

python / cpython Public

<> Code Issues 5k+ Pull requests 2.2k Actions Projects Security and q

# gh-135034: Normalize link targets in tarfile, add `os.path.realpath(strict='allow_missing')` #135037

Merged Yhg1s merged 20 commits into `python:main` from `ambv:gh-135034` on Jun 3, 2025

Conversation 23 Commits 20 Checks 57 Files changed 11

ambv commented on Jun 2, 2025 • edited by encukou

Contributor

Addresses CVEs 2024-12718, 2025-4138, 2025-4330, and 2025-4517.

[edit @encukou]: Also addresses [CVE-2025-4435](#). Sorry for leaving that out of the commit messages.

Co-authored-by: Petr Viktorin [encukou@gmail.com](mailto:encukou@gmail.com)

Signed-off-by: Łukasz Langa [lukasz@langa.pl](mailto:lukasz@langa.pl)

- Issue: [Multiple tarfile extraction filter bypasses \( filter="tar" / filter="data" \)](#) #135034

Documentation preview: <https://cpython-previews--135037.org.readthedocs.build/>

pythongh-135034: Normalize link targets in tarfile, add `os.path.real...` ✗ @c16f5f

ambv requested a review from ethanfurman as a code owner 11 months ago

bedevere-app Bot added the awaiting core review label on Jun 2, 2025

 **bedevere-app** (Bot) mentioned this pull request [on Jun 2, 2025](#)

### Multiple tarfile extraction filter bypasses ( `filter="tar" / filter="data"` ) #135034

 Closed

 **ambv** and others added 2 commits [11 months ago](#)

 **Fix lint** ✖ [335921b](#)

 **Add blurb** ✖ [fcefa72](#)

**serhiy-storchaka** commented [on Jun 2, 2025](#)

Member

See also [#71189](#).

 **Fix test\_tarfile on WASI** ✖ [9c275a7](#)

 **ambv** [force-pushed](#) the `gh-135034` branch from `d25f924` to `9c275a7` [11 months ago](#) Compare

 **Remove spurious line** ✖ [b59eaaa](#)


 **AA-Turner** reviewed [on Jun 2, 2025](#)

[View reviewed changes](#)

> `Lib/test/test_tarfile.py` Outdated

 Show resolved

 **ambv** and others added 3 commits [11 months ago](#)

 **Fix invalid parent directory unwinding in test** ✖ [fd5ba13](#)

 **Make tests more chatty** ✖ [aeebdc8](#)

 **Use a better skip** ✖ [f5544e6](#)

 **encukou** reviewed [on Jun 2, 2025](#)

[View reviewed changes](#)

> `Lib/test/test_tarfile.py` Outdated

 [Show resolved](#)

 **encukou** reviewed [on Jun 2, 2025](#)

[View reviewed changes](#)

> `Lib/test/test_ntpath.py` Outdated

 [Show resolved](#)

**encukou** commented [on Jun 2, 2025](#)

Member

See also [#71189](#).

To align with this, there'd be a `ntpath.ALLOW_MISSING` singleton rather than an `'allow_missing'` string. That's possible, of course. It can catch typos. But I don't think it's worth having to import an extra name.


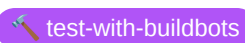
 **ambv** and others added 2 commits [11 months ago](#)

  [Work around Windows test failures](#)



✖ [3c5ed15](#)

  [Add ERROR\\_ACCESS\\_DENIED](#)

✖ [5af66c6](#)

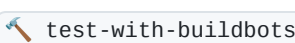
  **encukou** added the  label [on Jun 2, 2025](#)

**bedevere-bot** commented [on Jun 2, 2025](#)

 New build scheduled with the buildbot fleet by [@encukou](#) for commit [5af66c6](#) 

Results will be shown at:

<https://buildbot.python.org/all/#/grid?branch=refs%2Fpull%2F135037%2Fmerge>

If you want to schedule another build, you need to add the  label again.

**bedevere-bot** removed the `test-with-buildbots` label on [Jun 2, 2025](#)

**encukou** and others added 7 commits [11 months ago](#)

- [Switch to singleton](#) a124c42
- [Add ENAMETOOLONG to expected failures. And an extra subTest.](#) 5bf4a48
- [Discard more special files](#) 3b54acd
- [Use shorter names on Android](#) ✗ [7ff96a2](#)
- [Fix docs warning](#) ✓ [f845343](#)
- [Attempt to restore ntpath test](#) ✗ [fd2013a](#)
- [Revert "Attempt to restore ntpath test"](#) ✗ [f8f2786](#)

**encukou** added the `test-with-buildbots` label on [Jun 3, 2025](#)

1695 hidden items

[Load more...](#)

This was referenced last week

**[Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415581](#)** [RADAR-base/radar-helm-charts#9022](#)

Closed

**[Use of Incorrectly-Resolved Name or Reference SNYK-RHEL9-PYTHON3-10415440](#)** [RADAR-base/radar-helm-charts#9023](#)

Closed

**[Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415830](#)** [RADAR-base/radar-helm-charts#9024](#)

Closed

**[Directory Traversal SNYK-RHEL9-PYTHON3-10415579](#)** [RADAR-base/radar-helm-charts#9025](#)

 Closed

**Directory Traversal SNYK-RHEL9-PYTHON3-10415856** [RADAR-base/radar-helm-charts#9027](#)

 Closed

**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10409389** [RADAR-base/radar-helm-charts#9031](#)

 Closed

**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415372** [RADAR-base/radar-helm-charts#9032](#)

 Closed

**Use of Incorrectly-Resolved Name or Reference SNYK-RHEL9-PYTHON3LIBS-10415418** [RADAR-base/radar-helm-charts#9033](#)

 Closed

**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415581** [RADAR-base/radar-helm-charts#9034](#)

 Closed

**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415830** [RADAR-base/radar-helm-charts#9035](#)

 Closed

**Directory Traversal SNYK-RHEL9-PYTHON3-10409385** [RADAR-base/radar-helm-charts#9180](#)

 Open

**Directory Traversal SNYK-RHEL9-PYTHON3-10415394** [RADAR-base/radar-helm-charts#9182](#)

 Open

**Use of Incorrectly-Resolved Name or Reference SNYK-RHEL9-PYTHON3-10415440** [RADAR-base/radar-helm-charts#9185](#)

 Open

**Directory Traversal SNYK-RHEL9-PYTHON3-10415579** [RADAR-base/radar-helm-charts#9186](#)

 Open

**Directory Traversal SNYK-RHEL9-PYTHON3-10409385** [RADAR-base/radar-helm-charts#9187](#)



**Directory Traversal SNYK-RHEL9-PYTHON3-10415856** [RADAR-base/radar-helm-charts#9188](#)



**Directory Traversal SNYK-RHEL9-PYTHON3-10415394** [RADAR-base/radar-helm-charts#9189](#)



**Use of Incorrectly-Resolved Name or Reference SNYK-RHEL9-PYTHON3-10415440** [RADAR-base/radar-helm-charts#9191](#)



**Directory Traversal SNYK-RHEL9-PYTHON3-10415579** [RADAR-base/radar-helm-charts#9193](#)



**Directory Traversal SNYK-RHEL9-PYTHON3-10415856** [RADAR-base/radar-helm-charts#9195](#)



**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10409389** [RADAR-base/radar-helm-charts#9197](#)



**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415372** [RADAR-base/radar-helm-charts#9199](#)



**Use of Incorrectly-Resolved Name or Reference SNYK-RHEL9-PYTHON3LIBS-10415418** [RADAR-base/radar-helm-charts#9201](#)



**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10409389** [RADAR-base/radar-helm-charts#9202](#)



**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415581** [RADAR-base/radar-helm-charts#9203](#)



**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415372** [RADAR-base/radar-helm-charts#9204](#)

[Open](#)

**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415830** [RADAR-base/radar-helm-charts#9205](#)

[Open](#)

**Use of Incorrectly-Resolved Name or Reference SNYK-RHEL9-PYTHON3LIBS-10415418** [RADAR-base/radar-helm-charts#9206](#)

[Open](#)

 This was referenced 2 days ago

**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415581** [RADAR-base/radar-helm-charts#9208](#)

[Open](#)

**Directory Traversal SNYK-RHEL9-PYTHON3LIBS-10415830** [RADAR-base/radar-helm-charts#9210](#)

[Open](#)

[Sign up for free](#) to join this conversation on GitHub. Already have an account? [Sign in to comment](#)

Reviewers

 encukou

 AA-Turner

 ethanfurman



Assignees

 Yhg1s

Labels

None yet

Projects

None yet

---

### Milestone

No milestone

---

### Development

Successfully merging this pull request may close these issues.

None yet

---

### 7 participants

