

Pessimism, Entitlement, and other virtues of a successful debugging approach

Allen Shaw
Emphanos LLC, Chicago, IL

Your presenter

Who: Allen Shaw

What: Senior Developer
Emphanos, LLC

Where: @TwoMice
TwoMice.com
allen@emphanos.com

(no subject)

From: [REDACTED]

10:37 AM (3 hours ago)



To: allen@emphanos.com

Subject:

Date: Thursday, March 19, 2015 10:37 AM

OMG, that didn't work. I tried the new feature and I can't do anything.

Can you fix it please, thanks!!

--

[REDACTED]@emphanos.com

**Debugging starts in
3... 2... 1...**

Story time

Act 1

Disappearing nodes!

Act 2

Can't save new content!

Act 3

I can't masquerade!

Act 4

Newsletter emails
aren't going out!

Well, that sucked.

- wasted effort
- wasted time
- loss of stakeholder confidence
- frustration and stress
- no social life
- my kids don't know me
- my dog hates me

Appropriate responses

Appropriate responses



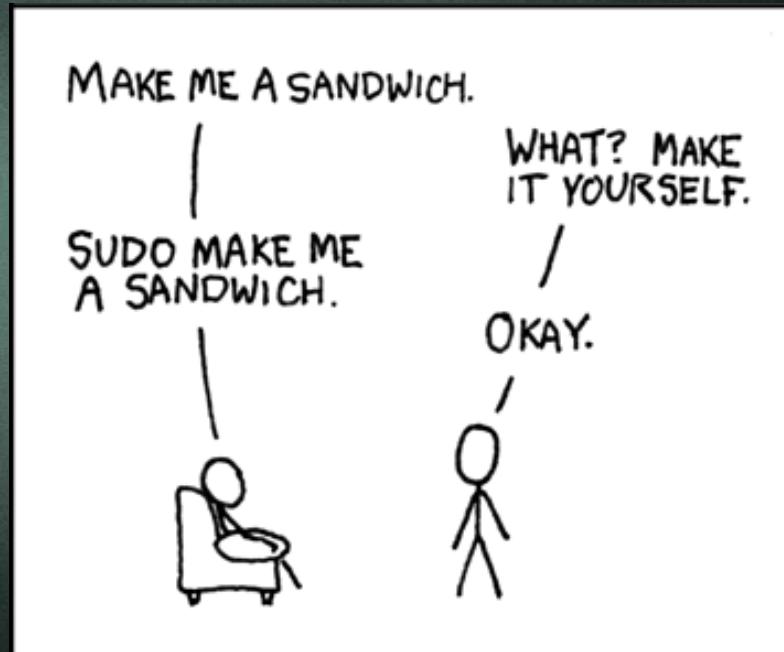
1. Skepticism

Appropriate responses



2. Finger-pointing

Appropriate responses



3. Entitlement

Appropriate responses



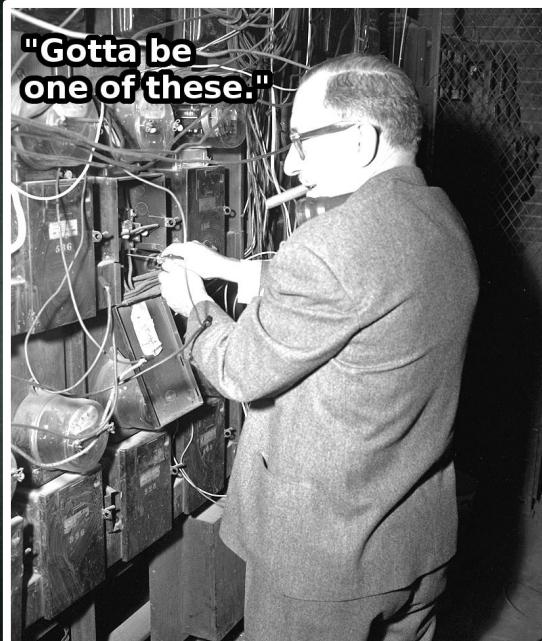
4. Impatience

Appropriate responses



5. Laziness

Appropriate responses



6. Pessimism

Appropriate responses



7. Ruthlessness

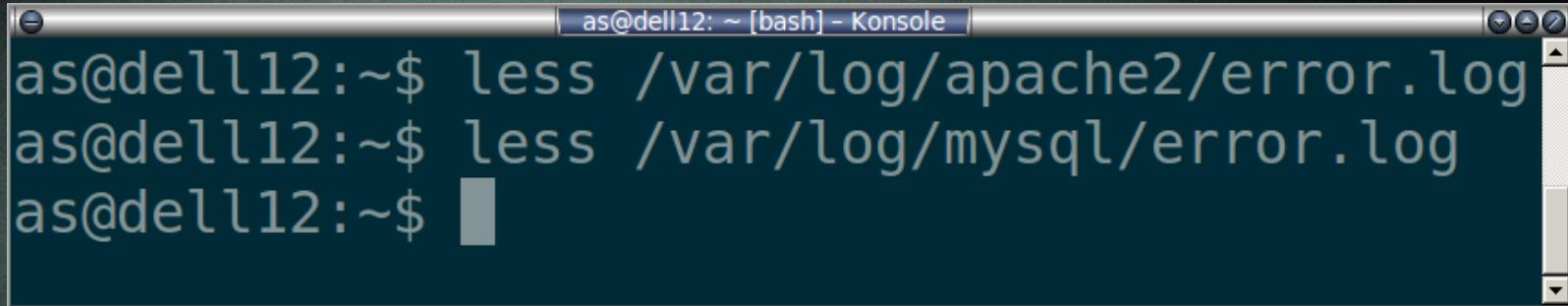
Appropriate responses



8. More skepticism

Tools

Logs

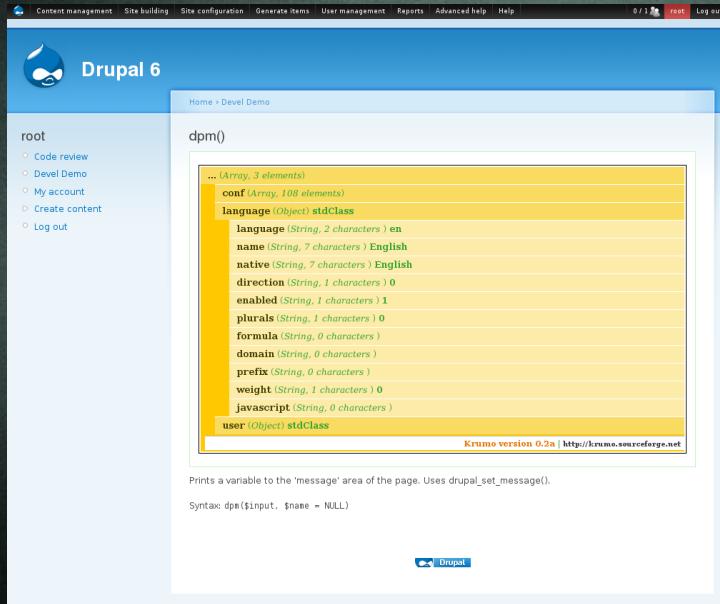


The screenshot shows a terminal window titled "as@dell12: ~ [bash] - Konsole". Inside the window, the user has run two commands: "less /var/log/apache2/error.log" and "less /var/log/mysql/error.log". Both logs are displayed in the terminal window, with the MySQL log currently active. The terminal has a dark background and light-colored text. A vertical scroll bar is visible on the right side of the window.

```
as@dell12:~$ less /var/log/apache2/error.log
as@dell12:~$ less /var/log/mysql/error.log
as@dell12:~$ █
```

- http: apache / nginx
- database: mysql / postgresql

Devel module (Drupal)



<http://drupal.org/project/devel>

- Easily examine variables.
- Limit output via Drupal permissions.

Firebug



<http://getfirebug.com>

- Analyze DOM and network calls, analyze and execute JavaScript, all within the browser.
- Similar features available natively in Google Chrome.

FirePHP

```
<?php  
  
FB::log('Log message');  
FB::info('Info message');  
FB::warn('Warn message');  
FB::error('Error message');  
  
?>
```



<http://firephp.org>

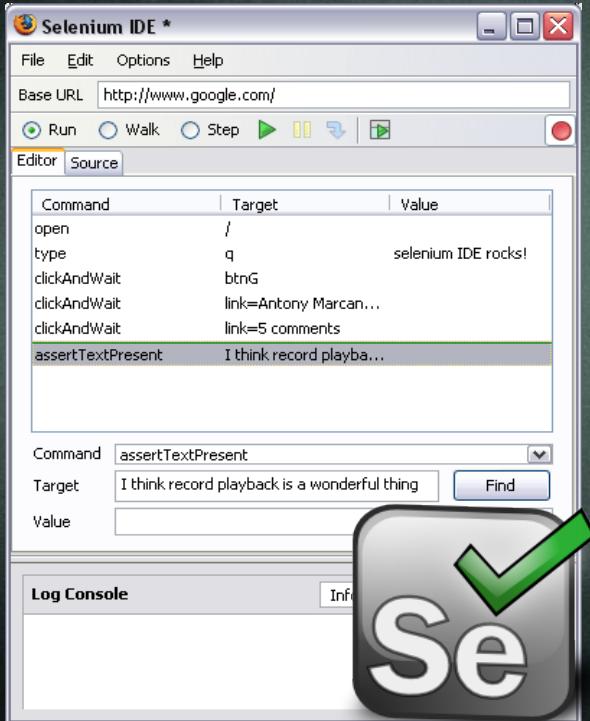
Send debugging messages to Firebug from PHP.

A good IDE helps.

Quickly navigate through unfamiliar code.



Selenium



<http://seleniumhq.org>

- Script the browser to perform the steps necessary to replicate a bug.
- Write regression tests to ensure bugs stay gone.

Questions so far?

Your turn:

Hi Allen,

Have there been any security updates on the site lately? I think maybe somebody's been messing around with the site, because suddenly I'm unable to upload any files. Any idea what's going on?

Thanks,
Bruce

What to do?

Hit me up: @TwoMice
allen@emphanos.com