

## NAME

perl586delta - what is new for perl v5.8.6

## DESCRIPTION

This document describes differences between the 5.8.5 release and the 5.8.6 release.

## Incompatible Changes

There are no changes incompatible with 5.8.5.

## Core Enhancements

The perl interpreter is now more tolerant of UTF-16-encoded scripts.

On Win32, Perl can now use non-IFS compatible LSPs, which allows Perl to work in conjunction with firewalls such as McAfee Guardian. For full details see the file *README.win32*, particularly if you're running Win95.

## Modules and Pragmata

- With the `base` pragma, an intermediate class with no fields used to messes up private fields in the base class. This has been fixed.
- `Cwd` upgraded to version 3.01 (as part of the new PathTools distribution)
- `Devel::PPPort` upgraded to version 3.03
- `File::Spec` upgraded to version 3.01 (as part of the new PathTools distribution)
- `Encode` upgraded to version 2.08
- `ExtUtils::MakeMaker` remains at version 6.17, as later stable releases currently available on CPAN have some issues with core modules on some core platforms.
- `I18N::LangTags` upgraded to version 0.35
- `Math::BigInt` upgraded to version 1.73
- `Math::BigRat` upgraded to version 0.13
- `MIME::Base64` upgraded to version 3.05
- `POSIX::sigprocmask` function can now retrieve the current signal mask without also setting it.
- `Time::HiRes` upgraded to version 1.65

## Utility Changes

Perl has a new `-dt` command-line flag, which enables threads support in the debugger.

## Performance Enhancements

`reverse sort ...` is now optimized to sort in reverse, avoiding the generation of a temporary intermediate list.

`for (reverse @foo)` now iterates in reverse, avoiding the generation of a temporary reversed list.

## Selected Bug Fixes

The regexp engine is now more robust when given invalid utf8 input, as is sometimes generated by buggy XS modules.

`foreach` on `threads::shared` array used to be able to crash Perl. This bug has now been fixed.

A regexp in `STDOUT`'s destructor used to coredump, because the regexp pad was already freed. This has been fixed.

`goto &` is now more robust - bugs in deep recursion and chained `goto &` have been fixed.

Using `delete` on an array no longer leaks memory. A `pop` of an item from a shared array reference no longer causes a leak.

`eval_sv()` failing a taint test could corrupt the stack - this has been fixed.

On platforms with 64 bit pointers numeric comparison operators used to erroneously compare the addresses of references that are overloaded, rather than using the overloaded values. This has been fixed.

`read` into a UTF8-encoded buffer with an offset off the end of the buffer no longer mis-calculates buffer lengths.

Although Perl has promised since version 5.8 that `sort()` would be stable, the two cases `sort {$b cmp $a}` and `sort {$b <=> $a}` could produce non-stable sorts. This is corrected in perl5.8.6.

Localising `$_D` no longer generates a diagnostic message about valid `-D` flags.

## New or Changed Diagnostics

For `-t` and `-T`, Too late for `"-T"` option has been changed to the more informative `"-T" is on the #! line`, it must also be used on the command line

## Changed Internals

From now on all applications embedding perl will behave as if perl were compiled with `-DPERL_USE_SAFE_PUTENV`. See "Environment access" in the *INSTALL* file for details.

Most `C` source files now have comments at the top explaining their purpose, which should help anyone wishing to get an overview of the implementation.

## New Tests

There are significantly more tests for the `B` suite of modules.

## 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 <http://bugs.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. You can browse and search the Perl 5 bugs at <http://bugs.perl.org/>

## SEE ALSO

The *Changes* file for 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.