

Don't Panic!

How to Cope Now You're Responsible for Production

Euan Finlay
@efinlay24

FT

FINANCIAL
TIMES

/usr/bin/whoami

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/usr/bin/whodoiworkfor

No such file or directory.

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TIMES

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Russian politics

Putin says men accused of Skripal attack are 'civilians'

Russian president says men not 'criminal' and urges them to tell their stories to the media

4 HOURS AGO

- Novichok attack sheds light on Putin's feared military agency
- Retribution over Russia will be hard to exact
- Key western allies back UK over novichok attack



FT Series **Financial crisis: Are we safer now?**

JPMorgan: defying attempts to end 'too big to fail'

**Banks**

Dimon hands over more responsibilities to lieutenants

'I'm more like the coach now,' says Wall Street's longest-serving chief executive

**Eurozone economy**

Juncker vows to turn euro into global reserve currency

Move is part of drive to project EU's collective power on international stage

● NEW 39 MINUTES AGO

**Global Economy**

Lagarde rules herself out of race for top jobs in EU

IMF head dismisses speculation over European Commission or European Central Bank roles

**Banks**

Goldman partner left after making ethics complaint

Bank says claims were 'thoroughly investigated' and required no additional action

You've just been told you're on call.

(and you're mildly terrified)

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Obligatory audience interaction.

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**Everyone feels the
same way at the start.**

(I still do today)

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**How do you get to the point
where you're more comfortable?**



The Ghost of Incidents...

> Future
Present
Past

FT

FINANCIAL
TIMES



The Ghost of Incidents Future

Handling incidents is the same as any other skill.

Get comfortable
with your alerts.

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**Get comfortable
with your alerts.**

(and bin the rubbish ones)

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Have a plan for when things break.

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Keep your documentation up to date.

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Practice regularly.

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*"The Gang Deletes
Production"*

NO PRODUCTION SERVERS?

NO PRODUCTION INCIDENTS

Break things, and see what happens.

Did your systems do what you expected?

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The Planned Datacenter Disconnect

**We got complacent, and stopped
running datacenter failure tests...**

Have a central place for reporting changes and problems.



19:25

Seeing aws dx link issues again-checking

Pasted image at 2018-07-27, 5:28 PM ▾



19:39

Methode alerts are firing
intermittent



19:40

yep we have network issues again at PR (edited)



Looks like the MPLS Verizon cct is down
So far no impact reported...
monitoring for now



19:44

We have reports of publishing not working, and problems with Methode portalpub connecting to UPP again



19:45

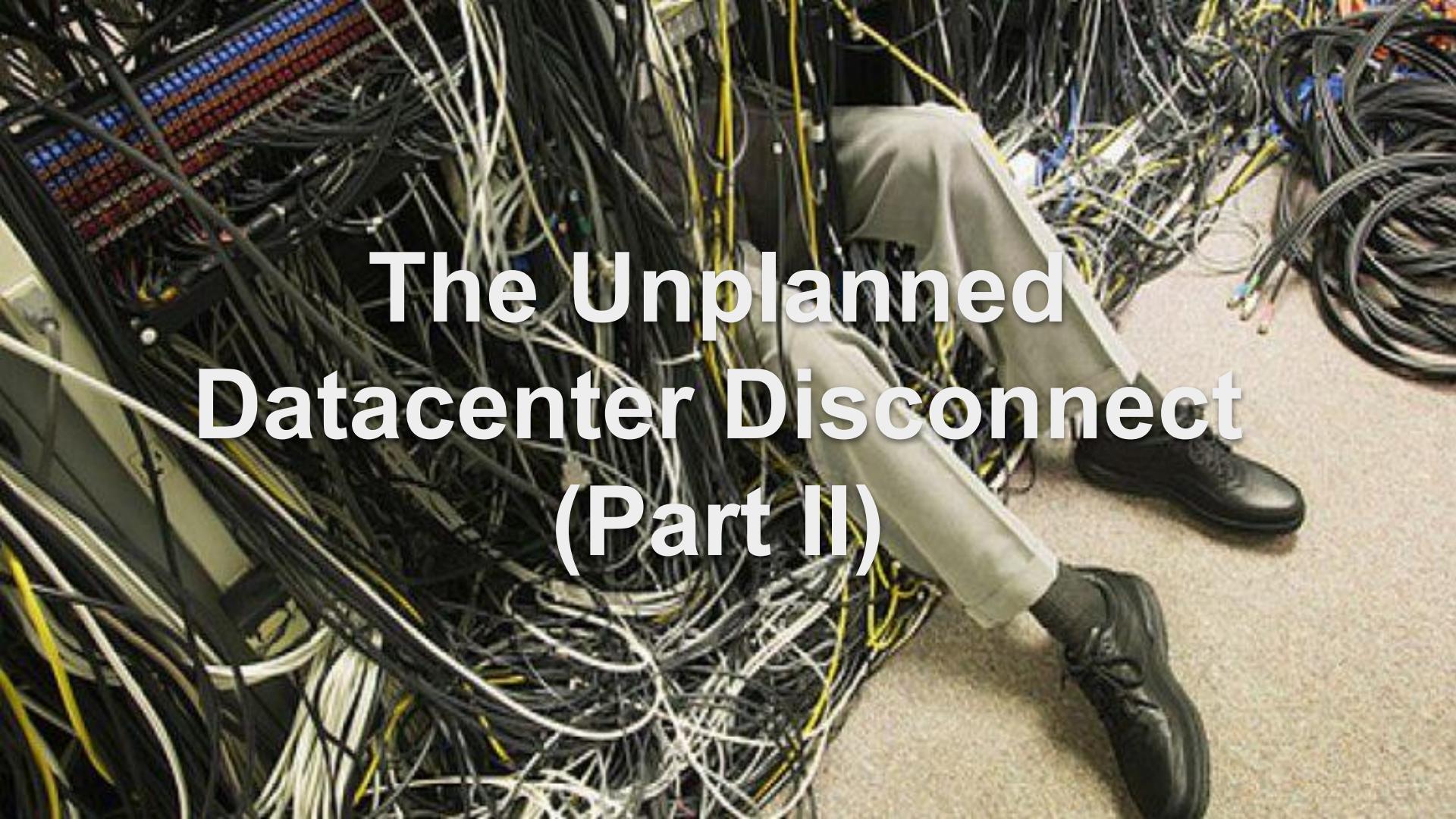
thanks Andrew

^^Verizon are saying PR site is affected by an issue affecting multiple locations



19:46

switching portalpub off in PR

A photograph showing a person's lower legs and feet walking through a dense, chaotic tangle of network cables in a datacenter. The cables are of various colors (black, white, yellow, blue) and are bundled together in several places. The floor is a light-colored carpet, and the background shows more server racks and equipment.

The Unplanned Datacenter Disconnect (Part II)

**We should have followed
our own advice.**

We're not perfect.

(but we always try to improve)

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The Ghosts of Incidents...

Future

> Present

Past

FT

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A scene from the Muppet Christmas Carol. Gonzo, the orange muppet with a large nose and a wide smile, is on the left, looking towards the right. He is wearing a dark brown coat and a small Santa hat. To his right is Bob Cratchit, played by Michael Caine, wearing a dark coat and a white bobble hat. They are standing in front of a brick building with a window decorated with a wreath. The overall atmosphere is festive and slightly somber.

The Ghost of Incidents Present

**Calm down, take a deep breath:
it's (probably) ok.**

Don't dive straight in.

Go back to first principles.

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What's the actual impact?

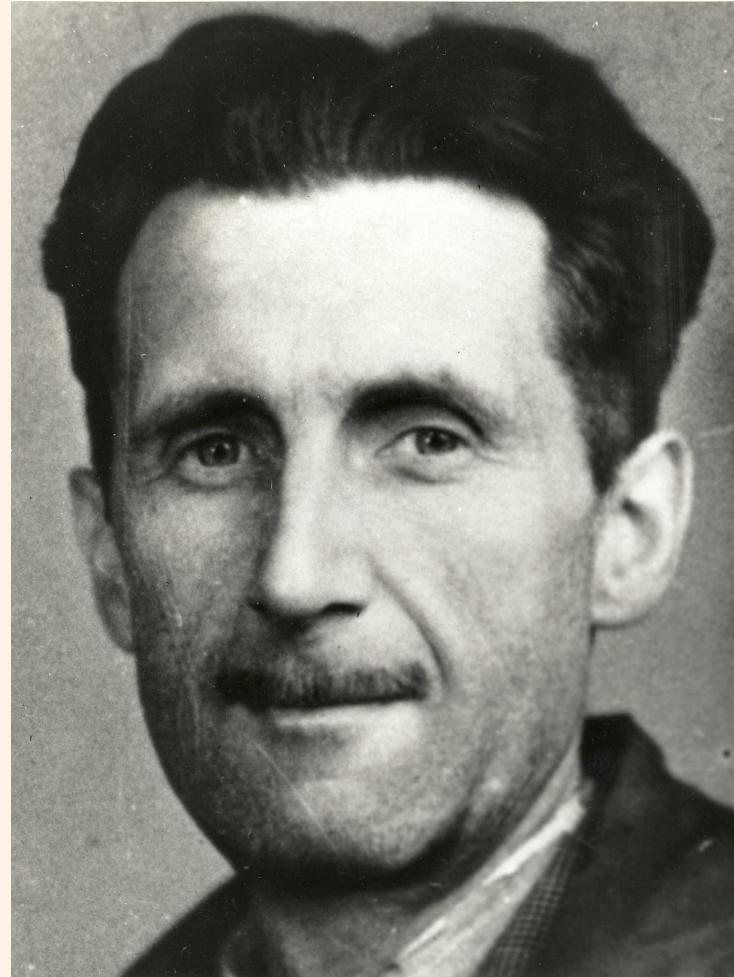
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**"All incidents are equal,
but some incidents are
more equal than others."**

George Orwell, probably



What's already been tried?

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Is there definitely a problem?

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DYNPUB / EXTRAPUB Prod Park Royal
Content

DYNPUB / EXTRAPUB Prod Watford
Content

SEMANTIC Prod Park Royal
Content

SEMANTIC Prod Watford
Content

SEMANTIC Prod AWS
Content
Downtime_5

DON'T
PANIC

OK
Healthy

MASHERY-V2-TESTS-PROD-UK

MASHERY-V2-TESTS-PROD-US

DON'T
WORRY

EVERYTHING
IS
FINE

PROBABLY
OK

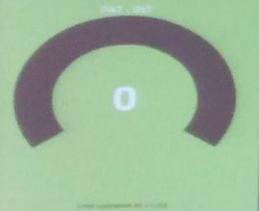
SEMANTIC Test Park Royal
Added_4

SEMANTIC Test Watford

NOT
CRTICAL

DYNPUB / EXTRAPUB Int Park Royal
Content

SEMANTIC Int Park Royal



What's the minimum viable solution?

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Get it running
before you
get it fixed.

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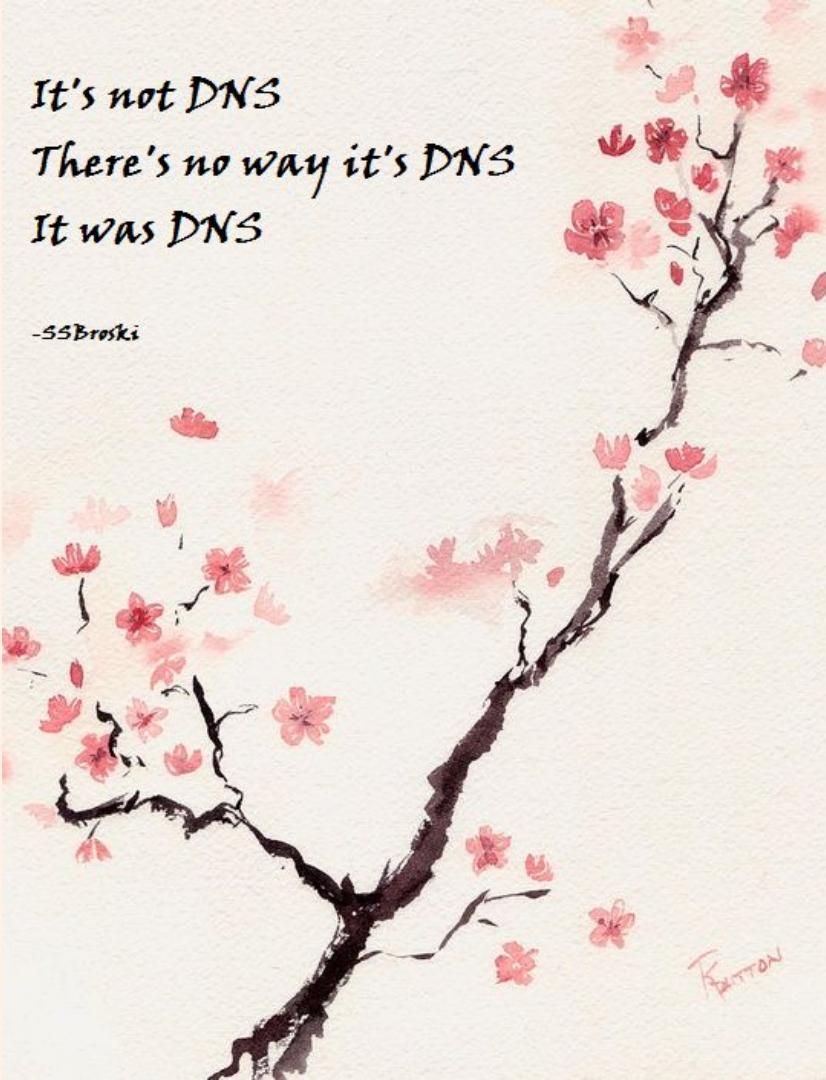
Check the basics first.

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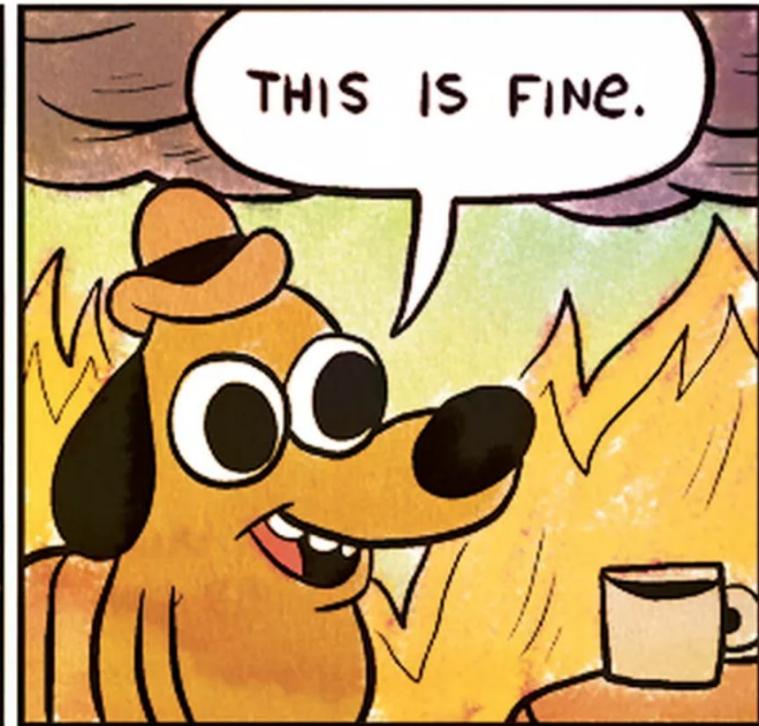
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*It's not DNS
There's no way it's DNS
It was DNS*

-SSBroski



FBUTTON



Don't be afraid to call for help.

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The One Where a Director Falls Through the Ceiling



Communication is key.

Especially to your customers.

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Put someone in charge.

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Tuesday, April 10th



Pingdom APP 14:42

k8s - UPP Prod Delivery US: Annotations Read Aggregate Healthcheck is down

(Incident #4073269)

[upp-prod-delivery-us.ft.com](#) • View details

k8s - UPP Prod Delivery UK: Annotations Read Aggregate Healthcheck is down

(Incident #4073041)

[upp-prod-delivery-eu.ft.com](#) • View details

k8s - UPP Prod Delivery UK: Content Read Aggregate Healthcheck is down

(Incident #4073077)

[upp-prod-delivery-eu.ft.com](#) • View details

k8s - UPP Prod Delivery US: Content Publish Aggregate Healthcheck is down

(Incident #4073290)

[upp-prod-delivery-us.ft.com](#) • View details

k8s - UPP Prod Delivery US: Annotations Read Aggregate Healthcheck is up

(Incident #4073269)

[upp-prod-delivery-us.ft.com](#) • View details

k8s - UPP Prod Delivery US: Image Publish Aggregate Healthcheck is down

(Incident #4073407)

[upp-prod-delivery-us.ft.com](#) • View details

k8s - UPP Prod Delivery UK: Image Publish Aggregate Healthcheck is down

(Incident #4073095)

[upp-prod-delivery-eu.ft.com](#) • View details

k8s - UPP Prod Delivery UK: List Read Aggregate Healthcheck is down (Incident #4073146)

[upp-prod-delivery-eu.ft.com](#) • View details

k8s - UPP Prod Delivery US: Content Publish Aggregate Healthcheck is up

(Incident #4073290)

[upp-prod-delivery-us.ft.com](#) • View details

Create a temporary incident channel.

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Software can be chaotic, but we make it work



Expert

Trying Stuff Until it Works

O RLY?

*The Practical Developer
@ThePracticalDev*

#upp-incident-20170929

2 | 1 | Add a topic



Search

@ ⭐ :

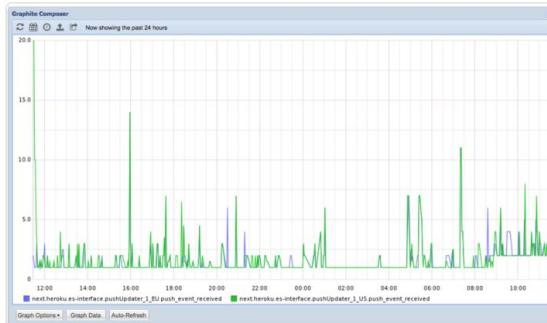
September 29th, 2017

[REDACTED] 11:26
 Same for EA460F68-495E-D18F-3130-C220FA23EF8E in prod-us at 04:01:57

[REDACTED] 11:26
 So [REDACTED] says that in the last 24 hours, Next have got 20% more push event notifications in the US than in the EU...

[REDACTED] 11:26
 Both request times line up exactly with the notification timestamps

[REDACTED] 11:27
 uploaded and commented on this image: [Push notifications received](#) ▾



“ green is US region

[REDACTED] 11:28
 suggestions-rw-neo4j (that's v2 annotations as I understand it) wrote annotations at 04:01:36 (uk) and 04:01:51 (us)

So they would have been present before the notifications were sent out

[REDACTED] 11:29
 and I have confirmed that no annotations will still allow the article to show in both enrichedcontent and internalcontent



Hmm, that's a big gap between 1 and 5

If you think you're
over-communicating,
it's probably just the right amount.

Tired people don't think good.

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*"The Gang Serves Traffic
From Staging"*



Uptime report

Content API V2 Lists API

Report dates: 26/07/2016 to 27/07/2016 (Europe/London)

Type: HTTP

Response time

Downtime
1h 51m

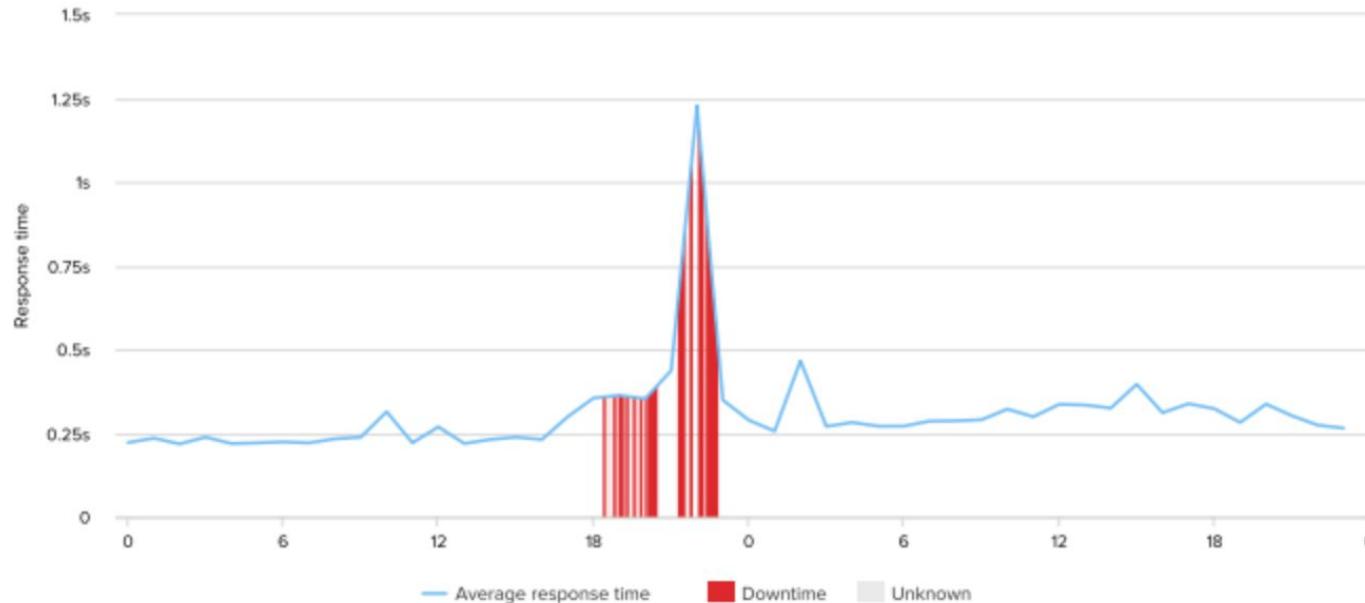
Outages
21

Uptime
96.15%

Max resp. time
1.23s

Min resp. time
218ms

Avg resp. time
302ms



**It wasn't great,
but it wasn't the end of the world.**

The Ghosts of Incidents...

Future
Present
> Past

FT

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A scene from the 1951 film adaptation of Charles Dickens' "A Christmas Carol". In the foreground, Ebenezer Scrooge (played by Alastair Sim) is shown from the chest up, wearing a dark brown coat over a white collared shirt. He has a white bandage wrapped around his head. Behind him, the Ghost of Incidents Past (played by Marjorie Main) is visible, appearing as a bright, ethereal figure with long, flowing white hair and a white robe.

The Ghost of Incidents Past

Congratulations! You survived.

It probably wasn't *that* bad, was it?

Run a post-mortem with everyone involved.

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Incident reports are important.

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NEVER HAVE I FELT SO
CLOSE TO ANOTHER SOUL
AND YET SO HELPLESSLY ALONE
AS WHEN I GOOGLE AN ERROR
AND THERE'S ONE RESULT
A THREAD BY SOMEONE
WITH THE SAME PROBLEM
AND NO ANSWER
LAST POSTED TO IN 2003

WHO WERE YOU,
DENVERCODER9?

WHAT DID YOU SEE?!



Prioritise follow-up actions.

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Incident Post-Mortem and Security Advisory: Data Exposure After travis-ci.com Outage

Apr 3, 2018



Konstantin Haase

SUPPORT

On Tuesday, 13 March 2018, [travis-ci.com was non-operational](#) for around 5.5 hours starting at 12:14 UTC. There was a backlog of builds for another 3.5 hours after the system returned to an operational state.

This post outlines what happened, and explains what exactly it means for you as a travis-ci.com customer.

What happened

On Tuesday, 13 March 2018 at 12:04 UTC a database query was accidentally run against our production database which truncated all tables. The query was blocked for around 10 minutes and finally executed at 12:14 UTC.

As we responded to alerts immediately following this, our API remained operational for roughly 30 minutes, connected to an almost empty database.

Whenever anyone signed in to travis-ci.com during this time, they saw blank user profiles. Since their old user records had been wiped from the database, our system

Remediation

Steps we have taken to avoid accidental database table truncation:

- Revoked the truncate permission on our databases, effectively making it impossible for tables to be truncated.
- Patched our internal spec_helpers to check for the DATABASE_URL environment variable.
- Added a shell prompt warning to our developer tooling to make the shell prompt warn when a DATABASE_URL is set.
- Submitted a Pull Request to the Database Cleaner gem to safeguard against accidentally using a remote DATABASE_URL.

Steps we have taken to avoid compounding issues:

- Created an alias for the follower database, to make it easier to find and connect to when testing is required against production data.
- Automated database failover and maintenance to reduce the time and number of manual steps needed to recover from this type of situation.

In addition to the measures mentioned above, we are planning a number of short and long term improvements that are aimed at making our system more resilient and preventing similar outages from happening.



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Identify what can
be done better
next time.

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A blurry, out-of-focus photograph of a house at night. In the foreground, there's a large, ornate sofa on a lawn, and a tall floor lamp with a colorful, stained-glass shade. The overall atmosphere is hazy and dreamlike.

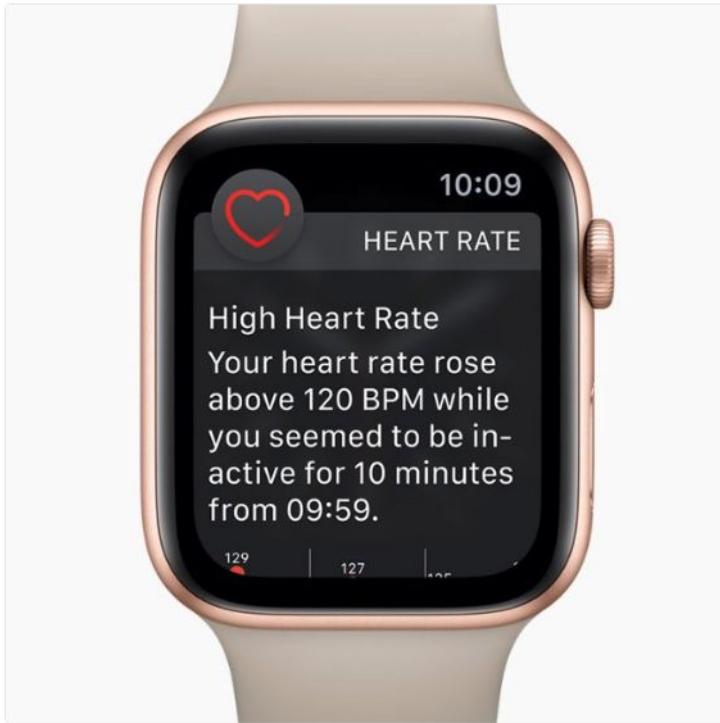
The One with the Badly Named Database

Don't name your pre-production database: 'pprod'

Seriously, who does that?



> did you know you're connected to the production database?



10:31 AM - 13 Sep 2018

375 Retweets 1,307 Likes



13



375



1.3K



Nearly the end.

(don't clap yet)

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Problems will always happen.

(and that's ok)

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The end.

(please clap)

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euan.finlay@ft.com

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<https://aboutus.ft.com/en-gb/careers/>

Image links: <https://goo.gl/3DeojV>