

# GSOC11: SUSE® Bug reporter

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# SUSE® Bug reporter

## Genuine useless topic

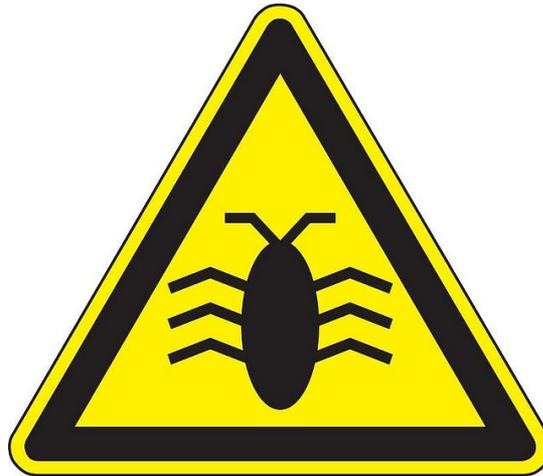
- Why do we need such tool (slides 3–8)
- How do we do it now (slides 9-13)
- How to do it better (slides 14-24)
- The tool (slides 24-29)
- Q&A (slides 30-30)
- Resources (slides 31-31)

Why do we need such tool

# Why do we need such tool

“There is at least one bug  
in every non-trivial program”

Dr. Murphy



# Why do we need such tool

“So if there is at least one bug in every program ...”

“...then there must be a lot of bugs in average Linux distribution!”

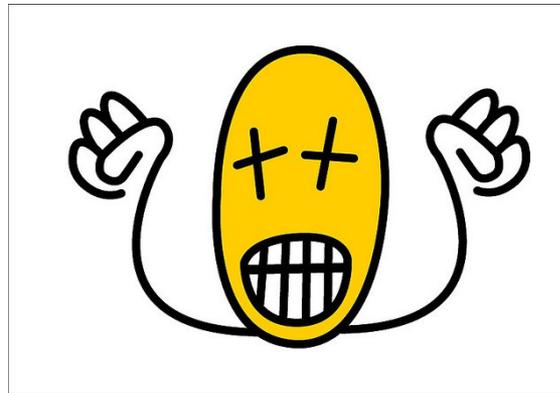
**consequence of Dr. Murphy's law**



# Why do we need such tool

“Did someone ever used this stupid !@\$#% %^# \$% system?”

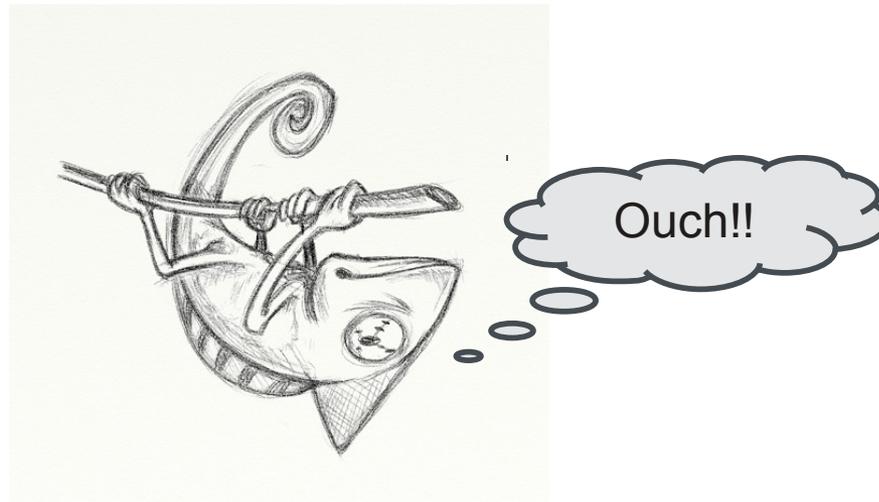
reinterpretation of Frustrated User



# Why do we need such tool

“I deleted openSUSE and installed some  
\${BETTERSYSTEM}”

ex-SUSE user



# Why do we need such tool

“Cooperation between users and developers is needed for every Linux distribution”

cooperation, consolidation, communication, ...



... and snowboarding?

How do we do it now

# How do we do it now

User



Hey, where's my icon?  
I will have open a bugreport

Developer



Did you reproduced it with foo?  
Where is the backtrace?  
Which version of bar do you have?

User



Help! I just want my icons back!

# How do we do it now

Creating a valuable bug report is not trivial

- You have to survive a product selection on [bugzilla.novell.com](http://bugzilla.novell.com)
- You have to summarize it somehow
- You have to wait until Bugzilla screening team finds an assignee
- ... you are waiting
- ... you are still waiting
- ... then assignee returns it back to screening team

# How do we do it now

Create a valuable report is not trivial

- Assignee asked you for some details
- Or he points you to [bugs.opensuse.org](https://bugs.opensuse.org) to find how to add such details
- Or he realizes you have a package from 3<sup>rd</sup> party BuildService repository he is not responsible for,
- ... so you are waiting again for new assignee
- ... you are still waiting
- And your bug will be FIXED, WONTFIXED or still OPENED

# How do we do it now

“Waiting and delays are an integral part of every bug report”

The Bug Reporter



How to do it better

# How to do it better

“Waiting and delays are an integral part of every bug report”

bug reporter



Not necessarily!!!

# How to do it better

“The user has to add all relevant information in the beginning!”

The Bug Assignee



How brilliant idea!!!

# How to do it better

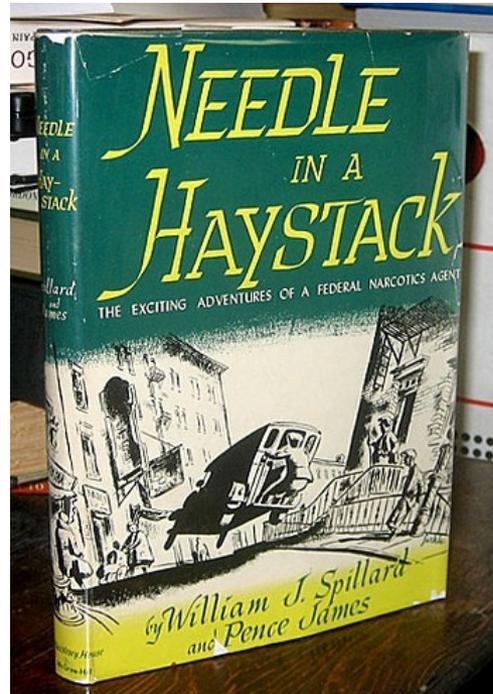
So maybe we can help with a collecting of such information

1. Find an assignee to reduce a load of screening team
2. Find a name of buggy application/package
3. Get the relevant information from user's system (may require root access)
4. Help with a duplicates in a bugzilla
5. ... and there have to be more cool ideas I never ever realized before

# How to do it better

“But I can't find a maintainer!!”

The Bug Reporter/Screening Team



# How to do it better

## How to find an assignee

1. We have a BuildService
2. Every package in it has its set of bugowners and maintainers
3. So if we know a name of package
4. Then we can find a maintainer using BuildService
5. And if we don't, then there is a still old-slow-way



# How to do it better

“Maybe now it is the perfect time to review how many packages/project you maintain in a Build Service.”

myself



Bugs, bugs, bugs!

# How to do it better

## Find a name of a buggy package

- Easy for experienced or command-line users  
`rpm -qf ${BINARY}`

- Not so straightforward for X users

```
xprop WM_CLASS
WM_CLASS(STRING) = "VCLSalFrame",
"libreoffice-impres"
if ! rpm -test -e "libreoffice-impres"; then
    package=$(rpm -qf $(which libreoffice-
impres))
fi
```

- Use other hints, like `iotop`, `top`, or some form of AI?

# How to do it better

Add all relevant information as soon as possible

- How to decide which ones are relevant
- Reuse guidelines on [bugs.opensuse.org](http://bugs.opensuse.org)



# How to do it better

## Duplicates identification

- Search the bugs with a package name in a summary
- Show the most matching bugs
- And hope user will pick one of these



The tool

# The tool

- Command line tool
- Provides interactive and non-interactive interface
- Implements most of the ideas above
- Talks with Build Service via osc (library)
- Talks with Bugzilla using python-bugzilla (XMLRPC)
- Reuses your credentials stored in `~/ .osrcrc`

# The tool

- Inspired by Debian reportbug
- Not yet in Factory (WIP), so please install from home:mihneadb
- Usage is simple  
bugreporter  
man bugreporter



# Why we need such tool

“Never show running program on a presentation”

Bill Gates

```
A problem has been detected and windows has been shut down to prevent damage
to your computer.

PAGE_FAULT_IN_NONPAGED_AREA

If this is the first time you've seen this stop error screen,
restart your computer. If this screen appears again, follow
these steps:

Check to make sure any new hardware or software is properly installed.
If this is a new installation, ask your hardware or software manufacturer
or any windows updates you might need.

If problems continue, disable or remove any newly installed hardware
or software. Disable BIOS memory options such as caching or shadowing.
If you need to use Safe Mode to remove or disable components, restart
your computer, press F8 to select Advanced startup options, and then
select Safe Mode.

Technical information:

*** STOP: 0x00000050 (0xFF000000,0x00000008,0xFF000000,0x00000000)
```



# The tool

So that's all folks!



# The tool

## What is missing

- There is no attachment support in XMLRPC
- So the gathering code has no usage atm
- Known by upstream, but might be worked around
- GUI is missing a lot!
- My preference is to have it done in libYUI, so maybe next SOC
- Other ideas ...

Q&A

# Resources

Thanks flickr.com users and Creative Common

- \_ warning-beta-software.jpg <http://www.flickr.com/photos/fastjack/282707058/>
- \_ angry-face.png <http://www.flickr.com/photos/gwendalcentrifuge/2004254879/>
- \_ geeko-steiner.jpg <http://www.flickr.com/photos/jakubsteiner/2479505530/>
- \_ new-computer-user.jpg <http://www.flickr.com/photos/20283351@N00/52006950/>
- \_ baby-geek.jpg <http://www.flickr.com/photos/ourdorseyfamily/1025218592/>
- \_ warning.jpg <http://www.flickr.com/photos/izumiflowers/2751808424/>
- \_ eureka.jpg <http://www.flickr.com/photos/rohdesign/5580144577/#/photos/rohdesign/5580144577/lightbox/>
- \_ eedle-in-a-haystack.jpg <http://www.flickr.com/photos/friendssfpl/3706903077/>
- \_ yes-we-can.jpg <http://www.flickr.com/photos/baggis/5549228126/>
- \_ apology.jpg <http://www.flickr.com/photos/k-ideas/5943821654/#/photos/k-ideas/5943821654/lightbox/>
- \_ dilemma.jpg [http://farm4.static.flickr.com/3039/2635898654\\_12ca95908d\\_z.jpg](http://farm4.static.flickr.com/3039/2635898654_12ca95908d_z.jpg)
- \_ bsod.jpg <http://www.flickr.com/photos/fsse-info/3253336998/#/photos/fsse-info/3253336998/lightbox/>
- \_ thats-all-folks.jpg <http://www.flickr.com/photos/gswj/1158070491/#/photos/gswj/1158070491/lightbox/>





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