HOW TO GET A MEDIAWIKI BUG FIXED

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WHO AM I?

A really great guy!
FIRST – AND ONLY! – BUGMEISTER FOR WMF

(They've since changed the title to Bug Wrangler)
FORMER MEMBER OF MEDIAWIKI RELEASE TEAM

Mark y Markus (in the process of being dissolved)
MEDIAWIKI CONSULTANT

- NicheWork LLC
- hexmode.com
- hexmode on Twitter
- Physical Location: Lancaster County, PA
HAVE A BUG.

This is the easy part.

Find something that doesn't work in MediaWiki.

Especially easy if you use a new feature currently being worked on.
THREE SCENARIOS

FATAL errors – everyone can agree on these

Persistence required – These can last for years, sometimes being resolved without anyone noticing.

You may have to solve it yourself.
FATAL ERROR

Friday, Jan 9, 2015 10:18pm

Fatal Error: Call to a member function disable() on a non-object
Fatal Error: Call to a member function disable() on a non-object (wfHttpError should check if wgOut is an instance of OutputPage)

Assigned To: AnonMe
Priority: Normal
Author: Florian
Subscribers: Krnarl, AnonMe, Akkapper, Florian
Projects: MediaWiki-General-or-Unknown (Backlog), MediaWiki-API (Unsorted), Patch-For-Review (Backlog), MediaWiki-Core-Team (Archive)
Tokens: None
Security: None

DESCRIPTION

wfHttpError assumes that $wgOut is an instance of OutputPage and runs ->disable() on it: https://github.com/wikimedia/mediawiki/blob/74facc1a264ca219c68a69c8b505395ec21ac39/includes/GlobalFunctions.php#L2078

I had some fatal errors in my error_log of my production server, so I tracked the problem down, and it seems, that wfHttpError can be called, before wgOut is set, here a stack trace (because I can't reproduce this error myself, because it seems to occur only on api calls and only specific times (always, when the mysql user exceeded the max_user_connection limit, which is another problem. So I had to workaround to get a stack trace, because it's only a workspace host, no possibility to enable anything to log fatal error stack traces):

```php
#0 and #1 are catching functions (called when wgOut isn't an instance of OutputPage in wfHttpError) to log the stack
#2 (wikinightly/includes/Exception/MException.php:228): wfHttpError(500, 'Internal Server Error', 'DB connection error')
#3 (wikinightly/includes/Exception/MExceptionHandler.php:159): MExceptionHandler->report(MConnectionException::set_status_text('error' => 'User \'' . $user . '\' has exceeded the \max_user_connections\ resource (current value: 15) \(127.0.0.1\', 
\db = DatabaseMysqli::set_status_text(array
```
CODE THAT CAUSED THIS WAS LAST TOUCHED IN 2004!

original commit to GlobalFunctions.php

```php
function wfHttpError( $code, $label, $desc ) {
    global $wgOut;
    $wgOut->disable();
    header( "HTTP/1.0 $code $label" );
    header( "Status: $code $label" );
    $wgOut->sendCacheControl();
}
```
PATCH TO FIX IS CREATED THE NEXT BUSINESS DAY

Monday, Jan 12, 2015 4:50pm

Commit Message

Don't call $wgOut->disable() from wfHttpError if $wgOut isn't set up yet

For example, if the database cannot be connected to, the language is something other than 'en', and the l10n cache is LCStoreDB, then the call to Language::factory() in Setup.php line 604 will do it when it's trying to get the fallback list.

Bug: T86398
Change-Id: ia0e9ea440d0cc4c6bab7bab1f33802aeff487eb3f0
THIS IS HOW BUG-FIXING SHOULD WORK

But rarely does…
PERSISTENCE REQUIRED

Autogenerated XML schema

May 7, 2008

January 31, 2010

I'm on it

(In reply to comment #1)

I'm on it

I'll re-assign to you then.

Don't presume you got anywhere with this VVV?

About 1.5 years
THE BUG IS CRUSHED AND REVIVED


MaxSem added a comment. Via Conduit Jan 25, 2014, 16:01 pm

I'm proposing to WONTFIX this bug: situation has changed since then. XML requests are less than 10% overall, and all the API developers hate XML with passion. We should be working towards killing this format, not adding more enterprisey cruft to it.

MaxSem added a comment. Via Conduit Jan 25, 2014, 14:01 pm

No objections voiced -> executing.

Seppi2013 reopened this task as "Open". Via Web Jan 1, 2015, 20:12 pm

Seppi2013 added a subscriber: Seppi2013.

@MaxSem - i had to lookup "cruft" - the meaning seems to be unnecessary garbage. Thank you for having added this to my english vocabulary.
BUT A SOLUTION HAS ALREADY BEEN GIVEN, IN DISGUISE.

Back in Oct 4, 2012

Since gantt 6.94 the api modules have a method getResultSetProperties, which is also outputted with action-paraminfo. So the information about the output exist and maybe can be processed to xml/xsd

January 5, 2015

In T:1002868541499, @Seppi2013 wrote:

Obviously the generator that creates the help page could also generate a computer readable api description.

See action-paraminfo.
START TO FINISH

2434 days
YOU MAY HAVE TO SOLVE IT YOURSELF

Even if the problem is in core
Mark A. Hershberger  2014-10-24 15:33:55 UTC

IE 11 seems to cache faulty parsoid responses.

I had a misconfigured server and, even after I fixed the problem and other browsers were able to continue after clicking "edit", IE didn't even attempt to make a request but just kept showing the alert box with the error message.
This can be a bit depressing, but don't give up.

You can try to solve it yourself.

You may find something you didn't expect!
REFRAME YOUR BUG TO BETTER DESCRIBE THE PROBLEM.

DESCRIPTION
There are different controls for the Cache-Control headers for the API and MediaWiki's OutputPage. This may have seemed innocuous in the past, but it is causing problems now that VisualEditor is moving page editing to the API.

On my local wiki pages are served with:

```
Cache-Control: private, must-revalidate, max-age=0
```

and, when mCacheMode is set to 'private', the default, API responses are sent with:

```
Cache-Control: private
```

RFC 2616 says:

```
private
    Indicates that all or part of the response message is intended for
    a single user. ... A private (non-shared) cache MAY cache the response.
```

and:

```
A cache MAY be configured to return stale responses without
validation, but only if this does not conflict with any "MUST"-level
requirements concerning cache validation (e.g., a "must-revalidate"
cache-control directive).
```

and:
FIND A SOLUTION.

If you've given more details, it may help someone else provide a solution if you don't know how.
SUBMIT IT.
REFINE IT.

Give feedback quickly.
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<td>PS12 just fixed indentation and updated the comment. Let's do this!</td>
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THEY'RE WORKING WITH YOU TO SOLVE THE BUG

It is in your interest to make it happen.
It may take more time than you expected.
YOUR BUG IS FIXED
TIME TO CELEBRATE!

Anomie
Patch Set 12: Code-Review+2
PS12 just fixed indentation and updated the comment. Let's do this!
CONCLUSION

Fixing wiki bugs takes patience and thick skin.
THANKS

- Emacs
- Org-mode
- Reveal.js
QUESTIONS?