Bug tracking tools
Outline

Why need Bug Tracking tool?
Life-cycle of a “bug report”
Bug report attributes
Bug tracking events
Main tools
Guidelines
Public bug trackers
Why need Bug Tracking tool?

Collaborative software engineering

- Software result of co-operation of many people typically at different locations

- Communication is crucial

- Many means available
  - face-to-face meetings, e-mail, phone
  - video-conferencing, instant messaging, Wiki

Bugs are inevitable

- Software written by humans

- It’s only human to errr
Why need bug tracking tool?

Need to **communicate about bugs**
- discovery / symptom / reproduction / reason / removal

Communication means *inappropriate*
- e-mail: all parties involved? difficult to follow evolution.
- phone, IM: all parties involved? might get forgotten.
- Wiki: needs notification.

We need a specialized tool
- able to **track history and evolution of bugs**
Life-cycle of a “bug report”

Oops, that’s in my code…

I think I know what’s wrong.

Que???

Reports

Notifies

Updates

Open Unassigned

Open Assigned

Closed

Notifies

Self-assigns

Fixes

Oops, that’s in my code…,
Bug report attributes

- **Date:** report, updates, close
- **Status:** open, closed, deleted, assigned
- **Short summary**
- **Detailed description**
- **Severity and priority**
- **Platform and version number**
- **Category:** GUI, installation, certain module
- **Reproduction:** description or test-case

<table>
<thead>
<tr>
<th>Request ID</th>
<th>Summary</th>
<th>Open Date</th>
<th>Priority</th>
<th>Assigned To</th>
<th>Submitted By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1457565</td>
<td>Startup Fails</td>
<td>2006-03-23 23:49</td>
<td>5</td>
<td>datallah</td>
<td>be_brg_peh</td>
</tr>
</tbody>
</table>
Bug report attributes

Date: report, updates, close
Status: open, closed, deleted, assigned
Short summary
Detailed description
Severity and priority
Platform and version number
Category: GUI, installation, certain module
Reproduction: description or test-case (e.g. attaching core dump)

[ 1457565 ] Startup Fails

You may monitor this Tracker item after you login (register an account, if you do not already have one)

Submitted By: be_brg_peh - be_brg_peh
Last Updated By: be_brg_peh - Comment added
Number of Comments: 2
Category: (?)
win32
Assigned To: (?)
Daniel Atallah
Status: (?)
Open
Summary: (?)
Startup Fails
Running Beta 2 on WinXP pro sp2.

First use after installation worked fine. Added a yahoo account, and could connect to the server using that account.

After restarting Windows it's impossible to start Gaim again. Complete uninstall, including aspell, didn't solve the problem. The last version I installed was the beta 2 win32 debug version.
Bug tracking events

Open, update and close report

Add a Comment:

DO NOT enter passwords or other confidential information!

Search among reports

Assignee: (?)
Any

Status: (?)
Open

Category: (?)
segfault

Group: (?)
http proxy

Show only: Submitter username: 

Summary keyword: 

Sort By: (?)
Open Date

Descending

Browse
Main tools

How to choose?

- free vs. commercial
- featurism vs. ease of use
- technical requirements

A comprehensive list of tools


Most popular tools

- Bugzilla, Mantis, GNATS, Flyspray
Bug report writing guidelines

One issue per report

Make sure it is not reported yet

How to write useful bug report

- **Summary**: short but quickly and uniquely identifies bug
- **Be specific**: product, version, component, platform, OS
  - include list of third party software used
- **Reproducible**: provide least amount of steps
Public bug trackers

- bugzilla.mozilla.org
- netbeans.org/community/issues.html
- bugs.eclipse.org
- bugs.debian.org