



# Glib: integer overflow in g\_string\_maybe\_expand() leading to potential buffer overflow in glib gstring

[MITRE](#)[NVD](#)[CVE.ORG](#)[JSON API](#)[Print: PDF](#)

## Summary

<b>CVE</b>	CVE-2025-6052
<b>State</b>	PUBLISHED
<b>Assigner</b>	redhat
<b>Source Priority</b>	CVE Program / NVD first with legacy fallback
<b>Published</b>	2025-06-13 16:15:28 UTC
<b>Updated</b>	2026-05-12 13:17:28 UTC

**Description** A flaw was found in how GLib's GString manages memory when adding data to strings. If a string is already very large, cor

## Risk And Classification

**Primary CVSS:** v3.1 7.5 HIGH from nvd@nist.gov

**CVSS:** 3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H

**EPSS:** 0.003010000 probability, percentile 0.534120000 (date 2026-05-12)

**Problem Types:** CWE-190 | CWE-190 Integer Overflow or Wraparound

Version	Source	Type	Score	Severity	Vector
3.1	nvd@nist.gov	Primary	7.5	HIGH	CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H
3.1	secalert@redhat.com	Secondary	3.7	LOW	CVSS:3.1/AV:N/AC:H/PR:N/UI:N/S:U/C:N/I:N/A:L
3.1	CNA	CVSS	3.7	LOW	CVSS:3.1/AV:N/AC:H/PR:N/UI:N/S:U/C:N/I:N/A:L

## CVSS v3.1 Breakdown

Attack Vector

Network

Attack Complexity

Low

Privileges Required

None

User Interaction

None

Scope

Unchanged

Confidentiality

None

Integrity

None

Availability

High

CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H

### NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Gnome	Glib	All	All	All	All

### Vendor Declared Affected Products

Source	Vendor	Product	Version	Platforms
CNA	Red Hat	Red Hat Enterprise Linux 10	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 10	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 10	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 10	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 10	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 10	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 6	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 7	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 8	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 8	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 8	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 8	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 9	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 9	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 9	Not specified	Not specified
CNA	Red Hat	Red Hat Enterprise Linux 9	Not specified	Not specified
ADP	Siemens	SIMATIC CN 4100	affected V5.0 custom	Not specified

### References

Reference	Source	Link	Tags
access.redhat.com/security/cve/CVE-2025-6052	secalert@redhat.com	access.redhat.com	Third Party
cert-portal.siemens.com/productcert/html/ssa-032379.html	0b142b55-0307-4c5a-b3c9-f314f3fb7c5e	cert-portal.siemens.com	
bugzilla.redhat.com/show_bug.cgi	secalert@redhat.com	bugzilla.redhat.com	Issue Trac
CVE Program record	CVE.ORG	www.cve.org	canonical

## Vendor Comments And Credit

## Discovery Credit

**CNA:** Red Hat would like to thank Philip Withnall for reporting this issue. (en)

## Additional Advisory Data

Source	Time	Event
CNA	2025-06-13T11:54:49.481Z	Reported to Red Hat.
CNA	2025-06-13T00:00:00.000Z	Made public.

## Workarounds

**CNA:** Currently, no mitigation is available for this vulnerability.

There are currently no legacy QID mappings associated with this CVE.

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