GNU Binutils BFD Library elf.c bfd_elf_get_str_section null pointer dereference

MITRE | NVD | CVE.ORG | JSON API | Print: PDF

Summary

CVE	CVE-2025-8224
State	PUBLISHED
Assigner	VulDB
Source Priority	CVE Program / NVD first with legacy fallback
Published	2025-07-27 06:15:26 UTC
Updated	2026-05-12 13:17:29 UTC
Description	A vulnerability has been found in GNU Binutils 2.44 and classified as problematic. This vulnerability affects the function bfd_

Risk And Classification

Primary CVSS: v4.0 1.9 LOW from cna@vuldb.com

CVSS:4.0/AV:L/AC:L/AT:N/PR:L/UI:N/VC:N/VI:N/VA:L/SC:N/SI:N/SA:N/E:P/CR:X/IR:X/AR:X/MAV:X/MAC:X/MAT:X/MPR:X/MUI:X/MVC:X/MVI:X/MVA:X/MSC:X/MSI:X/MSA:X/S:X/AU:X/R:X/V:X/RE:X/U:X

EPSS: 0.000410000 probability, percentile 0.125560000 (date 2026-05-12)

Problem Types: CWE-404 | CWE-476 | CWE-476 NULL Pointer Dereference | CWE-404 Denial of Service

Version	Source	Type	Score	Severity	Vector
4.0	cna@vuldb.com	Secondary	1.9	LOW	CVSS:4.0/AV:L/AC:L/AT:N/PR:L/UI:N/VC:N/VI:N/VA:L/SC:N/SI:N/SA:N/E:P/C...
4.0	CNA	DECLARED	4.8	MEDIUM	CVSS:4.0/AV:L/AC:L/AT:N/PR:L/UI:N/VC:N/VI:N/VA:L/SC:N/SI:N/SA:N/E:P
3.1	nvd@nist.gov	Primary	5.5	MEDIUM	CVSS:3.1/AV:L/AC:L/PR:L/UI:N/S:U/C:N/I:N/A:H
3.1	cna@vuldb.com	Secondary	3.3	LOW	CVSS:3.1/AV:L/AC:L/PR:L/UI:N/S:U/C:N/I:N/A:L
3.1	CNA	DECLARED	3.3	LOW	CVSS:3.1/AV:L/AC:L/PR:L/UI:N/S:U/C:N/I:N/A:L/E:P/RL:O/RC:C
3.0	CNA	DECLARED	3.3	LOW	CVSS:3.0/AV:L/AC:L/PR:L/UI:N/S:U/C:N/I:N/A:L/E:P/RL:O/RC:C
2.0	cna@vuldb.com	Secondary	1.7		AV:L/AC:L/Au:S/C:N/I:N/A:P
2.0	CNA	DECLARED	1.7		AV:L/AC:L/Au:S/C:N/I:N/A:P/E:POC/RL:OF/RC:C

CVSS v4.0 Breakdown

Attack Vector

Local

Attack Complexity

Low

Attack Requirements

None

Privileges Required

Low

User Interaction

None

Confidentiality

None

Integrity

None

Availability

Low

Sub Conf.

None

Sub Integrity

None

Sub Availability

None

CVSS:4.0/AV:L/AC:L/AT:N/PR:L/UI:N/VC:N/VI:N/VA:L/SC:N/SI:N/SA:N/E:P/CR:X/IR:X/AR:X/MAV:X/MAC:X/MAT:X/MPR:X/MUI:X/MVC:X/MVI:X/MVA:X/MSC:X/MSI:X/MSA:X/S:X/AU:X/R:X/V:X/RE:X/U:X

CVSS v3.1 Breakdown

Attack Vector

Local

Attack Complexity

Low

Privileges Required

Low

User Interaction

None

Scope

Unchanged

Confidentiality

None

Integrity

None

Availability

High

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

CVSS v3.0 Breakdown

Attack Vector

Local

Attack Complexity

Low

Privileges Required

Low

User Interaction

None

Scope

Unchanged

Confidentiality

None

Integrity

None

Availability

Low

CVSS:3.0/AV:L/AC:L/PR:L/UI:N/S:U/C:N/I:N/A:L/E:P/RL:O/RC:C

NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Gnu	Binutils	2.44	All	All	All

Vendor Declared Affected Products

Source	Vendor	Product	Version	Platforms
CNA	GNU	Binutils	affected 2.44	Not specified
ADP	Siemens	SIMATIC S7-1500 CPU 1518-4 PN/DP MFP	affected V3.1.5 * custom	Not specified
ADP	Siemens	SIMATIC S7-1500 CPU 1518-4 PN/DP MFP	affected V3.1.5 * custom	Not specified
ADP	Siemens	SIMATIC S7-1500 CPU 1518F-4 PN/DP MFP	affected V3.1.5 * custom	Not specified
ADP	Siemens	SIMATIC S7-1500 CPU 1518F-4 PN/DP MFP	affected V3.1.5 * custom	Not specified
ADP	Siemens	SIMATIC S7-1500 TM MFP - GNU/Linux Subsystem	affected * custom	Not specified
ADP	Siemens	SIPLUS S7-1500 CPU 1518-4 PN/DP MFP	affected V3.1.5 * custom	Not specified

References

Reference	Source	Link	Tags
vuldb.com	cna@vuldb.com	vuldb.com	Permissio
sourceware.org/bugzilla/show_bug.cgi	cna@vuldb.com	sourceware.org	Exploit, Iss
cert-portal.siemens.com/productcert/html/ssa-082556.html	0b142b55-0307-4c5a-b3c9-f314f3fb7c5e	cert-portal.siemens.com	
sourceware.org/git/gitweb.cgi	cna@vuldb.com	sourceware.org	Mailing Lis

cert-portal.siemens.com/productcert/html/ssa-265688.html	0b142b55-0307-4c5a-b3c9-f314f3fb7c5e	cert-portal.siemens.com	
vuldb.com	cna@vuldb.com	vuldb.com	Exploit, Th
vuldb.com	cna@vuldb.com	vuldb.com	Third Party
sourceware.org/bugzilla/attachment.cgi	cna@vuldb.com	sourceware.org	Exploit
sourceware.org/bugzilla/show_bug.cgi	cna@vuldb.com	sourceware.org	Exploit, Iss
www.gnu.org	cna@vuldb.com	www.gnu.org	Product
CVE Program record	CVE.ORG	www.cve.org	canonical
NVD vulnerability detail	NVD	nvd.nist.gov	canonical,

Vendor Comments And Credit

Discovery Credit

CNA: arthurx (VulDB User) (en)

Additional Advisory Data

Source	Time	Event
CNA	2025-07-26T00:00:00.000Z	Advisory disclosed
CNA	2025-07-26T02:00:00.000Z	VulDB entry created
CNA	2025-07-26T15:01:30.000Z	VulDB entry last update

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