

Security Bulletin

Red Hat Security Advisories: kernel security update - RHSA- 2025_19447

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TLP:CLEAR

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List of changes

Version	Date	Description
2.1	2025/11/07	Initial Eviden 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-2023-53226](#) – score 7.1

A vulnerability in the Marvell mwifiex driver (mwifiex, Marvell Wi-Fi) allows malformed over-the-air frames to trigger out-of-bounds reads and an integer underflow in the RX path, which can crash the kernel or drop packets. Remote code execution is highly unlikely — the flaw manifests as OOB reads / length miscalculations (leading to OOPS/panic or DoS), not as a controllable arbitrary-write or instruction pointer corruption, so an attacker cannot reliably gain code execution from this bug. This issue only affects systems running the mwifiex driver; if the system does not use Marvell's mwifiex module there is no exposure.

[CVE-2023-53257](#) – score 7.5

In the Linux kernel, the following vulnerability has been resolved: wifi: mac80211: check S/G action frame size Before checking the action code, check that it even exists in the frame.

[CVE-2025-39864](#) – score 7.0

In the Linux kernel, the following vulnerability has been resolved: wifi: cfg80211: fix use-after-free in cmp_bss() Following bss_free() quirk introduced in commit 776b3580178f ("cfg80211: track hidden SSID networks properly"), adjust cfg80211_update_known_bss() to free the last beacon frame elements only if they're not shared via the corresponding 'hidden_beacon_bss' pointer.

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CVE	CVE-2023-53226 CVE-2023-53257 CVE-2025-39864
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.</p> <p>The kernel packages contain the Linux kernel, the core of any Linux operating system.</p> <p>Security Fix(es):</p> <ul style="list-style-type: none">• kernel: wifi: mac80211: check S1G action frame size (CVE-2023-53257)• kernel: wifi: mwifiex: Fix OOB and integer underflow when rx packets (CVE-2023-53226)• kernel: wifi: cfg80211: fix use-after-free in cmp_bss() (CVE-2025-39864) <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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Recommendations

Using `uname -r` you can check the current running kernel version. The version provided by this patch is `kernel-4.18.0-553.82.1.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-2025:19447>

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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