



Grafana Loki: *Like Prometheus, but for logs.*

Tom Wilkie, May 2019





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Previously: Kausal, Weaveworks, Google, Acunu, Xensource

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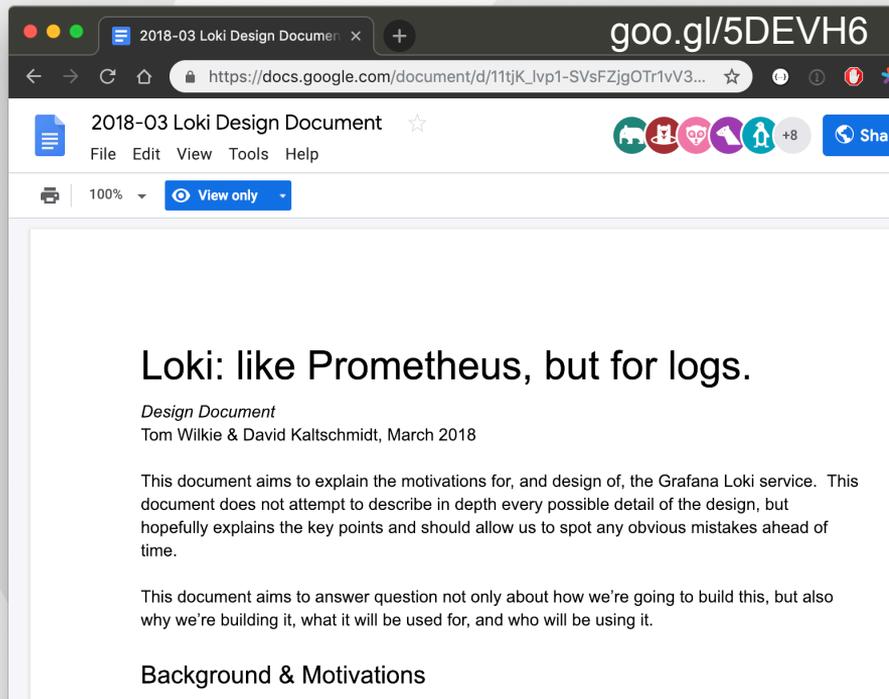




Loki is a horizontally-scalable, highly-available, multi-tenant log aggregation system inspired by Prometheus.

- 03/18 Project started
- 12/18 Launched at KubeCon US
- 12/18 #1 on HN for ~12hrs!
- 02/19 FOSDEM talk
- 03/19 Labels from logs
- 04/19 Lazy Queries; LogQL filtering
- 05/19 KubeCon EU: context, live tailing

<https://github.com/grafana/loki>





Intro

FOSDEM summary

What's New...

What's Next?

Demo

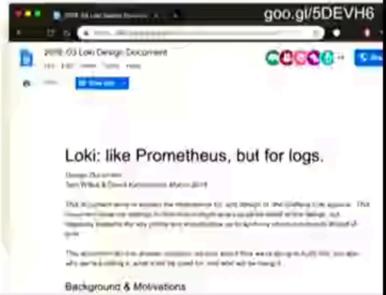
FOSDEM



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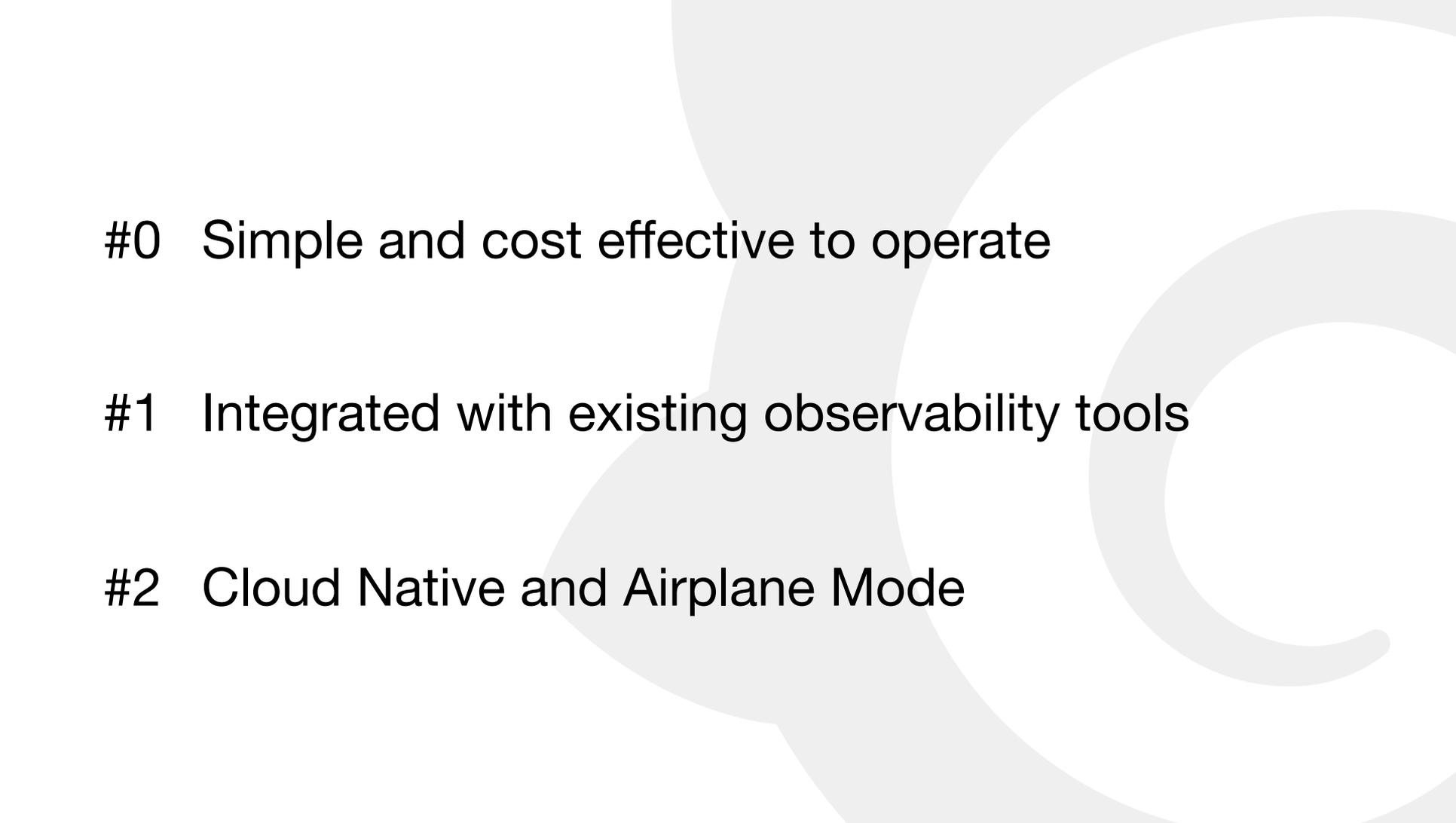


03/18 Project started
12/18 Launched at KubeCon
12/18 #1 on HN for ~12hrs!
01/19 ~5k GitHub stars



1:37 / 30:21





#0 Simple and cost effective to operate

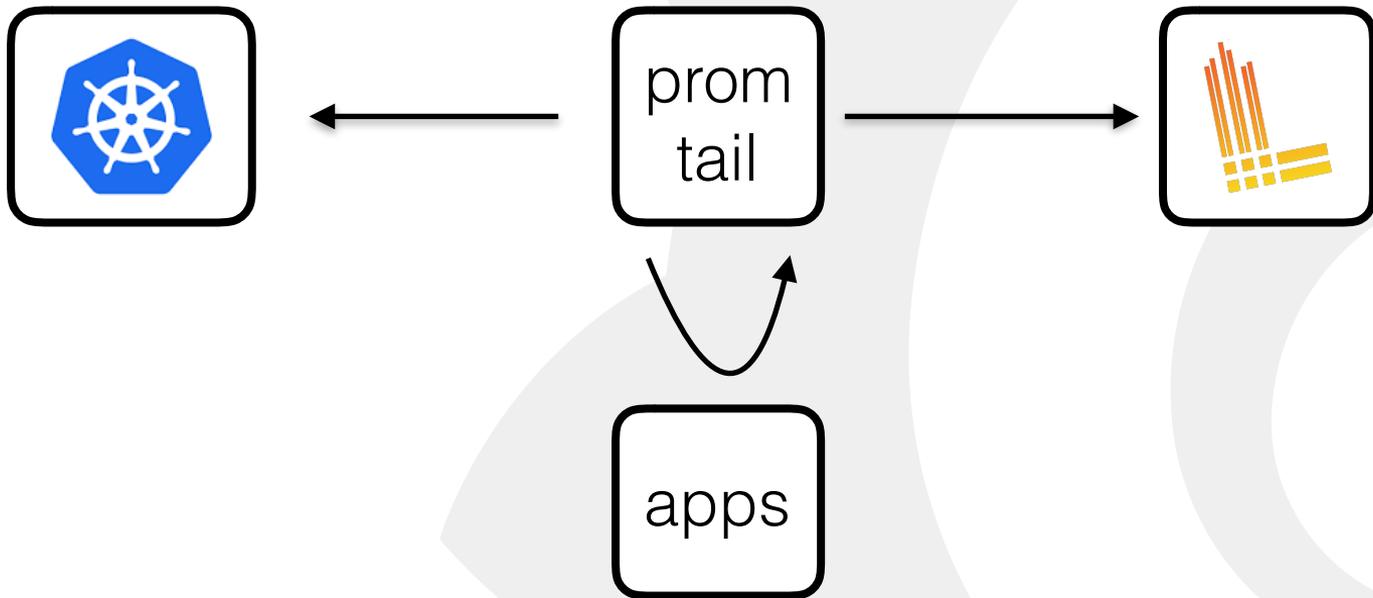
#1 Integrated with existing observability tools

#2 Cloud Native and Airplane Mode

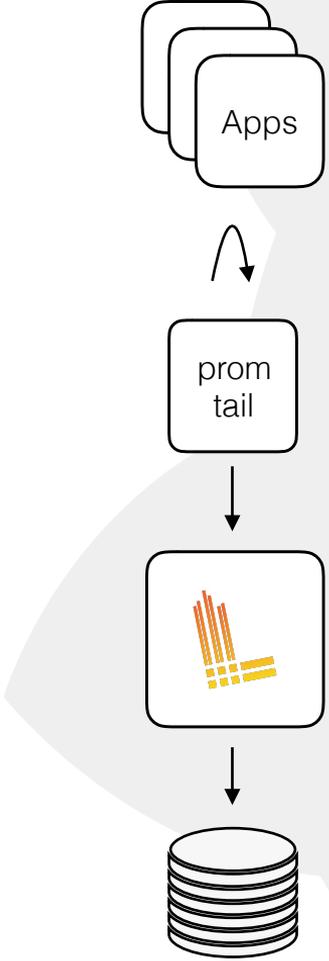
Loki doesn't index the text of the logs, instead grouping entries into "streams" and indexing those with labels.

```
{job="frontend", env="dev"} => {  
  time: "2018-01-31 15:41:04",  
  line: "POST /api/prom/push HTTP/1.1 502 0"  
}
```

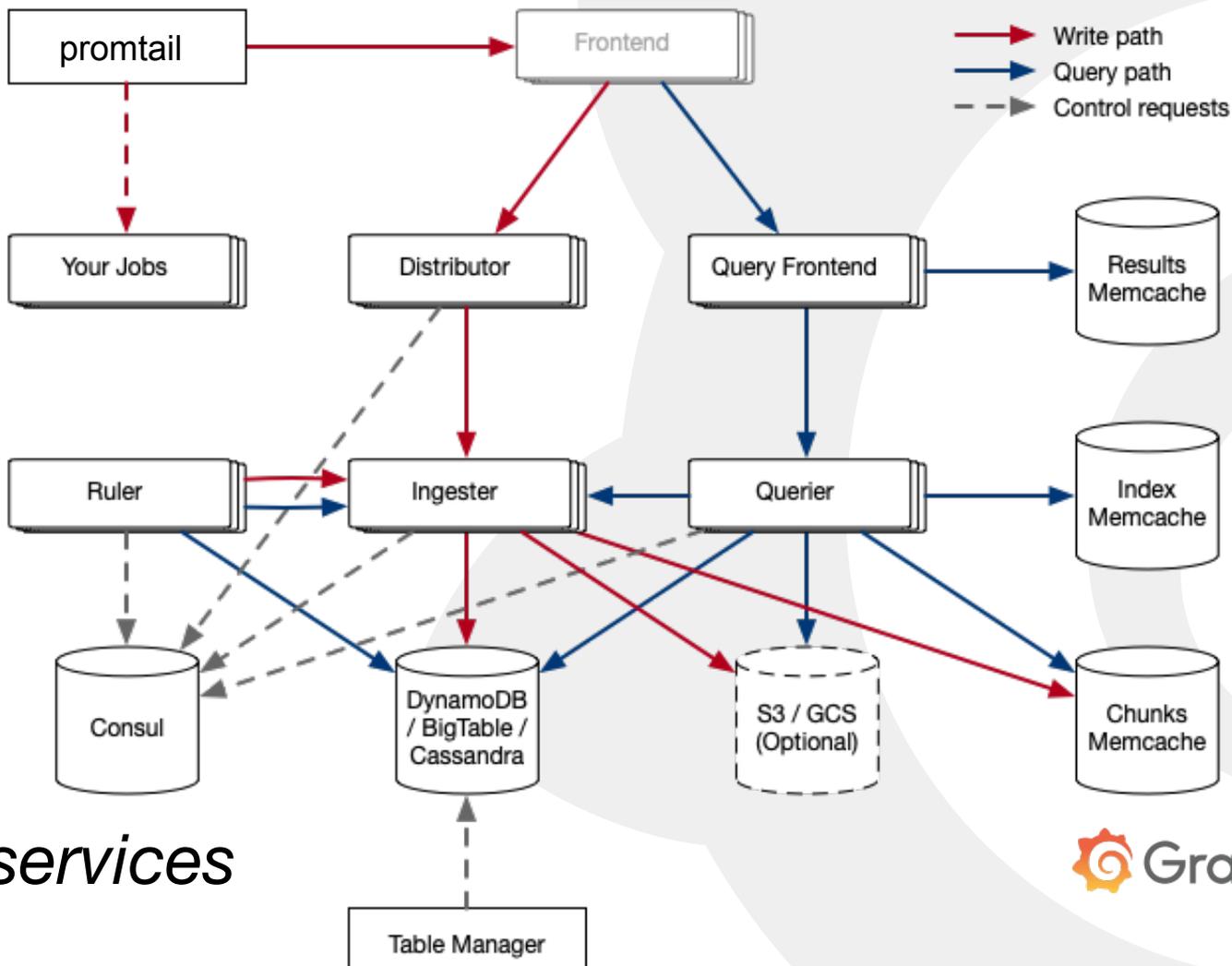
#0 Simple to scale



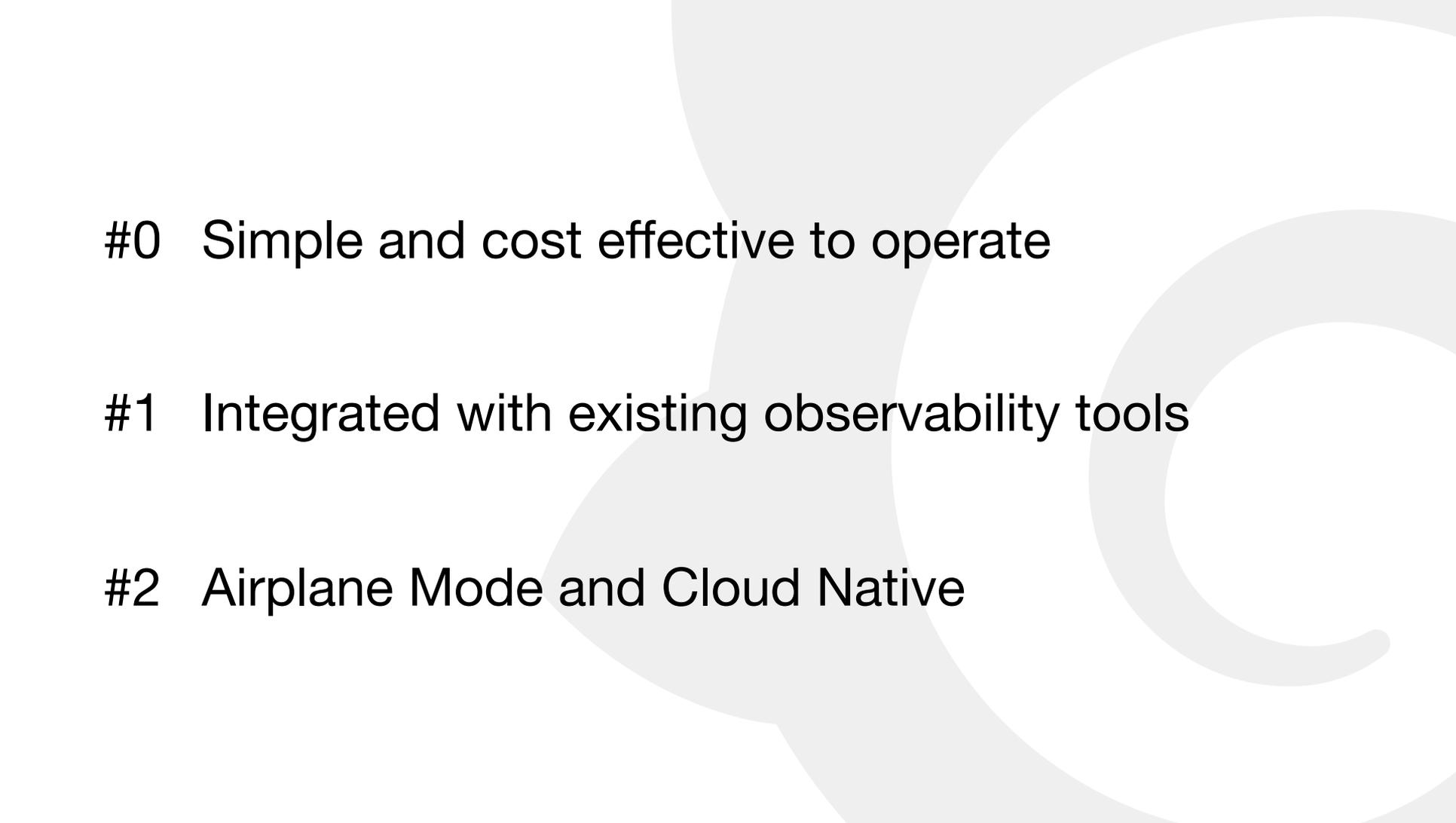
#1 Integrated



#3 *Airplane Mode*



Microservices



#0 Simple and cost effective to operate

#1 Integrated with existing observability tools

#2 Airplane Mode and Cloud Native

Whats new?

LogQL Filter Chaining:

```
{job="app"} |= "/foo" !~ "/foo/bar"
```

Extracting Labels from Logs

Live Tailing, Context

Much more

Demo

Whats next?

```
rate(({job="app"} |= "/foo" !~ "/foo/bar") [1m])  
extract_label({job="default/nginx"}, "code=(\d+)  
  |> {code =~ "5.."}  
sum(extract_value({job="app"}, "code=(\d+)", "$1
```

Add alerts & rules using aggregations

Signature chaining for verifiability

Removing dependancy on NOSQL

Launch first beta in ~now

Thanks! Questions?