



How Devin Builds Devin

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Builder in Residence @ Cognition

✕ imjaredz



Devin is the first AI software engineer

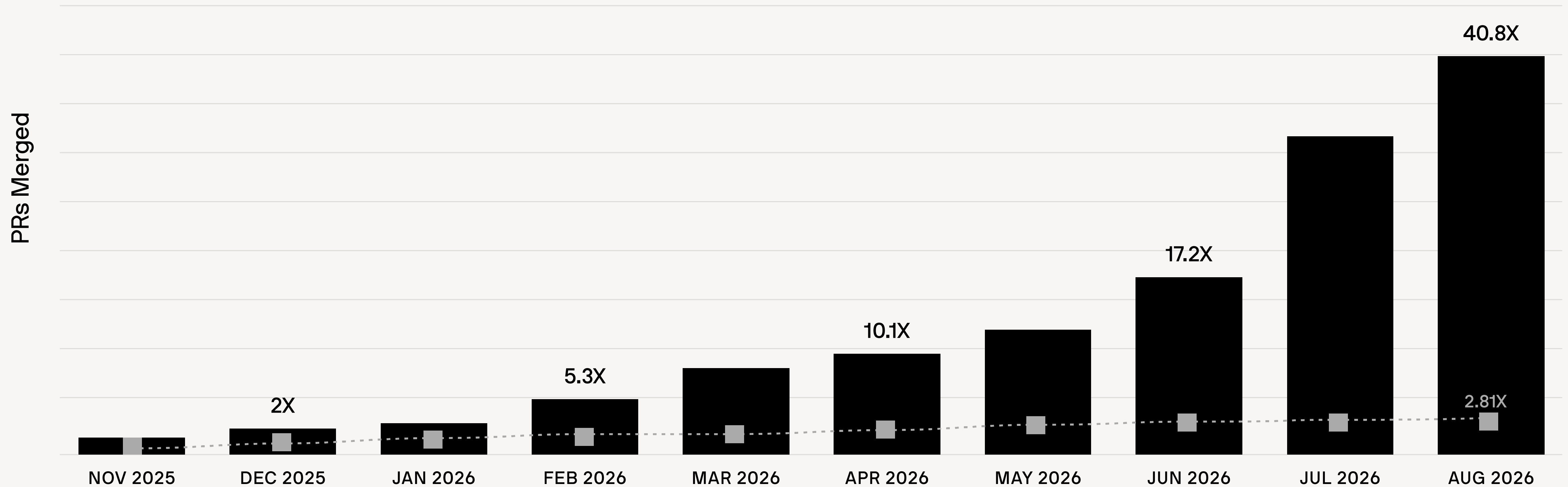
We're trusted by the best

	 Mercedes Benz		 U.S. ARMY	Operating around the world GLOBAL PRESENCE SF, NYC, Austin, Washington DC, Singapore, Japan, Sao Paulo SIZE OF TEAM 400+ FUNDING \$4B+ VALUATION \$48B
 Modal	 openrouter	 MERCOR		
 AT&T				
			 Santander	

The amount of code is exploding

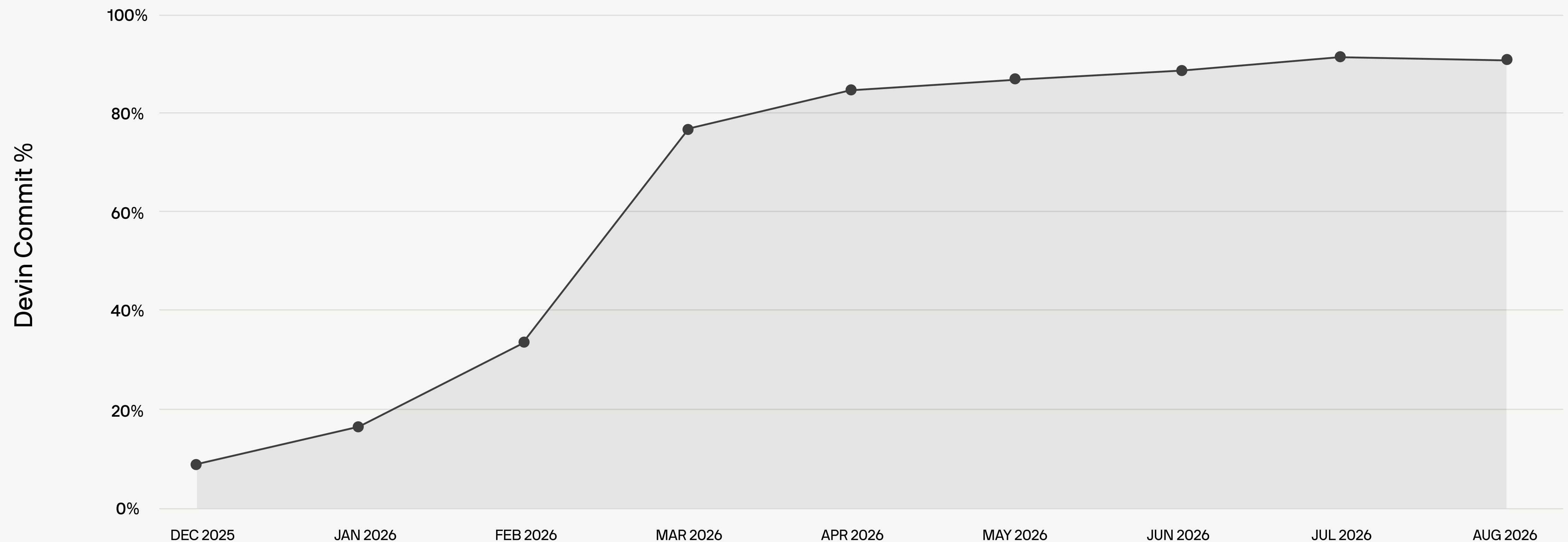
40x more PRs merged.
Similar size team.

■ PRs merged
■ Contributors

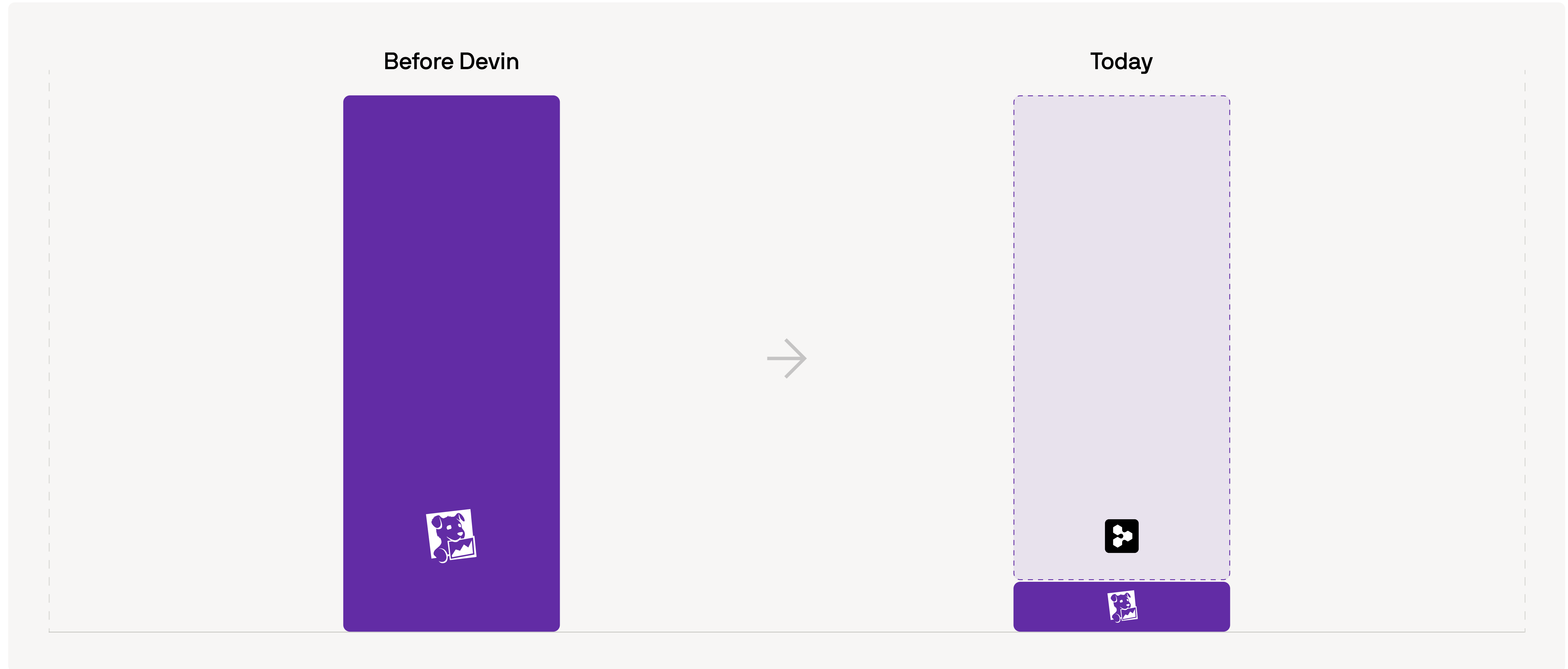


Agents are writing most of our code

% of Cognition commits authored or co-authored by Devin



How we burned down the backlog



Devin is the first responder

**Datadog** APP
Triggered: [prod] Automation Queue Delay High

**Datadog** APP
Re-Triggered: [Brain] Agent event channel depth over 4000 (prod)

**Datadog** APP
Triggered: Post auth is slowing down · p95 on /users/post-auth > 2.5s (now 2.656)

**Datadog** APP
Warn: High TX count on database devin-prod



Cognition

Channels

datadog-alerts

gtm-feedback

bug-reports

ext-mercedes

ext-goldman-sachs

brand-design

#

#

#

datadog-alerts

**Datadog** APP 4:46 PM
Warn: High TX count on database devin-prod

**Devin** AGENT 4:47 PM
Open transactions on devin-prodthree and 5 other reader DBs jumped ~500 → 2,000+. ~16,000 idle-in-transaction sessions. Investigating...

**Jared Zoneraich** 4:48 PM
could my PR from this morning have caused this?

**Devin** AGENT 4:49 PM
Unlikely, the timing doesn't match. webserver-events is stuck in a pool-exhaustion spiral: 137K pool timeouts in an hour, pods crash-looping.

**Devin** AGENT 4:50 PM
Investigating...

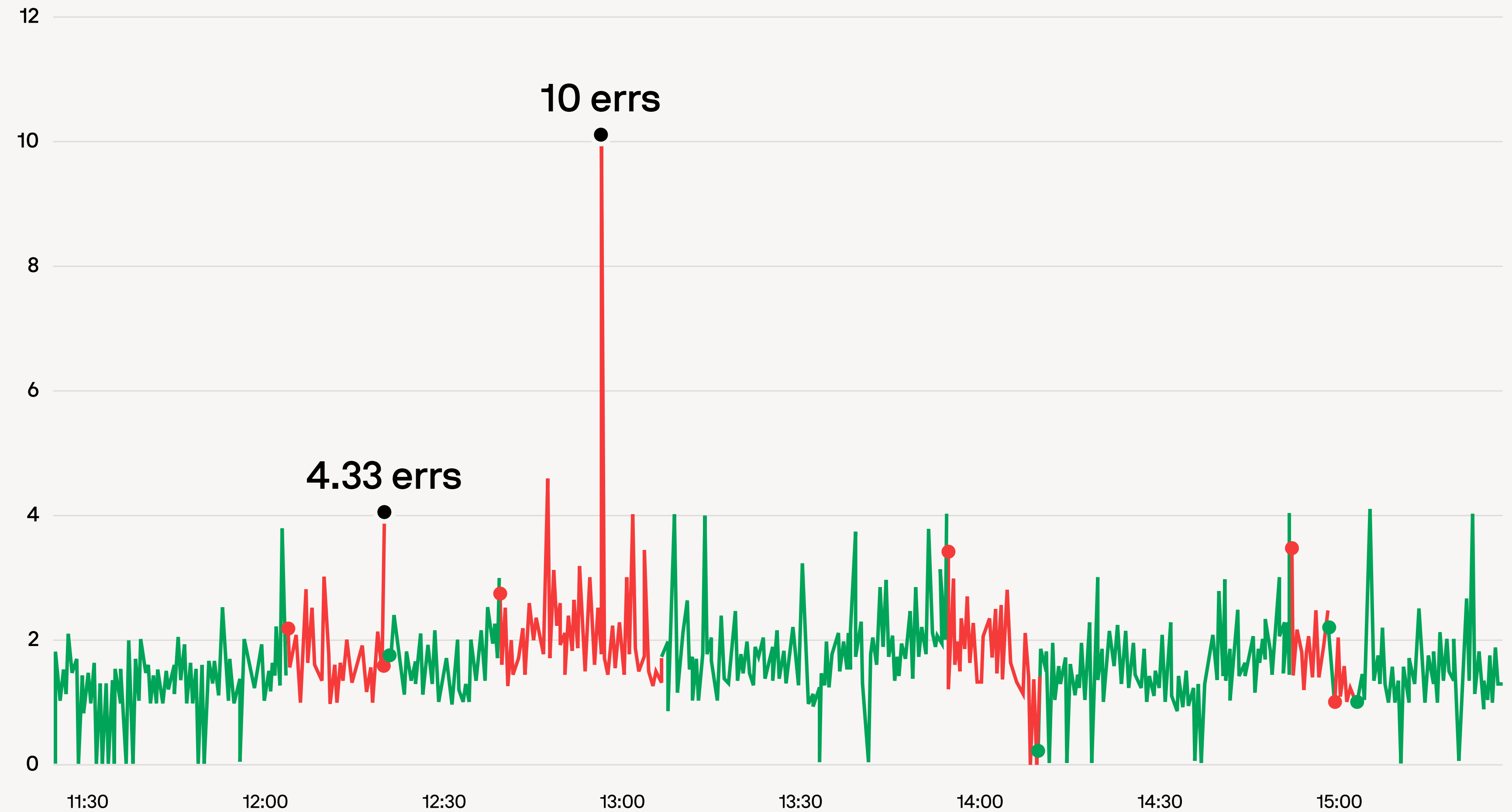
 Cognition

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How it works

1

Monitoring alert fires

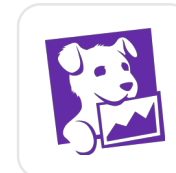


How it works

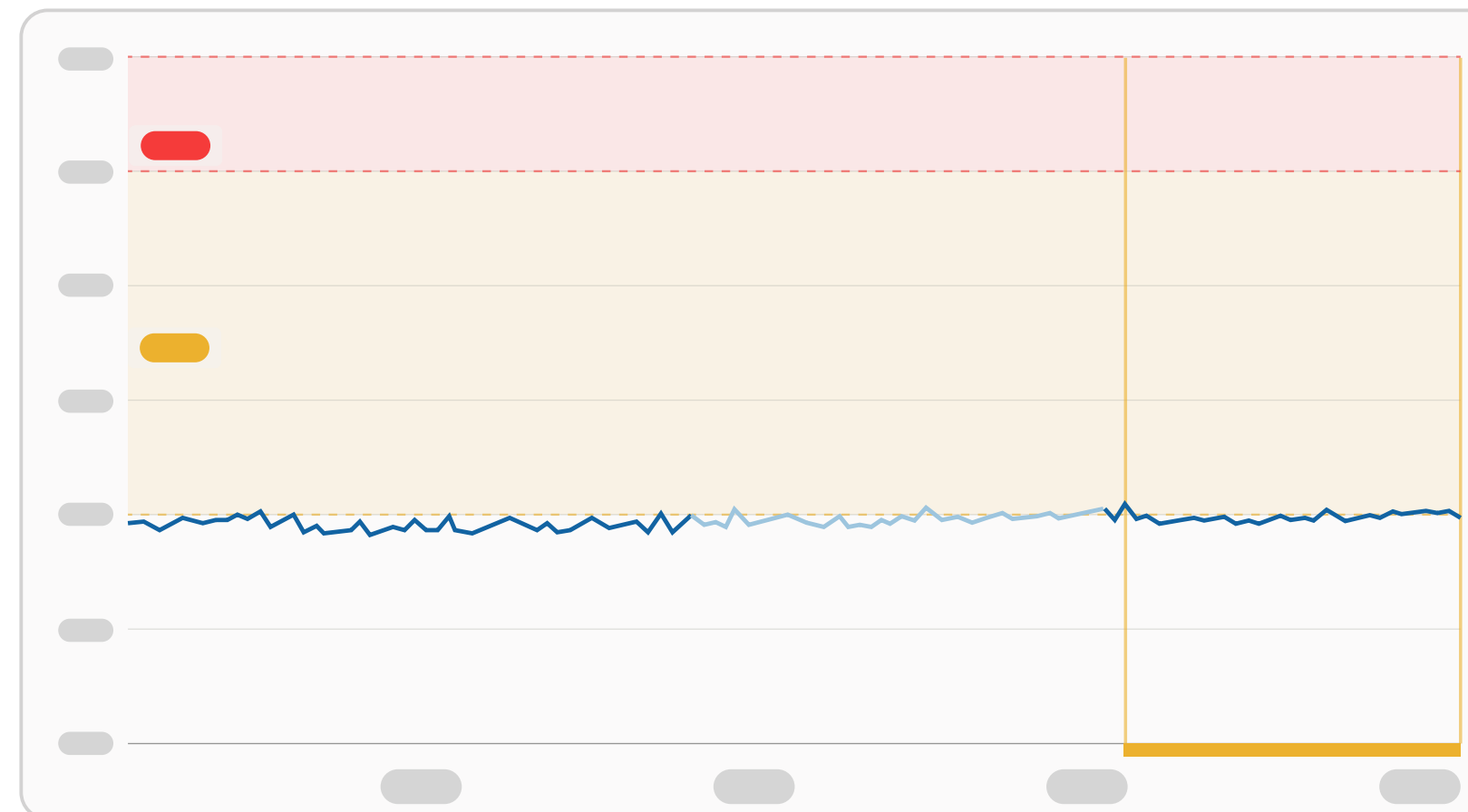
2

Alert is routed
to a Slack
channel

#urgent-alerts

**Datadog** APP**Warn: Many queued default tenant VM creation requests**

More than 40.083 pending VM creation requests in the default firecracker tenant

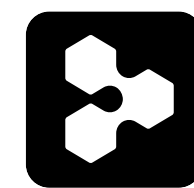


How it works

3



Devin is kicked off to respond



Devin AGENT

Same backlog as the [warn from ~3 minutes ago](#) - the pending count is hovering around the warn line (~40) and re-fired after a brief dip. I'm already investigating what's driving it and will report findings in that thread.



Devin AGENT

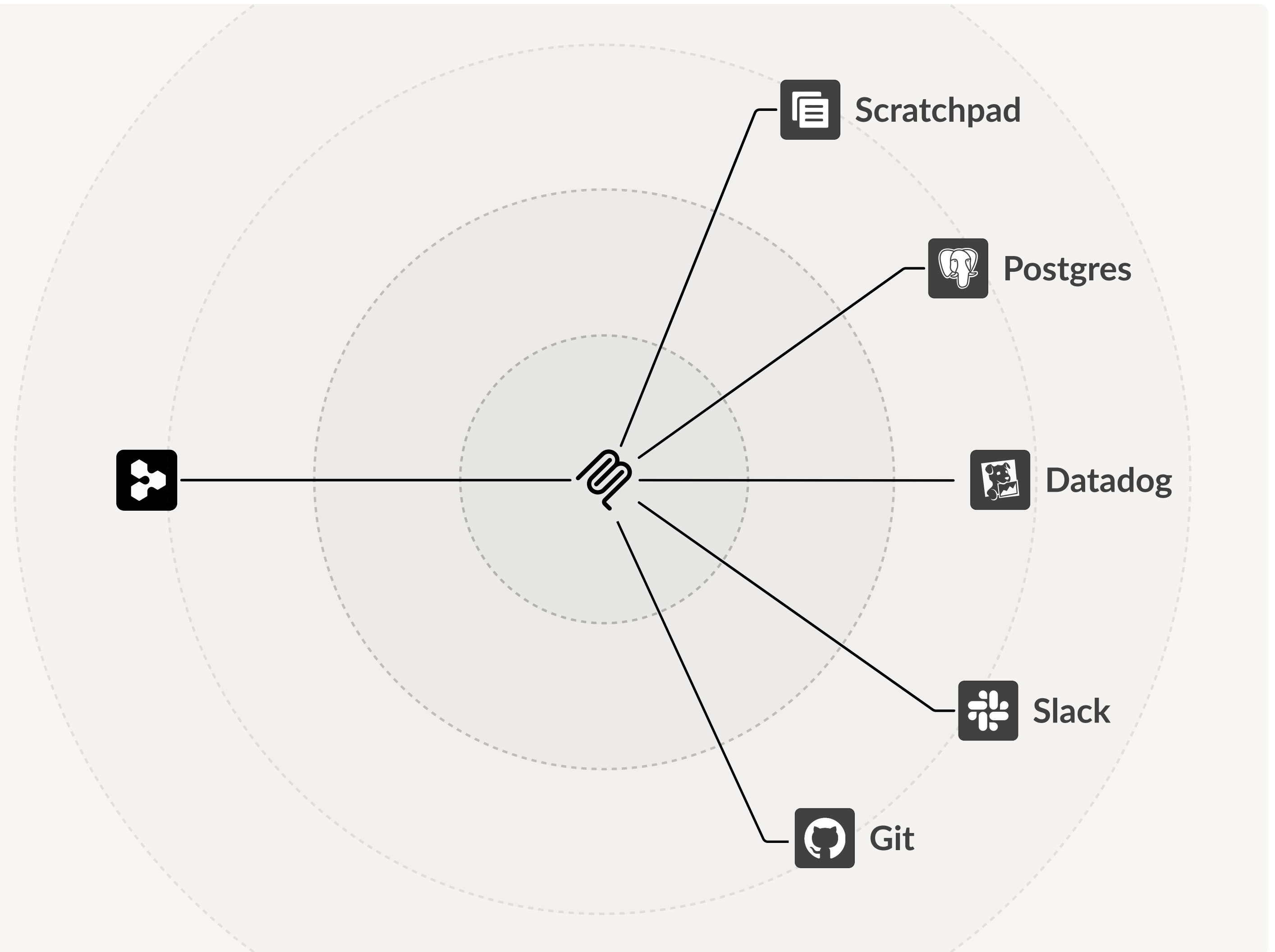
Planning next steps ...

How it works

4



Devin pulls in
more data as
it finds necessary

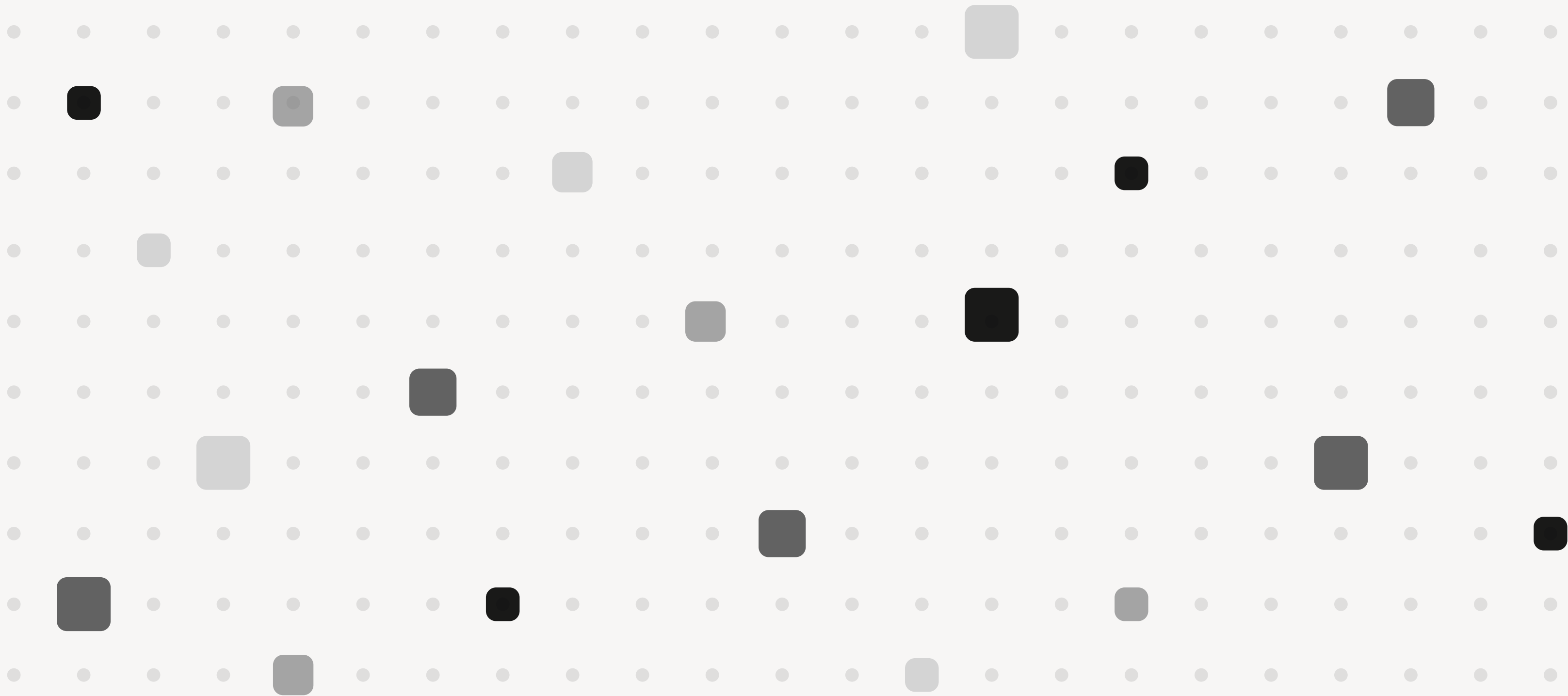


How it works

5

 Metrics → Logs

Finding signal
in the noise



-  7 code search
-  4 file reads
-  7 Git commands
-  32 Slack messages
-  45 Datadog calls
- 16 metrics | 20 logs | 4 log aggregations | 3 catalog | 1 monitor | 1 dashboard

How it works

6



Devin works with
human engineers to
resolve the issue

**Evan**

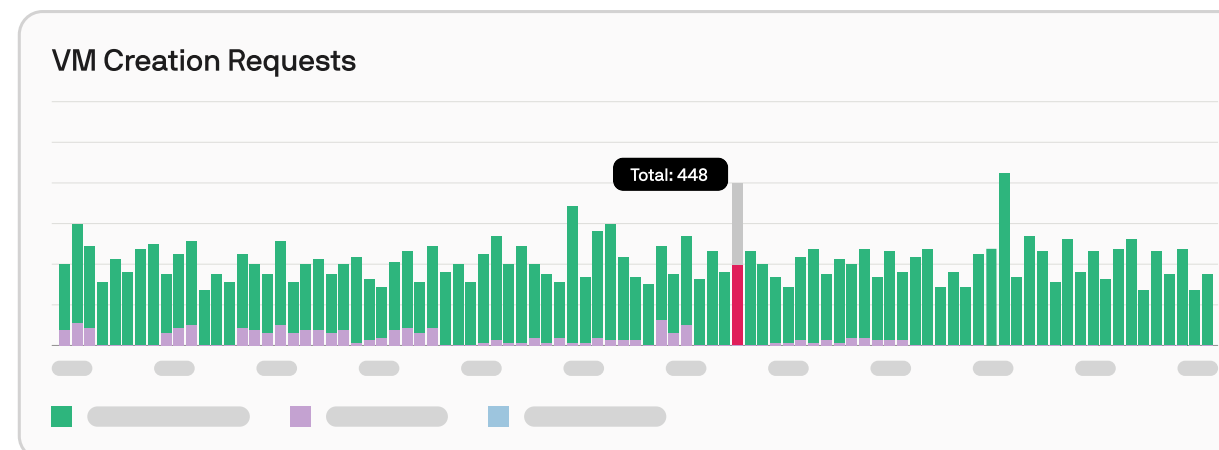
Let's just revert the binpacking entirely for now until we have a better throttle per hypervisor

**Devin (staging)** AGENT

Release cherry-pick [devin-webapp#61138 \(Devin Review\)](#) is merged ...

**Evan**

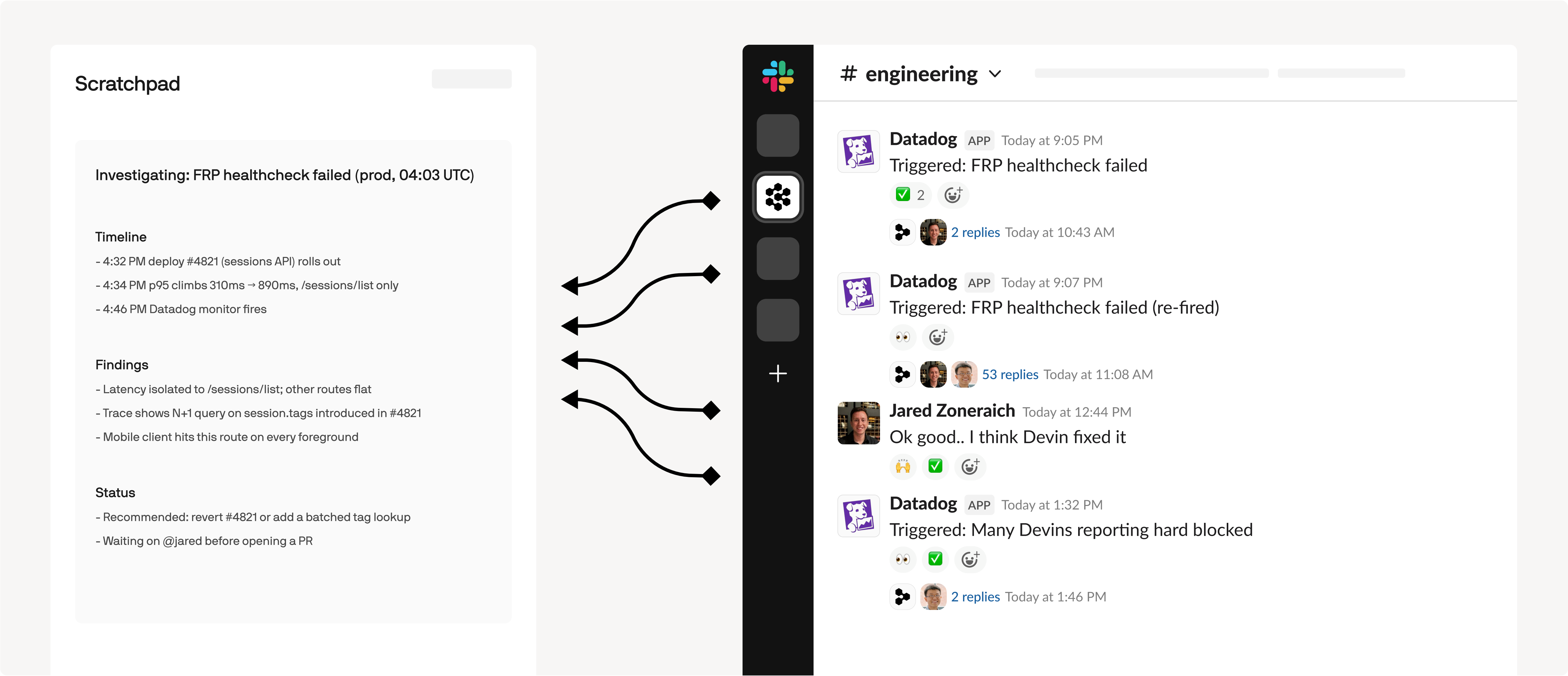
looks like this helped

**Devin (staging)** AGENT

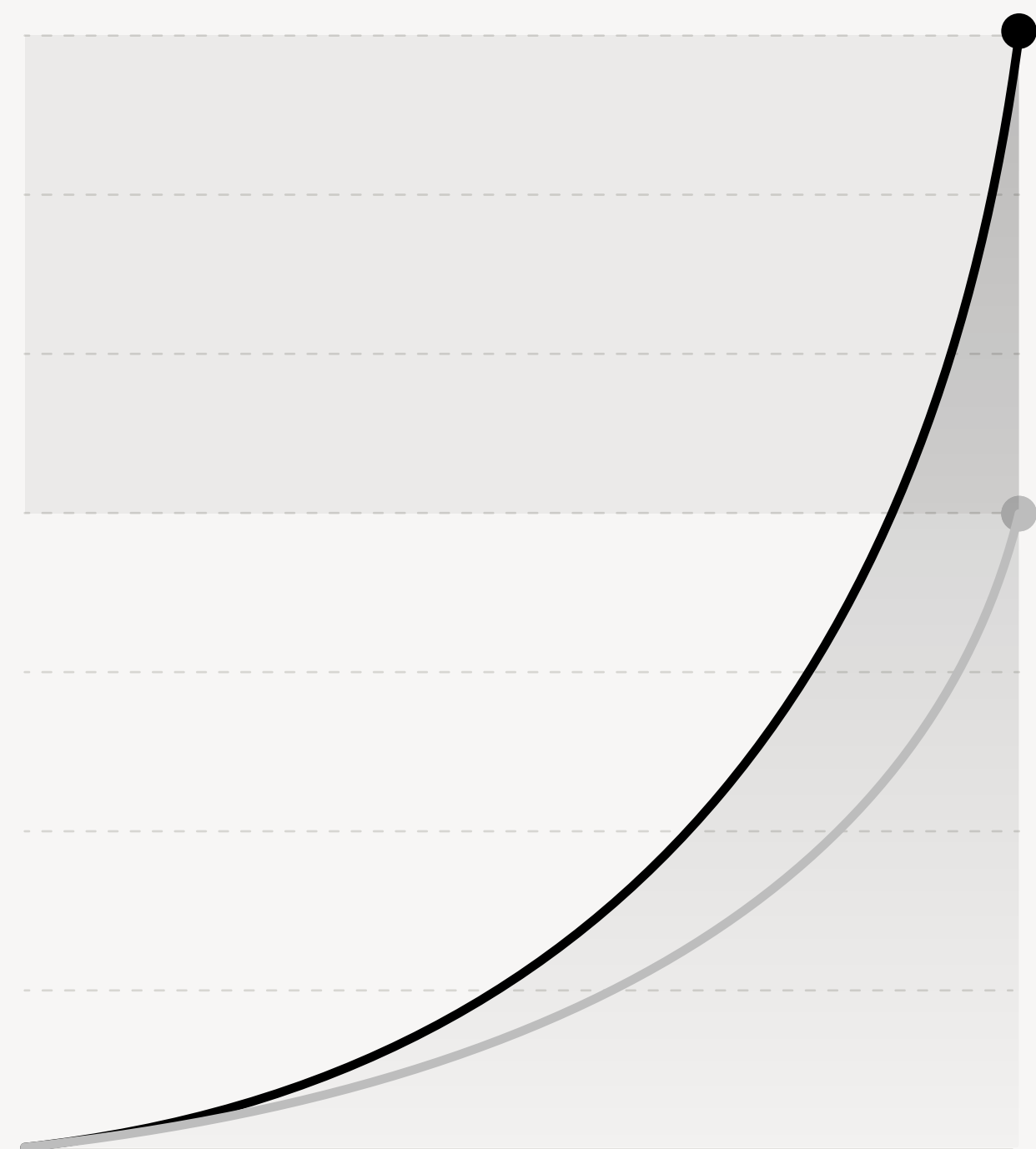
Confirmed on the queue metrics too: since the ~00:20Z rollout ...

Making it work

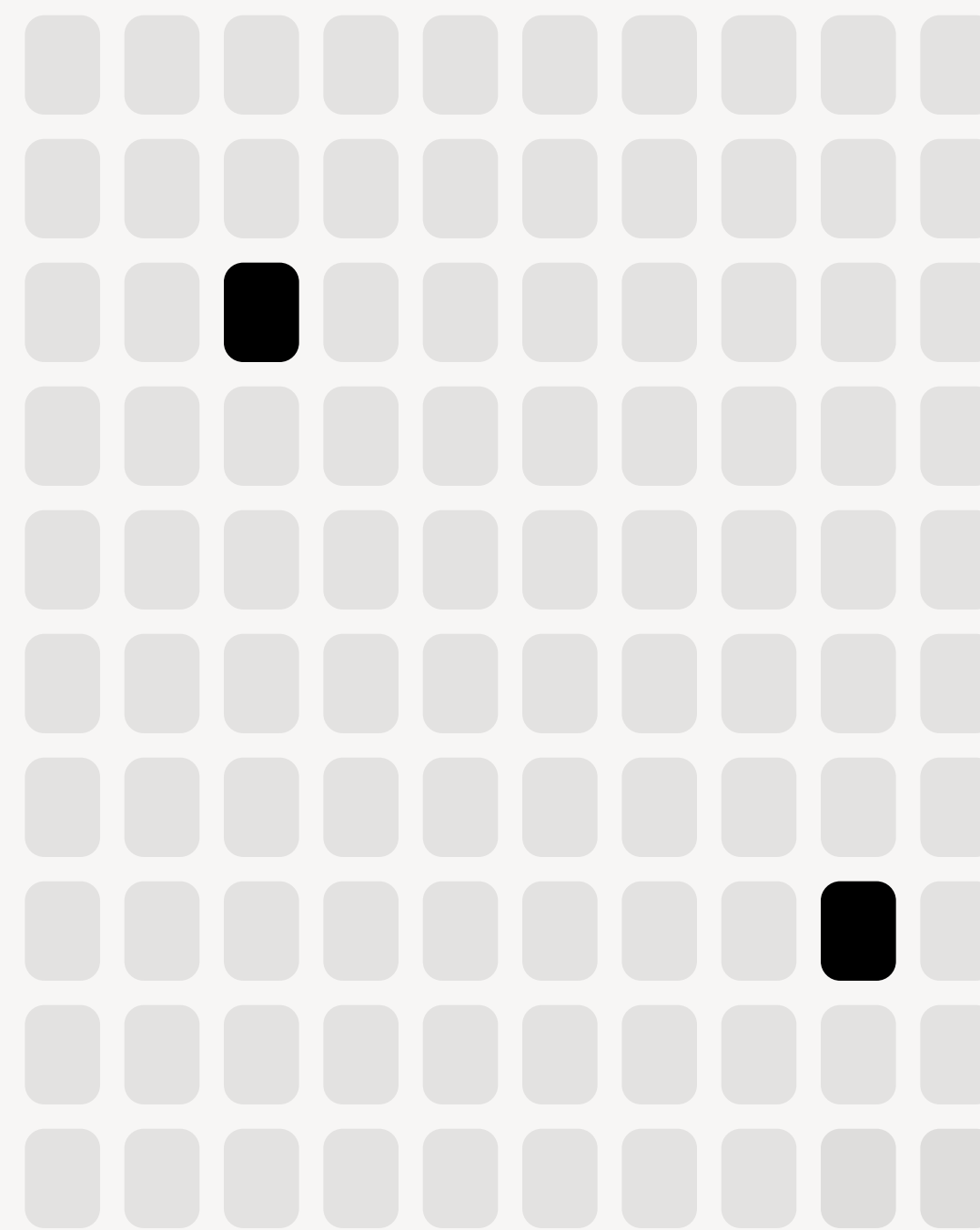
Shared memory between Devins



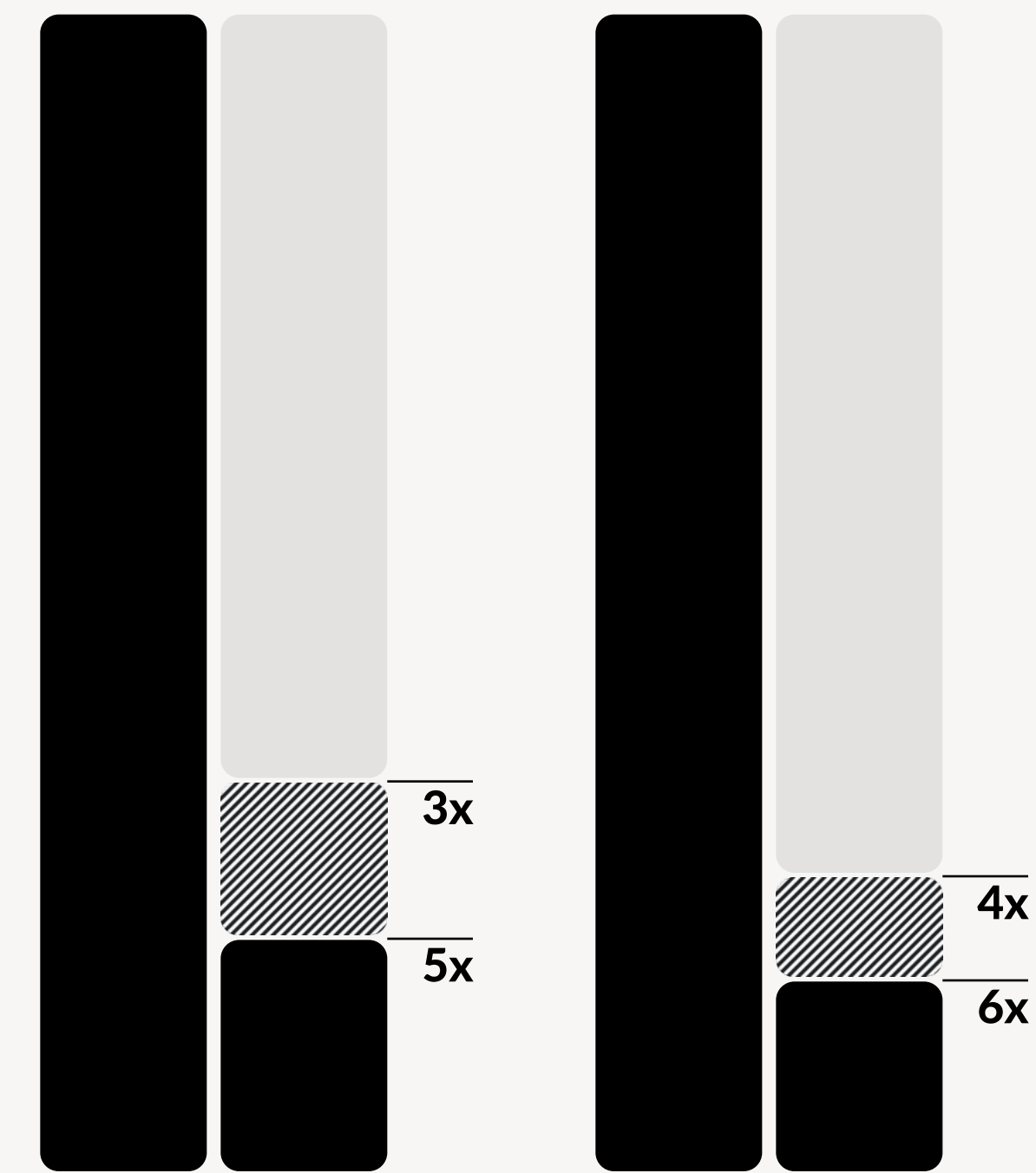
Don't force code changes



Datadog alert volume
up 75% in six weeks



<2% end in a code change



Investigations are 3-5x cheaper
Code changes are 4-6x shorter

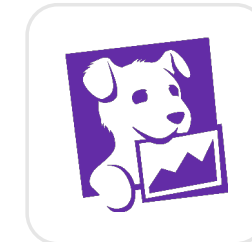
Different Devins for different work-streams

Triage Devin

you do NOT
investigate root causes, read the codebase,
or propose fixes yourself

Investigation Devin

reply with a clear diagnosis –
do NOT open a PR or fix it yourself
unless a human confirms



Datadog APP

VERY High TX count on database devin-prod



Triage Devin AGENT

Another full breach (6,949 open tx) of the
recurring spike. Ungrouping and taking a
separate look...

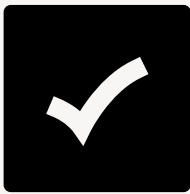
[@Investigation Devin](#) can you take a look?



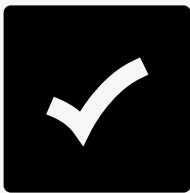
Investigation Devin AGENT

Working on a fix...

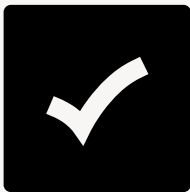
The war on AI slop



Code compiles



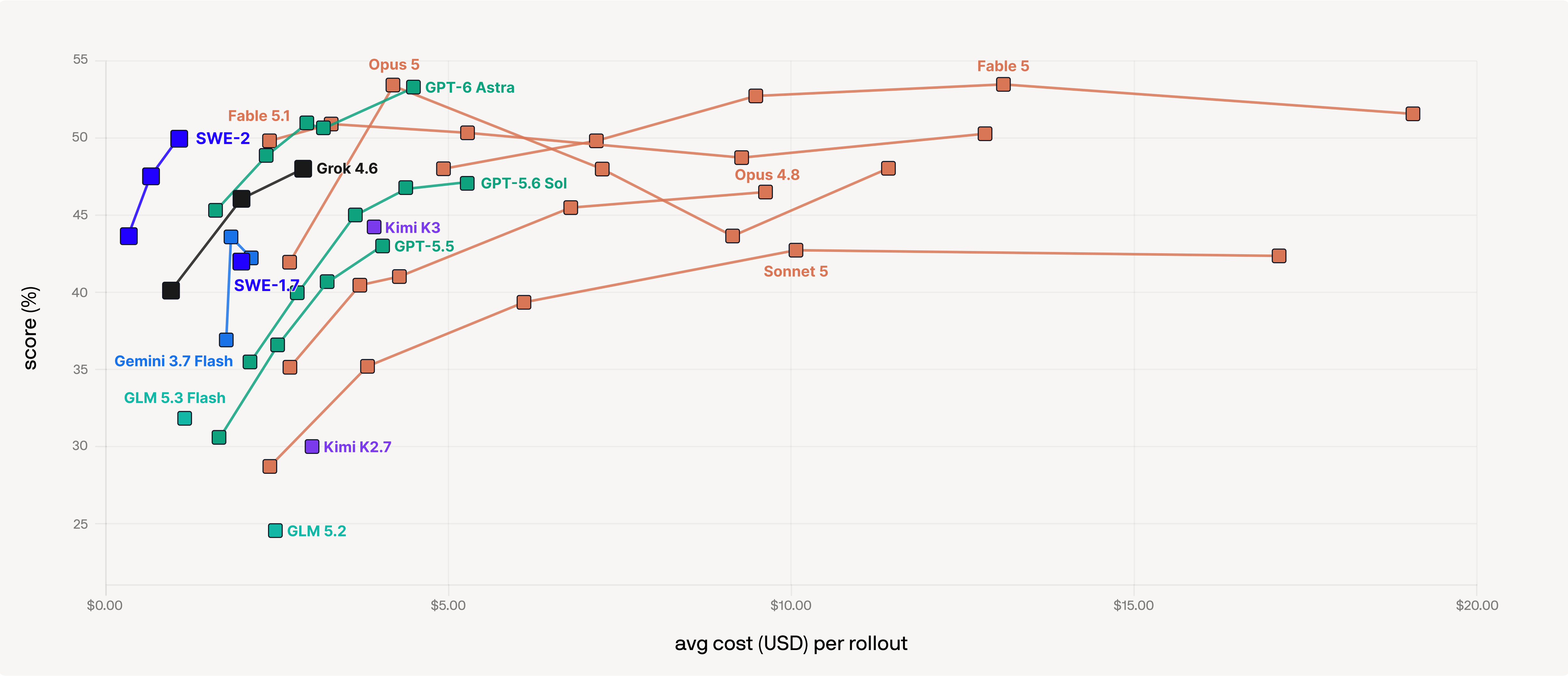
Code is verifiable
on a sandbox machine



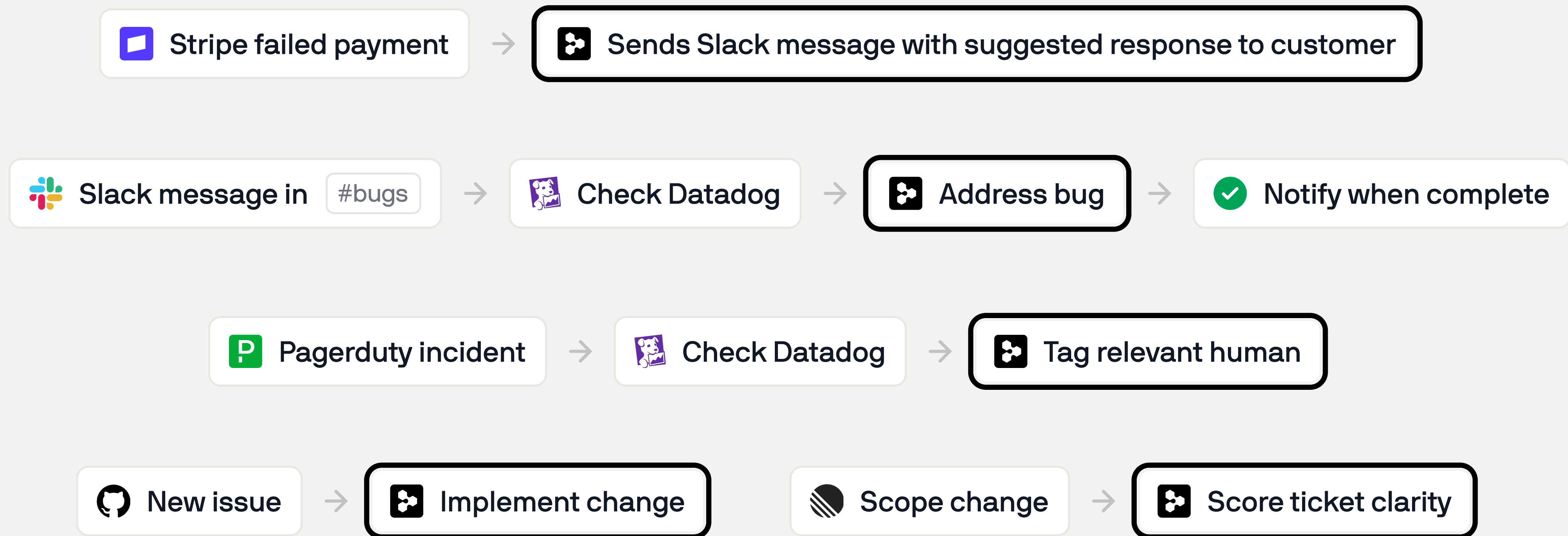
Code is mergable



FrontierCode



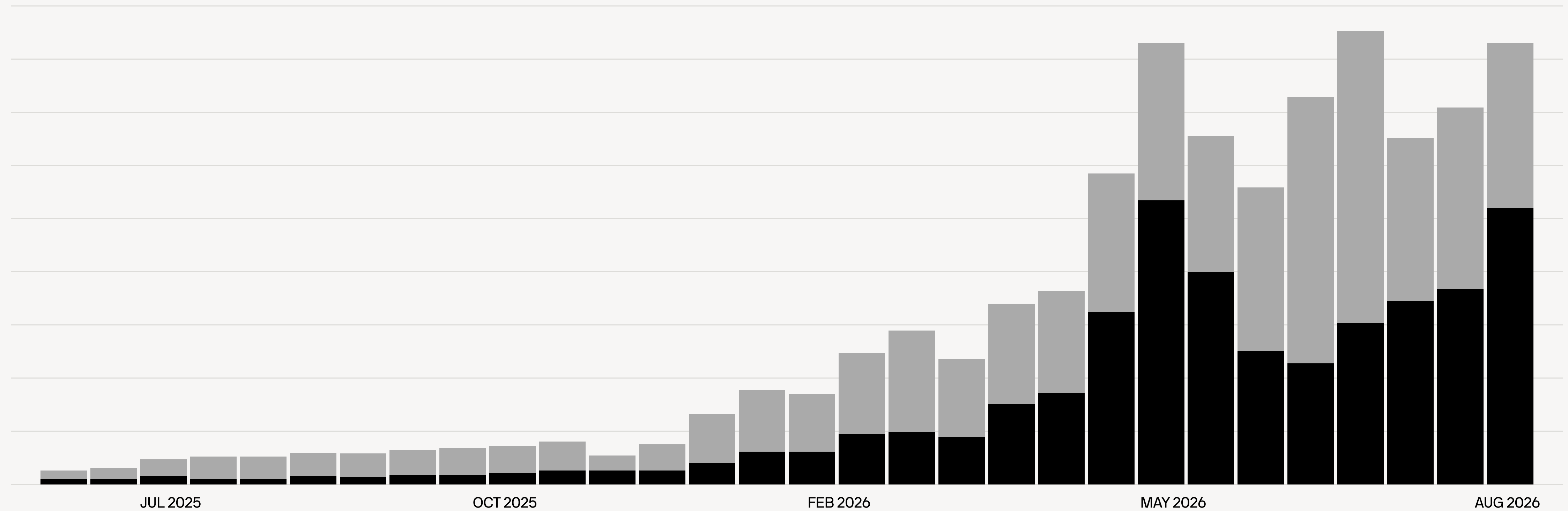
You can set this up

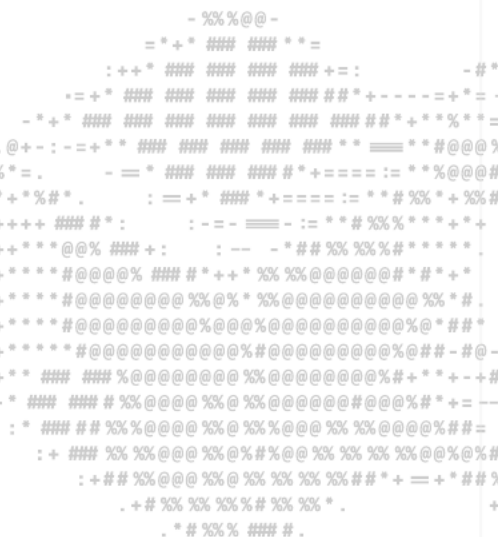
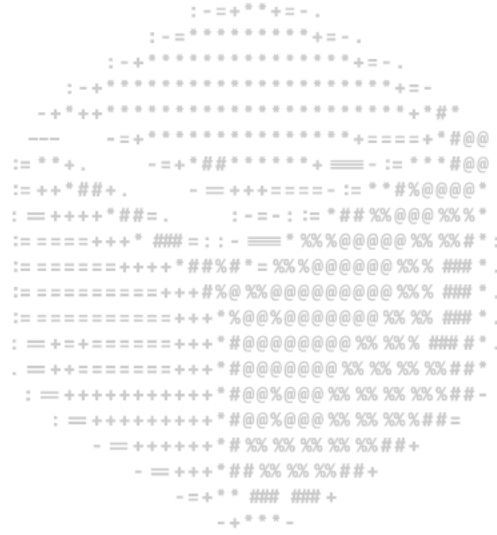
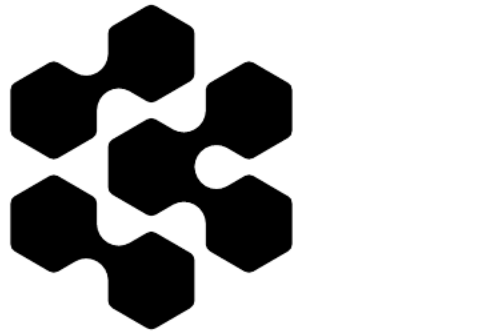
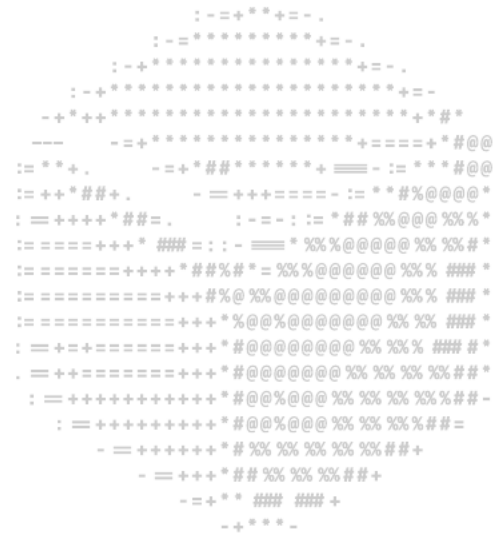
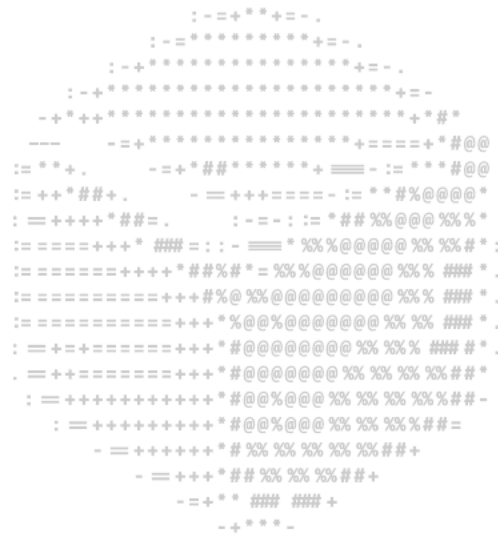


Most Devins aren't started by a human

61% are launched by APIs, schedules, and automations.

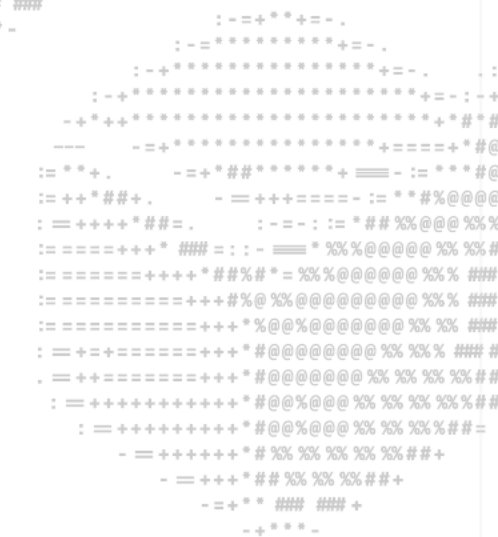
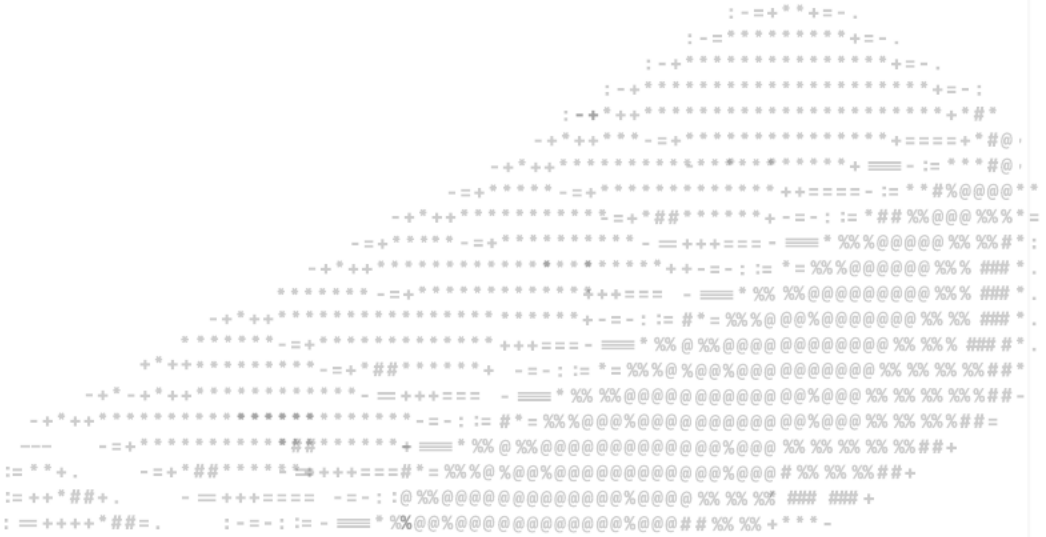
■ Automation (API, scheduled, automation)
■ Manual

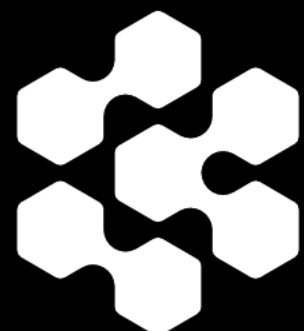




Software is exploding

This is the era of software abundance.





Put Devin to work

devin.ai

I just watched Jared's talk. Can you set it up?
Read devindatadog.com



Find me on X @imjaredz

