MONGODB
BUG
HUNT

PREPARING YOUR TOOLS FOR THE HUNT

- MongoDB issue tracking (JIRA)
- How to file a bug
- How to test MongoDB
- The hunting grounds - what's new in 3.4
- The 3.4 schedule

MONGODB ISSUE TRACKING (JIRA)

- All MongoDB work is tracked through JIRA
- https://jira.mongodb.org
- SERVER, TOOLS, DOCS and DRIVERS projects are public
- Need an account to create tickets and comment

THE SERVER PROJECT

- Used to track all server, shell, and mongos development
- Open a ticket in this project if you find a bug
- This project is **not for questions**
- Use the mongodb-user group instead
- https://groups.google.com/group/mongodb-user

USING JQL TO NAVIGATE JIRA

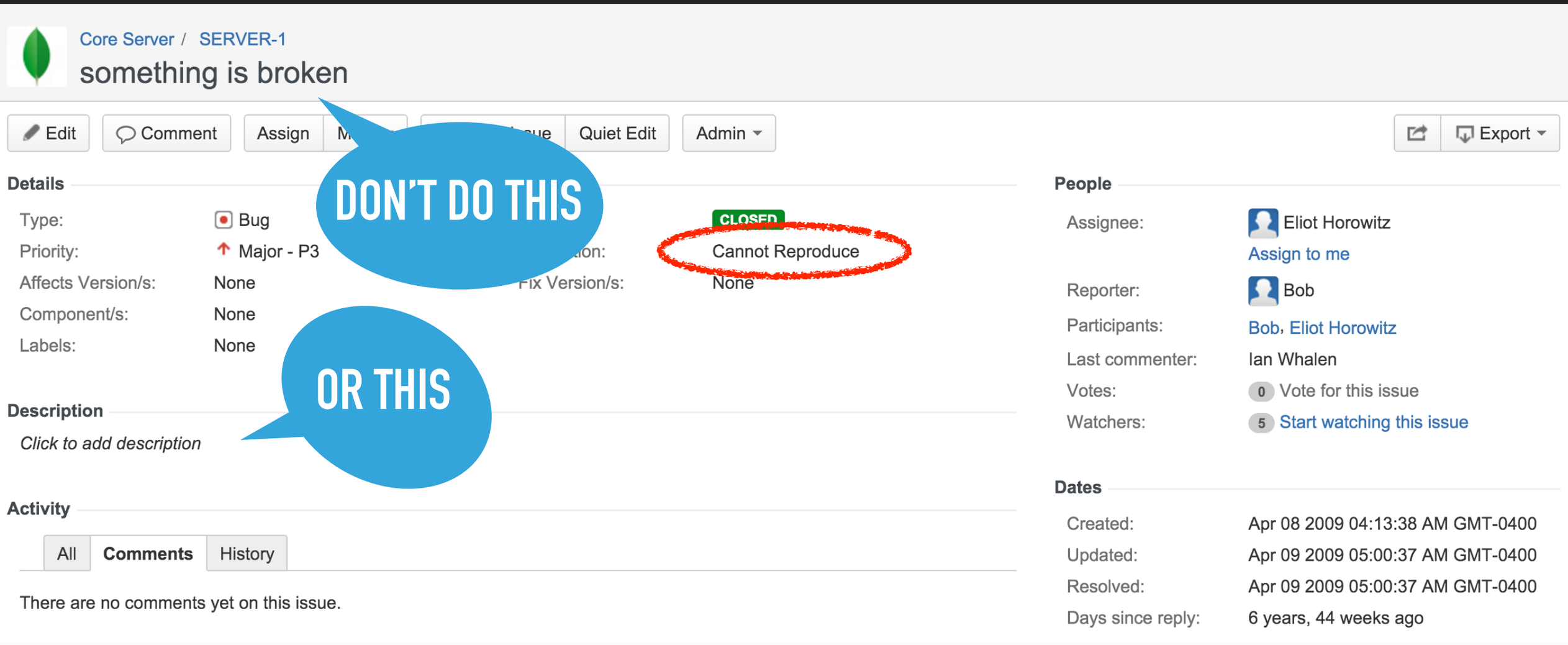
USE JQL TO FIND ISSUES FASTER:

- _project = SERVER and resolution is empty and summary ~ “collation"_
- _project = DOCS and fixVersion = "mongodb-3.4" and resolution is empty_
- _project = SERVER and affectsVersion >= 3.4.0-rc0 and resolution is empty_

HOW TO FILE A BUG

I'VE FOUND A BUG, WHAT DO I DO NOW?

PREPARING YOUR TOOLS FOR THE HUNT



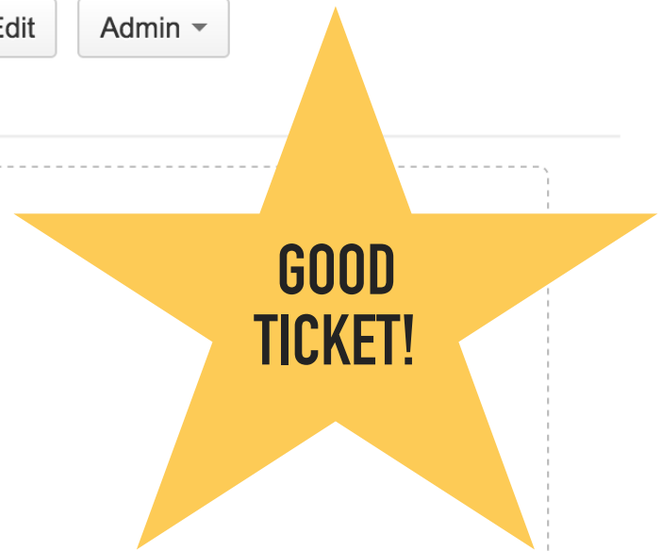
TRY TO ANSWER THESE QUESTIONS

- WHAT
  - Slow queries, unexpected query results, etc.
- WHERE
  - Primary, secondary, client application
- WHEN
  - Specific times of the day, all the time, after an event
- HOW MUCH
  - What's the impact and/or observable behavior

Core Server / SERVER-16948

printSlaveReplicationInfo() appears broken in master

Edit | Comment | Assign | More | Re-Open Issue | Quiet Edit | Admin | Export



Description

```
$ mongo
MongoDB shell version: 2.8.0-rc6-pre-
connecting to: test
Server has startup warnings:
2015-01-20T13:29:54.274-0500 I CONTROL  [initandlisten]

replset:PRIMARY> db.foo.insert({x:1})
WriteResult({ "nInserted" : 1 })

replset:PRIMARY> rs.printSlaveReplicationInfo()
source: tab:27018
        syncedTo: Tue Jan 20 2015 13:30:25 GMT-0500 (EST)
        -3630749425 secs (-1008541.51 hrs) behind the freshest member (no primary available at th
source: tab:27019
        syncedTo: Tue Jan 20 2015 13:30:25 GMT-0500 (EST)
        -3630749425 secs (-1008541.51 hrs) behind the freshest member (no primary available at th

replset:PRIMARY> db.serverBuildInfo()
{
        "version" : "2.8.0-rc6-pre-",
```

Activity

All | **Comments** | History

Ramon Fernandez added a comment - Jan 20 2015 01:35:37 PM GMT-0500 - edited

Reverting https://github.com/mongodb/mongo/commit/57806db0234321b9b88a74e013d952104e0c459a from ~~SERVER-16793~~ restores proper behavior.

Dates

Created:	Jan 20 2015 01:32:01 PM GMT-0500
Updated:	Jan 23 2015 06:35:29 PM GMT-0500
Resolved:	Jan 20 2015 05:00:58 PM GMT-0500
Days since reply:	1 year, 32 weeks, 6 days ago
Date of 1st Reply:	Jan 20 2015 02:27:37 PM GMT-0500

Private Fields

Documentation Changes:	Not Needed
Driver Changes:	Not Needed

comment-role

Agile

View on Board

Reporter

name:	ramon.fernandez
email:	ramon.fernandez@mongodb.com
CS:	10gen-eng , 10gen

Group	Links
MongoDB - Support Dashboard	Cloud Group / open issues / all issues / clienthub

WHAT TO INCLUDE

- A session transcript
- A shell reproducer in JavaScript is best
- A reproducer in other language helps too
- Logs for all affected nodes
- Contents of the `diagnostic.data` directory
- MongoDB server/driver/platform versions

Core Server / SERVER-16954

Removing objects from under a geo $near query causes invalid memory access

Edit | Comment | Assign | More | Re-Open Issue | Quiet Edit | Admin | Export

Operating System: ALL

Steps To Reproduce:

```
t = db.geo_near
t.drop();

for (var x = -1; x < 1; x += 1) {
    for (var y = -1; y < 1; y += 1) {
        t.insert({geo: [x, y]})
    }
}

t.ensureIndex({ geo : "2d" })

var cur = t.find({geo: {$near: [0,0], $maxDistance: 3}}).batchSize(2);
cur.next();
cur.next();
t.remove({})
cur.next();
```

Description

It seems like the GEO_NEAR_2D stage fails to realize when an object is removed from under it, see repro below. This only causes a failure on an MMAPV1 Node, no issues on a wiredTiger node, or a 2.6.6 node. Log attached.

Attachments

mongod.log	10 kB	Jan 20 2015 02:37:17 PM GMT-0500

Activity

Watchers: 7 Stop watching this issue

Dates

Created:	Jan 20 2015 02:37:17 PM GMT-0500
Updated:	Jan 23 2015 06:35:27 PM GMT-0500
Resolved:	Jan 22 2015 12:18:59 AM GMT-0500
Days since reply:	1 year, 32 weeks, 5 days ago
Date of 1st Reply:	Jan 20 2015 05:30:06 PM GMT-0500

Private Fields

Documentation Changes:	Not Needed
Driver Changes:	Not Needed

comment-role

Agile

View on Board

Reporter

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Group	Links

IS THIS A BUG?

MONGODB IS FULL OF SURPRISES!

- A certain behavior may be expected
- Ask in the **mongodb-user** group
- Same guidelines about asking good questions apply
- A bug in the documentation is still a bug
- File a detailed report in the DOCS project

GET READY FOR THE HUNT

- Download the server
- www.mongodb.com/download-center
- Use 3.3.13, or the latest 3.4.0-rcN
- Write your tests in a file
- Use the shell
- mongo < mytest.js

MORE ADVANCED TESTING

- Use an existing dataset
- https://www.citibikenyc.com/system-data
- Use mtools for more advanced setups
- Replica sets
- Sharded clusters
- https://github.com/rueckstiess/mtools
- See the jstests for black-belt testing
- github.com/mongodb/mongo/tree/master/jstests

MONGODB 3.4

TONS OF FOUNDATIONAL WORK

- Shard zones support
- Faster auto-balancing
- Intra-cluster compression
- Robust initial sync
- New architecture support

LOTS OF USER-FACING FEATURES

- Read-only views
- Graph lookup
- Collation support
- Decimal support
- Aggregation improvements
- Faceted search

THE 3.4 SCHEDULE

- MongoDB 3.4 is scheduled for publication on November 15
- We'll be releasing "Release Candidates" until then
  - e.g.: 3.4.0-rc3
- All bugs submitted between now and the 3.4.0 release are eligible to win the Bug Hunt
- Amazing prizes await our fearless Bug Hunters!

SUMMARY

- The SERVER project tracks bugs and feature requests
- SERVER, TOOLS, DOCS, DRIVERS
- Help us help you: ask good questions
- Easiest way to test is through the shell
- Start with user-facing features

THE PRIZES

FIRST PRIZE

- $1,500 Amazon Gift Card
- Complimentary admission to MongoDB World or MongoDB Europe
- 2 Professional Certification exam vouchers
- Recognition on our blog and in social media

HONORABLE MENTIONS

- $500 Amazon Gift Card
- Complimentary admission to MongoDB World or MongoDB Europe
- 1 Professional Certification exam voucher
- Recognition on our blog and in social media

QUESTIONS?

RESOURCES

- github.com/ramonfm/MUG201609
- mongodb.com/download-center
- docs.mongodb.com/manual/release-notes/3.3-dev-series/