# 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
Signed-off-by: Łukasz Langa lukasz@langa.pl

- Issue: **Multiple tarfile extraction filter bypasses (`filter="tar"` / `filter="data"`)** #135034

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📚 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`Lib/test/test_tarfile.py` Outdated Show resolved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`Lib/test/test_tarfile.py` Outdated — Show resolved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`Lib/test/test_ntpath.py` Outdated — Show resolved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 🔨 test-with-buildbots 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 `🔨 test-with-buildbots` label again.

**bedevere-bot** removed the 🔨 test-with-buildbots 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 🔨 test-with-buildbots label on Jun 3, 2025

**1749 hidden items**

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**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

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**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-10415372** RADAR-base/radar-helm-charts#9032

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

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**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

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

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

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

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

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

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**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

Closed

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

Closed

This was referenced 2 weeks ago

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

Closed

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

Closed



**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**