Staff Software Engineer

Walmart Labs

Store Financial Product Family

Monolithic vs. Microservices

Seriously ? ☺

Frameworks and tools for debugging and tracing Micro Services

Logging Frameworks : Log4J (Java), NLog (.NET) and Node-Loggly (Node)

Logging Databases

Time Series Databases (TSDB)

Prometheus ,Kibana and Grafana.

Monitoring tools

Application Performance Monitoring (APM) tools

Frameworks and tools for debugging and tracing Micro Services

Logging Frameworks : Log4J (Java), NLog (.NET) and Node-Loggly (Node)

Logging Databases

Time Series Databases (TSDB)

Prometheus ,Kibana and Grafana.

Monitoring tools

Application Performance Monitoring (APM) tools

Kibana vs. Grafana vs. Prometheus

Get help choosing one

Customize your comparison

Kibana vs Grafana vs Prometheus Compare

Kibana

Monitoring Tools

Follow

Stacks
3.57K

I Use This

Fans	Jobs	Votes
2.8K	438	220

Grafana

Monitoring Tools

Follow

Stacks
2.3K

I Use This

Fans	Jobs	Votes
1.88K	503	297

Prometheus

Monitoring Tools

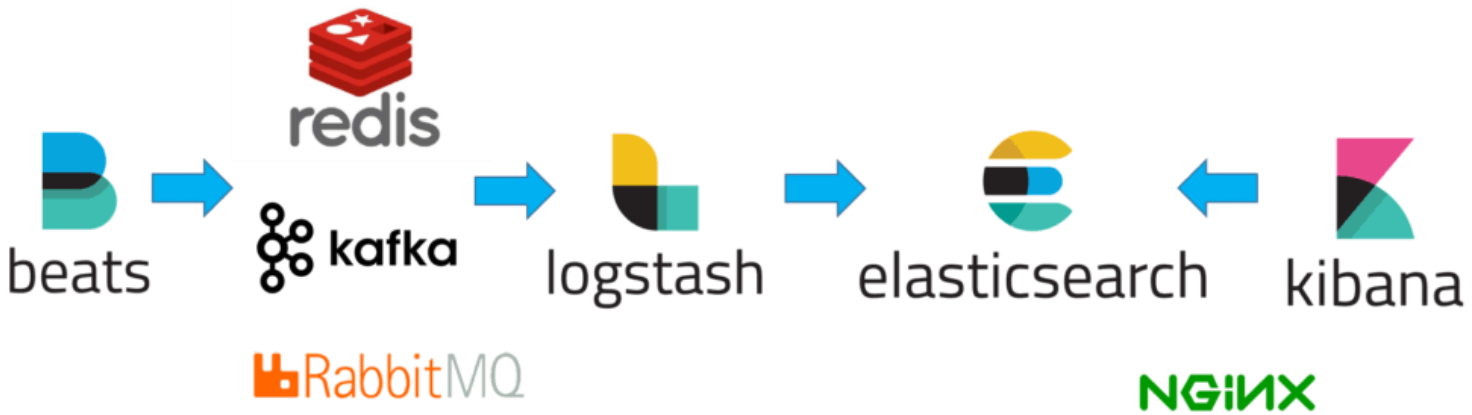
Follow

Stacks
708

I Use This

Fans	Jobs	Votes
653	527	180

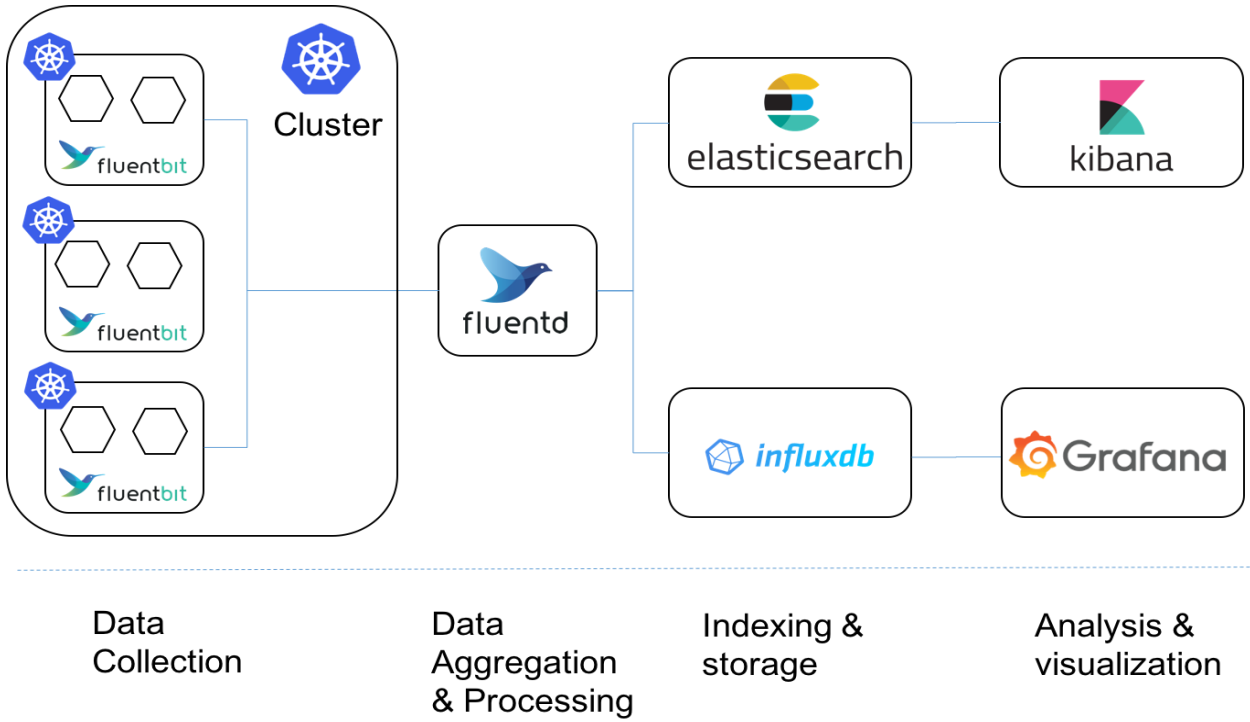
E
L
K



Reference: https://logz.io/learn/complete-guide-elk-st

Daniel Berman

E
F
K



Reference: https://logz.io/blog/fluentd-vs-fluent-bit/

Daniel Berman

Frameworks and tools for debugging and tracing Micro Services

Logging Frameworks : Log4J (Java), NLog (.NET) and Node-Loggly (Node)

Logging Databases

Time Series Databases (TSDB)

Prometheus ,Kibana and Grafana.

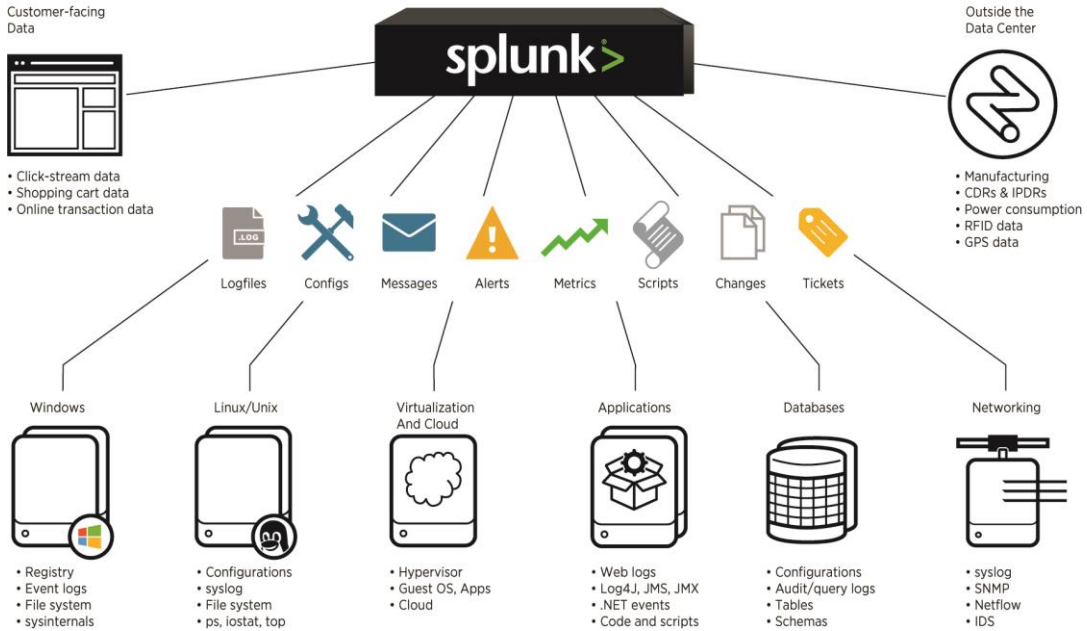
Monitoring tools

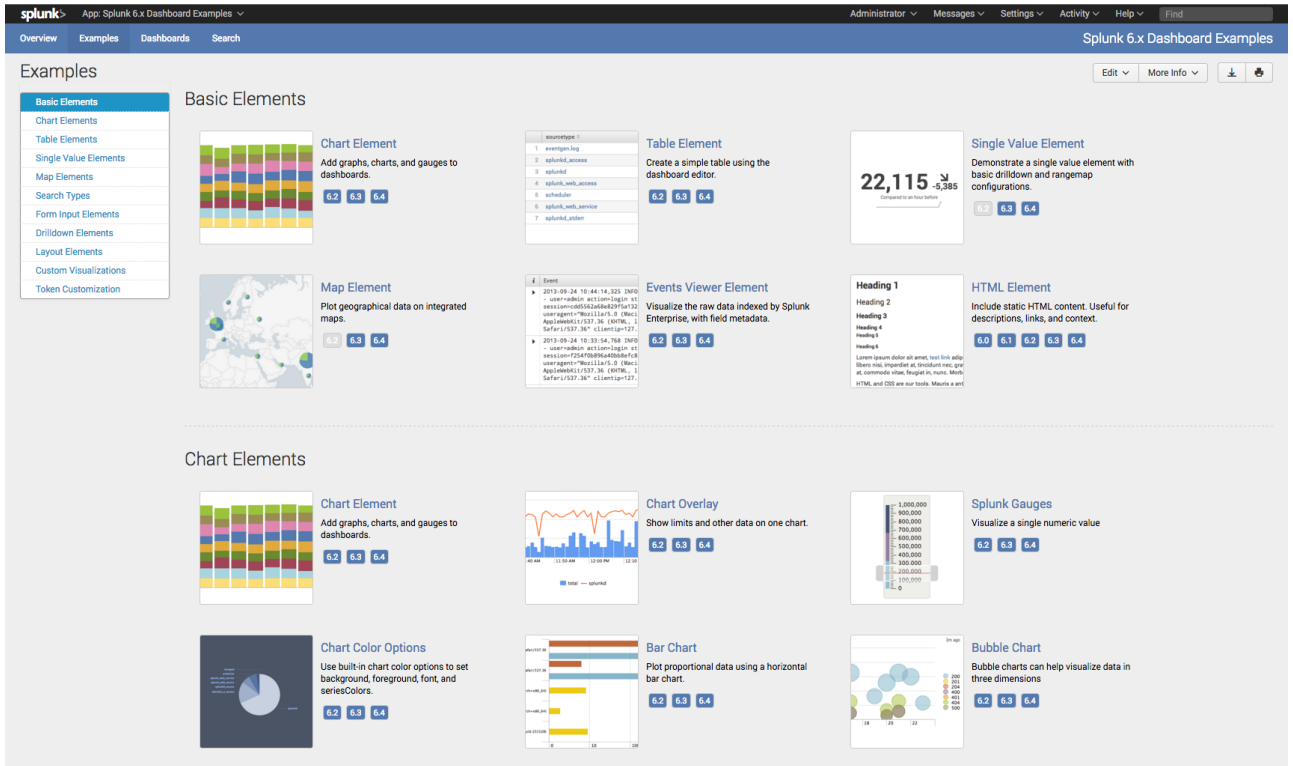
Application Performance Monitoring (APM) tools

Splunk is a software for searching, monitoring, and analyzing machine-generated big data, via a Web-style interface.
It captures, indexes, and correlates real-time data in a searchable repository from which it can generate graphs, reports, alerts, dashboards, and visualizations

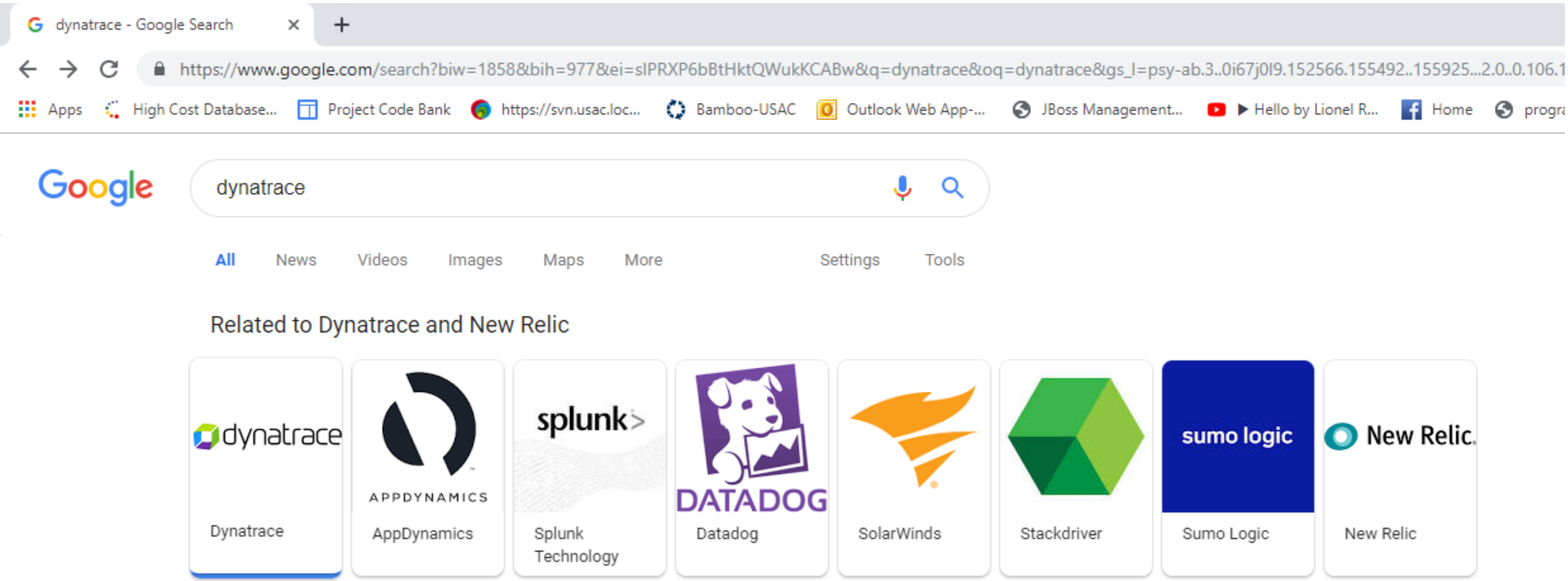
Reference: https://en.wikipedia.org/wiki/Splunk

What Splunk Can Index





Reference: http://dev.splunk.com


dynatrace - Google Search
https://www.google.com/search?biw=1858&bih=977&ei=sIPRXP6bBtHktQWukKCABw&q=dynatrace&oq=dynatrace&gs_l=psy-ab.3..0i67j0l9.152566.155492..155925...2.0..0.106.1
Apps
High Cost Database...
Project Code Bank
https://svn.usac.loc...
Bamboo-USAC
Outlook Web App-...
JBoss Management...
Hello by Lionel R...
Home
Google
dynatrace
All
News
Videos
Images
Maps
More
Settings
Tools
Related to Dynatrace and New Relic
Dynatrace
AppDynamics
Splunk Technology
Datadog
SolarWinds
Stackdriver
Sumo Logic
New Relic

Distributed tracing systems

Track a request through a software system - distributed across multiple applications, services, and databases as well as intermediaries like proxies.

A can determine where the system is experiencing latencies or blockages. Testing the system like a binary search tree ? when requests start failing, operators and developers can see exactly where the issues begin. This can also reveal where performance changes might be occurring from deployment to deployment.

How does this tracing thing work?

Each request gets a special **ID** usually injected into the headers.

What do you mean by trace?

Request **ID** uniquely identifies a transaction which is normally called a trace. The trace is the overall abstract idea of the entire transaction.

Transaction involves which items?

Transaction involves calling services, methods of one or more systems(even microservices chaining)

TRCAE vs SPAN

TRACE is an entire transaction, whereas Each trace is made up of SPANS. These spans are the actual work being performed, like a service call or a database request. Each span also has a unique ID. Spans can create subsequent spans called child spans, and child spans can have multiple parents.

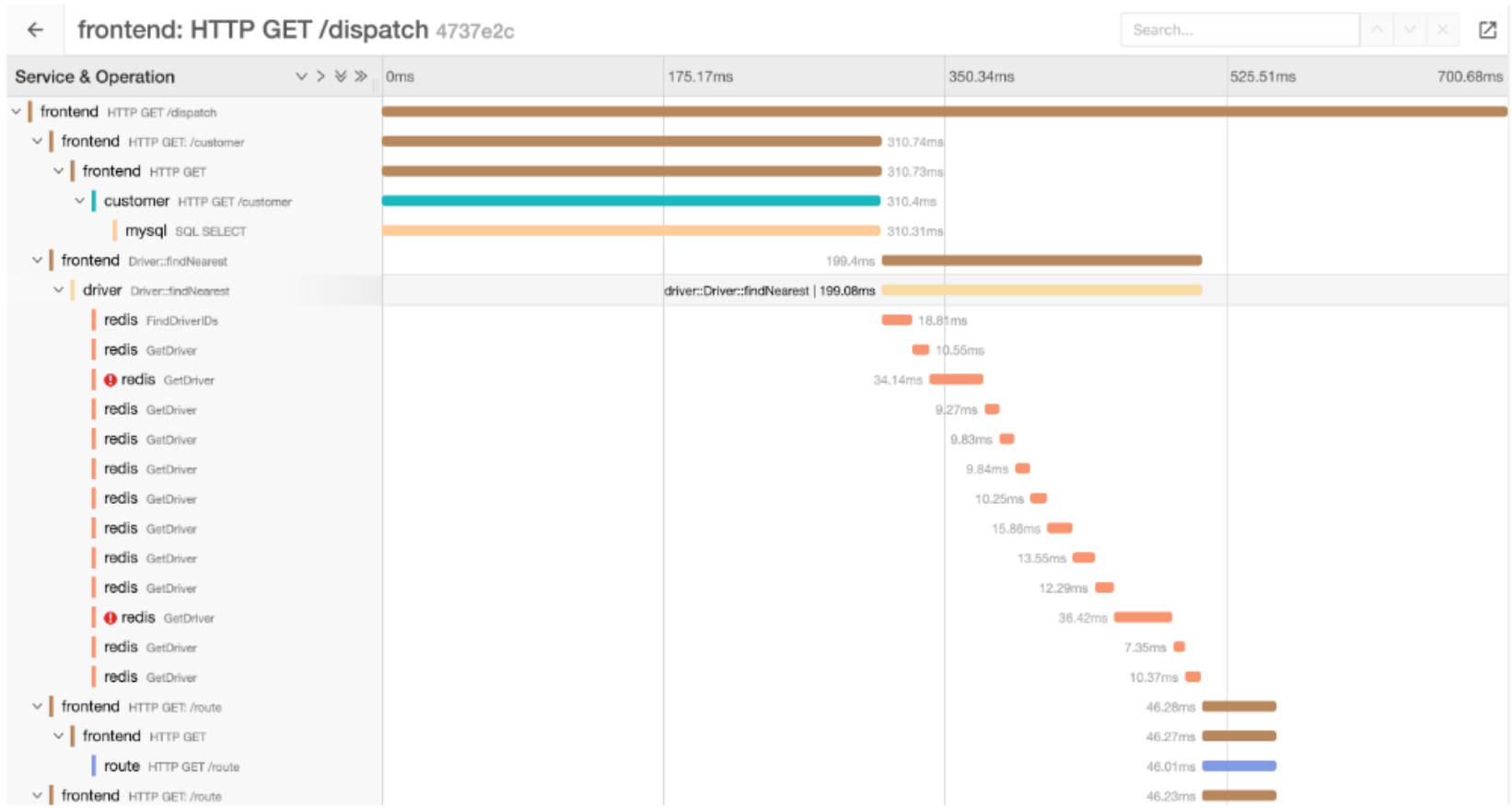
Frontend/UI — Jaeger document

https://www.jaegertracing.io/docs/1.11/frontend-ui/

Apps | Outlook Web App-... | Hello by Lionel R... | Home | programming-simp... | download | Travel Deal | Google | Other

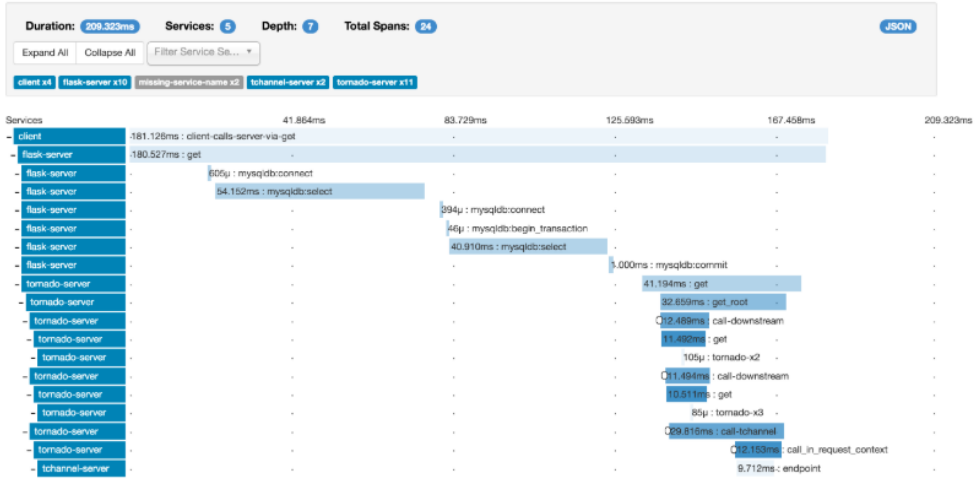
JAEGER

```
uiTimelineHideMinimap=1&
uiTimelineHideSummary=1
```



ZIPKIN

Zipkin

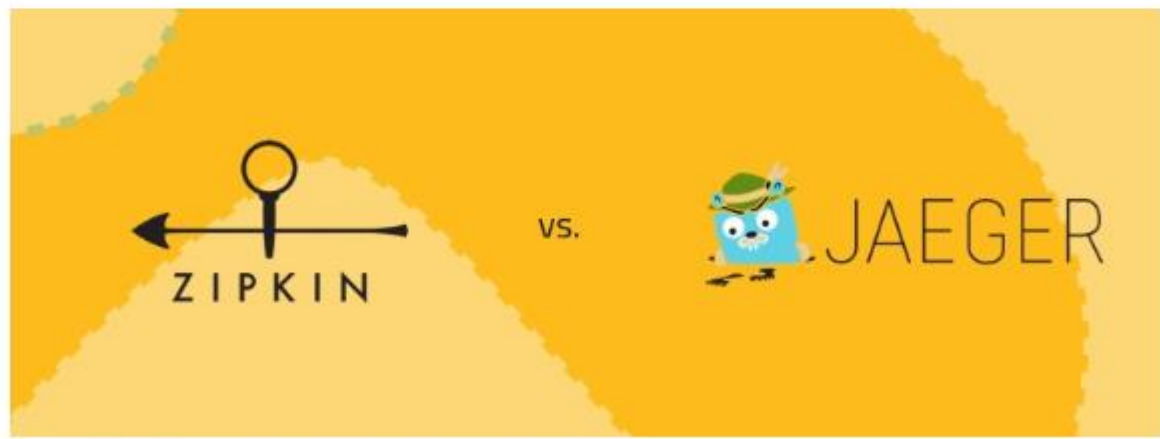


Zipkin is a distributed tracing system. It helps gather timing data needed to troubleshoot latency problems in microservice architectures. It manages both the collection and lookup of this data. Zipkin's design is based on the Google Dapper paper.

Zipkin vs Jaeger: Getting Started With Tracing

Daniel Berman

Jul 12th, 2018 | Write a comment |



https://logz.io/blog/zipkin-vs-jaeger/

DEMO ☺


Thank you !!