

python / cpython Public

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# gh-105704: Disallow square brackets ([ and ]) in domain names for parsed URLs #129418

Merged orsenthil merged 4 commits into python:main from sethmlarson:bracketed-domains on Jan 31, 2025

Conversation 16 Commits 4 Checks 0 Files changed 3



sethmlarson commented on Jan 28, 2025 • edited

Contributor

Opening this pull request in favor of #111261, as the original author appears to not be responding to reviews. This moves the error to occur during parsing instead of on the ParseResult properties.

cc @gpshead @orsenthil @pschoen-itsc as reviewers on the previous PR.

- Issue: [\[CVE-2025-0938\] urlparse does not flag hostname \\*containing\\* \[ or \] as incorrect #105704](#)

pythongh-105704: Disallow square brackets ( and ) in domain names for... 6204ab9

sethmlarson added type-security needs backport to 3.9 needs backport to 3.10 needs backport to 3.11 needs backport to 3.12 needs backport to 3.13 labels on Jan 28, 2025

bedevere-app Bot added the awaiting review label on Jan 28, 2025

bedevere-app Bot mentioned this pull request on Jan 28, 2025

**[CVE-2025-0938] urlparse does not flag hostname \*containing\* [ or ] as incorrect #105704**

Closed

**sethmlarson** requested review from **gpshead** and **orsenthil** [last year](#)

**Zerolntensity** reviewed [on Jan 29, 2025](#)

[View reviewed changes](#)

> Misc/NEWS.d/next/Security/2025-01-28-14-08-03.gh-issue-1057 Outdated Show resolved

04.EnhHxu.rst

**vstinner** reviewed [on Jan 30, 2025](#)

[View reviewed changes](#)

Lib/test/test\_urlparse.py

1425	+	self.assertRaises(ValueError, urllib.parse.urlsplit, 'scheme://prefi
1426	+	self.assertRaises(ValueError, urllib.parse.urlsplit, 'scheme://[::1]
1427	+	self.assertRaises(ValueError, urllib.parse.urlsplit, 'scheme://user@
1428	+	self.assertRaises(ValueError, urllib.parse.urlsplit, 'scheme://user@

**vstinner** [on Jan 30, 2025](#) Member

It might be helpful to add tests only with `[ ]`, and tests only with `] ]`. Such URL is also invalid, no?

**sethmlarson** [on Jan 30, 2025](#) Contributor Author

Yeah, I'll add tests with that structure too! Thanks :)

1

**sethmlarson** [on Jan 30, 2025](#) Contributor Author

Added in [ebf92bb](#)

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

[Use Sphinx references](#) ... [3ab35e8](#)

[Add mismatched bracket test cases, fix news format](#) [ebf92bb](#)

  **sethmlarson** requested a review from **vstinner** [last year](#)

 **orsenthil** reviewed [on Jan 30, 2025](#)

[View reviewed changes](#)

```
> Lib/test/test_urlparse.py ⌵ Show resolved
```

  [Add more test coverage for ports](#)

✓ [2817b2e](#)

 **orsenthil** approved these changes [on Jan 30, 2025](#)

[View reviewed changes](#)

 **orsenthil** left a comment

Member

LGTM.  
Thank you!

  **bedevere-app** Bot added **awaiting merge** and removed **awaiting review** labels [on Jan 30, 2025](#)

**sethmlarson** commented [on Jan 31, 2025](#)

Contributor Author

The failure in Windows free-threading looks unrelated, I can't merge without all the checks passing so if someone else can that would be appreciated 💜

  **orsenthil** enabled auto-merge (squash) [last year](#)

  **orsenthil** disabled auto-merge [last year](#)

Member

**orsenthil** commented on Jan 31, 2025

Looks like that's a required to succeed.



**orsenthil** merged commit **d89a5f6** into `python:main` on Jan 31, 2025

**miss-islington-app** (Bot) commented on Jan 31, 2025

Thanks [@sethmlarson](#) for the PR, and [@orsenthil](#) for merging it 🍷🎉.. I'm working now to backport this PR to: 3.9, 3.10, 3.11, 3.12, 3.13.



**bedevere-app** (Bot) removed the **awaiting merge** label on Jan 31, 2025



**miss-islington** pushed a commit to `miss-islington/cpython` that referenced this pull request on Jan 31, 2025



**pythongh-105704**: [Disallow square brackets \(\[ and \]\) in domain nam...](#) ... [6117a60](#)

**bedevere-app** (Bot) commented on Jan 31, 2025

[GH-129526](#) is a backport of this pull request to the [3.13 branch](#).

328 hidden items

[Load more...](#)



This was referenced on Feb 4, 2025

**[Fix: Reject creating tags of the wrong subtype greenbone/gvmd#2362](#)**

Merged

**[Avoid problem with the latest changes to the apply of report formats.](#)**

[greenbone/gvmd#2367](#)

Closed

**Support feed for 24.10** [greenbone/greenbone-feed-sync#253](#)

Merged

**Use SemVer instead of CalVer** [greenbone/greenbone-feed-sync#254](#)

Merged

**Fix CI: Run new version of black.** [greenbone/ospd-openvas#1025](#)

Merged

**Drop the old feed sync scripts** [greenbone/gvmd#2350](#)

Merged

**Update copyright and GMP feed version** [greenbone/gvmd#2368](#)

Merged

**Fix: Use CPE v2.2 in new CVE scanner, add indexes** [greenbone/gvmd#2365](#)

Merged

 **srinivasreddy** pushed a commit to [srinivasreddy/cpython](#) that referenced this pull request on Feb 7, 2025

 [pythongh-105704](#): [Disallow square brackets \(\[ and \]\) in domain nam...](#) ... [1f1424b](#)

  **github-actions** (Bot) mentioned this pull request on Feb 7, 2025

**Drop the feed version from gvmd data directories by default** [greenbone/greenbone-feed-sync#255](#)


Merged


 1 task

  **The-Compiler** mentioned this pull request on Feb 17, 2025

**urllib.parse doesn't fully comply to RFC 3986** [#78541](#)

Closed

 **The-Compiler** added a commit to [qutebrowser/qutebrowser](#) that referenced this pull request on Feb 17, 2025

 [Update urlmatch tests for Python fixes](#) ... [accce7f](#)

 **ambv** pushed a commit that referenced this pull request on Feb 19, 2025



[3.11] gh-105704: Disallow square brackets ( [ and ] ) in domain na...



526617e



ambv added a commit that referenced this pull request on Feb 19, 2025



[3.10] gh-105704: Disallow square brackets ( [ and ] ) in domain na...



b8b4b71



ambv added a commit that referenced this pull request on Feb 19, 2025



[3.9] gh-105704: Disallow square brackets ( [ and ] ) in domain nam...



ff4e5c2



gentoo-bot pushed a commit to gentoo/cpython that referenced this pull request on Apr 9, 2025



[3.9] pythongh-105704: Disallow square brackets ( [ and ] ) in doma...



558d39c



This was referenced on May 19, 2025

**Feature/GitHub actions** maleficarum/eversports#6

Closed

**Feature/test cases** maleficarum/eversports#8

Merged

**Feature/test cases** maleficarum/eversports#9

Merged

**feat: Add mongo cloud support removing non-required configuration params**

maleficarum/eversports#10

Merged

**test: Add an extra test for membership repository.** maleficarum/eversports#11

Merged

**feat: Terraform stack added** maleficarum/eversports#12

Merged

**Docs/readme** maleficarum/eversports#18

Merged

**Updated test cases** maleficarum/eversports#20

Merged

**test: Add sonarqube support** maleficarum/eversports#21

Closed

**Test/sonarqube maleficarum/eversports#22**

Merged

**Fixed medium issues according static analysis in sonarqube maleficarum/eversports#23**

Merged

**doc: Updated README with details about github actions maleficarum/eversports#24**

Merged

**test: Add coverage support for sonarqube maleficarum/eversports#25**

Merged

 **chadkouse** pushed a commit to chadkouse/qutebrowser that referenced this pull request [on Jul 31, 2025](#)

 [Update urlmatch tests for Python fixes](#) ... [b1e7eb9](#)

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Reviewers

-  ZeroIntensity 
-  orsenthil 
-  gpshead 
-  vstinner 

Assignees

No one assigned

Labels

type-security

Projects

None yet

Milestone

No milestone

### Development

Successfully merging this pull request may close these issues.

None yet

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### 5 participants

