

## Security Bulletin

# Red Hat Security Advisories: kernel security update - RHSA- 2025\_1253

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Reference	:	PSIRT-3705
Created	:	26 August 2025
Version	:	2.2
Status	:	Remediation
TLP Classification	:	CLEAR
Document date	:	3 February 2026
Keywords	:	CVE-2024-53104 CVE-2024-53113

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## List of changes

Version	Date	Description
0.1	2025/08/26	Initial Eviden version
2.2	2026/02/03	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-2024-53104 – score 7.8**

In the Linux kernel, the following vulnerability has been resolved: media: uvcvideo: Skip parsing frames of type UVC\_VS\_UNDEFINED in uvc\_parse\_format This can lead to out of bounds writes since frames of this type were not taken into account when calculating the size of the frames buffer in uvc\_parse\_streaming.

### **CVE-2024-53113 – score 5.5**

In the Linux kernel, the following vulnerability has been resolved: mm: fix NULL pointer dereference in alloc\_pages\_bulk\_noprof We triggered a NULL pointer dereference for ac.preferred\_zoneref->zone in alloc\_pages\_bulk\_noprof() when the task is migrated between cpusets. When cpuset is enabled, in prepare\_alloc\_pages(), ac->nodemask may be &current->mems\_allowed. when first\_zones\_zonelist() is called to find preferred\_zoneref, the ac->nodemask may be modified concurrently if the task is migrated between different cpusets. Assuming we have 2 NUMA Node, when traversing Node1 in ac->zonelist, the nodemask is 2, and when traversing Node2 in ac->zonelist, the nodemask is 1. As a result, the ac->preferred\_zoneref points to NULL zone. In alloc\_pages\_bulk\_noprof(), for\_each\_zone\_zonelist\_nodemask() finds a allowable zone and calls zonelist\_node\_idx(ac.preferred\_zoneref), leading to NULL pointer dereference. \_\_alloc\_pages\_noprof() fixes this issue by checking NULL pointer in commit ea57485af8f4 ("mm, page\_alloc: fix check for NULL preferred\_zone") and commit df76cee6bbeb ("mm, page\_alloc: remove redundant checks from alloc fastpath"). To fix it, check NULL pointer for preferred\_zoneref->zone.

### **RHSA-2025\_1253**

RHSA-2025_1253	<a href="#">Red Hat Security Advisory: kernel security update</a>
CVE	<a href="#">CVE-2024-53104</a> <a href="#">CVE-2024-53113</a>
Summary	<b>An update for kernel is now available for Red Hat Enterprise Linux 8.</b>
Description	<p>Red Hat Product Security has rated this update as having a security impact of Important. 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 system.</p> <p>Security Fix(es):</p> <ul style="list-style-type: none"><li>kernel: media: uvcvideo: Skip parsing frames of type UVC_VS_UNDEFINED in uvc_parse_format (CVE-2024-53104)</li><li>kernel: mm: fix NULL pointer dereference in alloc_pages_bulk_noprof (CVE-2024-53113)</li></ul> <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-5.14.0-70.124.1.el9\_0. 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-2025:1253>

## 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. <a href="https://www.first.org/tlp/">https://www.first.org/tlp/</a>
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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- Neutralization security bulletins are numbered 0.x
- Privately disclosed Remediation security bulletins are numbered 1.x
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- <https://support.bull.com/ols/product/security/psirt>

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