llama.cpp has a Heap Buffer Overflow via Integer Overflow in `mem_size` Calculation — Bypass of CVE-2025-53630 Fix

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Summary

CVE	CVE-2026-27940
State	PUBLISHED
Assigner	GitHub_M
Source Priority	CVE Program / NVD first with legacy fallback
Published	2026-03-12 17:16:49 UTC
Updated	2026-04-28 21:27:02 UTC
Description	llama.cpp is an inference of several LLM models in C/C++. Prior to b8146, the gguf_init_from_file_impl() in gguf.cpp is vuln

Risk And Classification

Primary CVSS: v3.1 7.8 HIGH from security-advisories@github.com

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

EPSS: 0.000150000 probability, percentile 0.034070000 (date 2026-04-28)

Problem Types: CWE-122 | CWE-190 | CWE-122 CWE-122: Heap-based Buffer Overflow | CWE-190 CWE-190: Integer Overflow or Wraparound

Version	Source	Type	Score	Severity	Vector
3.1	security-advisories@github.com	Secondary	7.8	HIGH	CVSS:3.1/AV:L/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H
3.1	CNA	DECLARED	7.8	HIGH	CVSS:3.1/AV:L/AC:L/PR:N/UI:R/S:U/C:H/I:H/A:H

CVSS v3.1 Breakdown

Attack Vector

Local

Attack Complexity

Low

Privileges Required

None

User Interaction

Required

Scope

Unchanged

Confidentiality

High

Integrity

High

Availability

High

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

NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Ggml	Llama.cpp	All	All	All	All

Vendor Declared Affected Products

Source	Vendor	Product	Version	Platforms
CNA	Ggml-org	Llama.cpp	affected < b8146	Not specified

References

Reference	Source	Link	Tags
github.com/ggml-org/llama.cpp/security/advisories/GHSA-3p4r-fq3f-q74v	security-advisories@github.com	github.com	Exploit, Vendor
CVE Program record	CVE.ORG	www.cve.org	canonical
NVD vulnerability detail	NVD	nvd.nist.gov	canonical, analy

No vendor comments have been submitted for this CVE.

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

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