

**NAME**

perl5302delta - what is new for perl v5.30.2

**DESCRIPTION**

This document describes differences between the 5.30.1 release and the 5.30.2 release.

If you are upgrading from an earlier release such as 5.30.0, first read perl5301delta, which describes differences between 5.30.0 and 5.30.1.

**Incompatible Changes**

There are no changes intentionally incompatible with 5.30.0. If any exist, they are bugs, and we request that you submit a report. See "Reporting Bugs" below.

**Modules and Pragmata****Updated Modules and Pragmata**

- ⊕ `Compress::Raw::Bzip2` has been upgraded from version 2.084 to 2.089.
  
- ⊕ `Module::CoreList` has been upgraded from version 5.20191110 to 5.20200314.

**Documentation****Changes to Existing Documentation**

We have attempted to update the documentation to reflect the changes listed in this document. If you find any we have missed, send email to <<https://github.com/Perl/perl5/issues>>.

**Configuration and Compilation**

- ⊕ GCC 10 is now supported by *Configure*.

**Testing**

Tests were added and changed to reflect the other additions and changes in this release.

**Platform Support****Platform-Specific Notes**

Windows

The MYMALLOC (PERL\_MALLOC) build on Windows has been fixed.

**Selected Bug Fixes**

- ⊕ `printf()` or `sprintf()` with the `%n` format no longer cause a panic on debugging builds, or report an incorrectly cached length value when producing "SVfUTF8" flagged strings.

[GH #17221 <<https://github.com/Perl/perl5/issues/17221>>]

- ⊕ A memory leak in regular expression patterns has been fixed.  
[GH #17218 <<https://github.com/Perl/perl5/issues/17218>>]
- ⊕ A read beyond buffer in `grok_infnan` has been fixed.  
[GH #17370 <<https://github.com/Perl/perl5/issues/17370>>]
- ⊕ An assertion failure in the regular expression engine has been fixed.  
[GH #17372 <<https://github.com/Perl/perl5/issues/17372>>]
- ⊕ "(?{...})" eval groups in regular expressions no longer unintentionally trigger "EVAL without pos change exceeded limit in regex".  
[GH #17490 <<https://github.com/Perl/perl5/issues/17490>>]

### Acknowledgements

Perl 5.30.2 represents approximately 4 months of development since Perl 5.30.1 and contains approximately 2,100 lines of changes across 110 files from 15 authors.

Excluding auto-generated files, documentation and release tools, there were approximately 920 lines of changes to 30 .pm, .t, .c and .h files.

Perl continues to flourish into its fourth decade thanks to a vibrant community of users and developers. The following people are known to have contributed the improvements that became Perl 5.30.2:

Chris 'BinGos' Williams, Dan Book, David Mitchell, Hugo van der Sanden, Karen Etheridge, Karl Williamson, Matthew Horsfall, Nicolas R., Petr PisaX, Renee Baecker, Sawyer X, Steve Hay, Tomasz Konojacki, Tony Cook, Yves Orton.

The list above is almost certainly incomplete as it is automatically generated from version control history. In particular, it does not include the names of the (very much appreciated) contributors who reported issues to the Perl bug tracker.

Many of the changes included in this version originated in the CPAN modules included in Perl's core. We're grateful to the entire CPAN community for helping Perl to flourish.

For a more complete list of all of Perl's historical contributors, please see the *AUTHORS* file in the Perl source distribution.

## Reporting Bugs

If you find what you think is a bug, you might check the perl bug database at <<https://rt.perl.org/>>. There may also be information at <<http://www.perl.org/>>, the Perl Home Page.

If you believe you have an unreported bug, please open an issue at <<https://github.com/Perl/perl5/issues>>. Be sure to trim your bug down to a tiny but sufficient test case.

If the bug you are reporting has security implications which make it inappropriate to send to a public issue tracker, then see "SECURITY VULNERABILITY CONTACT INFORMATION" in perlsec for details of how to report the issue.

## Give Thanks

If you wish to thank the Perl 5 Porters for the work we had done in Perl 5, you can do so by running the "perlthanks" program:

```
perlthanks
```

This will send an email to the Perl 5 Porters list with your show of thanks.

## SEE ALSO

The *Changes* file for an explanation of how to view exhaustive details on what changed.

The *INSTALL* file for how to build Perl.

The *README* file for general stuff.

The *Artistic* and *Copying* files for copyright information.