

## NAME

perl5224delta - what is new for perl v5.22.4

## DESCRIPTION

This document describes differences between the 5.22.3 release and the 5.22.4 release.

If you are upgrading from an earlier release such as 5.22.2, first read *perl5223delta*, which describes differences between 5.22.2 and 5.22.3.

## Security

### Improved handling of '.' in @INC in base.pm

The handling of (the removal of) '.' in @INC in *base* has been improved. This resolves some problematic behaviour in the approach taken in Perl 5.22.3, which is probably best described in the following two threads on the Perl 5 Porters mailing list:

<http://www.nntp.perl.org/group/perl.perl5.porters/2016/08/msg238991.html>,

<http://www.nntp.perl.org/group/perl.perl5.porters/2016/10/msg240297.html>.

### "Escaped" colons and relative paths in PATH

On Unix systems, Perl treats any relative paths in the PATH environment variable as tainted when starting a new process. Previously, it was allowing a backslash to escape a colon (unlike the OS), consequently allowing relative paths to be considered safe if the PATH was set to something like `/\ : ..`. The check has been fixed to treat `.` as tainted in that example.

## Modules and Pragmata

### Updated Modules and Pragmata

- *base* has been upgraded from version 2.22 to 2.22\_01.
- *Module::CoreList* has been upgraded from version 5.20170114\_22 to 5.20170715\_22.

### Selected Bug Fixes

- Fixed a crash with `s///1` where it thought it was dealing with UTF-8 when it wasn't. [*perl #129038*]

## Acknowledgements

Perl 5.22.4 represents approximately 6 months of development since Perl 5.22.3 and contains approximately 2,200 lines of changes across 52 files from 16 authors.

Excluding auto-generated files, documentation and release tools, there were approximately 970 lines of changes to 18 .pm, .t, .c and .h files.

Perl continues to flourish into its third decade thanks to a vibrant community of users and developers. The following people are known to have contributed the improvements that became Perl 5.22.4:

Aaron Crane, Abigail, Aristotle Pagaltzis, Chris 'BinGOs' Williams, David Mitchell, Eric Herman, Father Chrysostomos, James E Keenan, Karl Williamson, Lukas Mai, Renee Baecker, Ricardo Signes, Sawyer X, Stevan Little, Steve Hay, Tony Cook.

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 articles recently posted to the comp.lang.perl.misc newsgroup and 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 run the *perlbug* program included with your release. Be sure to trim your bug down to a tiny but sufficient test case. Your bug report, along with the output of `perl -V`, will be sent off to [perlbug@perl.org](mailto:perlbug@perl.org) to be analysed by the Perl porting team.

If the bug you are reporting has security implications, which make it inappropriate to send to a publicly archived mailing list, then please send it to [perl5-security-report@perl.org](mailto:perl5-security-report@perl.org). This points to a closed subscription unarchived mailing list, which includes all the core committers, who will be able to help assess the impact of issues, figure out a resolution, and help co-ordinate the release of patches to mitigate or fix the problem across all platforms on which Perl is supported. Please only use this address for security issues in the Perl core, not for modules independently distributed on CPAN.

## 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.