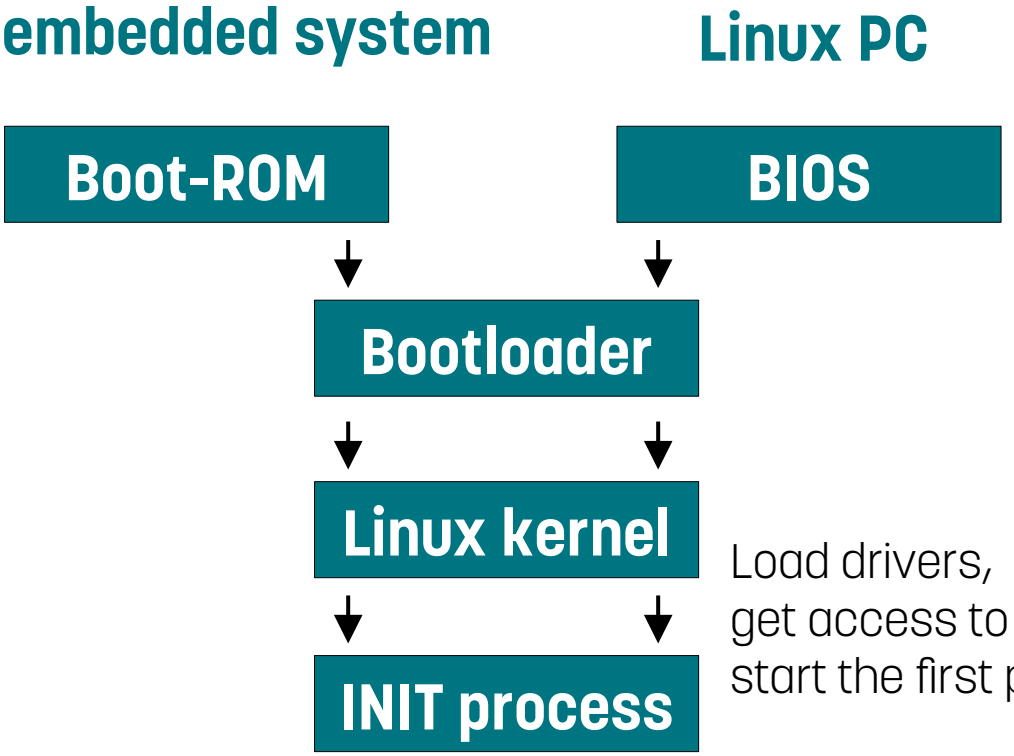

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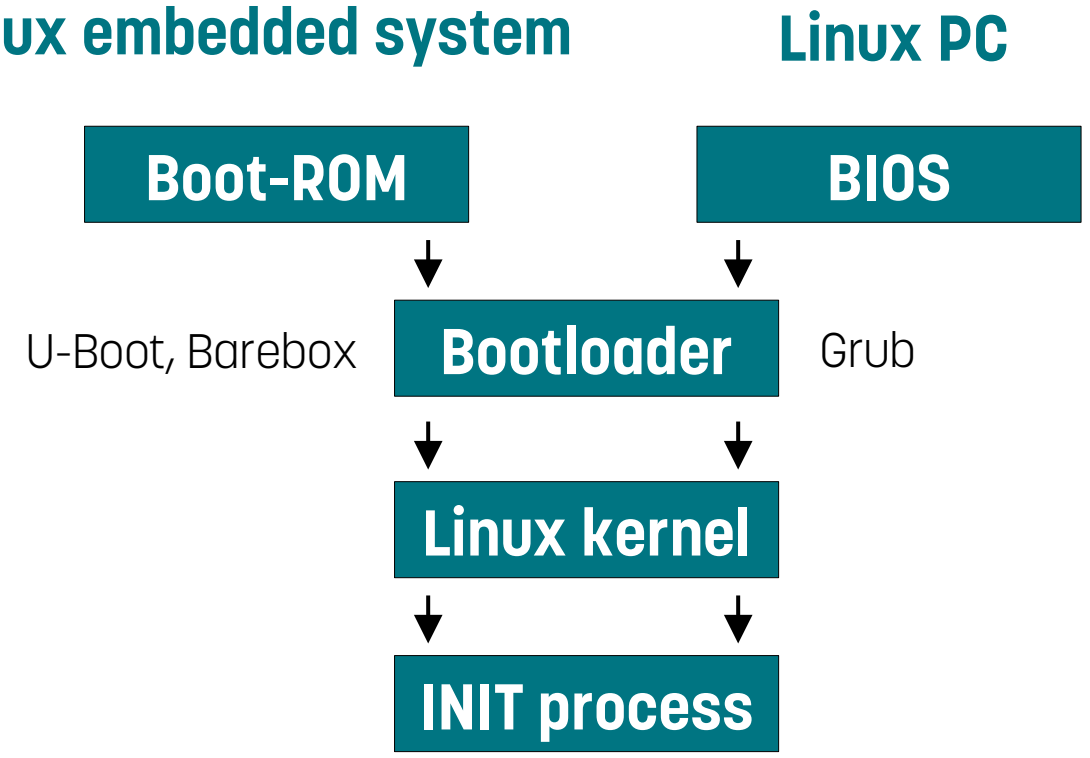

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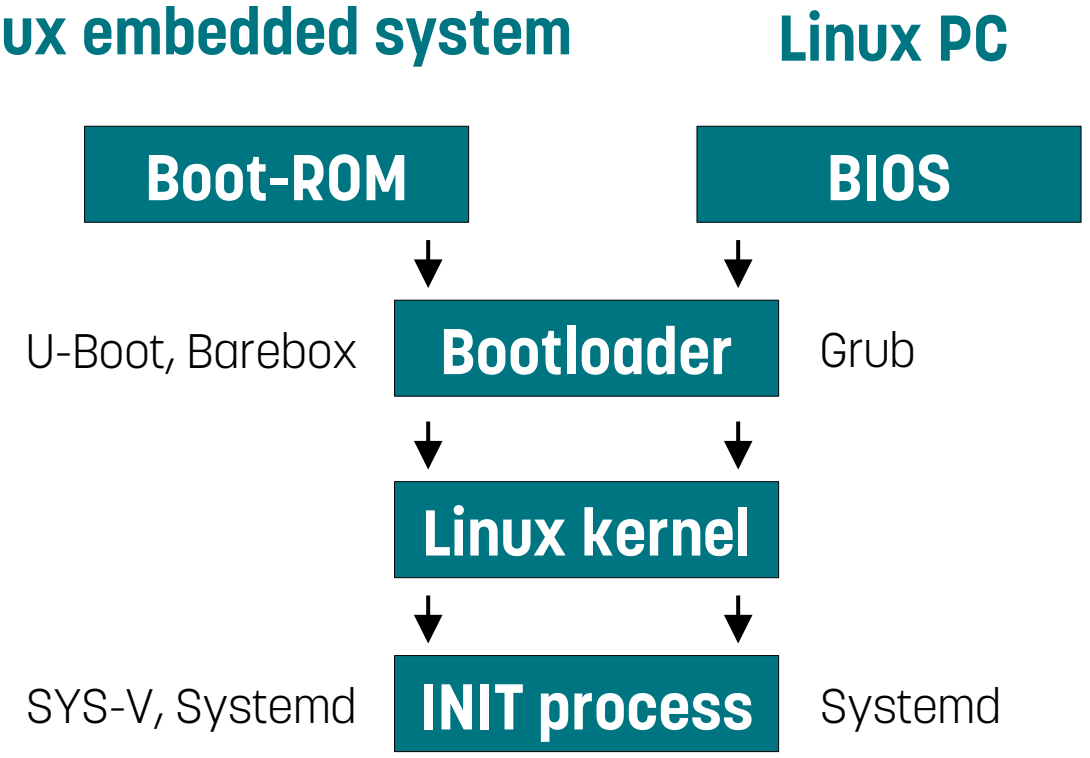

What is Secure Boot?

Linux embedded system

Boot-ROM

Bootloader

Linux PC

BIOS

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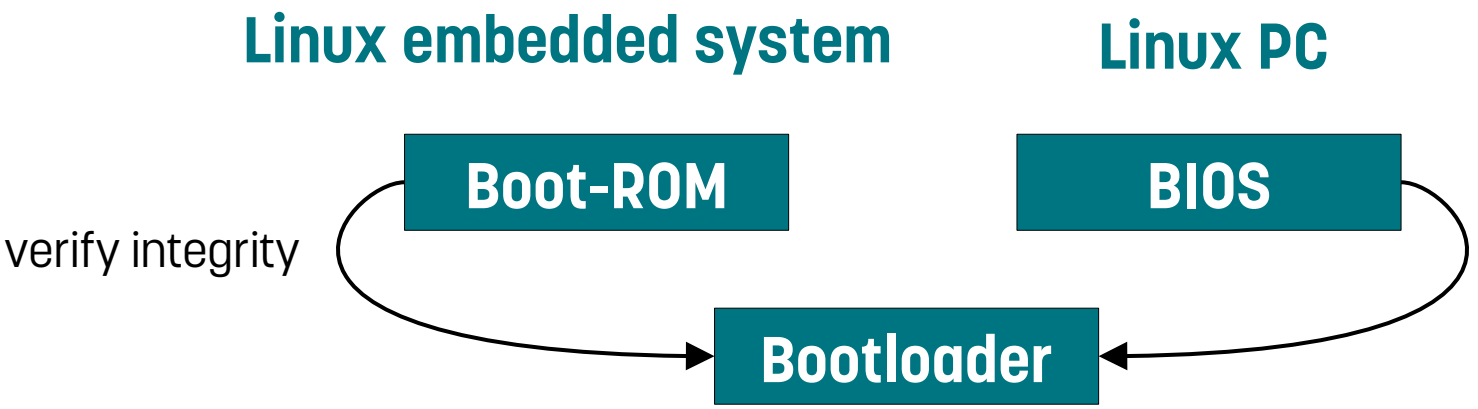

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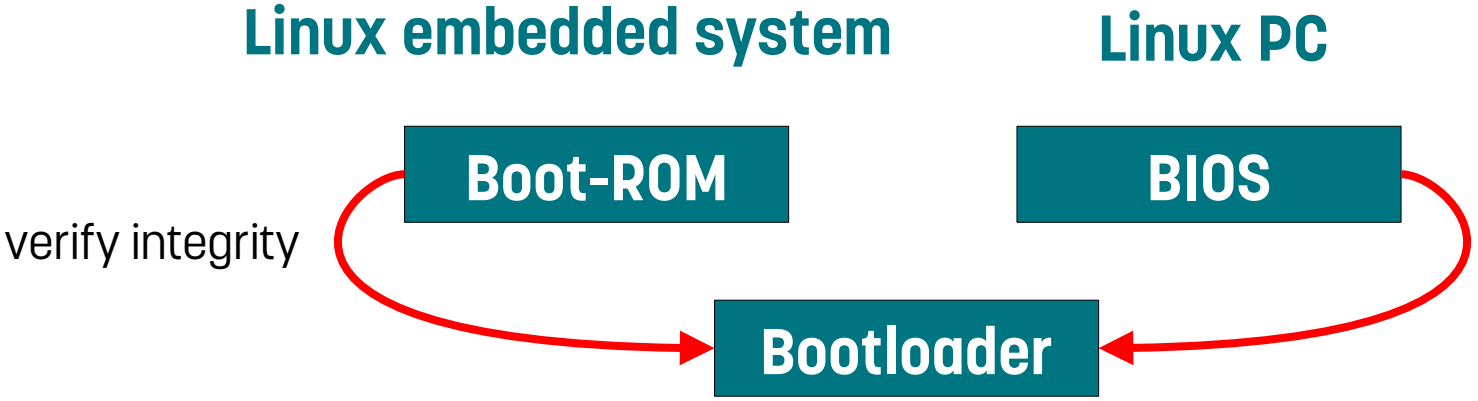

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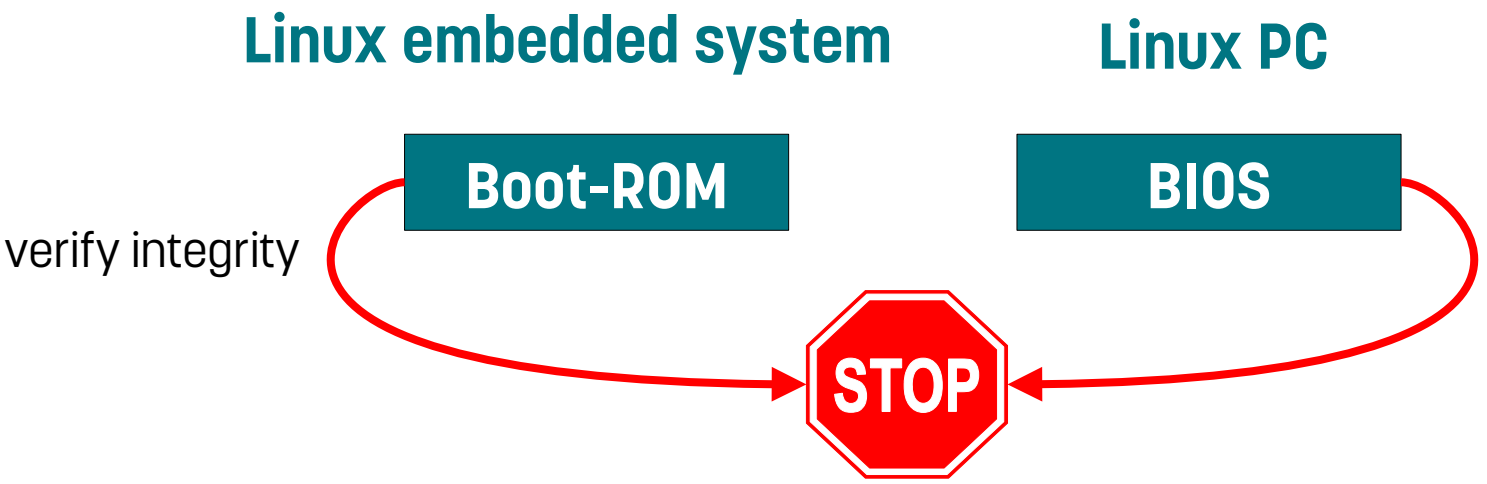

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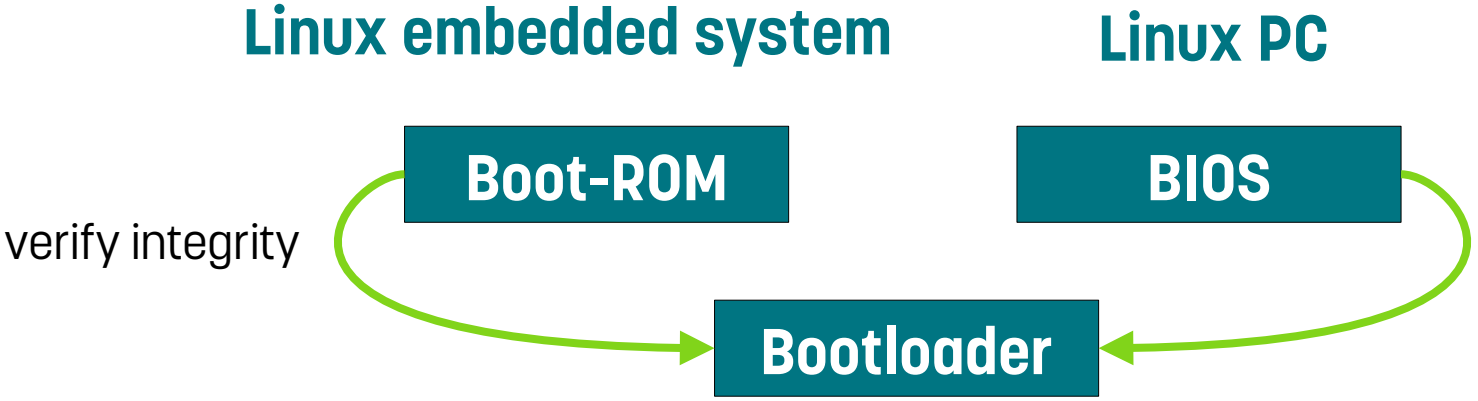

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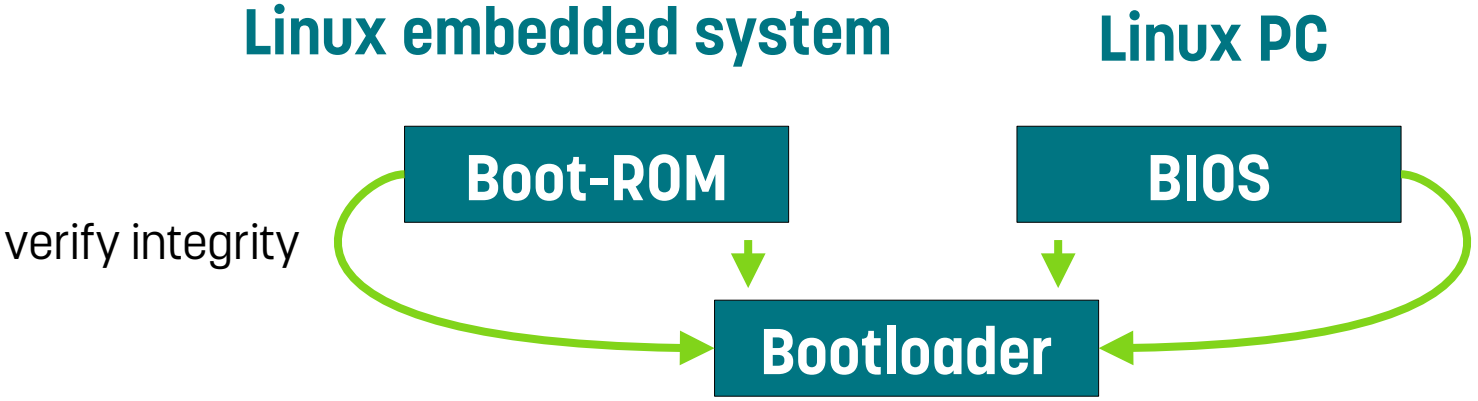

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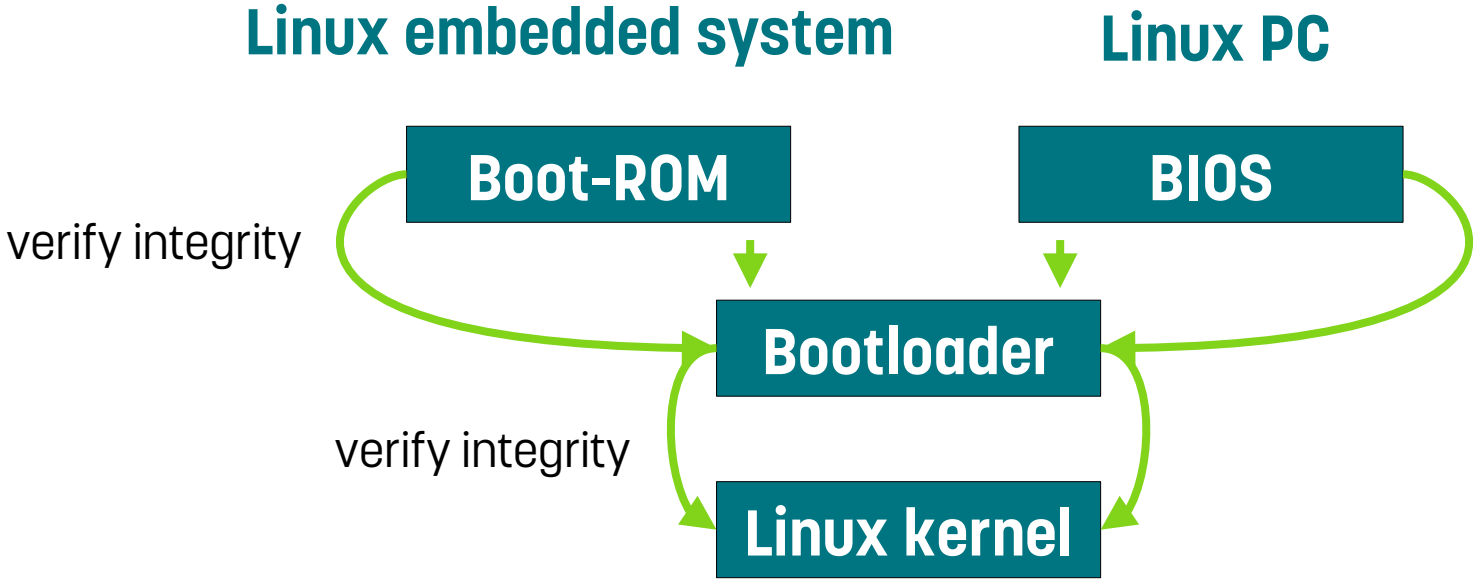

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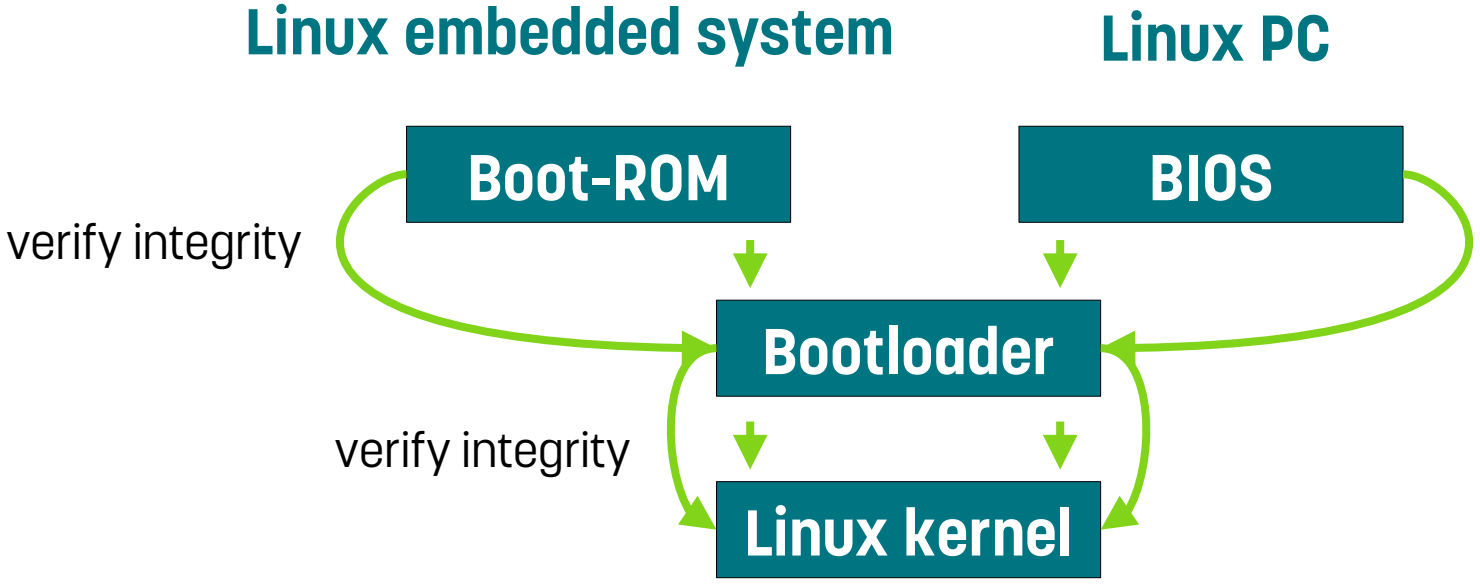

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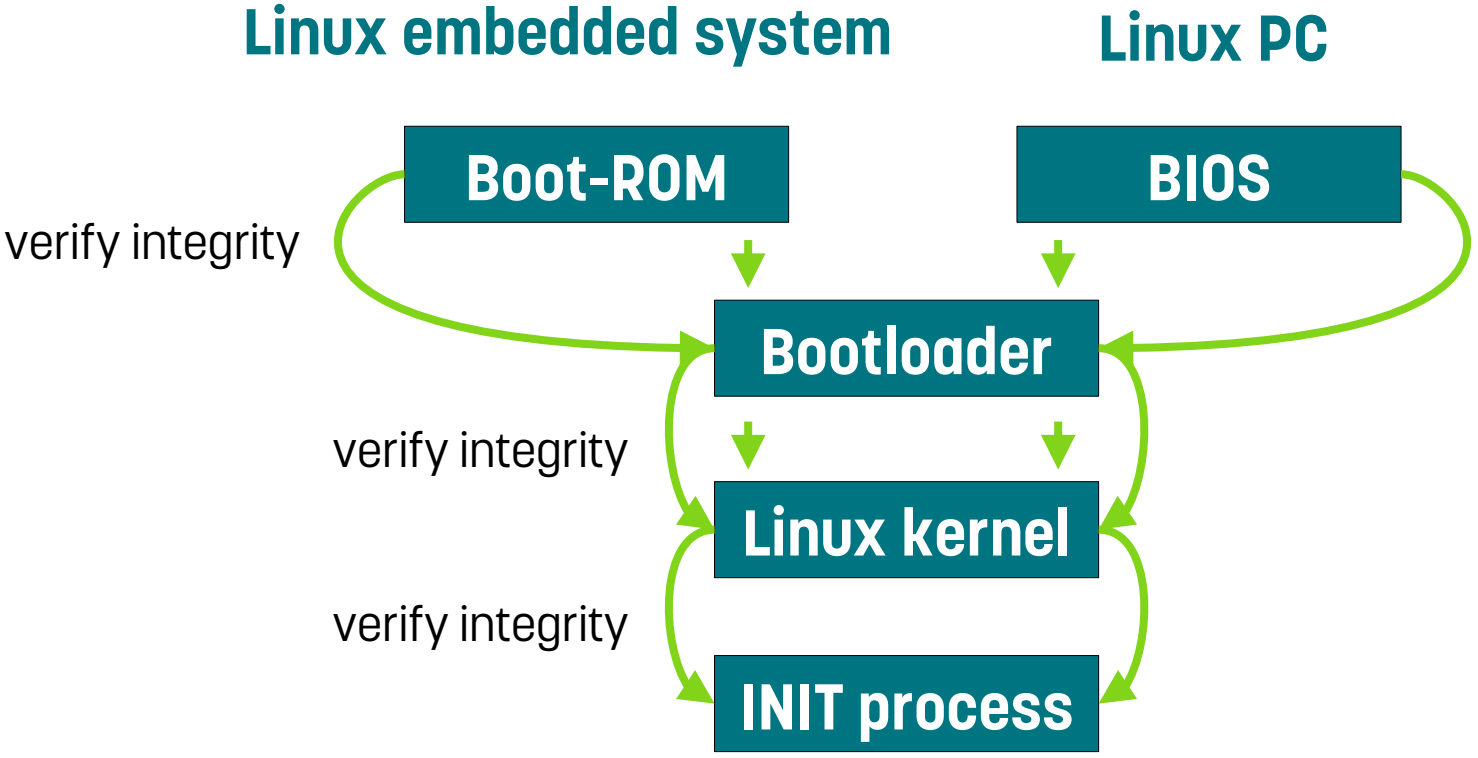

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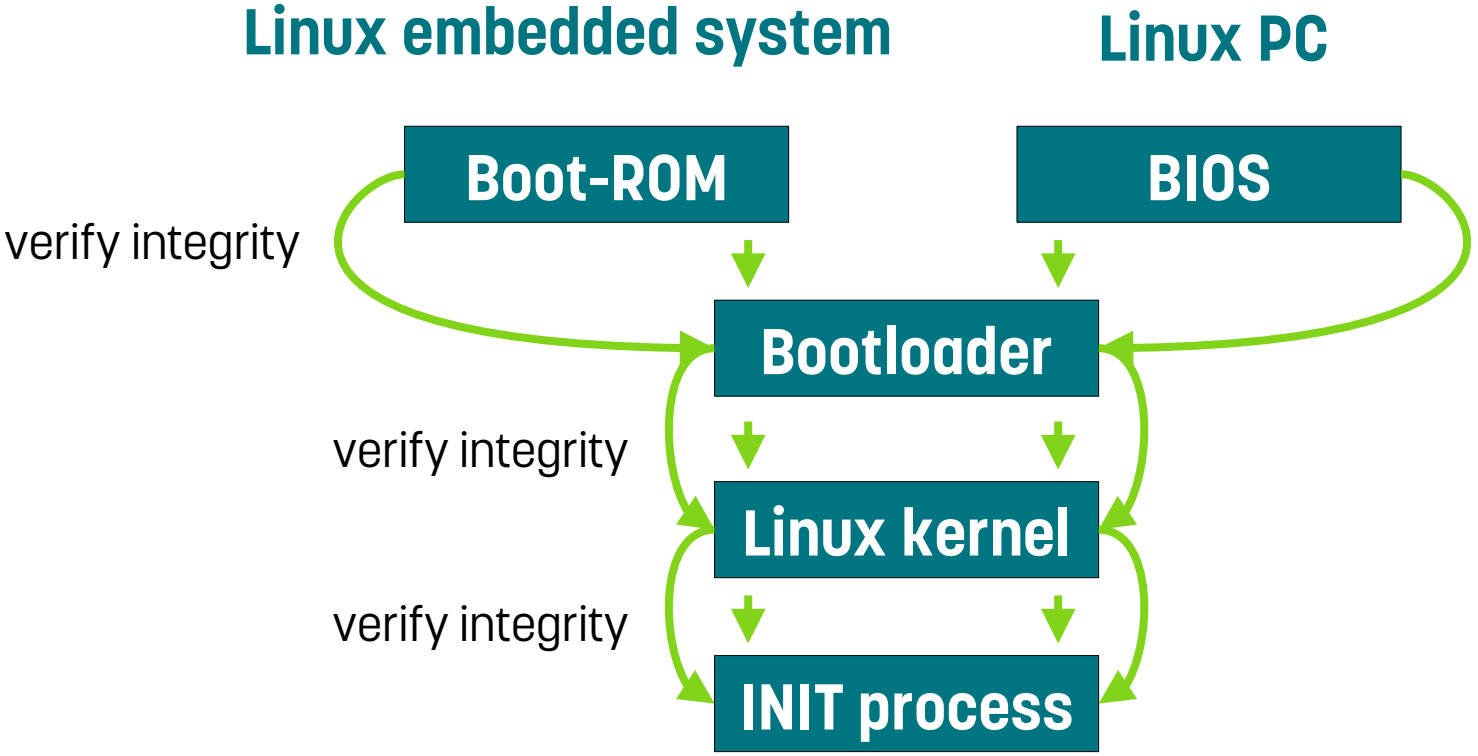

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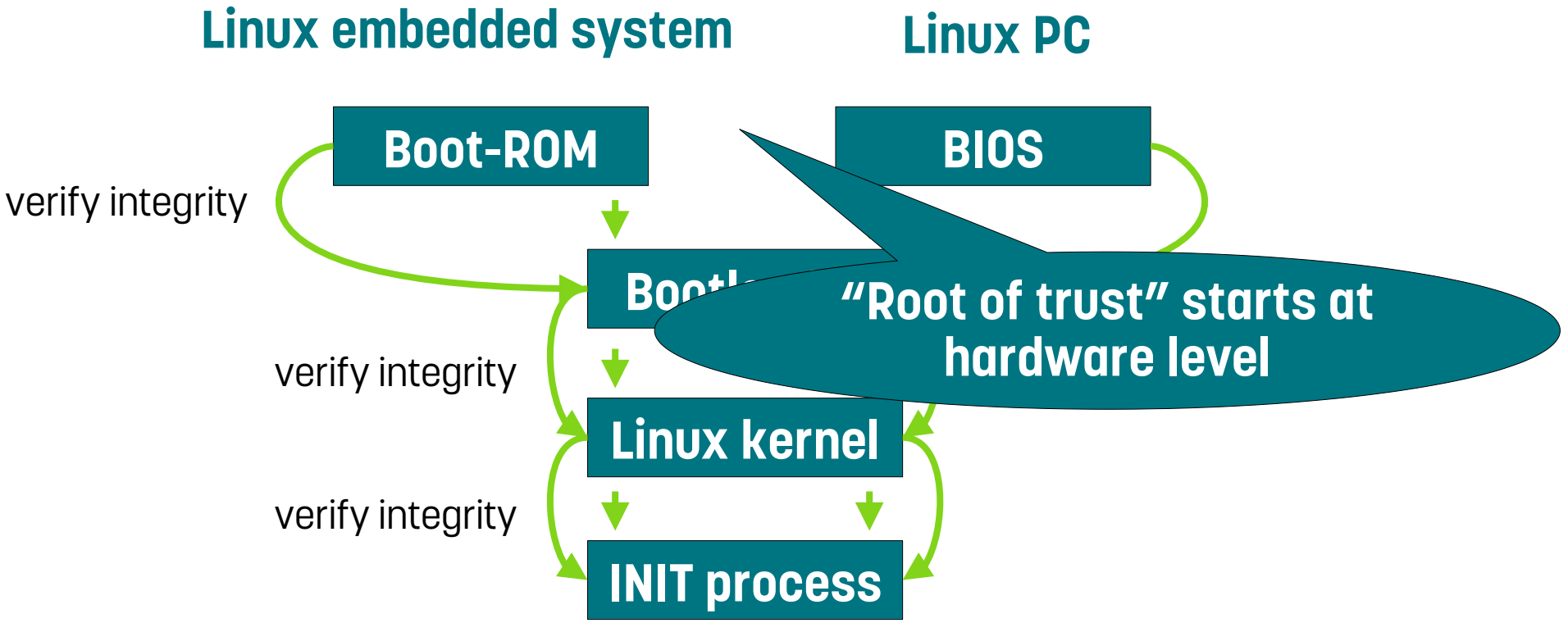

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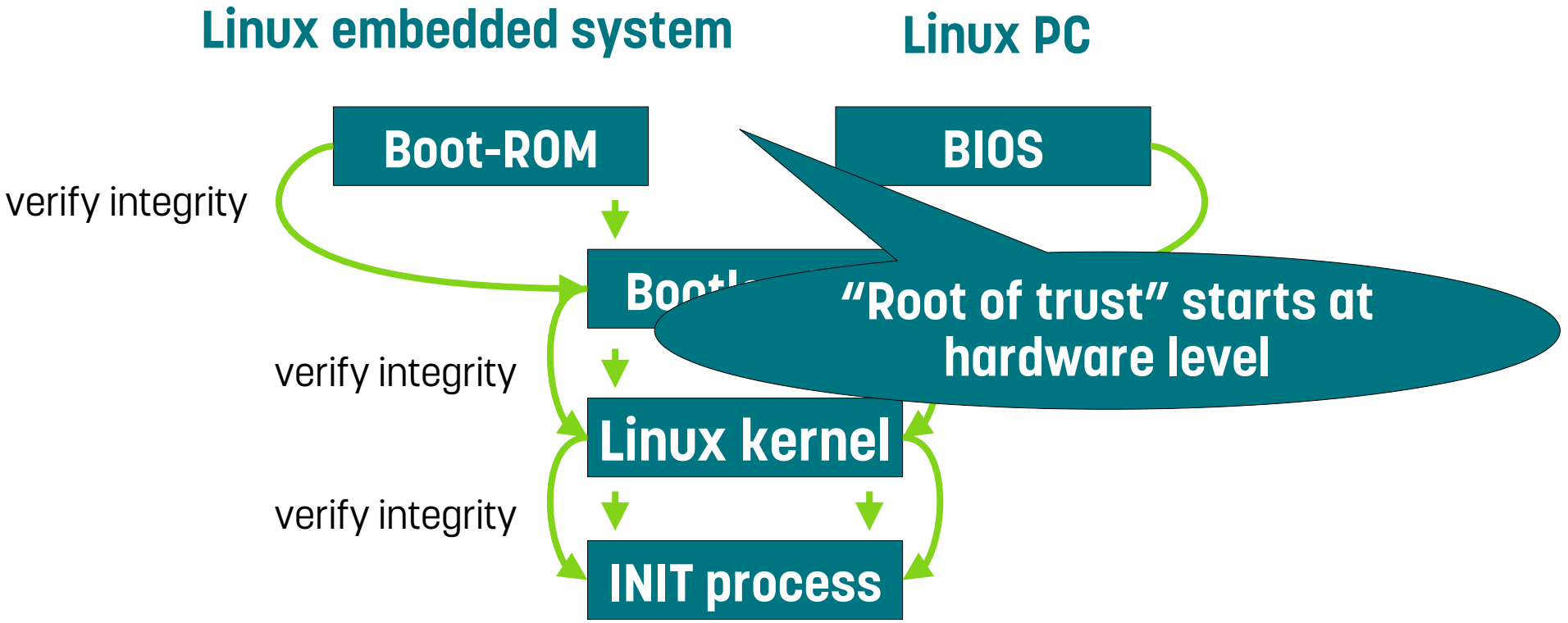

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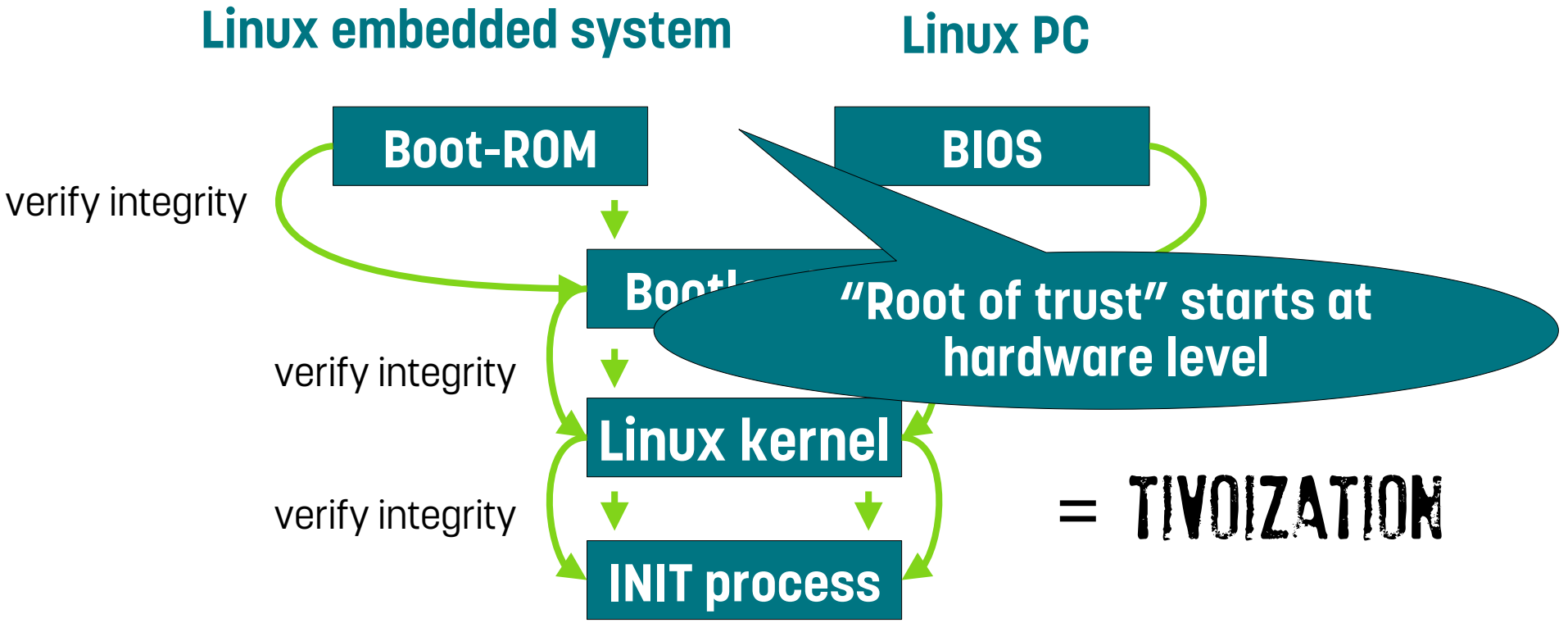

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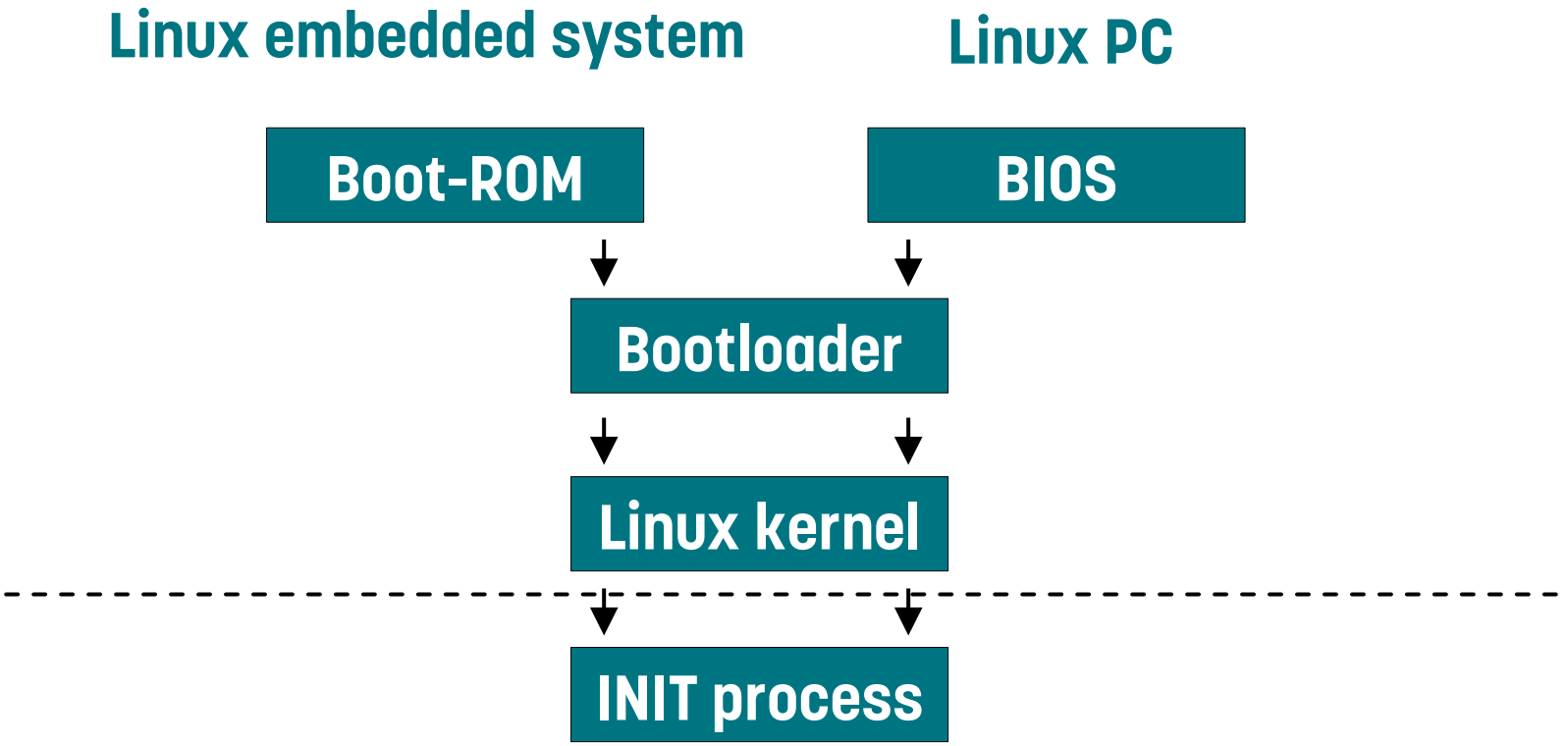

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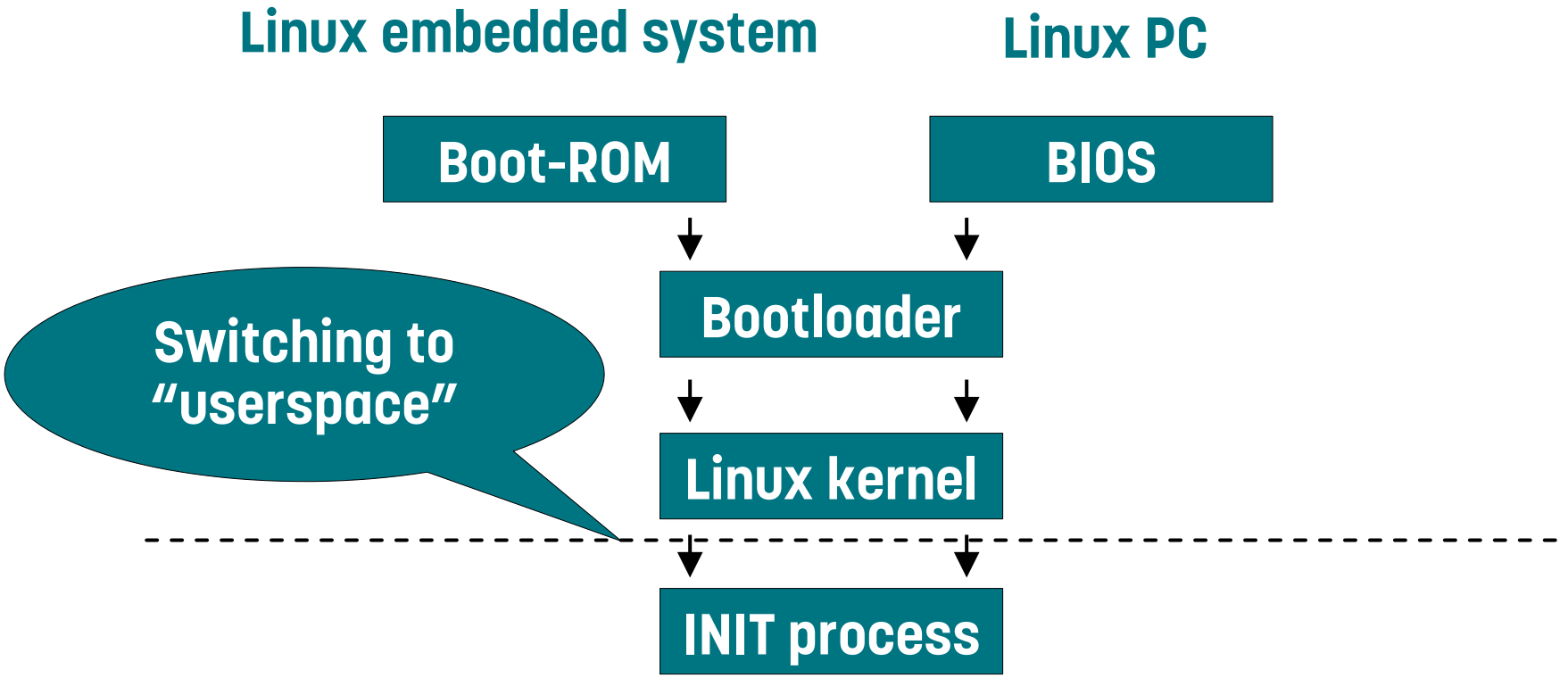

Kernelspace vs. userpace

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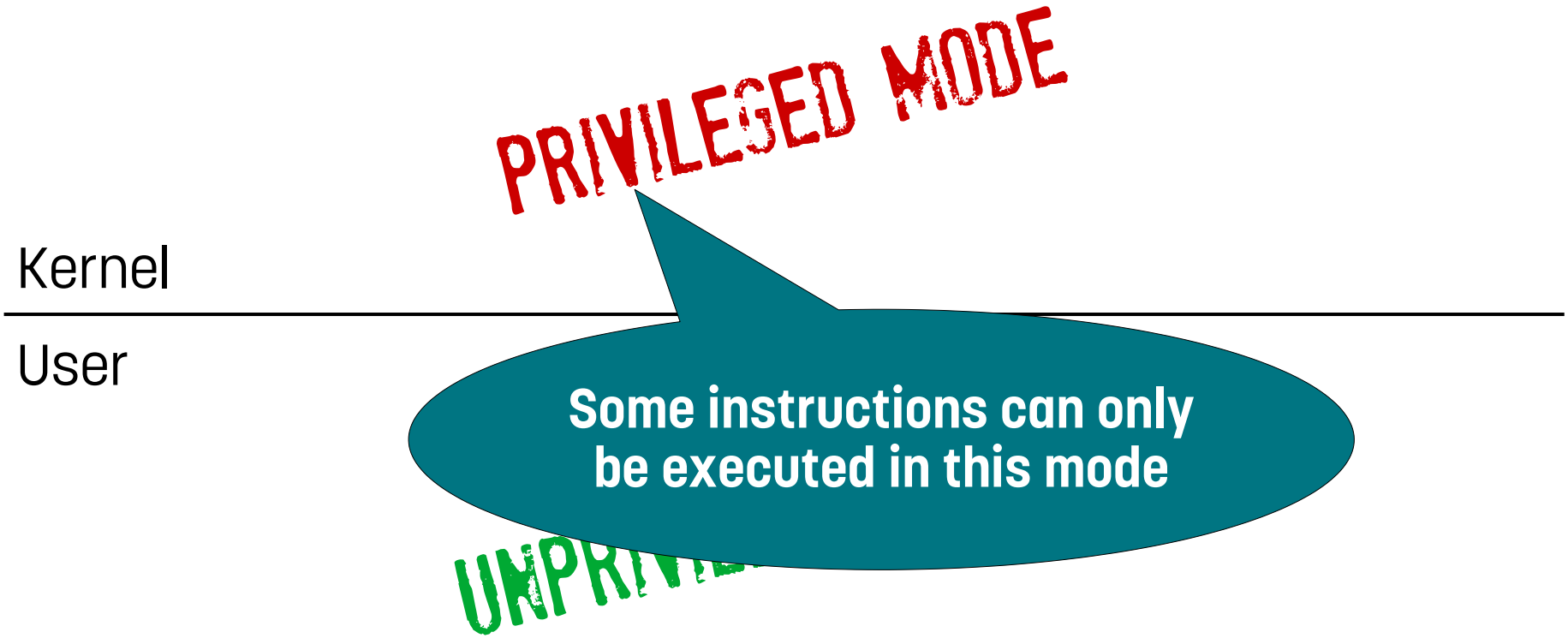

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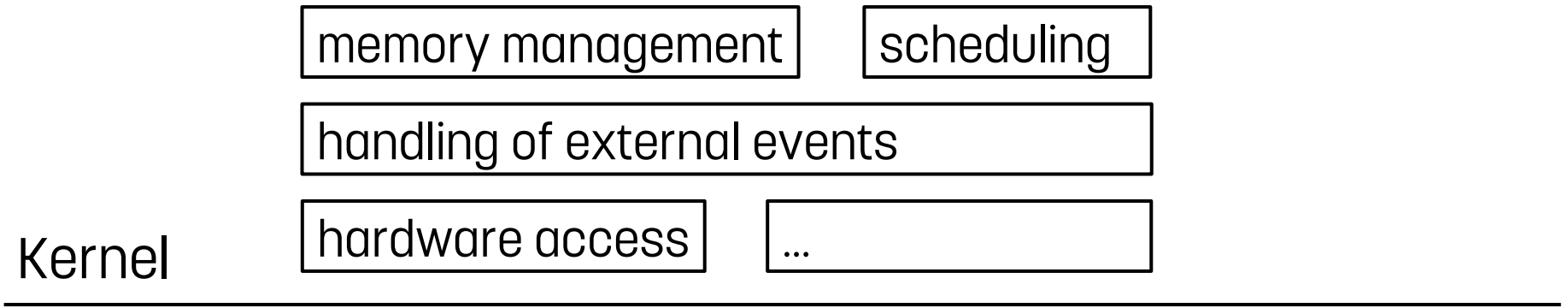

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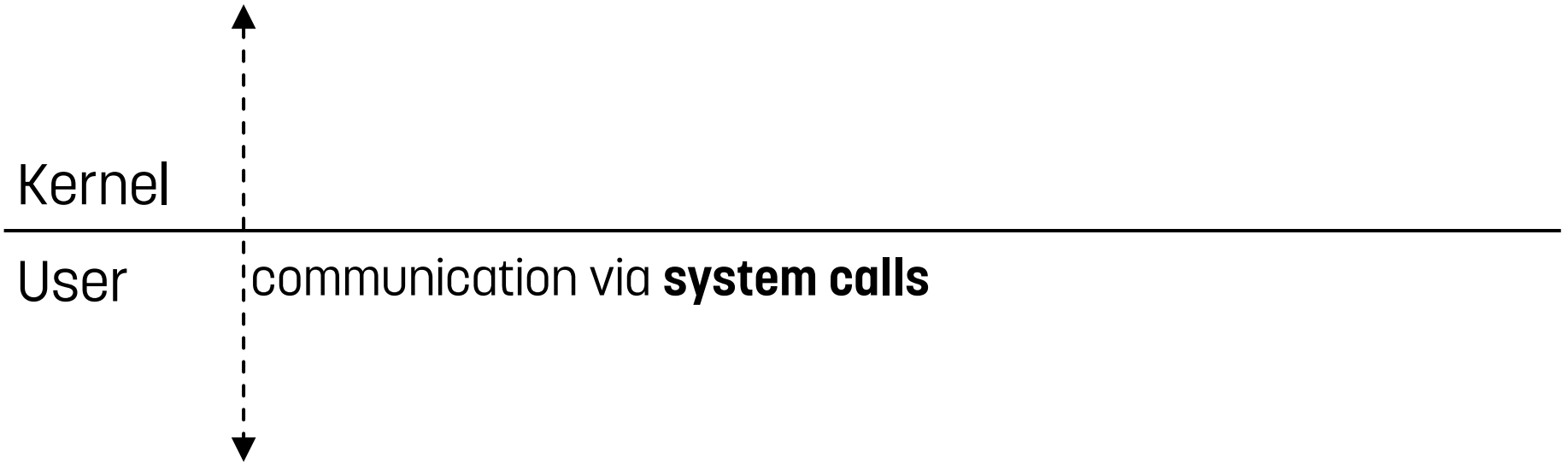

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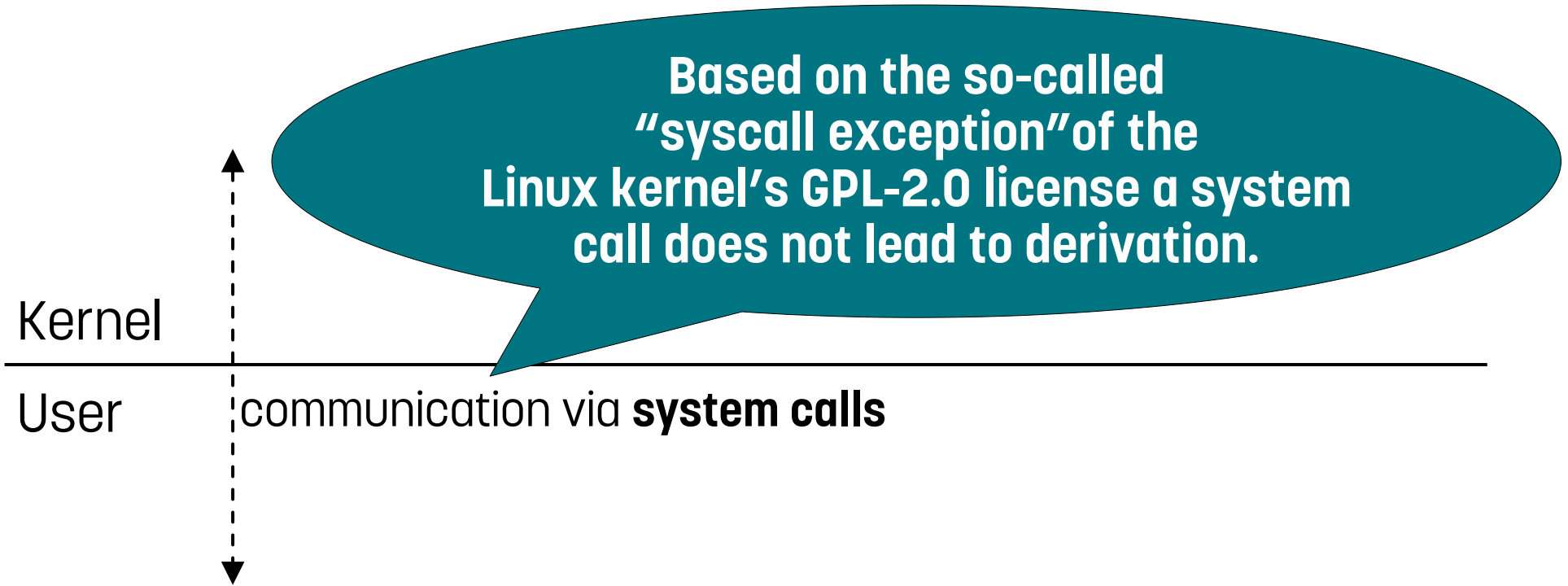

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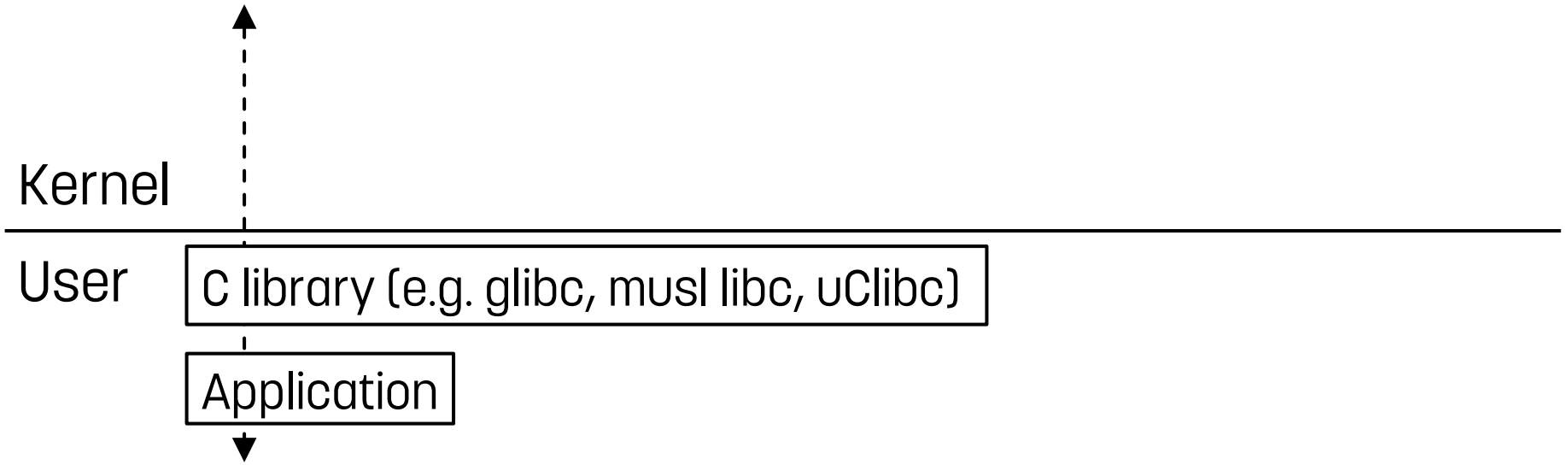

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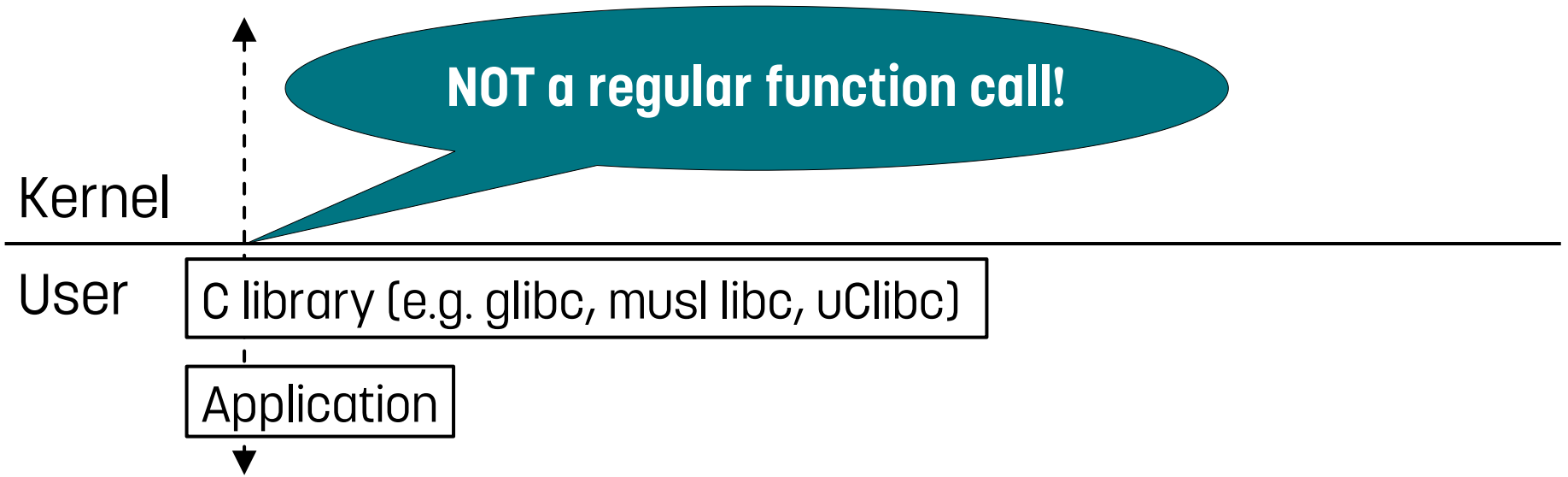
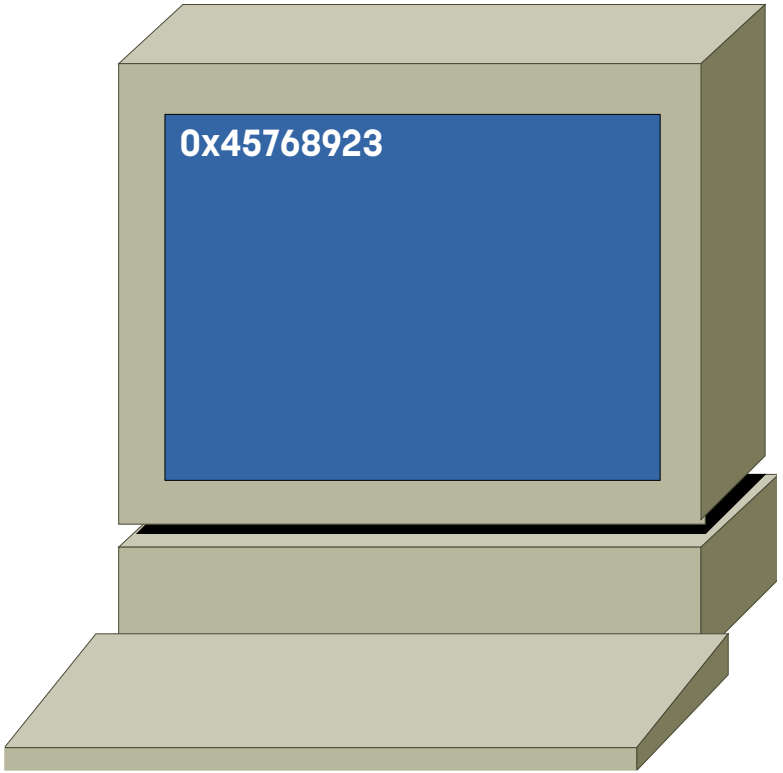


What is a “computer crash”?



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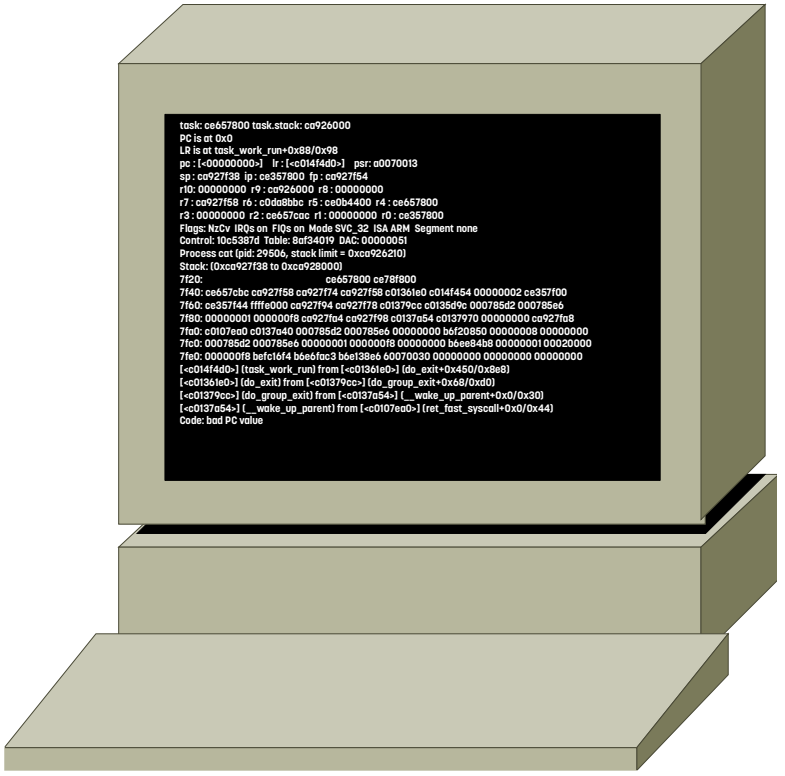

What is a “computer crash”?

- The processor is instructed to execute an “impossible” operation, e.g.
  - Division by zero
  - Access to a privileged resource from unprivileged context
- A crash has different consequences in user and kernel space
  - User space: The program is halted and an error message is presented.
  - Kernel space:
    - The computer can either stop the current action and write a message to the log file, or
    - The computer can no longer be accessed and must be restarted.

Who is responsible for a “computer crash”?

- Contrary to popular belief, a computer crash is usually not caused by an inappropriate action on the part of the user.
- Instead, a computer crash normally is the result of a programming error – either of kernel or user space developers.
  - In some cases it can also be caused be a severe hardware error.
- Users are encouraged to communicate computer crashes to the developers.