

Triaging Bugs in GNOME

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About me

Tobias

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ACF0 F5EC E9DC 1BDC F09D
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-  Talk 30 min.
-  Ask questions immediatly
-  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 incoming bugs per week
 - 🐾 ~ 750 closed bugs per week
 - 🐾 ~ 24000 unanswered bugs
 - 🐾 ~ 7000 bugs older than two years
- 🐾 bringing triage community together
- 🐾 teaching newcomers in triaging



Description

What is Bug Triaging anyway?




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







GNOME Methodology

How does GNOME manage its bugs?



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>

[#bugs](#) on GIMPnet

-  Easy Questions
-  hang around



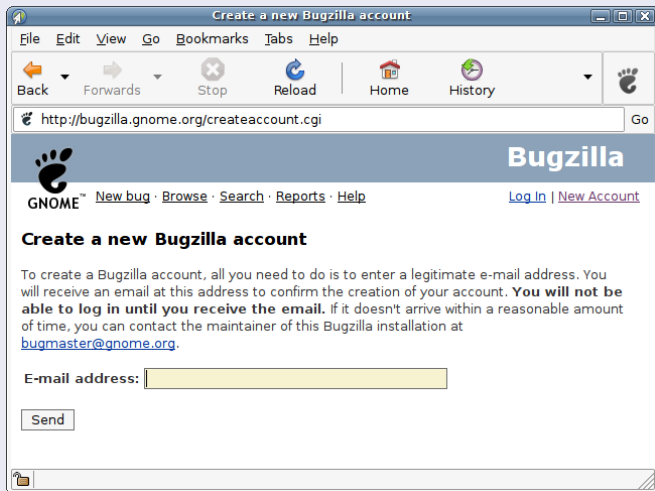
Beginners Guide

How do I triage bugs?

Beginners Guide (cont.)

How do I triage bugs?

Create Bugzilla Account




The screenshot shows a web browser window titled "Create a new Bugzilla account". The address bar contains the URL "http://bugzilla.gnome.org/createaccount.cgi". The browser's navigation bar includes buttons for Back, Forward, Stop, Reload, Home, and History. The page content features the Bugzilla logo and the GNOME logo. Below the logos, there are links for "New bug", "Browse", "Search", "Reports", and "Help", along with "Log In" and "New Account" links. The main heading is "Create a new Bugzilla account". The text explains that to create an account, one needs to enter a legitimate e-mail address and will receive a confirmation email. It emphasizes that the user will not be able to log in until they receive the email. If the email does not arrive, it suggests contacting the maintainer at "bugmaster@gnome.org". There is a text input field for the "E-mail address:" and a "Send" button below it.

Create a new Bugzilla account

File Edit View Go Bookmarks Tabs Help

Back Forward Stop Reload Home History

http://bugzilla.gnome.org/createaccount.cgi Go

 **Bugzilla**

GNOME™ [New bug](#) · [Browse](#) · [Search](#) · [Reports](#) · [Help](#) [Log In](#) | [New Account](#)

Create a new Bugzilla account

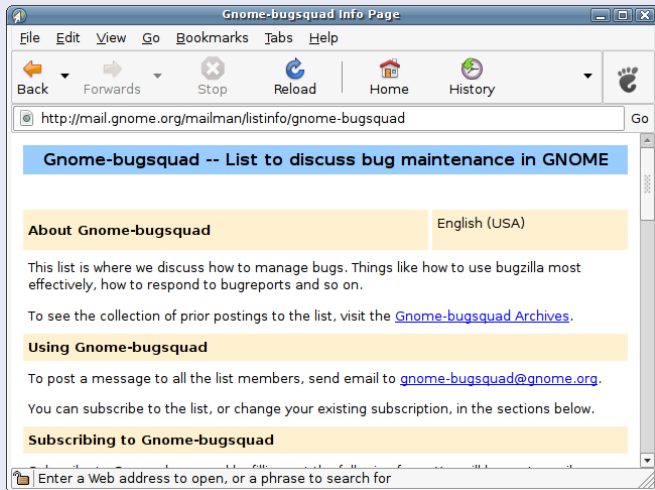
To create a Bugzilla account, all you need to do is to enter a legitimate e-mail address. You will receive an email at this address to confirm the creation of your account. **You will not be able to log in until you receive the email.** If it doesn't arrive within a reasonable amount of time, you can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

E-mail address:

Beginners Guide (cont.)

How do I triage bugs?

Subscribe Mailinglist



The screenshot shows a web browser window titled "Gnome-bugsquad Info Page". The address bar contains the URL "http://mail.gnome.org/mailman/listinfo/gnome-bugsquad". The page content includes a blue header "Gnome-bugsquad -- List to discuss bug maintenance in GNOME", a yellow section titled "About Gnome-bugsquad" with the text "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.", and another yellow section titled "Using Gnome-bugsquad" with the text "To post a message to all the list members, send email to gnome-bugsquad@gnome.org." Below this is a third yellow section titled "Subscribing to Gnome-bugsquad". The browser interface includes a menu bar (File, Edit, View, Go, Bookmarks, Tabs, Help), navigation buttons (Back, Forwards, Stop, Reload, Home, History), and a search bar at the bottom.

Gnome-bugsquad Info Page

File Edit View Go Bookmarks Tabs Help

Back Forwards Stop Reload Home History

http://mail.gnome.org/mailman/listinfo/gnome-bugsquad Go

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

About Gnome-bugsquad

English (USA)

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.

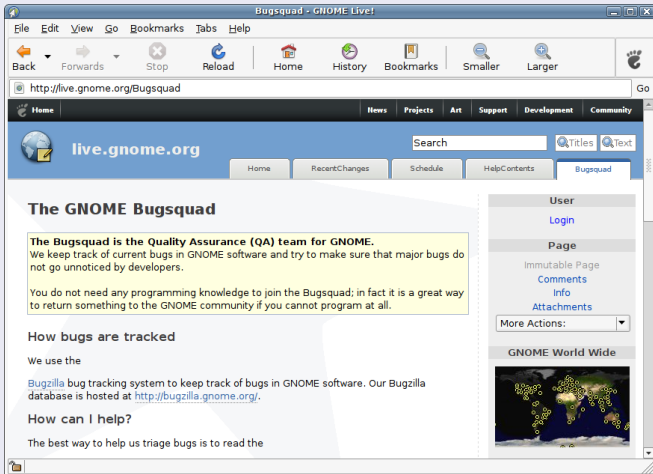
Subscribing to Gnome-bugsquad

Enter a Web address to open, or a phrase to search for

Beginners Guide (cont.)

How do I triage bugs?

Read Triage Guide



The screenshot shows a web browser window titled "Bugsquad - GNOME Live!". The address bar contains "http://live.gnome.org/Bugsquad". The browser's navigation bar includes buttons for Back, Forwards, Stop, Reload, Home, History, Bookmarks, Smaller, Larger, and a search icon. The page content features the GNOME logo and the text "live.gnome.org". A search bar is present with "Titles" and "Text" filters. Below the search bar are navigation tabs: Home, RecentChanges, Schedule, HelpContents, and Bugsquad. The main heading is "The GNOME Bugsquad". A yellow highlighted box contains the text: "The Bugsquad is the Quality Assurance (QA) team for GNOME. We keep track of current bugs in GNOME software and try to make sure that major bugs do not go unnoticed by developers. You do not need any programming knowledge to join the Bugsquad; in fact it is a great way to return something to the GNOME community if you cannot program at all." Below this, the section "How bugs are tracked" explains that the Bugzilla system is used, with a link to "http://bugzilla.gnome.org/". The "How can I help?" section states that the best way to help is to read the triage guide. On the right side, there is a sidebar with sections for "User" (Login), "Page" (Immutable Page, Comments, Info, Attachments), "More Actions:" (dropdown), and "GNOME World Wide" (a world map with bug icons).

Bugsquad - GNOME Live!

File Edit View Go Bookmarks Tabs Help

Back Forwards Stop Reload Home History Bookmarks Smaller Larger

http://live.gnome.org/Bugsquad Go

Home News Projects Art Support Development Community

live.gnome.org Search Titles Text

Home RecentChanges Schedule HelpContents Bugsquad

The GNOME Bugsquad

The Bugsquad is the Quality Assurance (QA) team for GNOME.
We keep track of current bugs in GNOME software and try to make sure that major bugs do not go unnoticed by developers.

You do not need any programming knowledge to join the Bugsquad; in fact it is a great way to return something to the GNOME community if you cannot program at all.

How bugs are tracked

We use the [Bugzilla](http://bugzilla.gnome.org/) bug tracking system to keep track of bugs in GNOME software. Our Bugzilla database is hosted at <http://bugzilla.gnome.org/>.

How can I help?

The best way to help us triage bugs is to read the

User

[Login](#)

Page

Immutable Page

[Comments](#)

[Info](#)

[Attachments](#)

More Actions: ▾

GNOME World Wide



Beginners Guide (cont.)

How do I triage bugs?

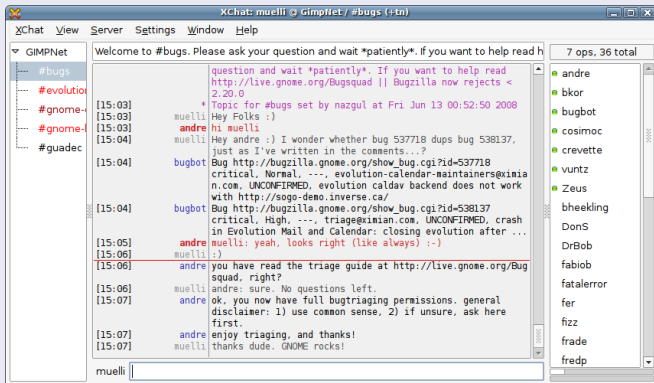
Triage Bugs

Write Comments, Ask on IRC or Mailinglist

Beginners Guide (cont.)

How do I triage bugs?

Ask for permissions



The screenshot shows an IRC chat window titled "XChat: muelli @ GimpNet / #bugs (+tn)". The chat history includes the following messages:

- muelli: Welcome to #bugs. Please ask your question and wait *patiently*. If you want to help read h
- muelli: question and wait *patiently*. If you want to help read <http://live.gnome.org/Bugsquad> || Bugzilla now rejects < 2.20.0
- muelli: * Topic for #bugs set by nazgul at Fri Jun 13 00:52:50 2008
- muelli: Hey Folks :)
- andre: hi muelli
- muelli: Hey andre :) I wonder whether bug 537718 dups bug 538137, just as I've written in the comments...?
- bugbot: Bug http://bugzilla.gnome.org/show_bug.cgi?id=537718 critical, Normal, ---, evolution-calendar-maintainers@ximian.com, UNCONFIRMED, evolution caldav backend does not work with <http://sogo-demo.inverse.ca/>
- bugbot: Bug http://bugzilla.gnome.org/show_bug.cgi?id=538137 critical, High, ---, triage@ximian.com, UNCONFIRMED, crash in Evolution Mail and Calendar: closing evolution after ...
- andre: muelli: yeah, looks right (like always) :-)
- muelli: :)
- andre: you have read the triage guide at <http://live.gnome.org/BugSquad>, right?
- muelli: andre: sure. No questions left.
- andre: ok, you now have full bugtrianing permissions. general disclaimer: 1) use common sense, 2) if unsure, ask here first.
- andre: enjoy triaging, and thanks!
- muelli: thanks dude. GNOME rocks!

The right sidebar shows a list of 7 ops, 36 total, including: andre, bkor, bugbot, cosimoc, crevette, vuntz, Zeus, bheeking, DonS, DrBob, fabiob, fatalerror, fer, fizz, frade, and fredp.

On IRC or on Mailinglist

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 → **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 → **ASSIGNED**, passed on to someone else and remain **NEW**, or resolved and marked **RESOLVED**.

Status Fields (cont.)

What do all these fields mean, anyway?

- 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.

Status Fields (cont.)

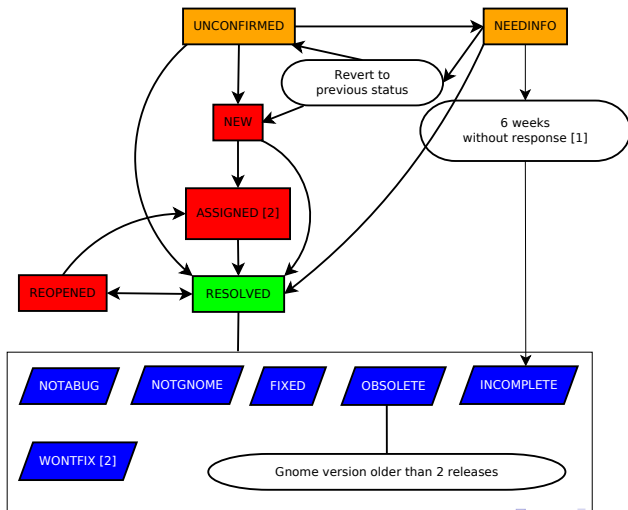
What do all these fields mean, anyway?

VERIFIED and

CLOSED 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.

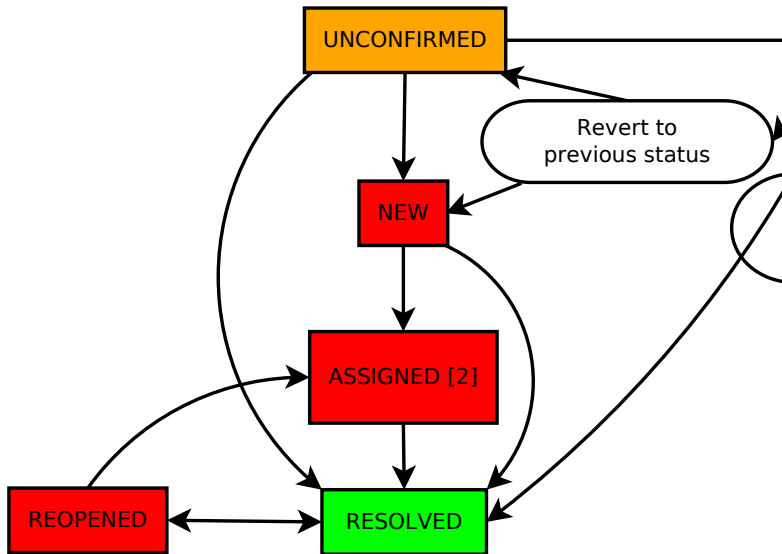
Triaging Diagram

Eh, what? How does it look like?



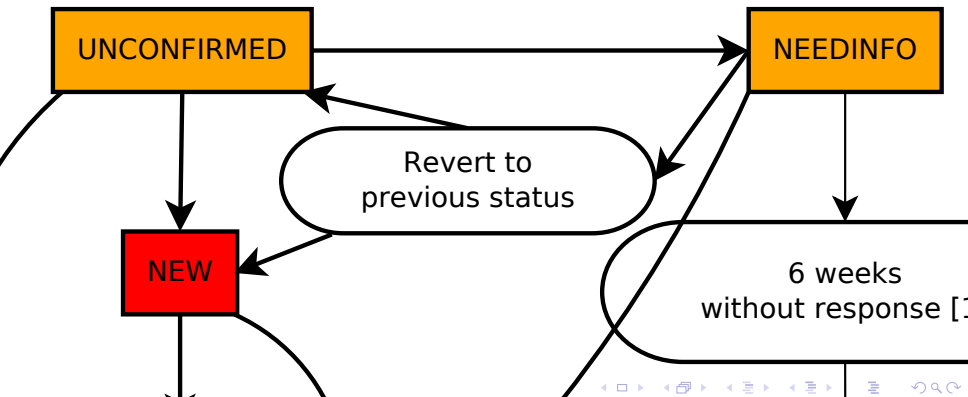
Triaging Diagram

Normal Flow



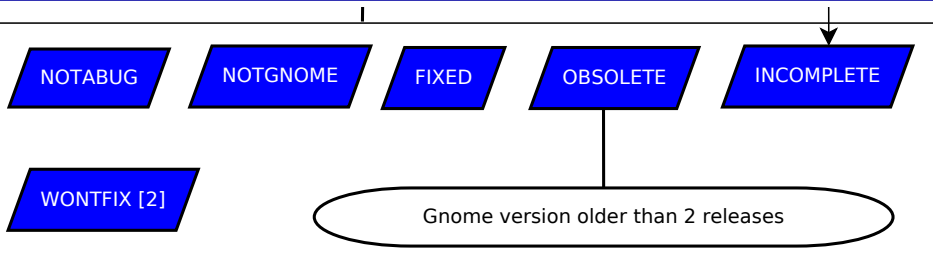
Triaging Diagram

NEEDINFO



Triaging Diagram

Resolutions

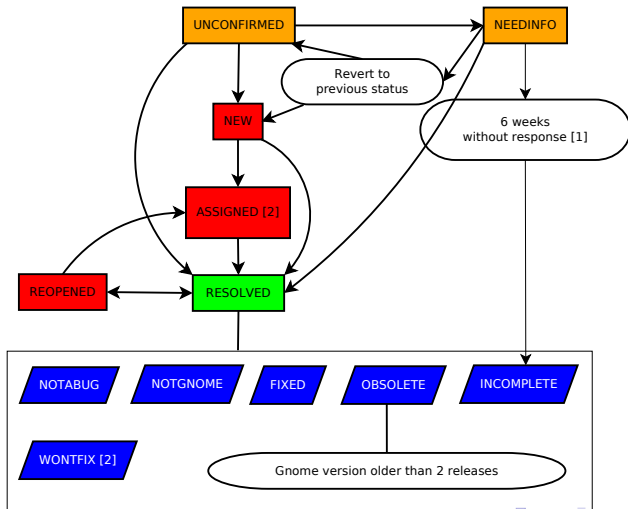


[1] It's not always 6 weeks. Some maintainers explicitly asked to not close after 6 weeks

[2] Only for maintainers

Triaging Diagram

Summary



Conclusion

What we've just learned

- 🐙 GNOME needs triagers
- 🐙 It's easy to start triaging
- 🐙 It's about people

Questions?

Questions?