

Security Bulletin

Red Hat Security Advisories: kernel security update - RHSA- 2025_16372

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TLP:CLEAR

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List of changes

Version	Date	Description
0.1	2025/09/24	Initial Eviden version
2.2	2025/12/04	Remediation version

Executive summary

Red Hat has released a set of security advisories addressing several vulnerabilities in the Linux kernel. The update includes important security fixes designed to protect systems from potential exploits. Users are strongly advised to apply the kernel update promptly to maintain system integrity and prevent unauthorized access.

[CVE-2025-38461](#)

In the Linux kernel, the following vulnerability has been resolved: vsock: Fix transport_* TOCTOU Transport assignment may race with module unload. Protect new_transport from becoming a stale pointer. This also takes care of an insecure call in vsock_use_local_transport(); add a lockdep assert. BUG: unable to handle page fault for address: fffffbfff8056000 Oops: Oops: 0000 [#1] SMP KASAN RIP: 0010:vsock_assign_transport+0x366/0x600 Call Trace: vsock_connect+0x59c/0xc40 __sys_connect+0xe8/0x100 __x64_sys_connect+0x6e/0xc0 do_syscall_64+0x92/0x1c0 entry_SYSCALL_64_after_hwframe+0x4b/0x53

[CVE-2025-38498](#)

In the Linux kernel, the following vulnerability has been resolved: do_change_type(): refuse to operate on unmounted/not ours mounts Ensure that propagation settings can only be changed for mounts located in the caller's mount namespace. This change aligns permission checking with the rest of mount(2).

[CVE-2025-38556](#)

In the Linux kernel, the following vulnerability has been resolved: HID: core: Harden s32ton() against conversion to 0 bits Testing by the syzbot fuzzer showed that the HID core gets a shift-out-of-bounds exception when it tries to convert a 32-bit quantity to a 0-bit quantity. Ideally this should never occur, but there are buggy devices and some might have a report field with size set to zero; we

shouldn't reject the report or the device just because of that. Instead, harden the `s32ton()` routine so that it returns a reasonable result instead of crashing when it is called with the number of bits set to 0 -- the same as what `snto32()` does.

RHSA-2025_16372

RHSA-2025_16372	Red Hat Security Advisory: kernel security update
CVE	CVE-2025-38461 CVE-2025-38498 CVE-2025-38556
Summary	An update for kernel is now available for Red Hat Enterprise Linux 8.
Description	<p>Red Hat Product Security has rated this update as having a security impact of Moderate. A Common Vulnerability Scoring System (CVSS) base score, which gives a detailed severity rating, is available for each vulnerability from the CVE link(s) in the References section. The kernel packages contain the Linux kernel, the core of any Linux operating system. Security Fix(es):</p> <ul style="list-style-type: none">kernel: vsock: Fix transport_* TOCTOU (CVE-2025-38461)kernel: do_change_type(): refuse to operate on unmounted/not ours mounts (CVE-2025-38498)kernel: HID: core: Harden s32ton() against conversion to 0 bits (CVE-2025-38556) <p>For more details about the security issue(s), including the impact, a CVSS score, acknowledgments, and other related information, refer to the CVE page(s) listed in the References section.</p>

Affected products

Linux Kernels used in all Eviden products are updated on a regular basis to guarantee that they are not older than 6 month when products are released.

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analysis process, the information in this document is subject to change without notice to reflect new results of this analysis.

Recommendations

Using `uname -r` you can check the current running kernel version. The version provided by this patch is `kernel-4.18.0-553.76.1.el8_10`. Recommendation is to check that running kernel version is at least this level.

Available Vendor Patches

It is highly recommended to apply the latest kernel security patches released by Red Hat without delay. These updates contain critical fixes that address vulnerabilities which could be exploited by attackers. Prompt installation of these patches helps ensure your systems remain secure and stable. Regularly updating your systems with Red Hat's security fixes is essential for maintaining a strong defense against potential threats.

Available Workarounds

No workaround is available.

Available Mitigations

No mitigation identified.

Available Exploits/PoC

Eviden is not aware of any exploitation of the reported vulnerabilities.

References

1. <https://access.redhat.com/errata/RHSA-2025:16372>

Glossary of terms

Term	Description
Mitigation	Refers to a setting, common configuration, or general best-practice, existing in a default state that could reduce the severity of exploitation of a vulnerability
Neutralization	The neutralization phase is the decision-making process during which the risk posed by an incident is evaluated.
PoC	Proof of Concept
Remediation	The remediation phase ends with the delivering of a qualified solution/update fixing the vulnerability without regression.
TI	Threat Intelligence
TLP	Traffic Light Protocol (TLP) FIRST Standards Definitions and Usage Guidance — Version 2.0. https://www.first.org/tlp/
Workaround	Refers to a setting or configuration change that does not correct the underlying vulnerability but would help block known attack vectors before you apply the update

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Eviden continuously monitors the security of its products. This Security Bulletin is shared under the constraints of the FIRST Traffic Light Protocol version 2.0 (TLP) to bring the attention of owners of the potentially affected Eviden products. Eviden recommends that all product owners determine whether the described situation is applicable to their individual case and take appropriate action.

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- Neutralization security bulletins are numbered 0.x
- Privately disclosed Remediation security bulletins are numbered 1.x
- Publicly disclosed Remediation security bulletins are numbered 2.x

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- <https://support.bull.com/ols/product/security/psirt>

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