



Heap Out-of-Bounds Write in DecodeObjectId() in wolfSSL

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

Summary

CVE	CVE-2026-5187
State	PUBLISHED
Assigner	wolfSSL
Source Priority	CVE Program / NVD first with legacy fallback
Published	2026-04-09 20:16:28 UTC
Updated	2026-04-16 20:39:33 UTC
Description	Two potential heap out-of-bounds write locations existed in DecodeObjectId() in wolfcrypt/src/asn.c. First, a bounds check c

Risk And Classification

Primary CVSS: v4.0 2.3 LOW from facts@wolfssl.com

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

EPSS: 0.000470000 probability, percentile 0.142820000 (date 2026-04-16)

Problem Types: CWE-122 | CWE-787 | CWE-122 CWE-122: Heap-based Buffer Overflow | CWE-787 CWE-787: Out-of-bounds Write

Version	Source	Type	Score	Severity	Vector
4.0	facts@wolfssl.com	Secondary	2.3	LOW	CVSS:4.0/AV:N/AC:L/AT:P/PR:L/UI:N/VC:N/VI:L/VA:L/SC:N/SI:N/SA:N/E:X/CR:X/IR:X/AR:X/MAV:X/MAC:X/MAT:X/MPR:X/MUI:X/MVC:X/MVI:X/MVA:X/MSX/MSI:X/MSA:X/S:X/AU:X/R:X/V:X/RE:X/U:X
4.0	CNA	CVSS	2.3	LOW	CVSS:4.0/AV:N/AC:L/AT:P/PR:L/UI:N/VC:N/VI:L/VA:L/SC:N/SI:N/SA:N
3.1	nvd@nist.gov	Primary	9.8	CRITICAL	CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H

CVSS v4.0 Breakdown

Attack Vector

Network

Attack Complexity

Low

Attack Requirements

Present

Privileges Required

Low

User Interaction

None

Confidentiality

None

Integrity

Low

Availability

Low

Sub Conf.

None

Sub Integrity

None

Sub Availability

None

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

CVSS v3.1 Breakdown

Attack Vector

Network

Attack Complexity

Low

Privileges Required

None

User Interaction

None

Scope

Unchanged

Confidentiality

High

Integrity

High

Availability

High

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

NVD Known Affected Configurations (CPE 2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Wolfssl	Wolfssl	All	All	All	All

Vendor Declared Affected Products

Source	Vendor	Product	Version	Platforms
--------	--------	---------	---------	-----------

Source	Vendor	Product	Version	Reference
CNA	WolfSSL	WolfSSL	affected 5.9.0 semver	Not specified

References

Reference	Source	Link	Tags
github.com/wolfSSL/wolfssl	facts@wolfssl.com	github.com	Product
CVE Program record	CVE.ORG	www.cve.org	canonical
NVD vulnerability detail	NVD	nvd.nist.gov	canonical, analysis

Vendor Comments And Credit

Discovery Credit

CNA: ytsun, Independent Security Researcher (en)

Additional Advisory Data

Solutions

CNA: Fix Bug 1: Add a bounds check requiring at least 2 output slots before writing the first OID arc split (y == 0 case). Fix Bug 2: Change callers to pass the element count (MAX_OID_SZ) instead of sizeof(decOid) as the output buffer size parameter.

Workarounds

CNA: Do not enable WC_ASN_UNKNOWN_EXT_CB or do not register an unknown extension callback if not required. This mitigates the network-reachable variant (Bug 2) but does not address Bug 1.

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

© [CVE.report](#) 2026 |

Use of this information constitutes acceptance for use in an AS IS condition. There are NO warranties, implied or otherwise, with regard to this information or its use. Any use of this information is at the user's risk. It is the responsibility of user to evaluate the accuracy, completeness or usefulness of any information, opinion, advice or other content. EACH USER WILL BE SOLELY RESPONSIBLE FOR ANY consequences of his or her direct or indirect use of this web site. ALL WARRANTIES OF ANY KIND ARE EXPRESSLY DISCLAIMED. This site will NOT BE LIABLE FOR ANY DIRECT, INDIRECT or any other kind of loss.

CVE, CWE, and OVAL are registered trademarks of [The MITRE Corporation](#) and the authoritative source of CVE content is [MITRE's CVE web site](#). This site includes MITRE data granted under the following [license](#).

Free CVE JSON API [cve.report/api](#)

CVE.report and Source URL Uptime Status [status.cve.report](#)