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# 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... 0c16f5f

ambv requested a review from ethanfurman as a code owner last year

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 [last year](#)

[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` [last year](#) 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 `Lib/test/test_tarfile.py` Outdated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 [last year](#)

[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 `Lib/test/test_tarfile.py` Outdated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 `Lib/test/test_ntpath.py` Outdated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.



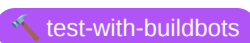
 **ambv** and others added 2 commits [last year](#)

  [Work around Windows test failures](#)



 [3c5ed15](#)

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

 [5af66c6](#)

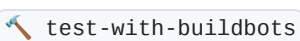
  **encukou** added the  label [on Jun 2, 2025](#)

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

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















Results will be shown at:

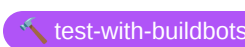
<https://buildbot.python.org/all/#/grid?branch=refs%2Fpull%2F135037%2Fmerge>

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

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

 **encukou** and others added 7 commits [last year](#)

-   [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  label on [Jun 3, 2025](#)

1746 hidden items

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**[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](#)

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

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

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

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

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

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

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

 Closed

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

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

 Closed

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

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

 Closed

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

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

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

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

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This was referenced 2 weeks ago

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

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Reviewers

 encukou

 AA-Turner

 ethanfurman



Assignees

 Yhg1s

Labels

None yet

Projects

None yet

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### Milestone

No milestone

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### Development

Successfully merging this pull request may close these issues.

None yet

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### 7 participants

