Bug Tracking Tools

Software Engineering
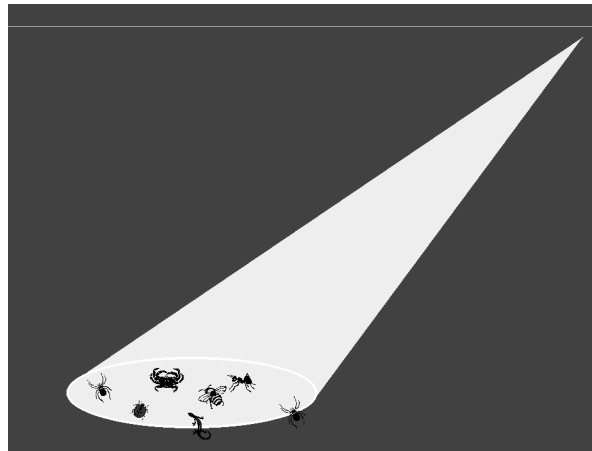
Chair of Programming Methodology

Outline

1. Why use Bug Tracking tools?

2. Life-cycle of a "bug report"

3. Bug report attributes

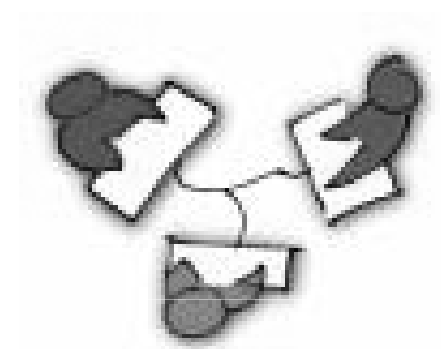4. Bug tracking events

5. Main tools

6. Guidelines

7. Public bug trackers

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Why use Bug Tracking tools?

- **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
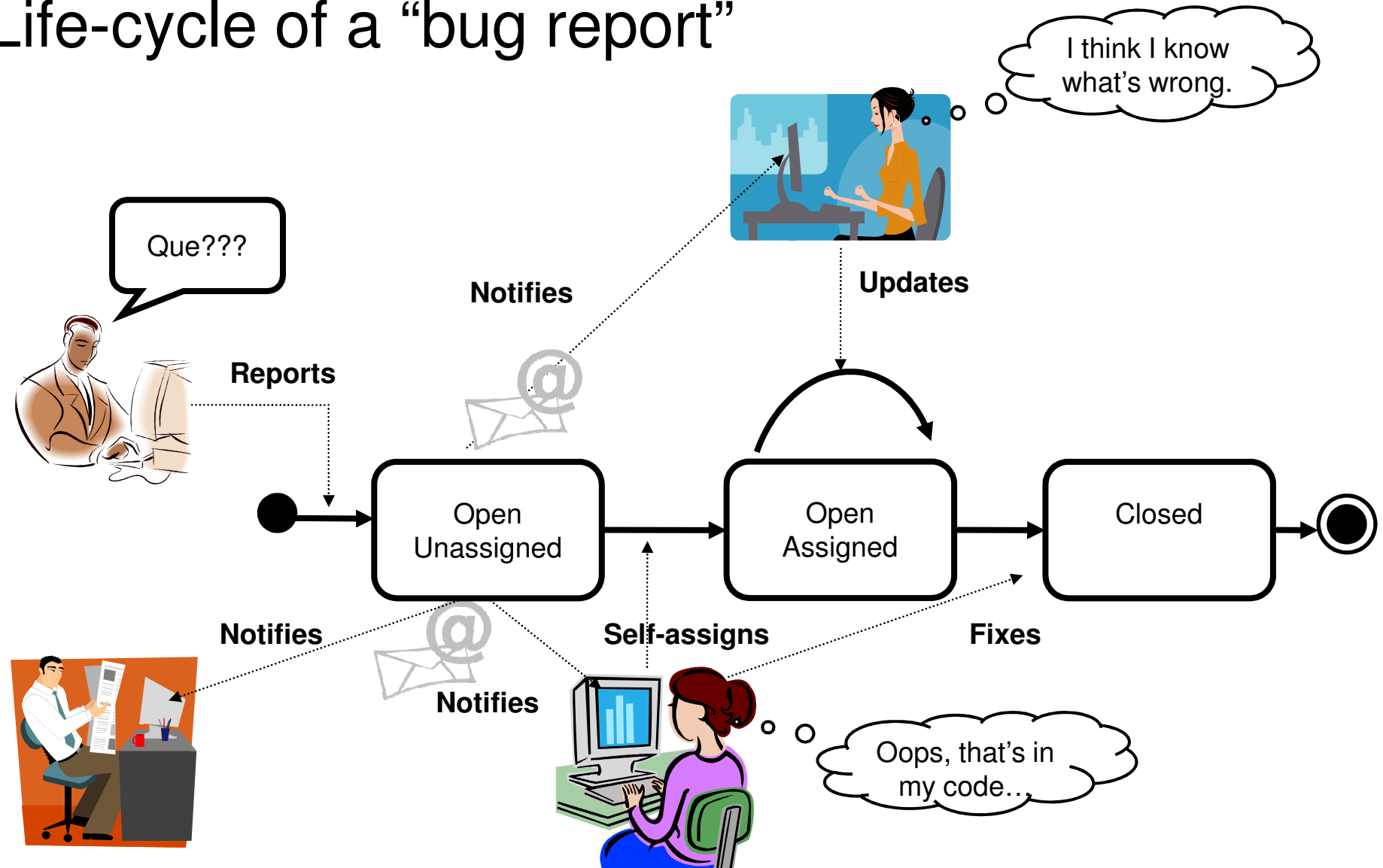
- **Bugs are inevitable**
  - Software written by humans

  - It's only human to errr

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Why use Bug Tracking tools?

- ■ **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

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Life-cycle of a "bug report"

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
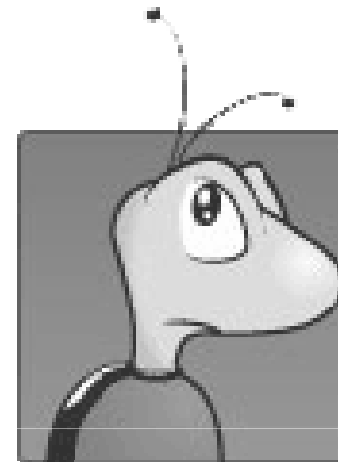
Request ID	Summary	Open Date	Priority	Assigned To	Submitted By
1457565	Startup Fails	2006-03-23 23:49	5	datallah	be_brg_peh

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- 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

Date Submitted:
2006-03-23 23:49

Last Updated By:
be_brg_peh - Comment added

Date Last Updated:
2006-03-25 05:09

Number of Comments:
2

Number of Attachments:
0

Category: (?)
win32

Group: (?)
2.0.0 beta 2

Assigned To: (?)
Daniel Atallah

Priority: (?)
5

Status: (?)
Open

Resolution: (?)
None

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 win32debug version.

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Bug tracking events

- Open, **update** and close report

Add a Comment:

DO NOT enter passwords or other confidential information!

SUBMIT

- **Search** among reports

Assignee: (?)   Status: (?)   Category: (?)   Group: (?)

Any   Open   segfault   http proxy

Show only: Submitter username :   Summary keyword:

Sort By: (?) Open Date   Descending   Browse

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Main tools

- ## How to choose?

  - free vs. commercial

  - featurism vs. ease of use

  - technical requirements

- ## A comprehensive list of tools

  www.software-pointers.com/en-defecttracking-tools.html

- ## Most popular tools

  - Bugzilla, Mantis, GNATS, Flyspray

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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
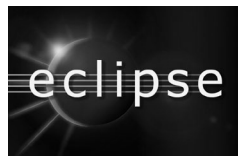 - Reproducible: provide least amount of steps

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Public bug trackers

bugzilla.mozilla.org

netbeans.org/community/issues.html

bugs.eclipse.org/bugs/

bugs.debian.org

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