

Filing a Bug in Debian By Aaron Grothe

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Introduction

Over the years I've filed a handful of bugs against various distributions I've used.

First bug filed was back in 2000 about the Debian installer while working at Heimdall Linux. It was rejected :-(but we did get clarification on what we did wrong.

Debian background

Debian is a volunteer distribution

It is largely supported by the work of unpaid Debian maintainers

Debian is the base for a lot of other Linux distributions

- Ubuntu
- Linux Mint
- Kali
- Knoppix
- Ton of others

Debian Releases

There are usually 4 Releases of Debian at any time

- Oldstable - (Stretch) - Debian 9 - some security updates, but should move on
- Stable - (Buster) - Debian 10 - current supported Debian version - more about stability than newest packages
- Testing - (Bullseye/Testing) - 11 - will become stable in the first half of 2021
- Unstable - (Unstable/Sid) - is the name for the latest greatest version of Debian

Named after Toy Story characters in honor of Bruce Perens

Which Debian version do you Run?

On my main desktop I run Debian/Testing. I usually will get burned once or twice a year by a bug. Month ago there was a kwin core dump which prevented KDE from running. So I had to switch to Mate for a couple of days until the issue was fixed. Thought about switching to SID Kde packages, but just used Mate for a couple of days.

Funnily enough this usually gets worse right before a release when a lot of packages are getting pushed in before the cutoff.

On most servers I tend to run Stable. Have a couple of VMs of Unstable to play around with as well

So what is your bug?

Python 3.9.1 has made some changes with regards to how it handles simple vs. compound statements.

So cutting and pasting commands from one window creates issues in the other window as it doesn't realize they are independent commands

3 import statements

File Edit View Bookmarks Settings Help

```
import os  
import datetime  
import pprint
```

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Put them into the 3.9 interpreter

```
grothe@desktop:~/pres/olug$ which python3
/usr/bin/python3
grothe@desktop:~/pres/olug$ python3
Python 3.9.1 (default, Dec  8 2020, 07:51:42)
[GCC 10.2.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import os
import datetime
import pprint

File "<stdin>", line 1
    import os
import datetime
import pprint

    ^
SyntaxError: multiple statements found while compiling a single statement
>>> █
```


What???

That doesn't look promising

That is the result of running on an up to date Debian testing installation with the latest available version of Python 3 (3.9.1)

Main server runs an up to date Debian stable installation. With the latest version of Python 3 (3.7.3). We'll see if it has the same issue

Put that into the 3.7.3 interpreter

```
grothe@server:~$ which python3
/usr/bin/python3
grothe@server:~$ python3
Python 3.7.3 (default, Jul 25 2020, 13:03:44)
[GCC 8.3.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import os
>>> import datetime
>>> import pprint
>>>
>>> █
```

That's not a good thing

So think we have a bug.

Next step let's go out and grab the version of Python 3.9.1 and compile it up.

Off to <https://www.python.org>

```
% wget
```

```
https://www.python.org/ftp/python/3.9.1/Python-3.9.1.tar.
```

```
xz
```

```
% tar xvf Python-3.9.1.tar.xz
```

```
% cd Python-3.9.1
```

```
% ./configure
```

```
% make
```

Try our Locally compiled version

```
grothe@desktop:~/pres/olug/Python-3.9.1$ ./python
Python 3.9.1 (default, Dec 10 2020, 18:05:12)
[GCC 10.2.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import os
import datetime
import pprint

>>> >>> >>> >>> █
```

Hmmm???

Ok.

So it appears to be a problem with a difference between the Debian packaged version and the upstream version.

Feel like we have a reproducible deviation, that is reasonably well defined.

So time to file a bug

What other information do we need?

Base information we need

- Debian version
- Package
- Information to recreate the bug
- Email address to hit to communicate with you
- How to use reportbug

Debian Version

Many ways to grab this

```
% cat /etc/*release
```

```
% cat /etc/issue
```

```
% cat /etc/debian_version
```

Or the classics

```
% lsb_release -d # or
```

```
% lsb_release -a
```

Debian Version: lsb_release -a

```
grothe@desktop:~/pres/olug/Python-3.9.1$ lsb_release -a
No LSB modules are available.
Distributor ID: Debian
Description:    Debian GNU/Linux bullseye/sid
Release:       testing
Codename:      bullseye
grothe@desktop:~/pres/olug/Python-3.9.1$ █
```


Which Package?

We need to know what package to refer to. Ok. Time for a bit of dpkg love.

Multiple ways of doing this as well:

Can hit <https://packages.debian.org> and do a search for python3

Or we can ask the installed system via dpkg-query

```
% dpkg-query -S /usr/bin/python3
```

Asking dpkg nicely

```
grothe@desktop:~/pres/olug/Python-3.9.1$ dpkg-query -S /usr/bin/python3
python3-minimal: /usr/bin/python3
grothe@desktop:~/pres/olug/Python-3.9.1$ █
```

Do we have reportbug installed

You can submit a bug multiple ways. The best for Debian is to just use reportbug.

Check to make sure we have reportbug installed

% which reportbug

Info Summary

Debian Version: Debian (Testing)
Package Name: python3-minimal
Reportbug is installed

Start filing a bug report with reportbug

If it is the first time you fire up reportbug you'll be asked to select your mode

- Novice: simple prompts, bypasses technical questions
- Standard: more extensive prompts, including stuff a moderately sophisticated user would be expected to know about Debian
- Advanced: Standard plus you should know about "incoming" (incoming is used for new packages as they are updated)
- Expert: no handholding, Shouldn't use unless you really know what the heck you're doing
- For this one we'll pick "Novice" :-)

ReportBug continues

You'll be asked questions along the lines of the following

- Do you have direct Internet access? - needed to submit a bug
- Name to use
- Email address to contact you at (note it will be public)
- Do you have an MTA configured? (don't need to can use the Debian ones)
- Name of your package
- Asked to review current bugs for this package to make sure you're not filing a duplicate bug
- Subject name for bug

ReportBug continues

You'll be asked to classify the severity of the bug

- Important - major effect on usability of a package
- Normal - issue with package, for example menu item or option not working
- Minor - things like spelling mistakes and cosmetic errors
- Wishlist - suggestion for new features

We'll put ours in as Normal

ReportBug Continues

Dropped into an editor session and allowed to put our information in

Let's take a look at the file `bugreport.txt` for this information

Reportbug Continues

We'll be asked to confirm submitting the bug.

And then we wait for the email for the bug system

So let's take a look at a copy of the email I've got saved under the name email.txt

ReportBug Email

Contains the following information

Issue number for Bug: 977116

Email to use to submit further information:

977116@bugs.debian.org

URL to hit to see bug status:

<https://bugs.debian.org/cgi-bin/bugreport.cgi?bug=977116>

Waiting for Resolution

This isn't a show stopper for me, but it is annoying

Options:

- I can grab the debian source and make changes and install it
- I can downgrade the version of Python from 3.9.1 to 3.8.x possibly, but that can also cause issues
- I can run the version of Python 3.9 that I got from python.org and run that one
- Can try and grab the Python3 packages from Sid/Unstable that might fix it
- I can just not use the cut and paste

Timeline

- 2020-12-09 - find bug, try and see if there is a way around it or it is just me
- 2020-12-10 - filled bug
- 2020-12-28 - no updates :-)

Other Distros

Fedora lays out how to file a bug at their site-

<https://docs.fedoraproject.org/en-US/quick-docs/howto-file-a-bug/>

They use bugzilla

Ubuntu lays out how to file a bug at their site -

<https://help.ubuntu.com/community/ReportingBugs>

They have a similar tool in ubuntu-bug to reportbug

Summary

Filing bugs by users helps the maintainers fix issues with their packages.

You can learn a lot in the process of filing a bug even if it gets rejected.