Observing Progressive Delivery

The Life of a Honeycomb Feature

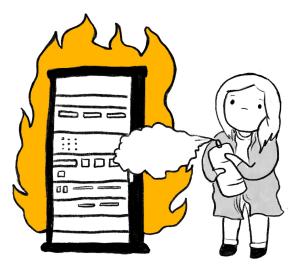




Shelby Spees

Developer Advocate at Honeycomb.io



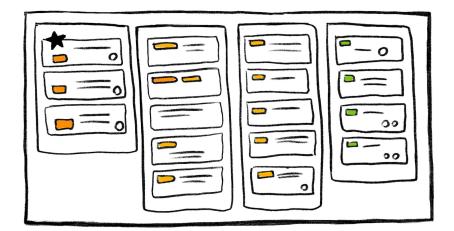


Friday Deploys



Production is increasingly complex







There's always pressure to ship fast

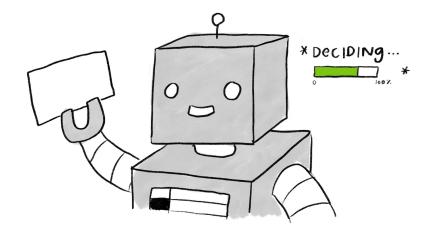




Safety enables speed



Progressive Delivery



Deploy != Release





Release changes gradually



Feature Flags

Separate deploys from releases

- conditionally enable or disable a specific code path
- changes propagate faster than a deploy

 (•) Evaluated 20 seconds ago true, false 	ON
(••) Evaluated 20 seconds ago false - off variation	OFF
 (••) Evaluated 21 seconds ago false - off variation 	OFF
(••) Evaluated 20 seconds ago	ON
 (•) Evaluated 20 seconds ago true 	ON
 (•) Evaluated 20 seconds ago true 	ON

Teams that use feature flags

Deploy 9x more often

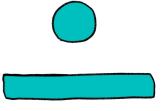
Release new features 27% faster

Time from commit to deploy shrank by 76%

46% of teams got their MTTR (mean time to recovery) down to <1hr



Source: The ROI of Feature Management, LaunchDarkly



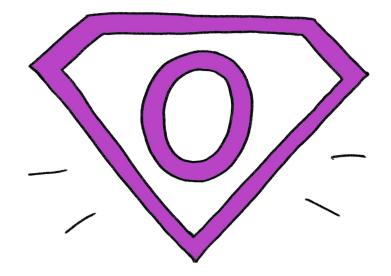
Velocity is only part of the equation



Observability-Driven Development

What is observability?

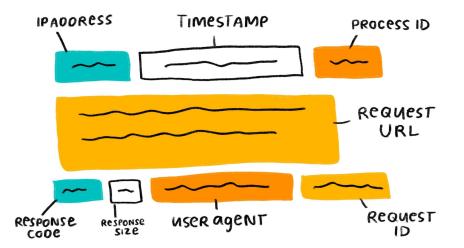
in software: the ability to understand and explain any state a system can get into, no matter how novel or bizarre, **without deploying new code**



How to gain observability?

Observability requires

- capturing telemetry data with lots of runtime context
- interacting with that telemetry in near-real time



The Life of a Honeycomb Feature



Instrument as we code.



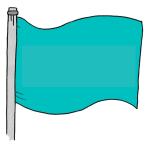


Functional and visual testing.



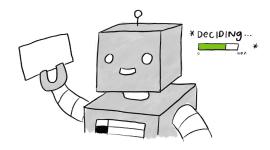
@shelbyspees at #SKILupDay

18



Design for feature flag deployment.





Automate integration.



Trace of CircleCl build in Honeycomb

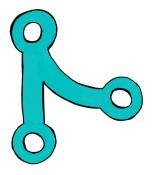
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4	start_trace	step	1.323s				
8	-7 go_test	step	194.503s				
	-• native-deps	cmd	2.571s				
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3	go-install	cmd	22.175s			duration_ms	
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	• poodle-test	cmd		40.233s			



#### Human PR Review.

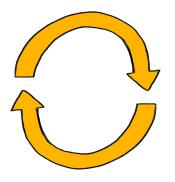


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#### Green button merge.





#### Auto-updates, rollbacks, & pins.

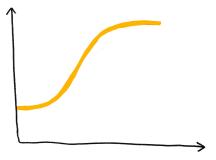




#### **Observe behavior in prod.**







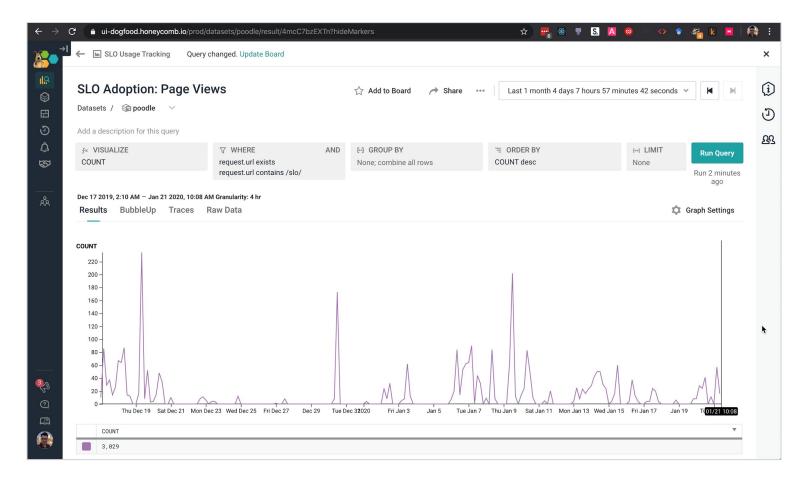
#### **Prod: customers observe data.**





## Dogfood observes prod.









## Kibble observes dogfood.





## **Progressive Delivery at Honeycomb**

- 1. Enable for self in Dogfood
  - observe in Kibble
- 2. Enable for Honeycomb team in Dogfood
  - observe in Kibble
- 3. Enable for self in Prod
  - observe in Dogfood
- 4. Enable for Honeycomb team in Prod
  - observe in Dogfood
- 5. Enable for all Prod users 🎉
  - observe in Dogfood

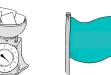
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10 ValidateTrigger	poodle	527.1ms
• GetContext	poodle	1.057ms
••• launchdarkly.BoolVariations	poodle	0.3330ms
• GetContext	poodle	1.392ms
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• GetContext	poodle	0.9676ms
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• GetContext	poodle	1.126ms
4 validateTrigger	poodle	517.8ms
- 4 FindTriggerByID	poodle	5.810ms
• GetContext	poodle	1.909ms
• GetContext	poodle	1.146ms
- 1 loadCreators	poodle	1.093ms
- QueryxContext	poodle	0.9643ms
loadEditors	poodle	1.069ms
- • QueryxContext	poodle	0.9524ms
• SelectContext	poodle	1.028ms
- 6 run_trigger_detailed	poodle	248.5ms
create_read_request	poodle	0.2059ms

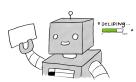




# That's how we confidently deploy on Fridays!

















#### Want to hear more?

#### Blog

"Using Honeycomb to remember to delete a feature flag"
 go.hny.co/delete-flag

#### Webinar

 Progressive Delivery, co-presented by LaunchDarkly and Honeycomb go.hny.co/LDxHNY2020





# **Questions?**



# **Reach out!**

honeycomb.io/shelby @shelbyspees



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