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## Expat 2.8.0 released, includes security fixes

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For readers new to Expat:

[libexpat](#) is a fast streaming XML parser. Alongside libxml2, Expat is one of the [most widely used](#) software libre XML parsers written in C, specifically C99. It is cross-platform and licensed under [the MIT license](#).

[Expat 2.8.0](#) was released two days ago. The key motivation for cutting a release and doing so now was:

- Addressing security issue [CVE-2026-41080](#) — insufficient entropy ([CWE-331](#)) —, and also
- Getting support for entropy extractor `getentropy(3)` as well as bugfixes in the hands of users.

So, a summary "entropy and bugfixes" would be on point for the theme of this release.

What is entropy, and what does Expat need it for?

**Entropy** (in computing) is the amount of information that an attacker *does not know*. If your banking card pin has four decimal digits, from 0000 to 9999, that's 10,000 possible combinations; that's roughly 14 bits or less than two bytes of entropy — `import math; math.ceil(math.log2(10_000) / 8)` in Python — that the attacker is missing.

Expat needs high-quality entropy for a [salt](#) with its internal [hash tables](#). Without an unknown-to-the-attacker hash salt, a hash table can be attacked using [hash flooding](#), allowing [denial of service](#) attacks through crafted XML documents.

Now Expat 2.8.0 uses more entropy than past releases — 16 bytes rather than previously 4 to 8 bytes (depending on architecture) —, starts supporting entropy provider `getentropy(3)` in the many systems that offer it (including WASI, that lacks all other previously supported providers like `getrandom` or `arc4random` ), and also offers a new API function `XML_SetHashSalt16Bytes` that overcomes the limitations of its predecessor `XML_SetHashSalt` .

For implementing the new cross-platform `getentropy(3)` support, I teamed up with [Jérôme Duval](#). The bug fixes were contributed by [Matthew Fernandez](#): the maintainer of [Graphviz](#). Thanks to everyone who contributed to this release of Expat!

For more details about this release, please [check out the change log](#).

If *you* maintain Expat packaging, a bundled copy of Expat, or a pinned version of Expat, please update to version 2.8.0. Thank you!

Sebastian Pipping



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