

Fix a crash in hamt.c caused by enabling GC tracking for an object that hadn't all of its fields set to NULL.

Fix a crash in Python initialization when parsing the command line options. Thanks Christoph Gohlke for the bug report and the fix!

Fixed reset of the SIGINT handler to SIG_DFL on interpreter shutdown even when there was a custom handler set previously.
Patch by Philipp Kerling.

Fix signed/unsigned comparison warning in pyhash.c.

Prevent site.main() exception if PYTHONSTARTUP is set. Patch by Steve Weber.

Datetime instance d with non-None tzinfo, but with d.tzinfo.utcoffset(d) returning None is now treated as naive by the astimezone() method.

Avoid race condition with debug logging

asyncio: Fix a race condition causing data loss on pause_reading()/resume_reading() when using the ProactorEventLoop.

Correct test for uuid_enc_be availability in configure.ac. Patch by Michael Felt.

Add asyncio.WindowsSelectorEventLoopPolicy and asyncio.WindowsProactorEventLoopPolicy.

Update unicodedata's database to Unicode version 11.0.0.

improve base64 exception message for encoded inputs of invalid length

asyncio/start_tls: Fix error message; cancel callbacks in case of an unhandled error; mark SSLTransport as closed if it is aborted.

The concatenation (+) and repetition (*) sequence operations now raise :exc:`TypeError` instead of :exc:`SystemError` when performed on :class:`mmap.mmap` objects. Patch by Zackery Spytz.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Misc\NEWS.d\ (cpython-main) (Misc) (NEWS.d) 3.7.0rc1.rst, line 132); [backlink](#)

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Misc\NEWS.d\ (cpython-main) (Misc) (NEWS.d) 3.7.0rc1.rst, line 132); [backlink](#)

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Misc\NEWS.d\ (cpython-main) (Misc) (NEWS.d) 3.7.0rc1.rst, line 132); [backlink](#)

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asyncio/ssl: Fix AttributeError, increase default handshake timeout

Use a better regex when breaking usage into wrappable parts. Avoids bogus assertion errors from custom metavar strings.

Emit a deprecation warning for inspect.formatargspec

Clarified the relationship between PEP 538's PYTHONCOERCECLOCALE and PEP 540's PYTHONUTF8 mode.

Improve the documentation of :func:`asyncio.open_connection`, :func:`asyncio.start_server` and their UNIX socket counterparts.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Misc\NEWS.d\ (cpython-main) (Misc) (NEWS.d) 3.7.0rc1.rst, line 181); [backlink](#)

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System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\cpython-main\Misc\NEWS.d\ (cpython-main) (Misc) (NEWS.d) 3.7.0rc1.rst, line 181); [backlink](#)

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Clarify meaning of CERT_NONE, CERT_OPTIONAL, and CERT_REQUIRED flags for ssl.SSLContext.verify_mode.

Move -Wstrict-prototypes option to CFLAGS_NODIST from OPT. This option emitted annoying warnings when building extension modules written in C++.

Reduces maximum marshal recursion depth on release builds.

On Windows, add API call saying that tk scales for DPI. On Windows 8.1+ or 10, with DPI compatibility properties of the Python binary unchanged, and a monitor resolution greater than 96 DPI, this should make text and lines sharper. It should otherwise have no effect.

Clicking on a context line moves that line to the top of the editor window.

IDLE: Use read-only text widget for code context instead of label widget.

Scroll IDLE editor text by lines. Previously, the mouse wheel and scrollbar slider moved text by a fixed number of pixels, resulting in partial lines at the top of the editor box. The change also applies to the shell and grep output windows, but not to read-only text views.

Enable theme-specific color configuration for Code Context. Use the Highlights tab to see the setting for built-in themes or add settings to custom themes.

Display up to maxlines non-blank lines for Code Context. If there is no current context, show a single blank line.