



NEW ORLEANS
DRUPALCON 2016

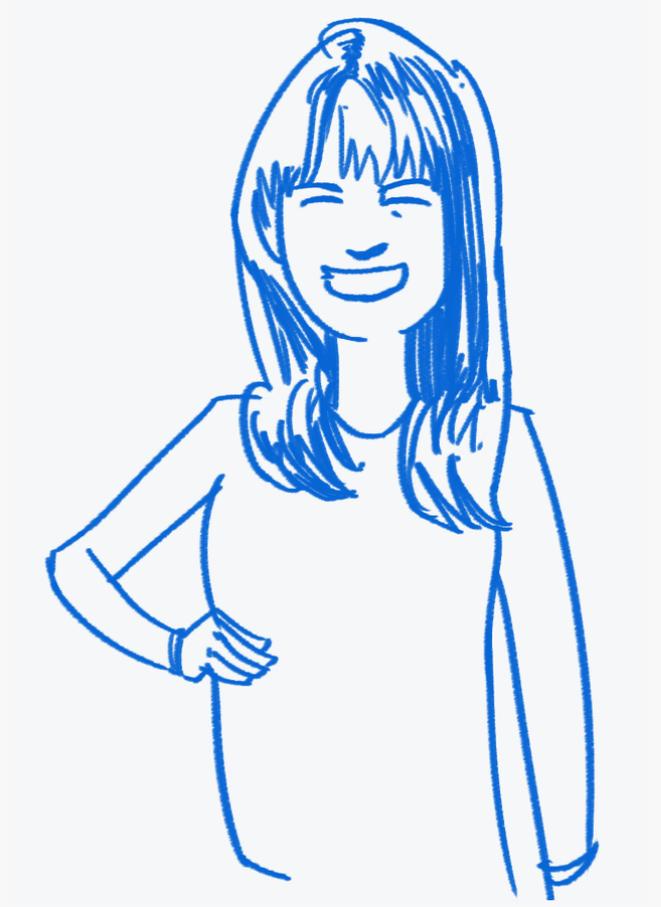


**Where's the fire?
AKA: My site is down... now what?**

Kristen Pol

My name is Kristen.

- Kristen Pol
- Hook 42
- CTO / Architect
- Drupal for 12 years!
- kristen@hook42.com
- @kristen_pol



Who are you?

Developer?

Builder?

All the roles?

PM?

Drupal
Veteran?

Drupal Newbie?

Themer?

Drupal
Intermediate?



What are some website disasters?

- Site down
- Site very slow
- Files directory deleted
- Code deleted
- Database deleted
- Email not working
- 3rd party services not working



What are some causes?

- Increased traffic
 - Legitimate
 - Nefarious
- CDN/WAF
- Hosting
 - Router
 - Network
 - File system
 - Security breach
- Mail server
- 3rd party services
- Application
 - Slow queries
 - Slow crons
 - Hit edge case
 - Insufficient caching
 - Security breach
- Human error
 - Drop database or tables
 - Remove code or files
 - Delete via UI
 - ...

How can you handle website disasters?

- ✓ Planning
- ✓ Monitoring
- ✓ Diagnostics
- ✓ Support
- ✓ Recovery
- ✓ Prevention



Don't panic!





PLANNING

What is disaster planning?

*“A disaster recovery plan (DRP) is a **documented process** or set of procedures **to recover and protect a business IT infrastructure in the event of a disaster.**”*



Create process that works for you & your “client”.

Example:

- ✓ Check other websites
- ✓ Check status pages
- ✓ Run traceroute
- ✓ Email urgent@example.com
- ✓ Check urgent coverage calendar
- ✓ Ping developer(s) via chat, text, phone
- ✓ Open internal support ticket



Make sure to document and train devs how to...

- ✓ Access all the services
- ✓ Diagnosis issues
- ✓ Open support tickets
- ✓ Deploy a hot fix
- ✓ Access backups
- ✓ Recover site from backups
- ✓ Log urgent issues





MONITORING

What is website monitoring?

*“Website monitoring is the process of testing and **verifying** that **end-users** can interact with a **website** or web application **as expected.**”*



Here are a few popular monitoring tools.

pingdom

Site24x7



You can configure checks.

Name of check:

Check interval: 
1 minute

Check type: **HTTP(S)**

Optional Required

URL/IP:

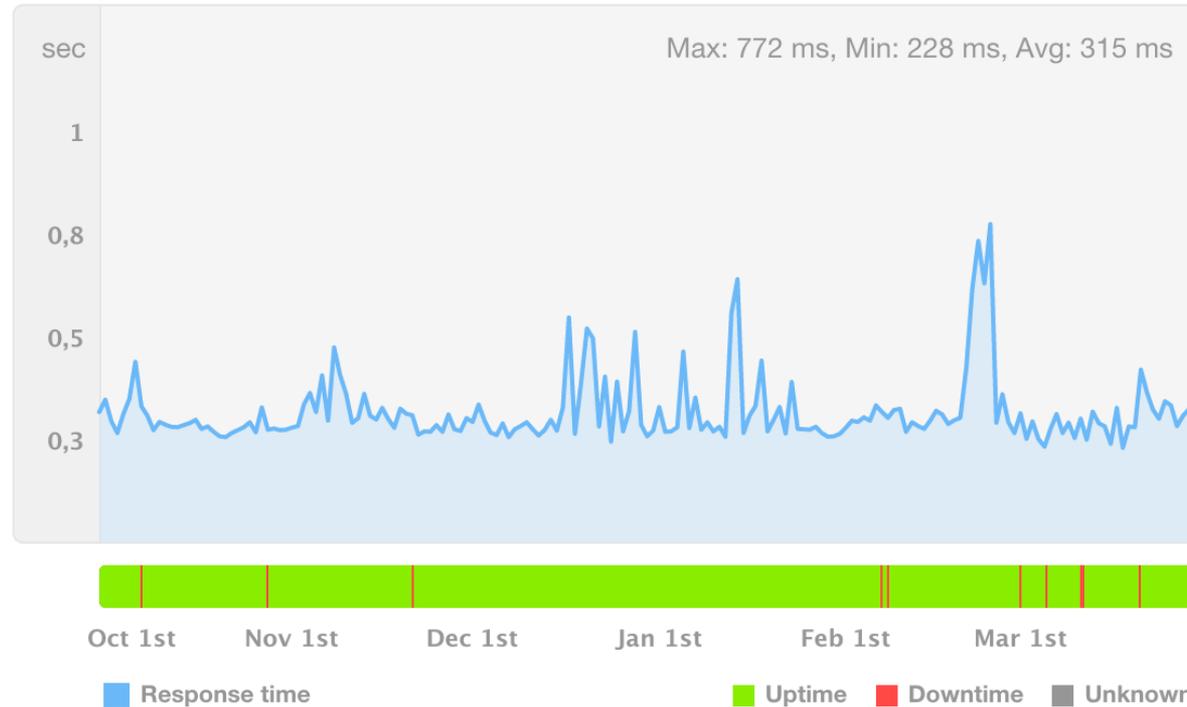
You can track uptime.

Hook 42

type: HTTP, host: www.hook42.com

Download PDF

Edit check



DOWNTIME

an hour

(13 outages)

UPTIME

99.98%

You can get alerts!

 Acknowledge  Close  Re-assign...

Status

Unconfirmed

Assigned to

Kristen Pol

Triggered by

Test Site - Cron

Description

Test Site - Cron

Say something

Type here...

Send

01/18/2016 07:00:18AM



Alert sent to Kristen Pol



DIAGNOSTICS

What is diagnostics?

*“Software diagnostics refers to concepts, techniques, and **tools** that allow **for obtaining findings, conclusions, and evaluations about software systems.**”*

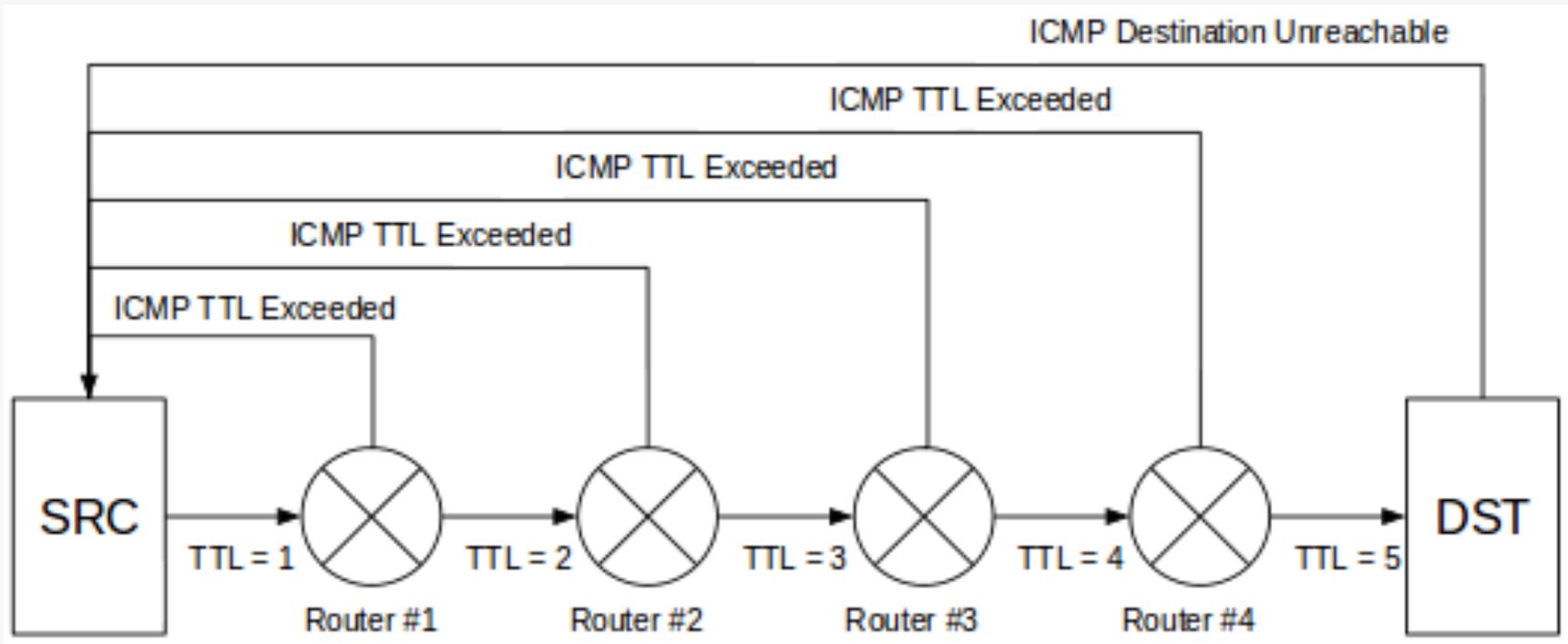


Here are some diagnostic tools.

- Traceroutes
- Status pages
- Logs
- Application Performance Management (APM) Software
- Drupal modules



Traceroute shows round-trip times between you and destination server.



Here's an example of a bad traceroute.

Tracing route to example2.com [192.168.32.15]
over a maximum of 30 hops:

```
 1  <1 ms  <1 ms  <1 ms  192.168.0.1
 2  *      *      *      Request timed out.
 3  6 ms   5 ms   6 ms  68.85.162.74
 4  13 ms  8 ms   9 ms  pos-0-3-0-0-cr01.newyork.ny.ibone.comcast.net [68.86.90.57]
 5  95 ms  100 ms 9 ms  xe-10-1-0.edge1.NY.exampleSP1.net [10.78.169.45]
 6  10 ms  8 ms   9 ms  ae-33-89.car3.NY.exampleSP1.net [10.68.16.133]
 7  893 ms * ms   799 ms nyc-edge-03-inet.example2.com 192.168.33.4
 8  809 ms 808 ms * ms   nyc-core-01.inet.example2.com [192.168.33.10]
 9  985 ms 947 ms 983 ms alt-core-03.inet.example2.com [192.168.32.11]
10 1028 ms 1010 ms 953 ms 192.168.32.15
```

Trace complete.

Check service status pages.

Figure out which ones your site uses!

● Hosting

- Acquia
- Pantheon
- Platform.sh
- Blackmesh
- Rackspace
- ...

● Mail Services

- MailGun
- Mandrill
- SendGrid
- ...

● CDN/WAF

- CloudFlare
- CloudFront
- EdgeCast
- Fastly
- MaxCDN
- ...

● Others

- Analytics
- Marketing Automation
- ...

Check service status pages.

Many look similar. Some are location-based.

Past Incidents

Mar 31, 2016

No incidents reported today.

Mar 30, 2016

Acquia has detected a temporary service interruption impacting self service SSL and our ability to launch new sites for Acquia Cloud Professional and Acquia Cloud Free.

Resolved - The underlying cause of this service interruption has been addressed. All affected Acquia services have been restored, though affected sites may still see a brief delay as task requests are processed. All services are operational at this time.

Mar 30, 21:44 UTC

Update - We are currently investigating an interruption in self service SSL services. During this time, customers with affected sites will be unable to edit or create new ELBs using Acquia Self Service SSL option. We will provide additional information as it becomes available.

Check the server logs.

Server logs are hosting dependent.

- Acquia
 - error.log
 - php-errors.log
 - drupal-watchdog.log
- Pantheon
 - nginx-error.log
 - php-error.log

Check the Drupal logs.

Drupal logs depend on site configuration.

- Database Logging module (core)
- File Logger module
- Logging and Alerts module
- Off-site logging via RabbitMQ Logs, Monolog, Logstash, etc.

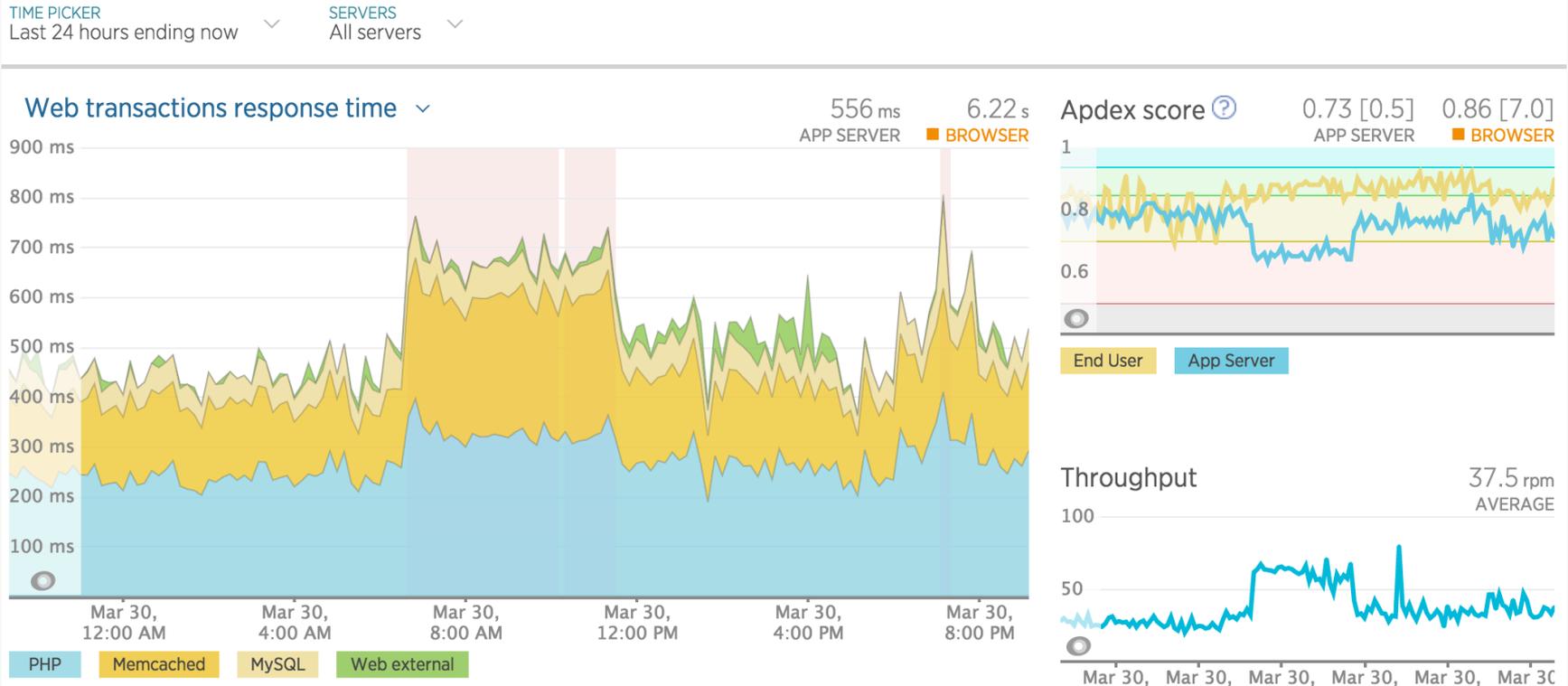
Here are a few APM tools.



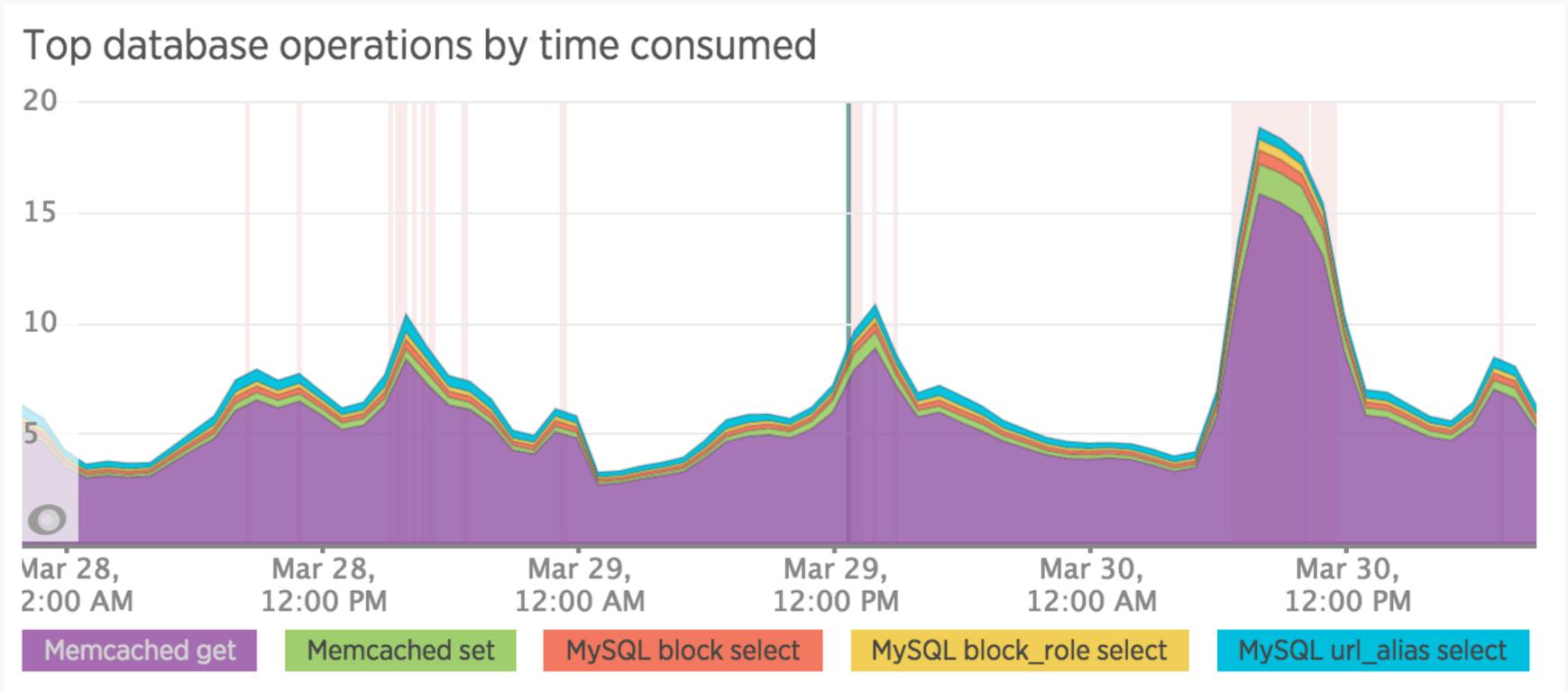
stackify



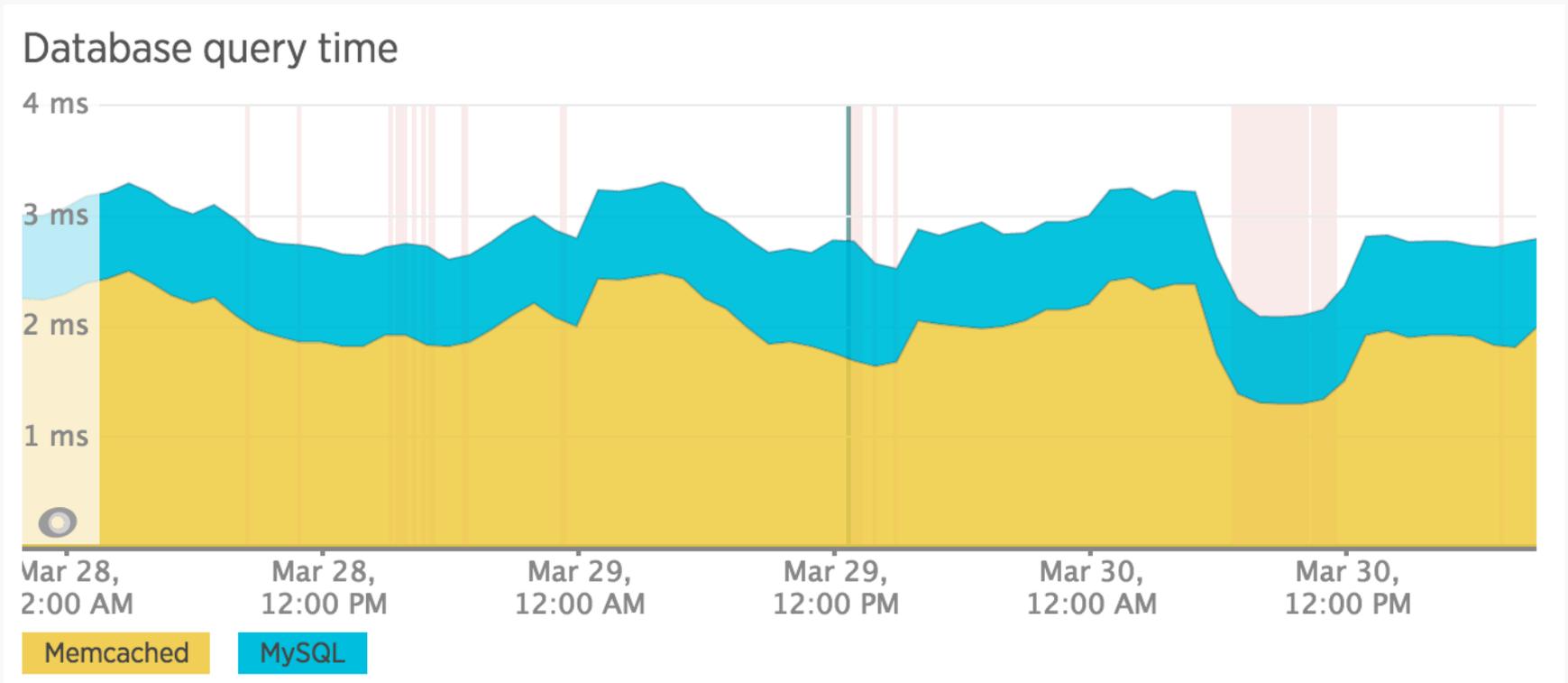
You can analyze the app.



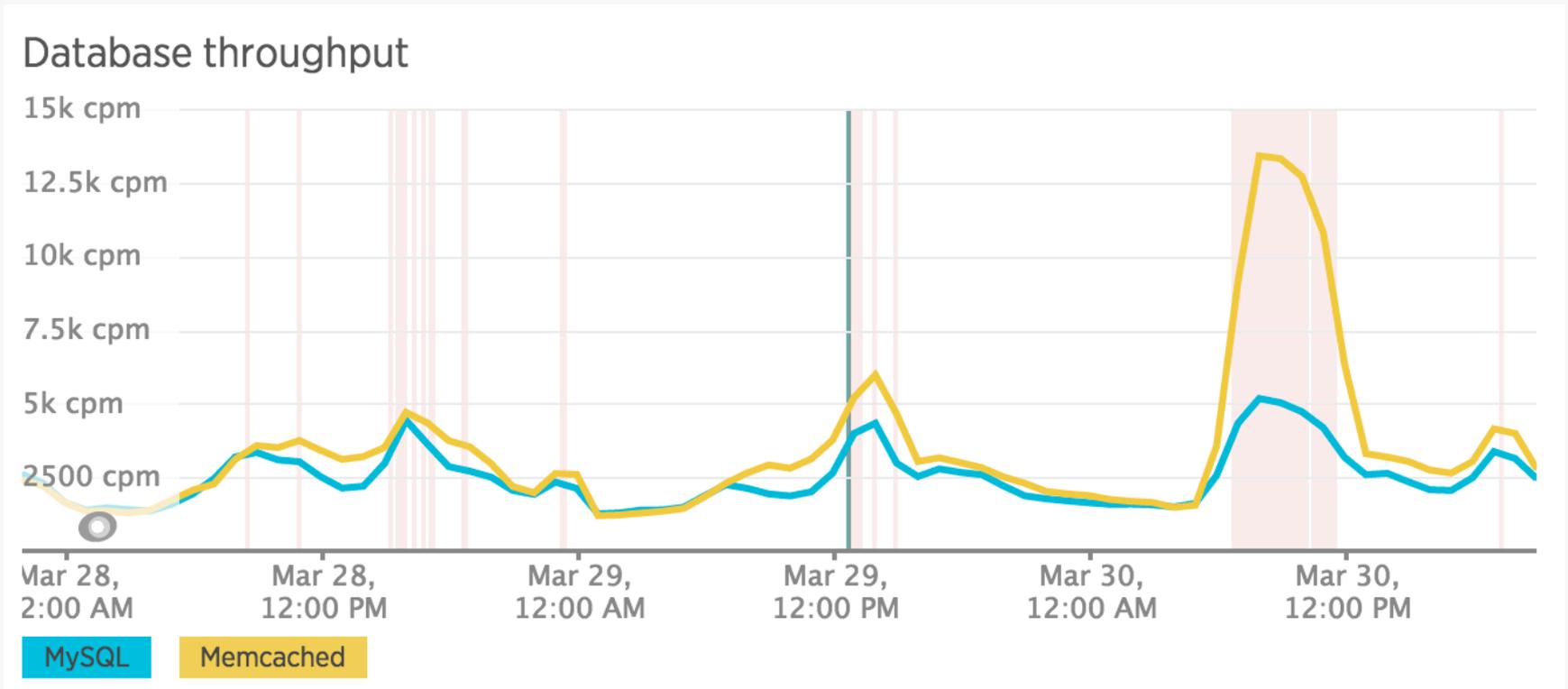
You can analyze the db.



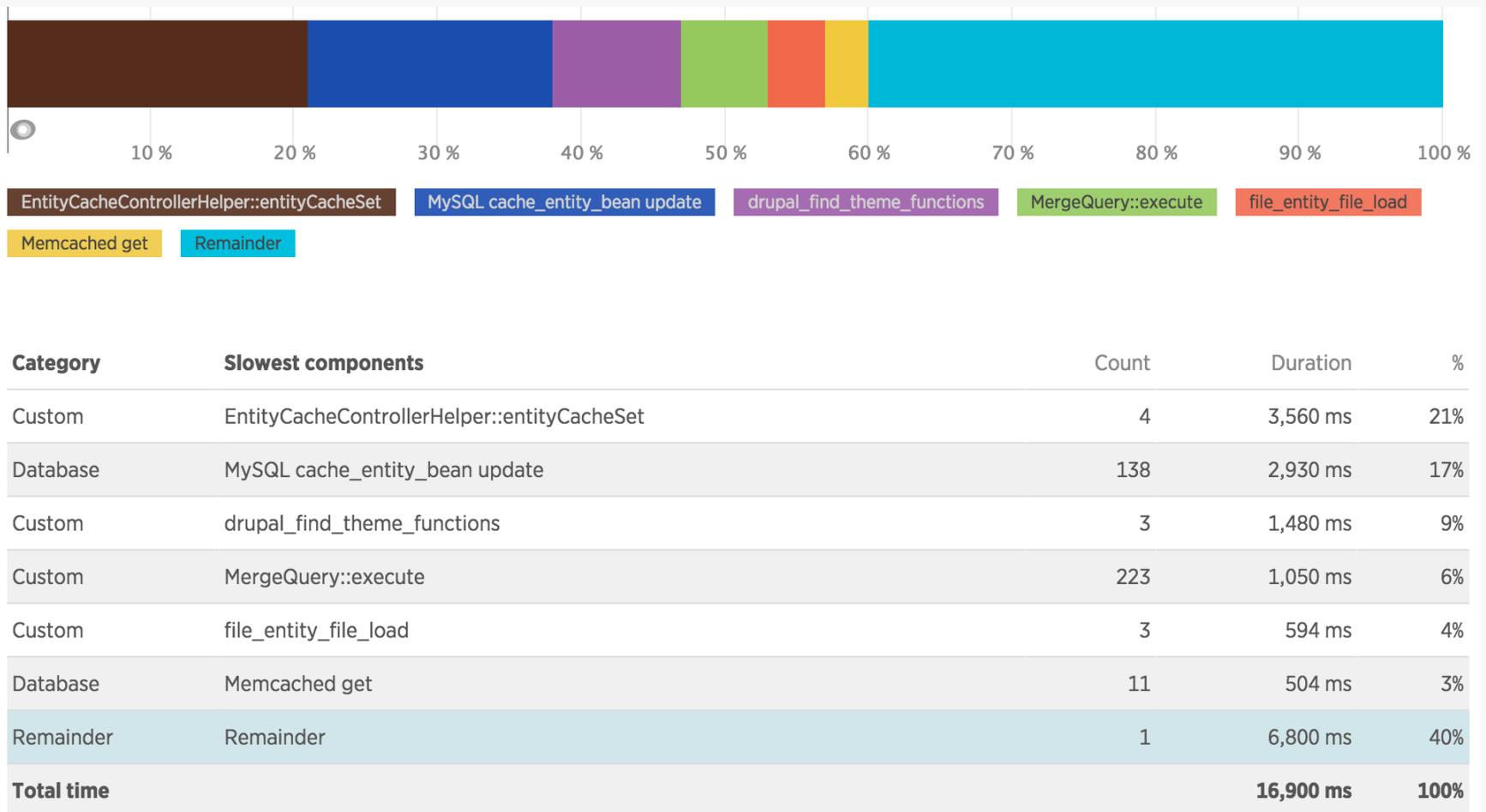
You can analyze the db.



You can analyze the db.

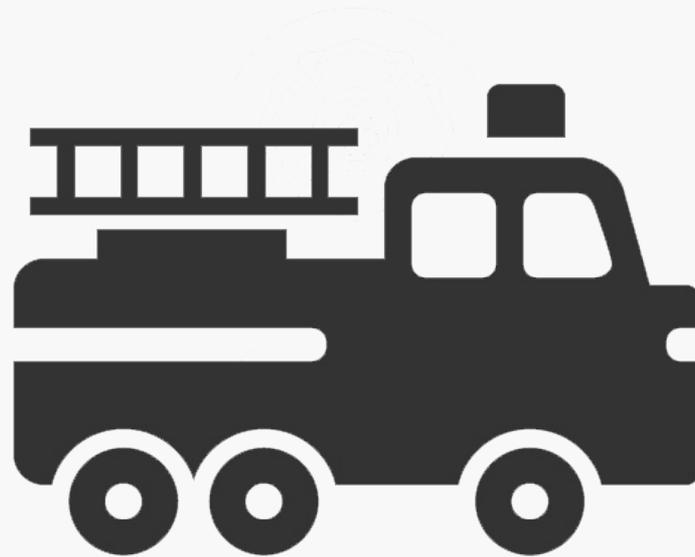


And drill down into code.



Drupal modules to help diagnose issues.

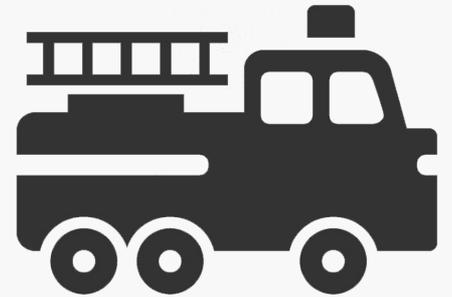
- ✓ Blame
- ✓ Hacked
- ✓ Security Review
- ✓ Logging and Alerts (emaillog)



SUPPORT

What is tech support?

*“Technical support refers to a plethora of services by which enterprises **provide assistance to users of technology products such as** mobile phones, televisions, computers, **software products** or other electronic or mechanical goods.”*



Opening a support ticket.

- ✓ First try to make sure it's not the Drupal site that is the problem
- ✓ Determine where to open ticket(s)
- ✓ Is site down or severely impacted? **Open emergency ticket!**
- ✓ Be polite
- ✓ Thank them for their help

Give tech support what they need.

- ✓ Detailed explanation of problem
- ✓ Level of impact
- ✓ Traceroute(s)
- ✓ Location(s) (if relevant)
- ✓ Steps to reproduce
- ✓ Diagnostic data when available
- ✓ Actions taken to remedy (if any)



RECOVERY

What is disaster recovery?

*“Disaster recovery involves a set of policies and procedures to **enable** the recovery or **continuation of vital technology infrastructure** and systems **following a natural or human-induced disaster.**”*



How do you recover?

It depends!



answers@hook42.com

Is it hackers?

Block IPs.



answers@hook42.com

Is it hosting, CDN, 3rd party services, or too much good traffic?

Open support tickets.



answers@hook42.com

Is it bad code or config?

Update and push hot fix.



answers@hook42.com

Is it completely unfixable?

Recover from backups!



answers@hook42.com



PREVENTION

What is prevention?

*“Measures taken to detect, contain, and forestall events or circumstances **which**, if left unchecked, **could result in a disaster.**”*



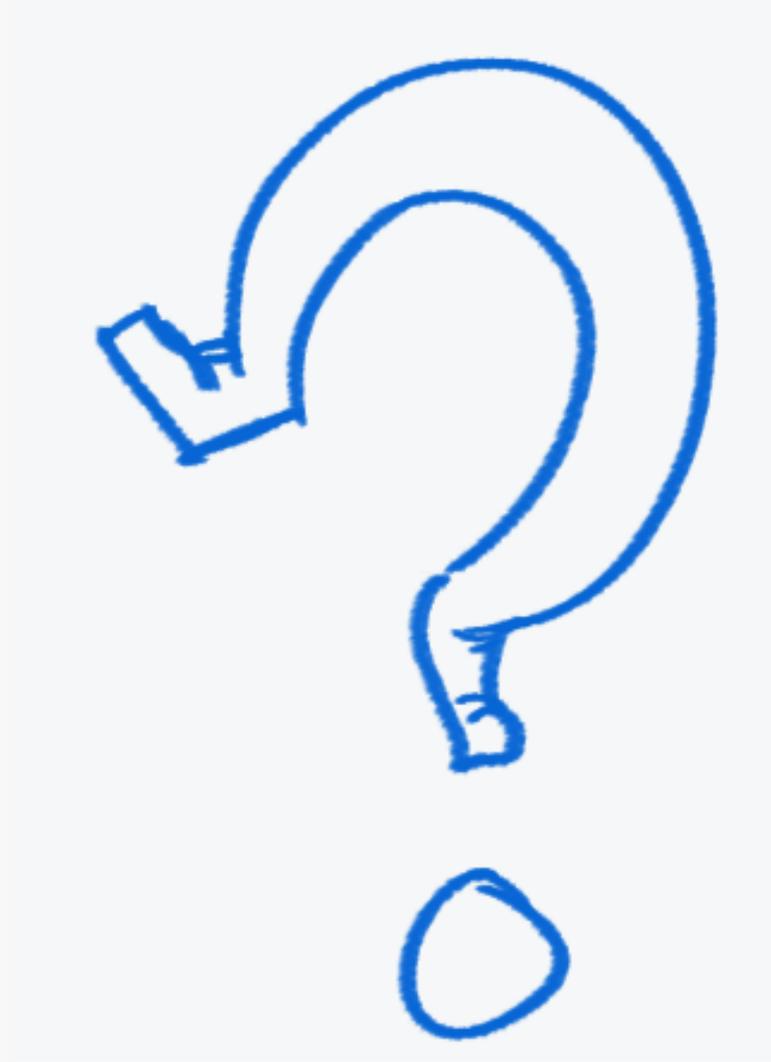
Some prevention tips...

- ✓ Managed hosting (if possible)
- ✓ Check automated daily backups
- ✓ Use code repository
- ✓ Track and tag releases
- ✓ Dev => Test => Live
- ✓ Test & backup before updating live!
- ✓ Monitor APM trends regularly
- ✓ Monitor long-term load time trends regularly

And more tips...

- ✓ Configure caching
- ✓ Spread out cron jobs
- ✓ Reduce number of modules
- ✓ Update core and modules regularly
- ✓ Proactively fix errors in logs
- ✓ Auto-block bad IP addresses
- ✓ Peer review code
- ✓ Limit access

Any questions?



THANKS!



Have more questions?

Email us at:

answers@hook42.com

answers@hook42.com



Join us for Sprints

Friday, May 13 at the Convention Center

First-Time Sprinter Workshop - 9am-12pm in Room 271-273

Mentored Core Sprint - 9am-6pm in Room 275-277

General Sprints - 9am-6pm in Room 278-282



So How Was It? Tell Us What You Think

Evaluate this session -
<https://events.drupal.org/neworleans2016/sessions/wheres-fire-aka-my-site-down-now-what>

Thanks!