

umar pt. 2

dns, cloudflare, reliability, perf(1) & more

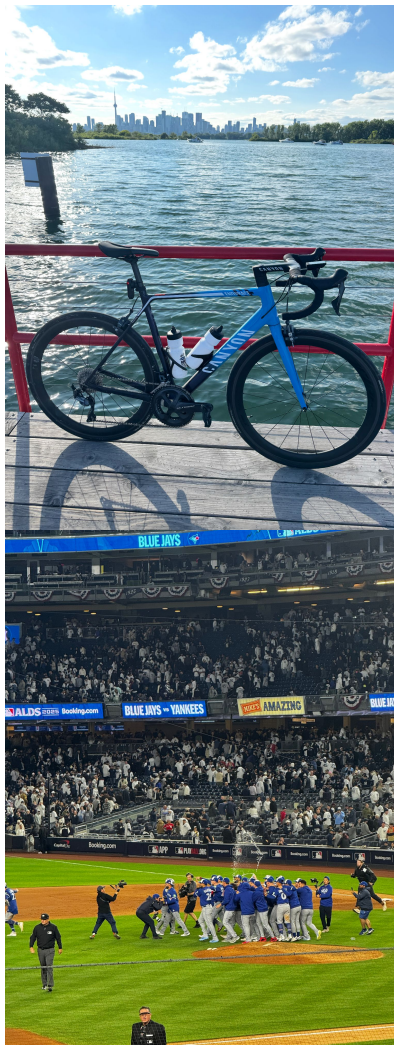
Umar Yousafzai | 12/16/2025

uyousafz [at] uwaterloo [dot] ca



Umar Yousafzai

- intern on infra under @JoeFulgieri
- senior at waterloo, from toronto
- loves to cycle
- fav customer @ salswee according to baristas



01 summer recap

02

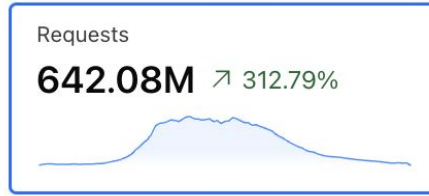
03

04

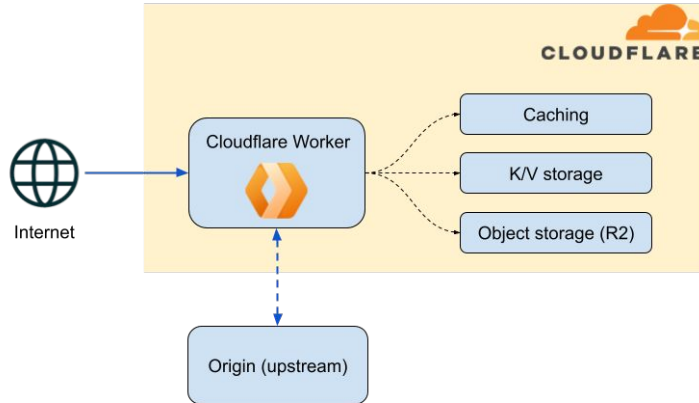
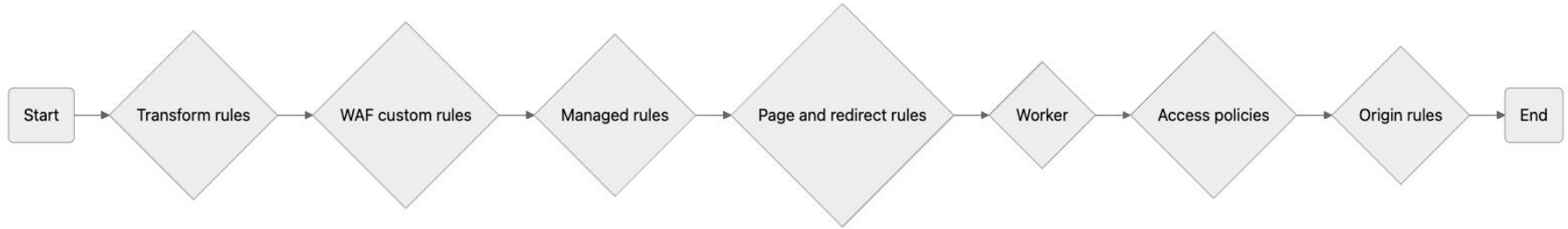


What is Cloudflare?

who is cloudflare?



Cloudflare Request Flow



02 making Ramp reliable (MRR)

03

04

ramp 

We'll be back shortly

Ramp is currently experiencing technical difficulties. Our team is working to resolve the issue as quickly as possible.

What's happening?

We're currently investigating an issue affecting access to Ramp services. You may experience difficulties logging in or accessing your account.

We're working to restore full functionality as quickly as possible. Thank you for your patience.

[Support Center](#) [Return to Homepage](#)



#project-sre

They always ask "Can we fix it?"
but never "How do we fix it?"



O'REILLY®



Site Reliability Engineering

HOW GOOGLE RUNS PRODUCTION SYSTEMS

Edited by Betsy Beyer, Chris Jones,
Jennifer Petoff & Niall Richard Murphy

site reliability eng trainee

who is sre? (go/sev1) 🔥 🔥 🔥 🔥

 **incident** APP 16:55

 **Health check failure for core-sync API in production**

PROD - core-sync API Health Check failed!@webhook-Incidentio_Platform @slack-alerts-datadog

The monitor was last triggered at Mon Dec 08 2025 21:55:37 UTC.

[\[Test Status\]](#) · [\[Edit Test\]](#) · [\[Related Logs\]](#)

 **Type:** Detected internally (Sentry, Datadog) + Platform Issues

 **Severity:** sev1: High

 **Channel:** [#_inc-12-08-inc_46616-health-check-failure-for-core-sync-api-in-production](#)

 **Status:** Investigating (Platform)

 **Team:** [Infrastructure Compute](#)

 **Incident Lead:** [@Joe Fulgieri](#)

[P1] Triggered: High Canary Error Rate

=5 Users experiencing errors on Canary (not observed in prod)

[Canary Errors](#)

1. Determine if the release is faulty and whether we should not release. If so:
2. `devtool rollback --env prd --app core` to revert to previous version and pause deployments.
3. `devtool option 14` disable canary to stop traffic to canary
4. Find offending commit, revert it, wait for buildkite master to complete, then resume deployments.

[@ssnow@ramp.com](#)

[@umar.yousafzai@ramp.com](#)

 **Stephen Snow** VIP 19:35

lol wtf

 **Datadog** APP 19:36

[Triggered: High # of users experiencing 500 errors on prd:core.api \(non statement timeouts\)](#)

21.0 users experienced [HTTP 500 errors](#) on prd:core.api.canary in past 5 minutes.

1. Review [Sentry](#) to see if the release `0b6892d52ce347acaf61140597a38cf2c21f1793` was faulty and needs to be rolled back.
2. If you need to rollback, `devtool rollback --env prd --app core`.

Other helpful links:

* [Launch Darkly Recently Updated Prod Flags](#)

* [Datadog Databases Page](#) (check for spikes in waits across writer and/or reader)

Tags

@git.commit.sha:0b6892d52ce347acaf611

40597a38cf2c21f1793

[Mute Monitor](#)

[Declare Incident](#)

[Create Case](#)

[Run Workflow](#)

 **umar** 19:37

I'm in the washroom rn if someone else could disable canary

 [18 replies](#) Last reply 18 hours ago

 **incident** APP 14:55

 **@channel Ramp is down!**

[#_inc-12-11-inc_47052-high-number-of-users-experiencing-http-500-errors-on-c](#) is ongoing and is impacting users' ability to use Ramp.

A separate channel has been created to answer questions and will be posted in this thread by someone from the incident response team. Please wait for that channel to be shared before asking any questions. Please also refrain from posting in the main incident channel so that it can remain streamlined for engineering response to the incident. It will be easier to see and answer your questions in the dedicated channel.

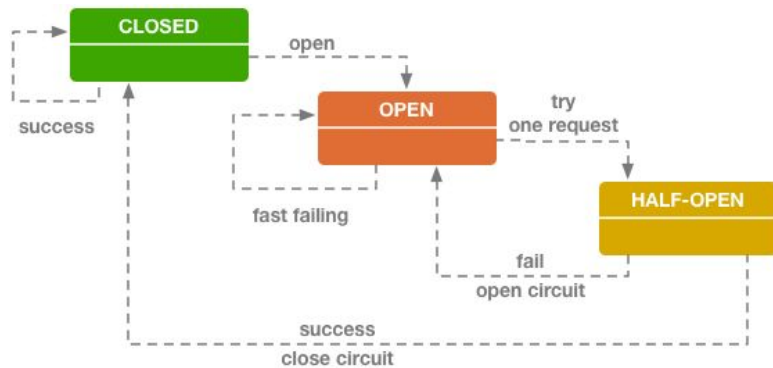
 27  69  15  11  7  5  3  1  1  2 

  [3 replies](#) Last reply 5 days ago

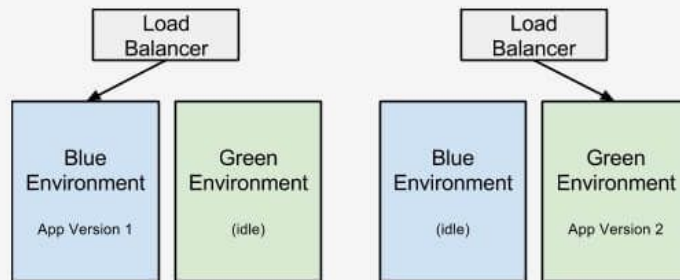
#project-sre

what am i cooking?

1. stop breaking prod with better canary
 2. API load shedding & circuit breakers
 3. better & faster deploys with blue & green
- green



Circuit Breaker State Diagram



#project-sre

why sre?

1. reliability => less sev0/1s
2. better sleep
3. dev velocity => more confidence =>
increased locked in => goto 2
4. less dev toil => happiness

#project-header-based-routing

Move several more highly uncooperative endpoints to sync workers #1211

Edit

<> Code

Merged

asteinborn_ramp merged 1 commit into master from astei/more-sync-endpoints 14 hours ago

Conversation 0

Commits 1

Checks 2

Files changed 1

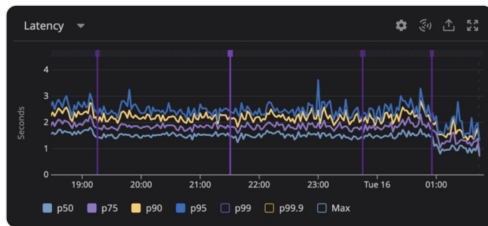
+2 -0



andrew, a garbage collector 01:46

Also reporting a new win on moving another uncooperative endpoint to sync workers, this is `GET /v1/auth/expense-groups/grouped-spend-events`. p50 dropped by a staggering 500ms so you know this was not a gevent-friendly workload.

image.png



01

02

03 random stuff

04

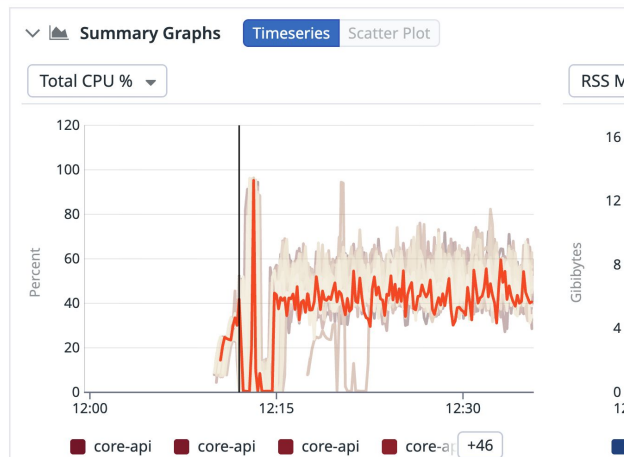


#container-boot-cpu-spike lol (lmao even) datadog

- chopped 2 minutes from deploys of most python services
- saved 5 mins from core deploys & minimum \$20K a year in compute
- made local dev flask shell faster
- come to **#eng-biweekly** for deets

fuck datadog.

chatgpt-codex-connector[bot]
reacted with thumbs up emoji



01

02

03

04 Thank you!



- joe
- anthony & jordan
- max, christ(ina) & jason
- ikky's spam, jane & kevin
- stephen & sunny
- beast
- recruiting (angela !!)
- raphaël
- interns
- all of infra & engplat
- god????