

Security Bulletin

Vulnerability in MongoDB

Author(s)	:	Eviden PSIRT
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TLP:CLEAR

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List of changes

Version	Date	Description
0.1	2024/11/11	Initial Eviden version
1.2	2025/01/28	Status changed for remediation
2.3	2025/02/20	TLP changed for CLEAR
2.4	2025/03/27	CVE-2025-0755 added to bulletin
2.5	2025/03/29	Minor change in wording to clarify the independence between OneBSM and MongoDB server version. Fix version recommended for Mongo DB 7.0 branch (16 instead of 15).

Executive summary

MongoDB informed that unique index may cause secondaries to crash due to incorrect enforcement of index constraints on secondaries, where in extreme cases may cause multiple secondaries crashing leading to no primaries. This issue affects MongoDB Server v6.0 versions prior to 6.0.17, MongoDB Server v7.0 versions prior to 7.0.13 and MongoDB Server v7.3 versions prior to 7.3.4

Second vulnerability: an authorized user may trigger crashes or receive the contents of buffer over-reads of Server memory by issuing specially crafted requests that construct malformed BSON in the MongoDB Server. This issue affects MongoDB Server v5.0 versions prior to 5.0.30, MongoDB Server v6.0 versions prior to 6.0.19, MongoDB Server v7.0 versions prior to 7.0.15 and MongoDB Server v8.0 versions prior to and including 8.0.2.

Third vulnerability (CVE-2025-0755) is in MongoDB C driver. The various `bson_append` functions in the MongoDB C driver library may be susceptible to buffer overflow when performing operations that could result in a final BSON document which exceeds the maximum allowable size (`INT32_MAX`), resulting in a segmentation fault and possible application crash. This issue affected `libbson` versions prior to 1.27.5, MongoDB Server v8.0 versions prior to 8.0.1 and MongoDB Server v7.0 versions prior to 7.0.16.

Vulnerability Info

CVE No.	CVSS Score	Type of Vulnerability
CVE-2024-8305	6.5	CWE-1288 Improper Validation of Consistency within Input
CVE-2024-10921	6.8	CWE-158 Improper Neutralization of Null Byte or NUL Character
CVE-2025-0755	8.4	CWE-122 Heap-based Buffer Overflow

Eviden is liaising closely with its suppliers and investigating the exact nature of these vulnerabilities to provide validated remediation.

Affected products

Products	Fixed version	Status	Comments
MongoDB	5.0.30 6.0.19 7.0.15 8.0.3	Fixed	Fix for CVE-2024-8305 CVE-2024-10921
MongoDB Server	8.0.1 7.0.16	Fixed	Fix for CVE-2025-0755

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TBD (to be defined) indicates that a new technical state fixing the vulnerabilities is under study.

Unpatched means that the vulnerability is presumably present, but there is no plan to provide a fix. This can be investigated on demand.

List of affected products

Products	Fixed version	Status	Comment
OneBSM	1.0.1	Fixed	For already installed instances, it is recommended to update Mongo DB server.

Recommendations

Eviden recommends applying its Technical States upgrade on its servers as soon as they are made available.

Available Vendor Patches

MongoDB recommends to upgrade versions

- MongoDB Server v5.x versions prior to 5.0.30
- MongoDB Server v6.x versions prior to 6.0.19
- MongoDB Server v7.x versions prior to 7.0.16
- MongoDB Server v8.x versions prior to 8.0.3

Technical States links for Eviden servers are reminded in the table below.

Product	Technical State link
OneBSM	https://support.bull.com/ols/product/platforms/bullion/one-bsm/index.html

Available Workarounds

For CVE-2025-0755 Eviden recommends to update MongoDB. This can be done without full reinstallation.

Available Mitigations

No mitigation identified.

Available Exploits/PoC

Eviden is not aware of any exploitation of the reported vulnerabilities.

References

1. <https://jira.mongodb.org/browse/SERVER-92382>
2. <https://www.cert.ssi.gouv.fr/avis/CERTFR-2024-AVI-0910/>
3. <https://jira.mongodb.org/browse/SERVER-96419>
4. <https://www.cert.ssi.gouv.fr/avis/CERTFR-2024-AVI-0989/>
5. <https://jira.mongodb.org/browse/SERVER-94461>

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. https://www.first.org/tlp/
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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Eviden continuously monitors the security of its products. This Security Bulletin is shared under the constraints of the FIRST Traffic Light Protocol version 2.0 (TLP) to bring the attention of owners of the potentially affected Eviden products. Eviden recommends that all product owners determine whether the described situation is applicable to their individual case and take appropriate action.

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- Neutralization security bulletins are numbered 0.x
- Privately disclosed Remediation security bulletins are numbered 1.x
- Publicly disclosed Remediation security bulletins are numbered 2.x

Updated versions of this document can be found on:

- <https://support.bull.com/ols/product/security/psirt>

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