Triaging bug reports in GNOME

Tobias Mueller

2012-12-01
FOSS.in 2012
1. **Introduction**
   - About us
   - Motivation

2. **Bug Triaging**
   - Description
   - GNOME Methodology
   - Beginners Guide
   - Best Practice Pitfalls

3. **QnA**
   - Status Fields
   - Triaging Diagram
   - Questions
About me

Tobias

Mail  tobiasmue@gnome.org
      F289  F7BA  977D  F414  3AE9
      FDFB  F70A  0290  6C30  1813

⏰ Talk 30 min.
⏰ Ask questions immediately
⏰ discussion at the end (and in between, if applicable)
Motivation

Why are we here today?

- Help People to start triaging
- Show best practices and common pitfalls
- Identify, discuss and solve current problems
- Get to know each other, aka map addresses to faces
Motivation
Why is GNOME here today?

- tidy up bug database
  - ~5 active triagers
  - ~1200 ~750 ~ 500 incoming bug reports per week
  - ~500 closed bug reports per week
  - ~24000 unanswered open bug reports
  - ~25000 open bug reports older than two years
- bringing triage community together
- teaching newcomers in triaging
Description
What is Bug Triaging anyway?

- Quality Assurance
- Manage bug reports
  - get enough information for devs to fix bugs
  - keep bug reports in their actual state (NEEDINFO, OBSOLETE, Version, . . .)
  - address severe bug reports
- make users and devs happy :-)

Description
The Art of Bug Reporting

Place the bug details in a highly visible area

Describe the bug accurately so others would recognise it

Explain the location and environment where the bug dwells

Include the time and date of the bug find

Highlight how damaging or dangerous the bug is

Detail how to find the bug again and what footprints to follow

Give a brief summary of the bug

Big bug in a field
GNOME Methodology

How does GNOME manage its bug reports?

**Bugzilla** as Bug Database
- mature product
- awesome install base
- though old and kinda rusty

**gnome-bugsquad@gnome.org** as mailing-list
- Discuss Policies
- Organize Bugdays
- Answer Questions
- Subscribe [http://mail.gnome.org/mailman/listinfo/gnome-bugsquad](http://mail.gnome.org/mailman/listinfo/gnome-bugsquad)

**#bugs** on GIMPnet
- Easy Questions
- hang around
Beginners Guide

How do I triage bugs?
How do I triage bugs?

Create Bugzilla Account

To create a Bugzilla account, all you need to do is enter a legitimate e-mail address. You will receive an email at this address to confirm the creation of your account. You will not be able to log in until you receive the email. If it doesn't arrive within a reasonable amount of time, you can contact the maintainer of this Bugzilla installation at bugmaster@gnome.org.

E-mail address:

Send
Beginners Guide (cont.)

How do I triage bugs?

Subscribe Mailinglist

Gnome-bugsquad -- List to discuss bug maintenance in GNOME

About Gnome-bugsquad

This list is where we discuss how to manage bugs. Things like how to use bugzilla most effectively, how to respond to bugreports and so on.

To see the collection of prior postings to the list, visit the Gnome-bugsquad Archives.

Using Gnome-bugsquad

To post a message to all the list members, send email to gnome-bugsquad@gnome.org.

You can subscribe to the list, or change your existing subscription, in the sections below.

Subscribing to Gnome-bugsquad
How do I triage bugs?

Read Triage Guide
How do I triage bugs?

Triage bug reports

Write Comments, Ask on IRC or Mailinglist
Ask for permissions

On IRC or on Mailinglist
How do I triage bugs?

Be in the top 10!

**Weekly Bug Summary**

**Top 5 bug closers**

<table>
<thead>
<tr>
<th>Position</th>
<th>Who</th>
<th>Number of bugs closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jasper St. Pierre</td>
<td>48</td>
</tr>
<tr>
<td>2</td>
<td>Milan Crha</td>
<td>42</td>
</tr>
<tr>
<td>3</td>
<td>Cosimo Cecchi</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Matthew Barnes</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>Evan Nemerson</td>
<td>17</td>
</tr>
</tbody>
</table>

**Top 5 bug reporters**

<table>
<thead>
<tr>
<th>Position</th>
<th>Who</th>
<th>Number of bugs reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Milan Crha</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>Matthias Clasen</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Jasper St. Pierre</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Christophe Fergeau</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Jean-François Fortin Tam</td>
<td>13</td>
</tr>
</tbody>
</table>
Beginners Guide (cont.)
How do I triage bugs?

Collect Points

Real Triagers are older in bugzilla points than in real life
Best Practice Pitfalls
How does Triaging look like?

Communication
- Be nice, be friendly, be happy
- Answer early, answer often
- Be nice, be friendly, be happy
Best Practice Pitfalls (cont.)

How does Triaging look like?

Methods

- 🐿️ Adjust Bugzilla Metadata (Version, Product, ...)
- 🐘 Ask for proper Stacktrace (C vs Mono vs Python vs ...)
- 🐐 Analyze Stacktrace (Ignore Glib/Gtk+ buzz, Find crashing function, ...)
- 🦁 look for Dups with Traceparser
- 🐺 Rename Bug to include crashing function, filename, location
- 🐶 Watch out for modules that don’t like being triaged (Pango and vte)
Status Fields
What do all these fields mean, anyway?

**UNCONFIRMED**  This bug has recently been added to the database. Nobody has validated that this bug is true. Users who have obtained permissions from the bugsquad may confirm this bug, changing its state to \(\rightarrow\) NEW. It may also be directly resolved and marked RESOLVED, or more information may be necessary, moving it to NEEDINFO.

**NEW**  This bug has recently been added to the assignee’s list of bugs and must be processed. Bugs in this state may be accepted and become \(\rightarrow\) ASSIGNED, passed on to someone else and remain NEW, or resolved and marked RESOLVED.
ASSIGNED  This bug is not yet resolved, but is assigned to the proper person. From here bugs can be given to another person and become NEW, or resolved and become →RESOLVED.

NEEDINFO  More information from the reporter is needed to proceed further in fixing this bug. This should not be used when someone needs more information from a developer- a NEW or ASSIGNED bug implicitly needs more information from the developer.

RESOLVED  The bug has been resolved in some way. The resolution field should contain a secondary status describing the way in which it was resolved. See the Resolutions section for more details.
What do all these fields mean, anyway?

**VERIFIED**  GNOME does not substantially use VERIFIED (or CLOSED). When used, they indicate that a third party has checked to see that a bug was properly resolved.
Triaging Diagram
Eh, what? How does it look like?

- NEW
- NEEDINFO
- UNCONFIRMED
- RESOLVED
- REOPENED
- NOTGNOME
- FIXED
- INCOMPLETE
- OBSOLETE
- NOTABUG

- ASSIGNED [2]
- WONTFIX [2]

6 weeks without response [1]
Revert to previous status

Gnome version older than 2 releases

[1] It's not always 6 weeks. Some maintainers explicitly asked to not close after 6 weeks

[2] Only for maintainers
Triaging Diagram
Normal Flow

UNCONFIRMED

NEW

ASSIGNED [2]

REOPENED

RESOLVED

Revert to previous status

NOT GNOME

FIXED

INCOMPLETE

OBSOLETE

NOT A BUG

6 weeks without response [1]

Gnome version older than 2 releases

[1] It's not always 6 weeks. Some maintainers explicitly asked to not close after 6 weeks

ASSIGNED [2]

WONTFIX [2]

[2] Only for maintainers
Triaging Diagram

**NEW**

- **NEEDINFO**
- **UNCONFIRMED**
- **RESOLVED**
- **REOPENED**
- **Revert to previous status**

**NOT**
- **GNOME**
- **FIXED**
- **INCOMPLETE**
- **OBSOLETE**
- **NOTABUG**

6 weeks without response [1]

[1] It's not always 6 weeks. Some maintainers explicitly asked to not close after 6 weeks

ASSIGNED [2]

WONTFIX [2]

[2] Only for maintainers
Triaging Diagram

Resolutions

- NEW
- NEEDINFO
- UNCONFIRMED
- RESOLVED
- REOPENED
- Revert to previous status
- NOTGNOME
- FIXED
- INCOMPLETE
- OBSOLETE
- NOTABUG

6 weeks without response [1]

Gnome version older than 2 releases

[1] It's not always 6 weeks. Some maintainers explicitly asked to not close after 6 weeks
[2] Only for maintainers
Triaging Diagram

Summary

- NEW
- NEEDINFO
- UNCONFIRMED
- RESOLVED
- REOPENED
- Revert to previous status

- 6 weeks without response [1]

- Gnome version older than 2 releases

- NOTBUG
- NOTGNOOME
- FIXED
- OBSOLETE
- INCOMPLETE

- WONTFIX [2]

[1] It's not always 6 weeks. Some maintainers explicitly asked to not close after 6 weeks

[2] Only for maintainers
Conclusion

What we’ve just learned

- GNOME needs triagers
- It’s easy to start triaging
- It’s about people
Questions?