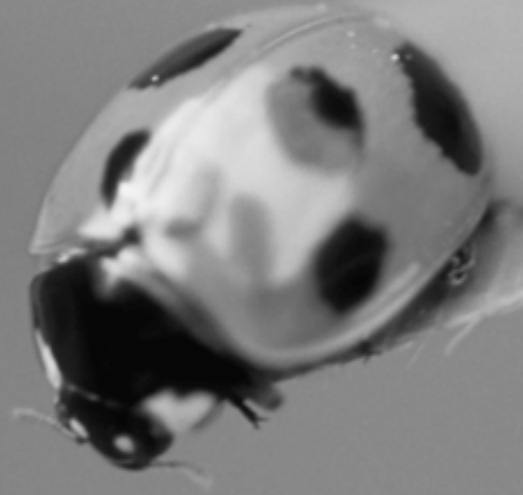# ECE453/SE465/CS447/ECE653/CS647:
Better Bug Reports

Lin Tan

March 11, 2015

Goals of Reporting Bugs

- Get the bugs fixed!

- Get the bugs fixed faster!

- For better software!

Bug 109242 - GUI

Status: VERIFIED INVALID

Whiteboard:

Keywords:

Reported: 2001-11-08 20::

Modified: 2005-11-22 15::

CC List: 2 users (show)

Product: SeaMonkey

Component: General

Version: Trunk

Platform: x86 Windows NT

See Also:

Crash Signature:

Importance: -- normal (vote)

Target Milestone: ---

Assigned To: Asa Dotzler [:asa]

QA Contact: Doron Rosenberg (IBM)

URL: http://www.relq.com/

Duplicates: 109246 (view as bug list)

Depends on:

Blocks:

Show dependency tree / graph

Attachments

Title page of http://www.relq.com/ (13.38 KB, text/html) 2001-11-09 00:12 PST, Adam Hauner	*no flags*	Details
Add an attachment (proposed patch, testcase, etc.)		View All

Summon comment box

unita **2001-11-08 20:16:05 PST**	**Description**

The page is too clumsy

Bug 528120 - Firefox freezes on Applications Tab

Midna 2009-11-11 19:29:34 PST   **Description**

```
User-Agent:        Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2b2)
Gecko/20091108 Firefox/3.6b2
Build Identifier: Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.9.2b2)
Gecko/20091108 Firefox/3.6b2

Every time I click the Applications Tab, the options (and Firefox too, I think)
freezes for at least a few seconds and I can't click anywhere.


Reproducible: Always
```

Ria Klaassen (not reading all bugmail)   2009-11-12 00:36:54 PST   **Comment 1**

```
Mozilla/5.0 (Windows; U; Windows NT 6.0; en-US; rv:1.9.2b3pre) Gecko/20091110
Namoroka/3.6b3pre

This works fine for me.
Can you retest this in safe-mode / with a new profile?
http://support.mozilla.com/en-US/kb/Safe+Mode
http://support.mozilla.com/en-US/kb/Basic+Troubleshooting#Make_a_new_profile
```

Samuel Tarling   2011-06-09 03:57:41 PDT   **Comment 2**

```
This is normally caused by firefox having to parse a large number of applications,
which can equate to a delay on slower systems.

Firefox 4.0.1
Mozilla/5.0 (Windows NT 6.1; rv:2.0.1) Gecko/20100101 Firefox/4.0.1
Windows 7

This 'bug' gives me a < 1second delay time.
This bug could be closed now, seeing as it from two years ago, and can hardly be
classified as a bug.

WORKSFORME
```

A Chrome Bug Report

1 person starred this issue and may be notified of changes.   Back to list

Fixed

issue chromium-os:28529

sadrul@chromium.org

Yesterday

al...@google.com,
Kusc...@chromium.org,
lafo...@chromium.org,
davemo...@chromium.org,
piman@chromium.org,
rby...@chromium.org,
saintlou@chromium.org

Reported by project member benc...@chromium.org, Mar 27 (2 days ago)

The Ethernet icon (see the attach screenshot) is too light in color and not very visible to some users. They may not immediately recognize the icon, and may even be confused by it. Making the icon a bit darker would greatly improve its usability.

📎 **ethernet.png**
3.3 KB   View   Download

> Select a network: [= Ethernet   ▾]

Comment 1 by kan...@chromium.org, Mar 27 (2 days ago)

nicholas, can you take a look and see if we can improve this?

> **Status:** Assigned
> **Owner:** al...@google.com
> **Labels:** -Pri-3 Pri-2 Mstone-R19

Comment 2 by saintlou@chromium.org, Mar 27 (2 days ago)

Alex: can we punt to 20?

> **Owner:** Kusc...@chromium.org
> **Cc:** al...@google.com
> **Labels:** -Sev-3 -Mstone-R19 Sev-2 Mstone-19

Comment 3 by Kusc...@chromium.org, Mar 27 (2 days ago)

If it is an easy asset change, we may want to do it

k-Beta
ved
ed-1084

nt below

Software Testing   Instructor: Lin Tan   5

Bug 8223 - RACE: Lock is expected before calling ata_dev_select, but in some call chains not held!

Status: ASSIGNED

Product: IO/Storage
Component: Serial ATA
Version: 2.5
Platform: i386 Linux

Importance: P2 normal
Assigned To: Tejun Heo

URL:

Depends on:
Blocks:
          Show dependency tree / graph

Reported: 2007-03-16 21:59 by Ding
Modified: 2010-09-18 14:55 (History)

Kernel Version: 2.6.20.1
Tree: Mainline
Regression: No

Attachments

Add an attachment (proposed patch, testcase, etc.)

Description From Ding 2007-03-16 21:59:19

```
ata_dev_select:

The comment of this function: " LOCKING: caller".
But in some call chain lock is not acquired:
ata_dev_read_id <- ata_qc_issue_prot <- ata_bus_probe <- ata_dev_revalidate <-
ata_eh_revalidate_and_attach <- ata_device_add


A lock is not acquired.
But in other call chains, there is lock acquired.
```

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A Linux Kernel Bug Report Details

[Description](#) From [Ding](#) 2007-03-16 21:59:19

```
ata_dev_select:

The comment of this function: " LOCKING: caller".
But in some call chain lock is not acquired:
ata_dev_read_id <- ata_qc_issue_prot <- ata_bus_probe <-
ata_dev_revalidate <-
ata_eh_revalidate_and_attach <- ata_device_add


A lock is not acquired.
But in other call chains, there is lock acquired.
```

A JFreeChart Bug Report

Tracker: Bugs

5   Missing parameter check in the setRotationAnchor(TextAnchor) - ID: 3428870   Last Update: Comment added (matinh)

Details: The method "setRotationAnchor" in the "TextAnnotation" class does not check the parameter for "null", whereas several related methods check the parameter, e.g., methods "setText", "setFont", "setPaint", and "setTextAnchor" in the same class, or "setRotationAnchor" in the "XYTextAnnotation" class (which has the same Javadoc comment and same method name but different behavior). We found this inconsistency while inspecting the "null not permitted" part in the Javadoc.

Suggested Fix: Make "setRotationAnchor" in "TextAnnotation" consistent with the other methods by changing it like this:

```
public void setRotationAnchor(TextAnchor anchor) {
if (anchor == null) {
throw new IllegalArgumentException("Null 'anchor' argument.");
}
this.rotationAnchor = anchor;
}
}
```

Submitted: Shin Hwei Tan (shinhwei) 2011-10-26 13:03:35 PDT	**Assigned:**	Martin Höller
Priority: 5	**Category:**	General
Status: Closed	**Group:**	1.0.x
Resolution: Fixed	**Visibility:**	Public

Comment (1)

Date: 2011-10-28 13:31:33 PDT   Thanks for the report. Fix is applied in SVN and scheduled for 1.0.14
Sender: matinh   release.

Software Testing   Instructor: Lin Tan   8

JFreeChart Bug Report Details

The method "setRotationAnchor" in the "TextAnnotation" class does not check the parameter for "null", whereas several related methods check the parameter, e.g., methods "setText", "setFont", "setPaint", and "setTextAnchor" in the same class, or "setRotationAnchor" in the "XYTextAnnotation" class (which has the same Javadoc comment and same method name but different behavior). We found this inconsistency while inspecting the "null not permitted" part in the Javadoc.

Suggested Fix: Make "setRotationAnchor" in "TextAnnotation" consistent with the other methods by changing it like this:

```
public void setRotationAnchor(TextAnchor anchor) {
    if (anchor == null) {
        throw new IllegalArgumentException("Null 'anchor' argument.");
    }
    this.rotationAnchor = anchor;
    }
}
```

What makes a good bug report?

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Survey

Five minutes

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Participants

809 contacts   156 responses

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Information

Question 1

Which of the following items have you previously used when fixing bugs?

(select as many items as you wish)

Question 2

Which three items helped you the most?

(select at most three items)

- ☐ product
- ☐ component
- ☐ version
- ☐ severity

- ☐ hardware
- ☐ operating system
- ☐ summary
- ☐ build information

- ☐ observed behavior
- ☐ expected behavior
- ☐ steps to reproduce
- ☐ stack traces

- ☐ screenshots
- ☐ code examples
- ☐ error reports
- ☐ test cases

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Problems

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Legend

Symbol	Description
▨▨▨	All consistent responses for the project
▨▨	Number of times that *item* was selected in D1
▬	Number of times that *item* was selected in D1 and D2
▭	Number of times that *item* was selected in D1 but not D2

D1: Question 1
D2: Question 2

R1: Which of the following items have you previously provided when reporting bugs?
R2: Which three items were the most difficult to provide?
R3: In your opinion, which three items are most relevant for developers when fixing bugs?

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Legend

▬▬▭	All consistent responses for the project
▬▭	Number of times that *item* was selected in D1
▬	Number of times that *item* was selected in D1 and D2
▭	Number of times that *item* was selected in D1 but not D2

D1: Which of the following items have you previously used when fixing bugs?

D2: Which three items helped you the most?

R1: Which of the following items have you previously provided when reporting bugs?

R2: Which three items were the most difficult to provide?

R3: In your opinion, which three items are most relevant for developers when fixing bugs?

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Table 2: Results from the survey among developers. (130 consistent responses by APACHE, ECLIPSE, and MOZILLA developers.)

Contents of bug reports (D1/D2). *In parentheses: importance of item.*

product (5%)	hardware (0%)	observed behavior (33%)	screenshots (26%)
component (3%)	operating system (4%)	expected behavior (22%)	code examples (14%)
version (12%)	summary (13%)	steps to reproduce (83%)	error reports (12%)
severity (0%)	build information (8%)	stack traces (57%)	test cases (51%)

Problems with bug reports (D3/D4). *In parentheses: severeness of problem.*

You were given wrong:
- product name (7%)
- component name (15%)
- version number (22%)
- hardware (8%)
- operating system (20%)
- observed behavior (48%)
- expected behavior (27%)

There were errors in:
- code examples (15%)
- steps to reproduce (79%)
- test cases (38%)
- stack traces (25%)

The reporter used:
- bad grammar (16%)
- unstructured text (34%)
- prose text (18%)
- too long text (26%)
- non-technical language (19%)
- no spell check (0%)

Others:
- duplicates (10%)
- spam (0%)
- incomplete information (74%)
- viruses/worms (0%)

Table 3: Results from the survey among reporters. (215 consistent responses by APACHE, ECLIPSE, and MOZILLA reporters.)

Contents of bug reports (R1/R2). *In parentheses: difficulty of item.*

product (0%)	hardware (1%)	observed behavior (2%)	screenshots (8%)
component (22%)	operating system (1%)	expected behavior (3%)	code examples (43%)
version (1%)	summary (4%)	steps to reproduce (51%)	error reports (2%)
severity (5%)	build information (3%)	stack traces (24%)	test cases (75%)

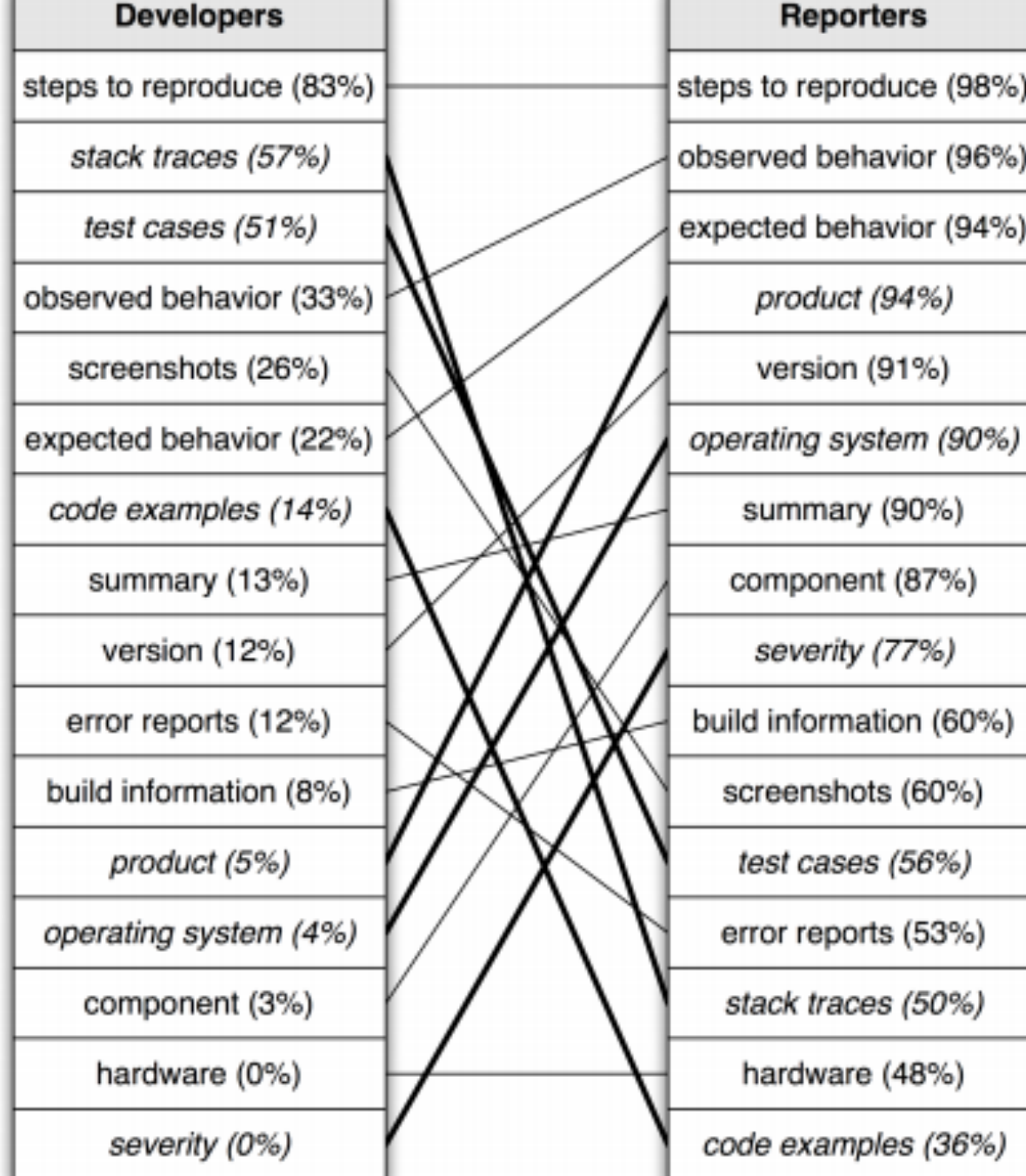**Contents considered to be relevant for developers (R3).** *In parentheses: frequency of item in R3.*

product (7%)	hardware (0%)	observed behavior (33%)	screenshots (5%)
component (4%)	operating system (4%)	expected behavior (22%)	code examples (9%)
version (12%)	summary (6%)	steps to reproduce (78%)	error reports (9%)
severity (2%)	build information (8%)	stack traces (33%)	test cases (43%)

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Developers	Reporters
steps to reproduce (83%)	steps to reproduce (98%)
stack traces (57%)	observed behavior (96%)
test cases (51%)	expected behavior (94%)
observed behavior (33%)	product (94%)
screenshots (26%)	version (91%)
expected behavior (22%)	operating system (90%)
code examples (14%)	summary (90%)
summary (13%)	component (87%)
version (12%)	severity (77%)
error reports (12%)	build information (60%)
build information (8%)	screenshots (60%)
product (5%)	test cases (56%)
operating system (4%)	error reports (53%)
component (3%)	stack traces (50%)
hardware (0%)	hardware (48%)
severity (0%)	code examples (36%)

(b) Most helpful for developers vs. provided by reporters.

Mining facts

Keywords

Readability

Stack Trace

Repro Steps

Code Examples

Screenshots

Set of Features

Correlate

Time to fix

Yes No Maybe

Fixed or not

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DID YOU KNOW?

Bug reports containing stack traces get fixed sooner. (APACHE/ECLIPSE/MOZILLA)

Bug reports that are easier to read have lower lifetimes. (APACHE/ECLIPSE/MOZILLA)

Including code samples in your bug report increases the chances of it getting fixed. (MOZILLA)

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