## **Everything is Terrible**

#### $\bullet \bullet \bullet$

(and we're to blame)

Jim Perrin @BitIntegrity

#### **Disclaimer**:

- This talk may contain (or cause) sudden outbursts of profanity by the speaker, or the audience.
- Audience participation is encouraged.
- This talk may increase your blood pressure and stress levels
- It may also decrease your faith in humanity, or at least our industry.

This talk is BYOB and no, I'm not sharing.

#### Who is this guy?

- Currently with Red Hat
- Linux Systems Administrator since 1999
- CentOS Project member since 2004
- Defense Industry consultant (USAJFKSWCS G-6)
- Oil Industry consultant

## Idealism vs reality

#### $\bullet \bullet \bullet$

The first project



# CHANGED PRIORITIES AHEAD

#### So now you have OPTIONS

#### **Continue?**

#### **Evaluate Alternatives**









## This is not okay

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What we do hits every aspect of daily life

#### **Banking and financial markets**

- Knight Capital lost \$440 million in under an hour
  - http://dealbook.nytimes.com/2012/08/02/knight-capital-says-trading-mishap-cost-it-440-million/
- Citigroup used legitimate transactions as test data for 15 years without noticing
  - <u>http://www.theregister.co.uk/2016/07/13/coding\_error\_costs\_citigroup\_7m/</u>
- In 2010 the stock market lost over \$1 Trillion in a 36 minute crash, with no clear explanation
  - https://en.wikipedia.org/wiki/2010\_Flash\_Crash
  - It happened again in 2015 too, despite regulatory protection enacted after the 2010 incident
- Our very own Ben Cotton had to explain why leading 0's might be important
  - https://funnelfiasco.com/blog/2016/09/30/how-not-to-code-your-bank-website/

#### But it's not just money

• Three words: Galaxy. Note. 7

- Malware is compromising medical devices in hospitals
  - <u>http://www.tomsitpro.com/articles/security-medical-device-hijack-attacks,1-1780.html</u>
- The F-35 is so ridiculously buggy that pilots under 165lbs can't safely eject.
  - http://www.defenseone.com/technology/2016/02/f-35s-terrifying-bug-list/125638/
- The San Francisco Muni was \*accidentally\* infected with crypto malware
  - https://boingboing.net/2016/11/27/ransomware-creep-accidentally.html

### This is just the accidental stuff

#### What about intentional bad behavior?

- What will happen to your users if you get bought out and someone kills your project?
  - <u>https://www.engadget.com/2016/12/08/fitbit-pebble-acquisition/</u>
- Volkswagen violates emissions testing
  - http://www.reuters.com/article/us-volkswagen-emissions-idUSKCN12P22F
- A desire to protect a business model, assets, or IP
  - http://www.networkworld.com/article/2998251/malware-cybercrime/sony-bmg-rootkit-scandal-1
    <u>0-years-later.html</u>
- This could even involve ignoring security entirely, because hey, who'd attack a wireless camera?
  - http://arstechnica.com/security/2016/09/botnet-of-145k-cameras-reportedly-deliver-internets-big gest-ddos-ever/

# Oh hell, he mentioned loT

Don't worry, this is just a shameless plug for another talk

### So what's the solution?

## **Certification?**

## **Educational Requirements?**

# Turns out it's us.

But of course it's more complicated than that

### So you're not giving us an answer?