Bugzilla Kills Godzilla

or How to report bugs the useful way

Lukáš Růžička (lruzicka@redhat.com)

Fedora QE

What is Bugzilla?

Bugzilla is a bug-tracking (issue-tracking) system. Among the most important features are:

- open source
- powerful bug tracking
- highly configurable
- history aware
- robust and stable
- secure
- various interfaces (configurable and localisable)

More at www.bugzilla.org.

Red Hat Bugzilla

Bugzilla is the bug-tracking system used at Red Hat. It is available to everyone (customers, collaborators, developers, QAs and more) interested in:

- Red Hat products
- JBoss products
- Fedora products
- Community projects
- Internal products

Red Hat Bugzilla lives at `bugzilla.redhat.com`.

Why bug tracking?

- receive information about a problem
- organize your time, plan, and estimate
- cooperate with others
- share knowledge and ideas
- see the progress
- find a solution.

Introduction
oo

Reporting bugs
o●oooo

Collect information
oooooo

Using Bugzilla
oooooooooooooooo

Why you should think about reporting bugs?

You want others know that you . . .

- want a problem fixed
- have a unique hardware and setting
- have a new idea
- have different needs and expectations
- want to keep people informed

Introduction
oo

Reporting bugs
oooeooo

Collect information
oooooo

Using Bugzilla
ooooooooooooooo

What could be a bug?

You would like to report a bug anytime you find out that
something is not right, especially when the program:

- does not start
- keeps crashing
- behaves incorrectly
- reports errors
- lacks some features[1]
- and more

_____

[1]If you want to suggest new features, contact upstream developers.

Introduction
00

Reporting bugs
000●00

Collect information
000000

Using Bugzilla
00000000000000

Before you report

Think about basic information that you can say about the
problem, for example . . .

- what happened?
- when?
- how?
- how often?
- why (if possible)?
- why it should not have happened?

Introduction
00

Reporting bugs
000●00

Collect information
000000

Using Bugzilla
00000000000000

Reproducing the bug

1. Make sure you can repeat the bug again.
2. Record the steps needed to reproduce it.
3. Try to achieve a **minimal reproducer**.
4. Try changing some of the steps to see if situation changes.
5. Try to use clean user and application profiles.
6. Try to find out if the bug can be avoided by changing the workflow (workaround).

Introduction
00

Reporting bugs
000000●

Collect information
000000

Using Bugzilla
00000000000000

Getting and providing info

If your bug report should be good, you have to collect some info to provide, for example:

- system logs and info
- application messages
- screenshots and videos

Introduction
oo

Reporting bugs
oooooo

Collect information
●ooooo

Using Bugzilla
ooooooooooooooo

ABRT

The **Automatic Bugzilla Reporting Tool** is a service that monitors your computer and analyzes problems.

- installed by default
- records failures and collects data
- makes reporting easier
- sometimes is useless
- use `abrt`, `abrt-cli` for command line
- use `gnome-abrt` for GUI

Introduction
00

Reporting bugs
000000

Collect information
0●0000

Using Bugzilla
00000000000000

journalctl

journalctl is a front-end to a service that collects the majority of logs of the system. You can filter the logs using various options.

- --boot logs from the latest boot
- --unit logs from a certain system unit
- --follow follow logs as they appear
- --since logs since a time point
- --until logs until a time point

See `man journalctl` for more info.

Introduction
00

Reporting bugs
000000

Collect information
000●000

Using Bugzilla
00000000000000

Collecting logs

- inspect `/var/log/` for log files
- use `dmesg` for kernel logs
- run the application from the terminal and see if messages are printed to `stdout` and `stderr`
- inspect `.local` and `.config` for settings
- run the command with `-v` for more verbosity

Introduction
00

Reporting bugs
000000

Collect information
000●00

Using Bugzilla
00000000000000

Redirecting output

Let's say we run a script to get the results. It sends messages to **stdout** and **stderr**. We may need to redirect that output.

> stdout to file

2> stderr to file

2>&1 stderr to stdout

&> everything to file

Introduction
oo

Reporting bugs
oooooo

Collect information
oooo●o

Using Bugzilla
oooooooooooooooo

Getting logs from the machine

Sometimes, you cannot **copy&paste** logs from the testing (virtual) machine. There are several ways, how you can get them out:

- using **scp** or **rsync**
- using **fpaste** or **dpaste**

Introduction	Reporting bugs	Collect information	Using Bugzilla
oo	oooooo	ooooo●	oooooooooooooo

Using dpaste

Fedora offers **fpaste** by default, but it returns a long and hard to remember hash – `Kut1tUlXWJvpwI2QEcX5EA`.

dpaste returns a four letter hash, which is fairly easy to remember – `fxEr`.

You can get **dpaste** from
https://github.com/lruzicka/dpaste.git

Introduction
oo

Reporting bugs
oooooo

Collect information
oooooo

Using Bugzilla
●ooooooooooooooo

New at Bugzilla

Welcome to Red Hat Bugzilla

Thank you for visiting Red Hat Bugzilla. Red Hat Bugzilla is the Red Hat bug-tracking system and is used to submit and review defects that have been found in Red Hat distributions. Red Hat Bugzilla is not an avenue for technical assistance or support, but simply a bug tracking system. If you submit a defect, please provide detailed information in your submission after you have queried Red Hat Bugzilla to ensure the defect has not been reported yet. Defects will go directly to the engineer responsible for the component you filed the defect against. Engineers have many responsibilities and will get to your defect in due time.

If you are a Red Hat customer with an active subscription, please visit the Red Hat Customer Portal for assistance with your issue.

If you are a Fedora Project user and require assistance, please consider using one of the mailing lists we host for the Fedora Project.

File a Bug   **Search**   **Open a New Account**   **Documentation**

Enter a bug # or some search terms   Quick Search   [?]

Introduction
oo

Reporting bugs
oooooo

Collect information
oooooo

Using Bugzilla
●●○○○○○○○○○○○○○○

Logged into Bugzilla

Welcome to Red Hat Bugzilla

Thank you for visiting Red Hat Bugzilla. Red Hat Bugzilla is the Red Hat bug-tracking system and is used to submit and review defects that have been found in Red Hat distributions. Red Hat Bugzilla is not an avenue for technical assistance or support, but simply a bug tracking system. If you submit a defect, please provide detailed information in your submission after you have queried Red Hat Bugzilla to ensure the defect has not been reported yet. Defects will go directly to the engineer responsible for the component you filed the defect against. Engineers have many responsibilities and will get to your defect in due time.

If you are a Red Hat customer with an active subscription, please visit the Red Hat Customer Portal for assistance with your issue.

If you are a Fedora Project user and require assistance, please consider using one of the mailing lists we host for the Fedora Project.

File a Bug   **Search**   **User Preferences**   **Documentation**

Enter a bug # or some search terms   Quick Search   [?]

Introduction
○○

Reporting bugs
○○○○○○

Collect information
○○○○○○

Using Bugzilla
○○●○○○○○○○○○○○○○

Classify the bug

🏠 **New** 🔍 ▾ **My Links** ▾ **Saved Searches** ▾ **Help** ▾ **Agile** ▾ **Administration**

First, you must pick a classification on which to enter a bug:

All: Show all products

Red Hat: Red Hat Products

JBoss: JBoss Products

Fedora: Fedora Products

Community: Community Projects

oVirt: oVirt Virtualization Management Projects

Internal: Internal Projects.

Other: Other Miscellaneous Products

Introduction
○○

Reporting bugs
○○○○○○

Collect information
○○○○○○

Using Bugzilla
○○○●○○○○○○○○○○○○

Choose the correct product

| 🏠 | **New** | **🔍 ▾** | **My Links ▾** | **Saved Searches ▾** | **Help ▾** | **Agile ▾** | **Administration** |

Next, you must pick a product on which to enter a bug:

Fedora: Fedora Products

Fedora: Bugs related to the components of the Fedora distribution. If you are reporting a bug against a
                                        is Fedora 30. If you have a bug to report against the daily development tree (rawhide) please

Fedora Container Images: Fedora Container Images

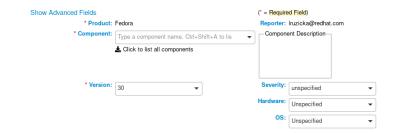**Fedora Documentation**:   Fedora Documentation

Fedora EPEL: For bugs relating to EPEL (Extra Packages for Enterprise Linux) run by Fedora Project

Fedora Localization: Localization (Translations into other Languages)

Fedora Management Console: For bugs related to the Fedora Management Console Software Development Kit

Fedora Modules: Fedora Modules

Introduction
○○

Reporting bugs
○○○○○○

Collect information
○○○○○○

Using Bugzilla
○○○○●○○○○○○○○○○

File the bug (part 1)

Show Advanced Fields

(* = Required Field)

* **Product:** Fedora

* **Component:** Type a component name. Ctrl+Shift+A to lis ▼

📥 Click to list all components

* **Version:** 30 ▼

Reporter: lruzicka@redhat.com

Component Description

Severity: unspecified ▼

Hardware: Unspecified ▼

OS: Unspecified ▼

File the bug (part 2)

Introduction
○○

Reporting bugs
○○○○○○

Collect information
○○○○○○

Using Bugzilla
○○○○○○●○○○○○○○○

Description of problem

- What is the problem?
- When does it appear?
- How much does it affect work?
- Why is it a problem?
- others

Introduction
oo

Reporting bugs
oooooo

Collect information
oooooo

Using Bugzilla
oooooooo●oooooo

Version of selected component

Provide the version number of the problematic components and also of the affected components.

- **About** menu in GUI
- `-v` or `--version` option on CLI (or `man`)
- `rpm -q` for installed packages
- `dnf info` for installed and available packages

Introduction
00

Reporting bugs
000000

Collect information
000000

Using Bugzilla
00000000●000000

How reproducible

- Always
- Sometimes – specify when exactly
- Under certain conditions – describe them
- Heisenbug

Introduction
oo

Reporting bugs
oooooo

Collect information
oooooo

Using Bugzilla
oooooooooo●ooooo

Steps to reproduce

Procedure that leads to reproducing the bug.

- One activity in one step.
- Do not skip steps, even if you think the step is obvious.
- Pay attention to details.
- Be exact.

Others want to see that bug, too.

Introduction
00

Reporting bugs
000000

Collect information
000000

Using Bugzilla
00000000000●0000

Results

Actual – what is the result of the current behaviour
Expected – how you think the system should behave

File the bug (part 3)

Introduction
oo

Reporting bugs
oooooo

Collect information
oooooo

Using Bugzilla
ooooooooooooo●oo

No clue about anything?

File the bug anyway!

Introduction
oo

Reporting bugs
oooooo

Collect information
oooooo

Using Bugzilla
ooooooooooooooo●o

Q&A

Question time.

Introduction
oo

Reporting bugs
oooooo

Collect information
oooooo

Using Bugzilla
oooooooooooooo●

End

Thank you for coming!