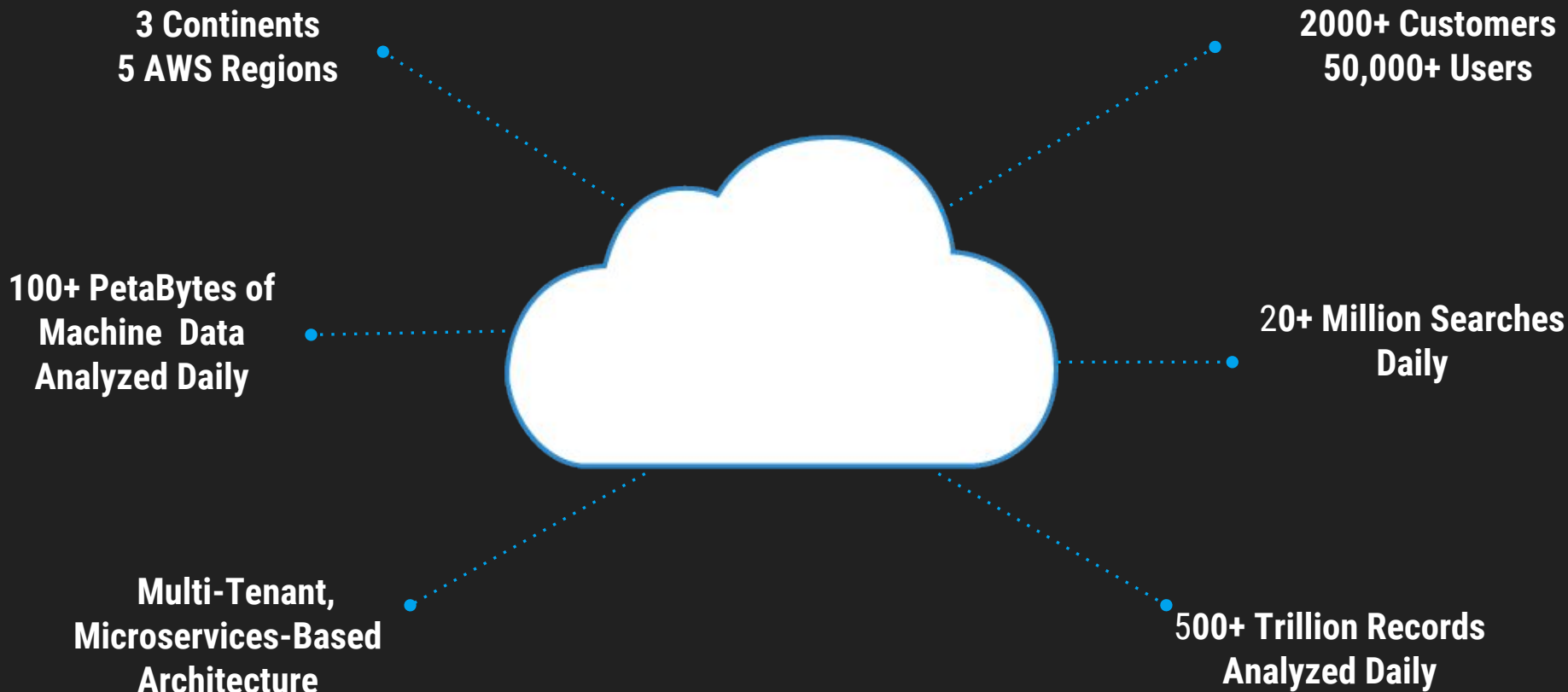


# Leveraging Kubernetes to Build a Flexible Self-Service Product Demo Environment

By Frank Reno, Sr. Technical PM | 12/4/2018

A series of horizontal stripes in various colors (purple, blue, green, orange, etc.) spanning the width of the slide at the bottom.

# Who is Sumo Logic?



# Demos Are Critical to the Customer Journey



# Sales Engineers are the Drivers

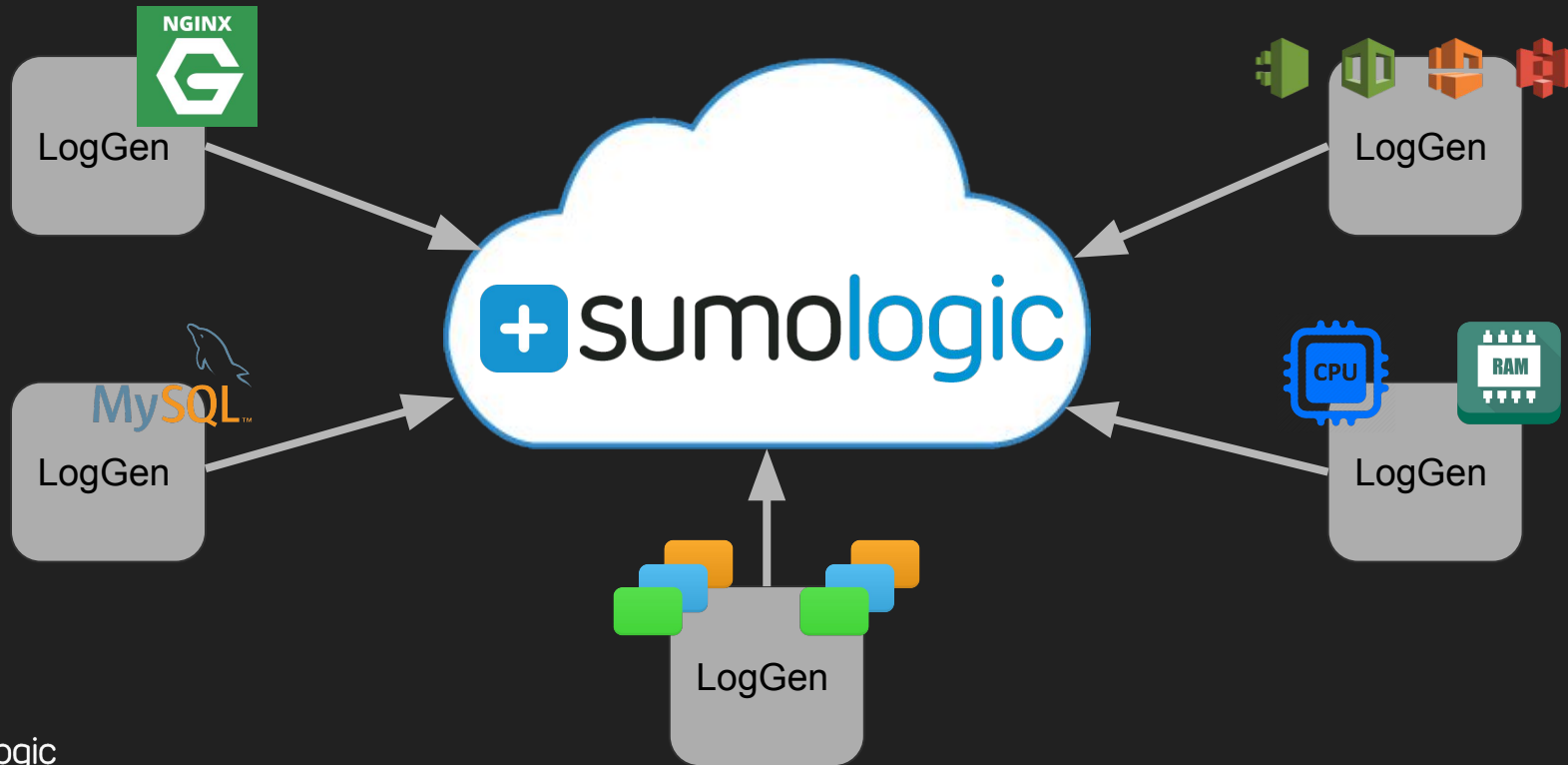


# Demo Must Be...

- Reliable
- Comprehensive
- Relatable
- Flexible



# The Old Way



# Powerful...but Could be Better



# What was Missing?

- Zero Isolation
- Not Customizable
- Not Real



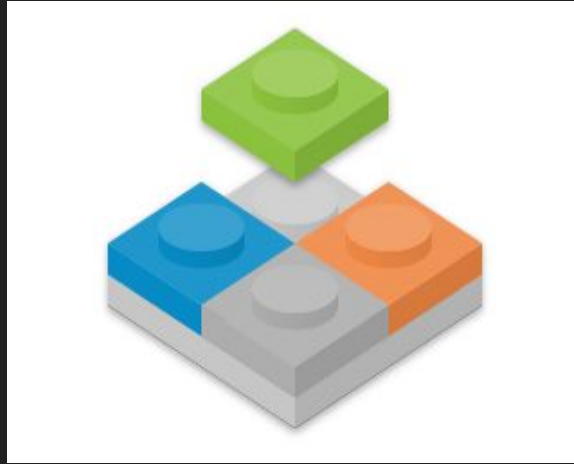


# New Demo Must Be...

**Tangible**



**Customizable**



**Reliable**



# How Do We Get There?

Microservices



Containers



Overhead



# Need Orchestration



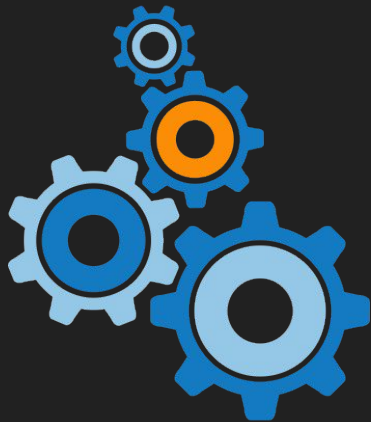
# What is Kubernetes?



“Kubernetes is a portable, extensible open-source platform for managing containerized workloads and services, that facilitates both declarative configuration and automation. It has a large, rapidly growing ecosystem. Kubernetes services, support and tools are widely available.”

# Why Kubernetes?

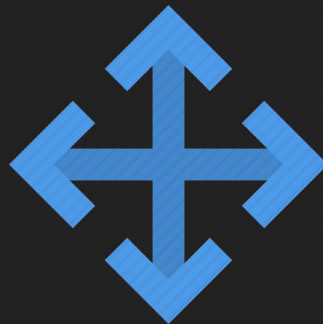
**Automation**



**Easy  
Scheduling**



**Scalability**

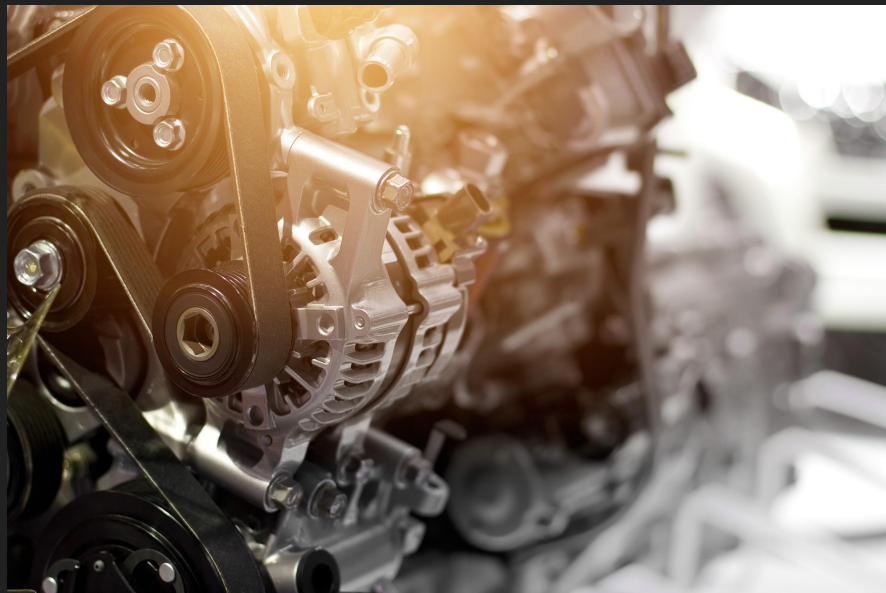


**Dogfooding**



# Kubernetes Control Plane

- API Server
- Scheduler
- Controller Manager
- Etcd





# Compute

- Nodes
- Kubelet
- Kube Proxy
- Container Runtime



# Building Blocks for Your Applications

- Pods
- Deployments
- Daemonsets
- Services
- Namespaces





# Final Product

TravelLogic

FLIGHTS HOTEL CAR HIRE 0 ITEMS

Flight Search

6/3/2018

From City

6/5/2018

To City

SEARCH







TravelLogic

FLIGHTS HOTEL CAR HIRE 2 ITEMS

## Flight Booking

Denver International (DEN) ▶ Sydney Kingsford S

### Outbound

	10:00AM DEN	13.3 Hrs Direct	11:18PM SYD	\$603.00	<input type="button" value="SELECT"/>	
	08:00PM DEN	13.3 Hrs Direct	09:18AM SYD	\$617.00	<input type="button" value="SELECT"/>	
	12:00PM DEN	13.3 Hrs Direct	01:18AM SYD	\$719.00	<input type="button" value="SELECT"/>	

\$0.00

TravelLogic

FLIGHTS HOTEL CAR HIRE 2 ITEMS

## Cart

Item	Total
✈ American Airlines AA330 (DEN to SYD)	\$572.00
✈ Delta Air Lines DL178 (SYD to DEN)	\$542.00
	Tax (10%) \$111.40
	Total \$1,225.40

## Checkout

### Payment method



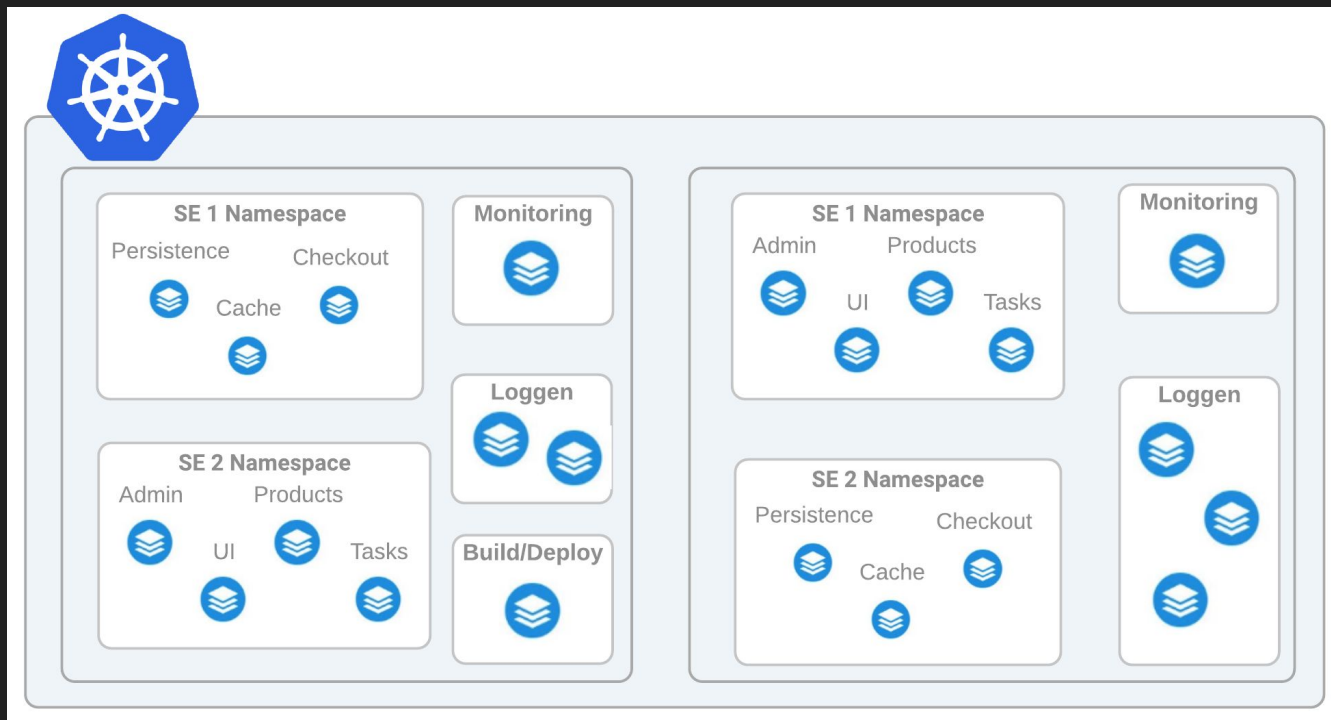
Name \*

Email \*

Credit Card Number \*

Month ▼ Year ▼

# High-Level Architecture



# TravelLogic Layer



Flask

Products



Settings



docker

Tasks



Persistence & Cache

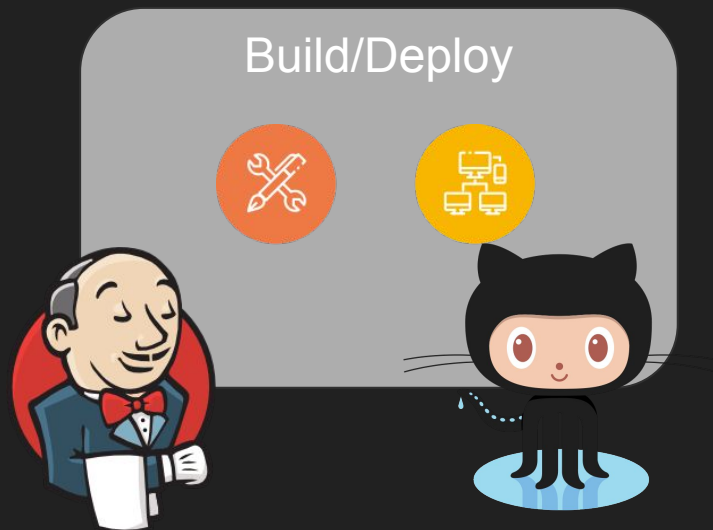


redis

UI and Administration



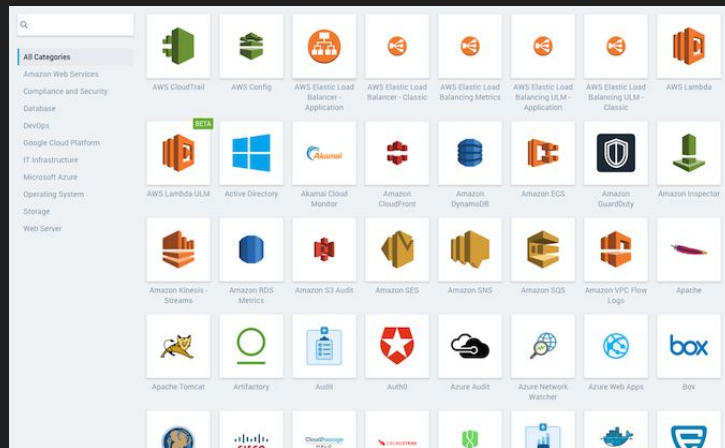
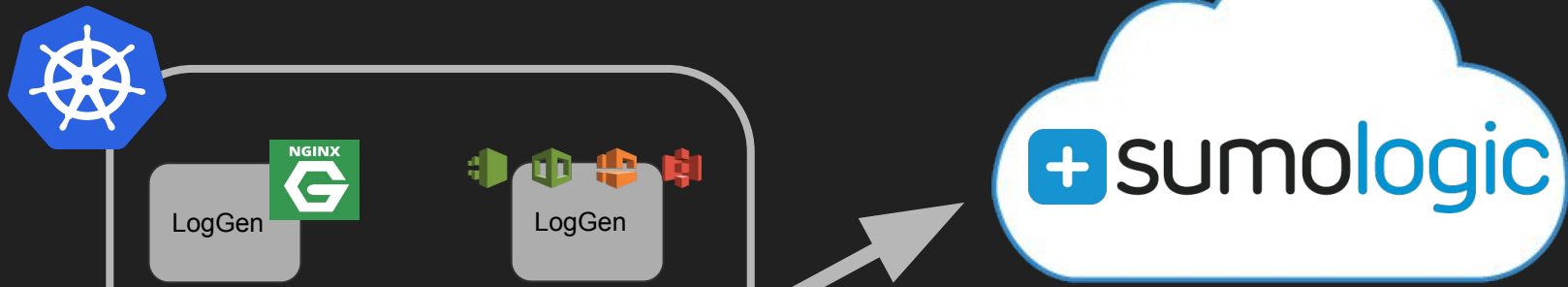
# Common Components



# Infrastructure



# LogGen is Still a Critical Component

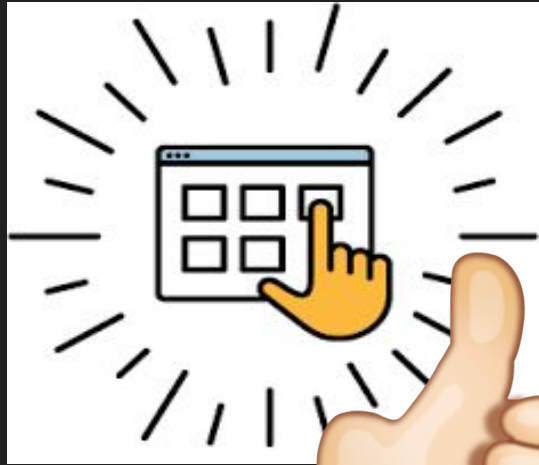


# Let's See TravelLogic in Action!

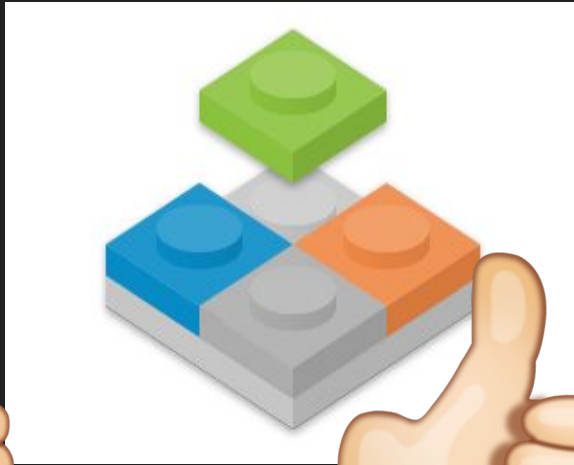


# Did We Meet Our Goals?

**Tangible**



**Customizable**



**Reliable**





# Kubernetes for Customer Success

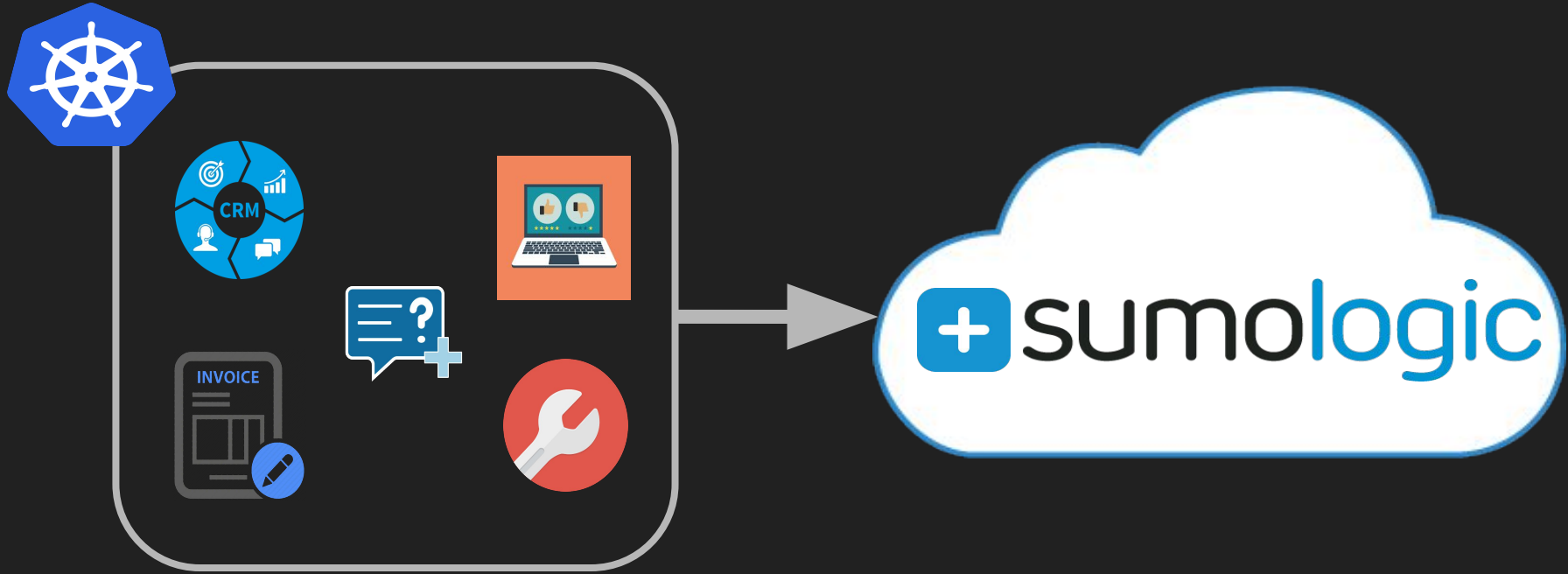


1:N

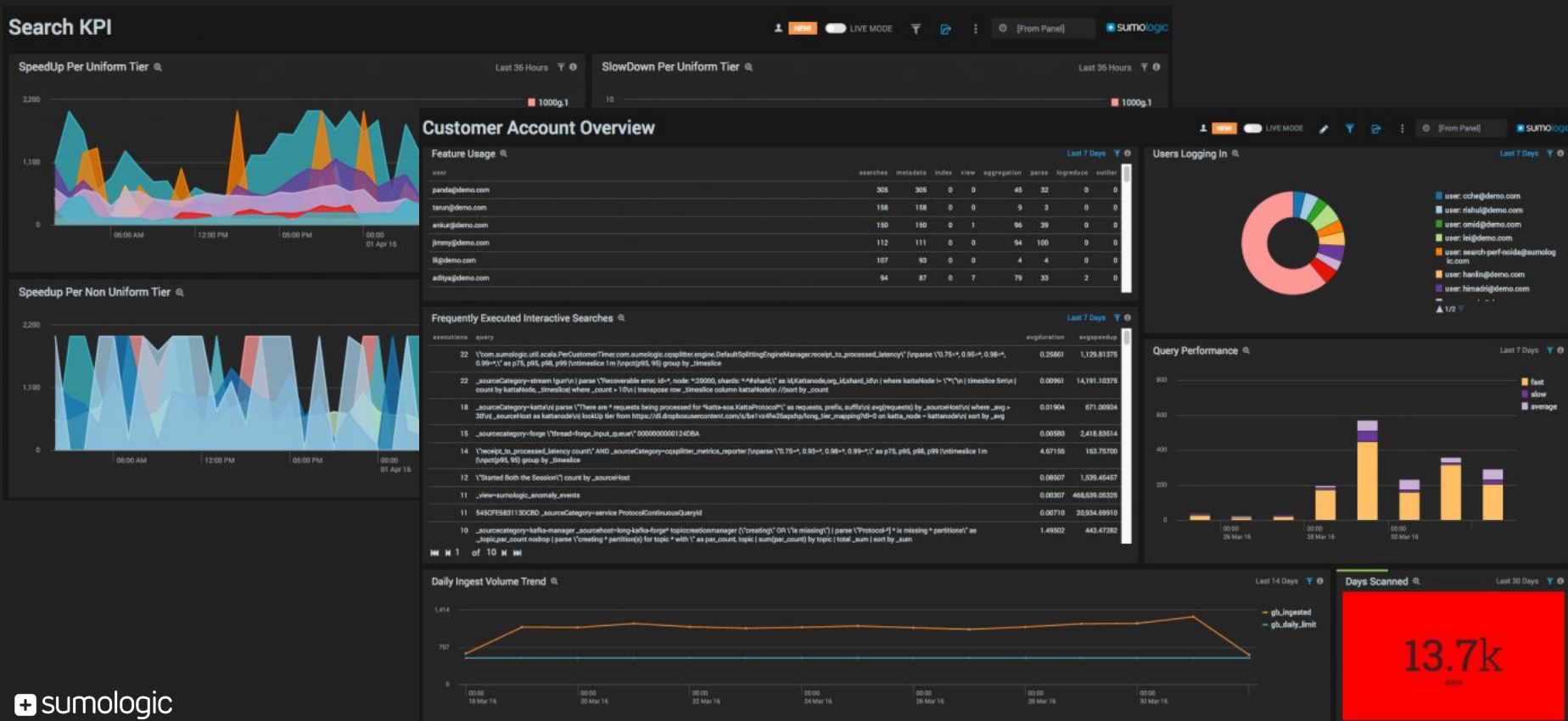
# Decentralized Data And Tooling



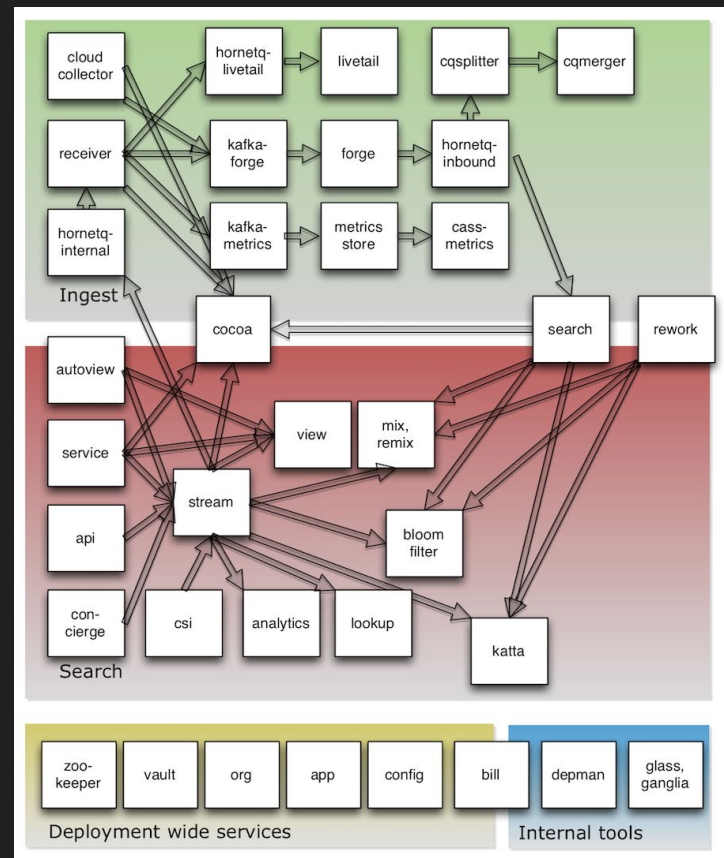
# Bringing It All Together



# Single Pane View



# Kubernetes in Engineering



# Kubernetes is Versatile



Sales  
Engineering



Engineering &  
Product



Customer  
Success



Sales



Engineering

# Thank you

**Frank Reno**

Sr. Technical Product Manager

Email: [freno@sumologic.com](mailto:freno@sumologic.com)

sumo logic

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u


Empowering the  
people who power  
modern business

m

o


# Travel Logic Demo Flow


 Flight Search



6/8/2018


Denver International





6/10/2018

Sydney Kingsford Smith International






SEARCH






# Travel Logic Demo Flow

Denver International (DEN) ▶ Sydney Kingsford Smith International (SYD)

## Outbound

	06:00PM DEN	13.3 Hrs Direct	07:18AM SYD	\$641.00	<a href="#">SELECT</a>
	07:00PM DEN	13.3 Hrs Direct	08:18AM SYD	\$581.00	<a href="#">SELECT</a>
	01:00AM DEN	13.3 Hrs Direct	02:18PM SYD	\$634.00	<a href="#">SELECT</a>

## Return

	06:00PM SYD	13.3 Hrs Direct	07:18AM DEN	\$757.00	<a href="#">SELECT</a>
	02:00PM SYD	13.3 Hrs Direct	03:18AM DEN	\$543.00	<a href="#">SELECT</a>
	01:00PM SYD	13.3 Hrs Direct	02:18AM DEN	\$735.00	<a href="#">SELECT</a>

\$0.00

[PURCHASE](#)

[RESET](#)

# Travel Logic Demo Flow

## Cart

Item	Total
✈ Cathay Pacific CX97 (DEN to SYD)	\$641.00
✈ Qantas Airways QF215 (SYD to DEN)	\$735.00
Tax (10%)	\$137.60
Total	\$1,513.60

## Checkout

### Payment method

#### Payment

Payment was processed successfully paymentID 484fdf32-2fb2-4ab7-aca8-23a8ede49f25

OK

Credit Card Number \*

123456789

Month

Feb

▼

Year

2018

▼

PAY

EMPTY CART

# Travel Logic Demo Flow

**Checkout**

**Payment method**

**Payment**

Payment was processed successfully paymentID 484fdf32-2fb2-4ab7-aca8-23a8ede49f25

OK


Name \*  
Frank Re

Credit Card Number \*  
123456789

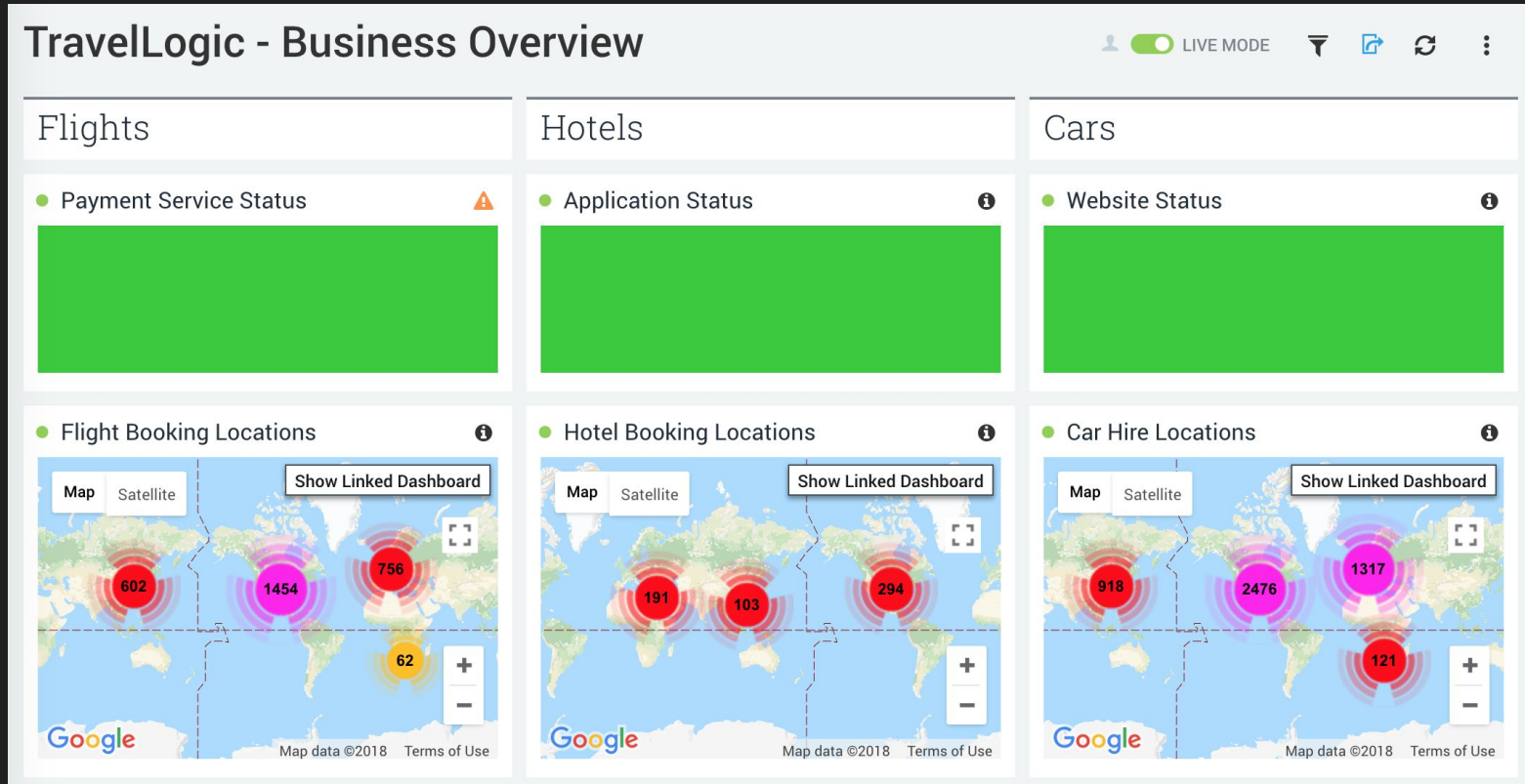
Month Year  
Feb 201

PAY EMPTY CART

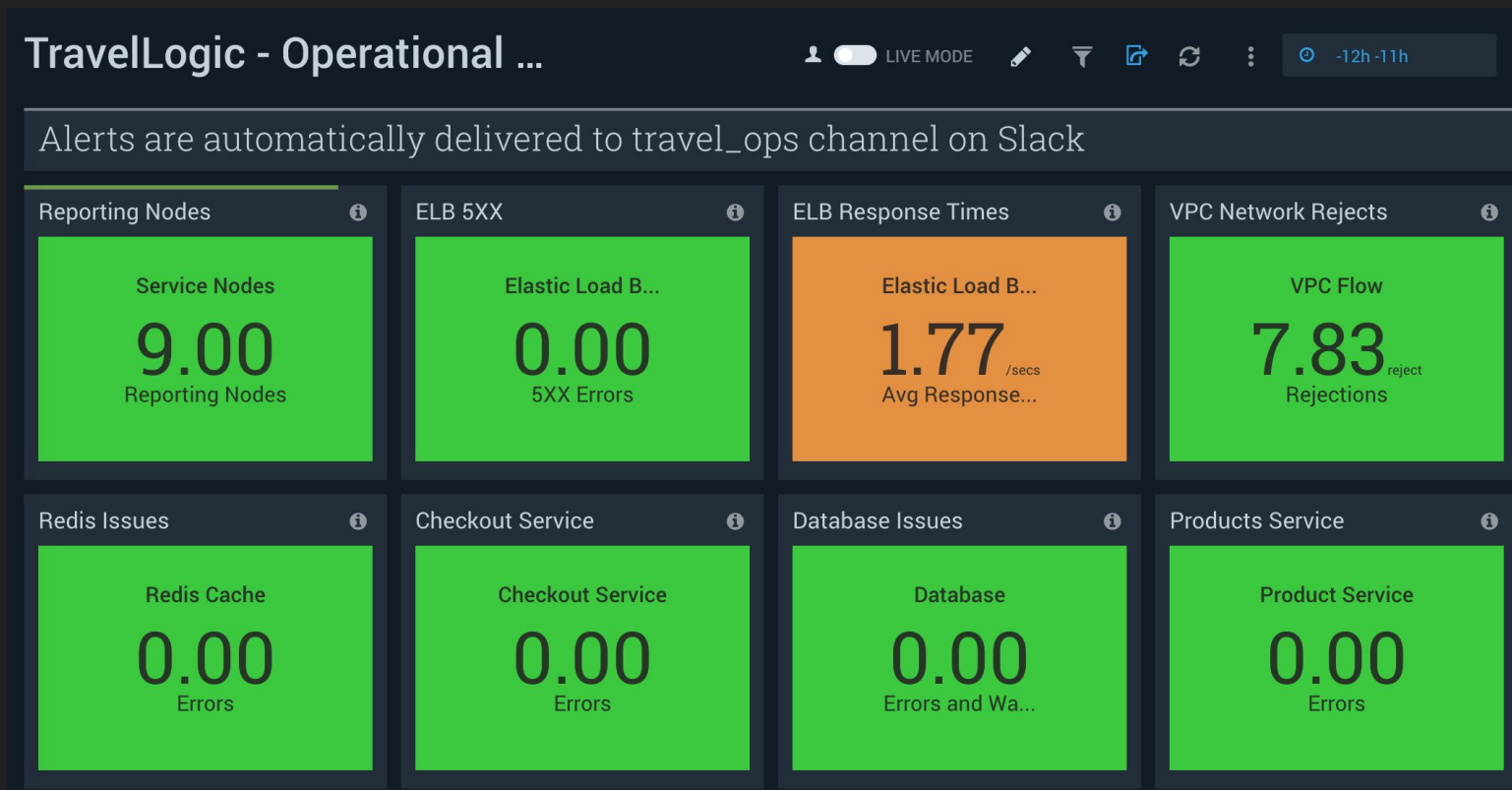
OK



# Travel Logic Demo Flow



# Travel Logic Demo Flow



# Travel Logic Demo Flow

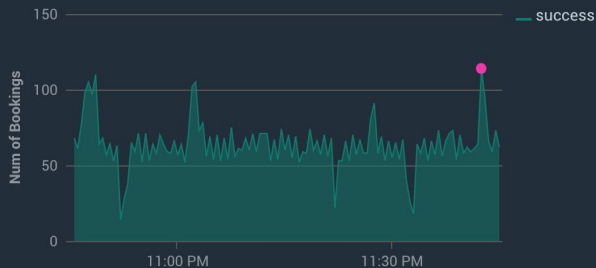
## TravelLogic - Services Detail

LIVE MODE

-12h -11h

### Bookings

-12h to -11h



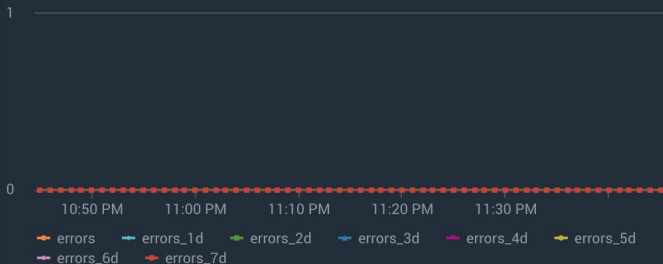
### CPU and Total Memory

-12h to -11h



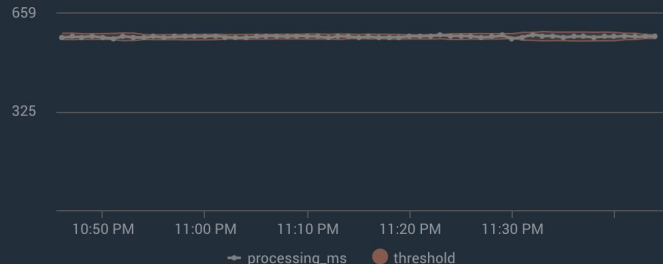
### Errors Last 7d

-12h to -11h

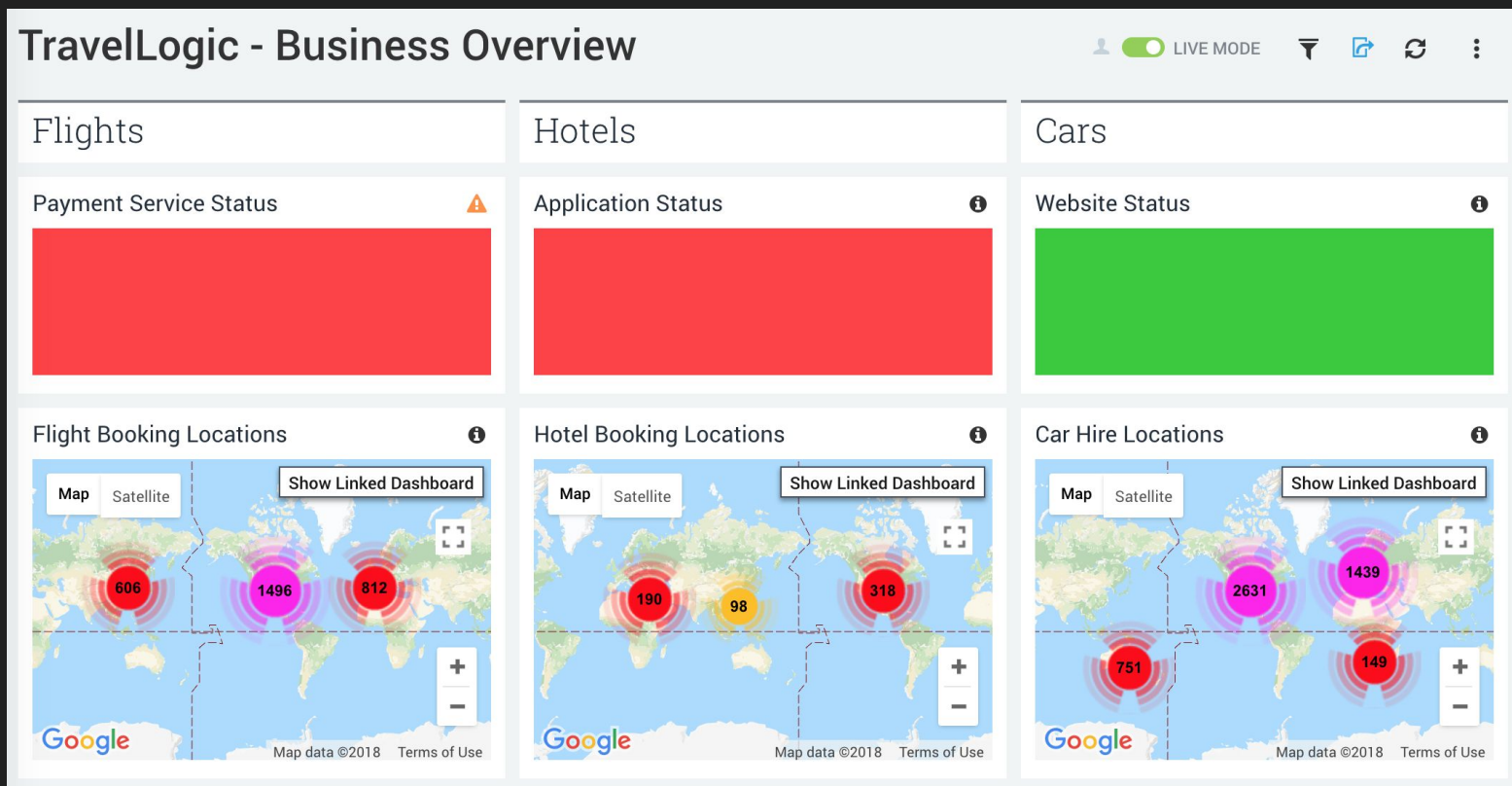


### GW Latency Avg

-12h to -11h



# Travel Logic Demo Flow



# Travel Logic Demo Flow

## TravelLogic - Operational Overview

👤 ☒ LIVE MODE 🔍 📄 ↺ ⋮

Alerts are automatically delivered to travel\_ops channel on Slack

R... 🔍

Last 2 Hours 📅 🔊 ⓘ

Service Nodes

15.0

Reporting Nodes

● ELB 5XX ⓘ

Elastic Load B...

644

5XX Errors

● ELB Response Times ⓘ

Elastic Load B...

4.36 /secs

Avg Response...

● VPC Network Rejects ⓘ

VPC Flow

10.0

reject  
Rejections

● Redis Issues ⓘ

Redis Cache

0.00

Errors

● Checkout Service ⓘ

Checkout Service

2.70k

Errors

● Database Issues ⓘ

Database

0.00

Errors and Wa...

● Products Service ⓘ

Product Service

0.00

Errors



# Travel Logic Demo Flow

## Payment method

### Payment

Error processing payment 2b43681e-7733-4d60-9b5b-99a93379d64e 500 INTERNAL SERVER ERROR

OK

Name

Franchise

Credit Card Number \*

123456789

Month

Year

Feb ▼

2018 ▼

PAY

EMPTY CART

# Travel Logic Demo Flow

