

Lab Assignment 3 CMT

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TASK 2

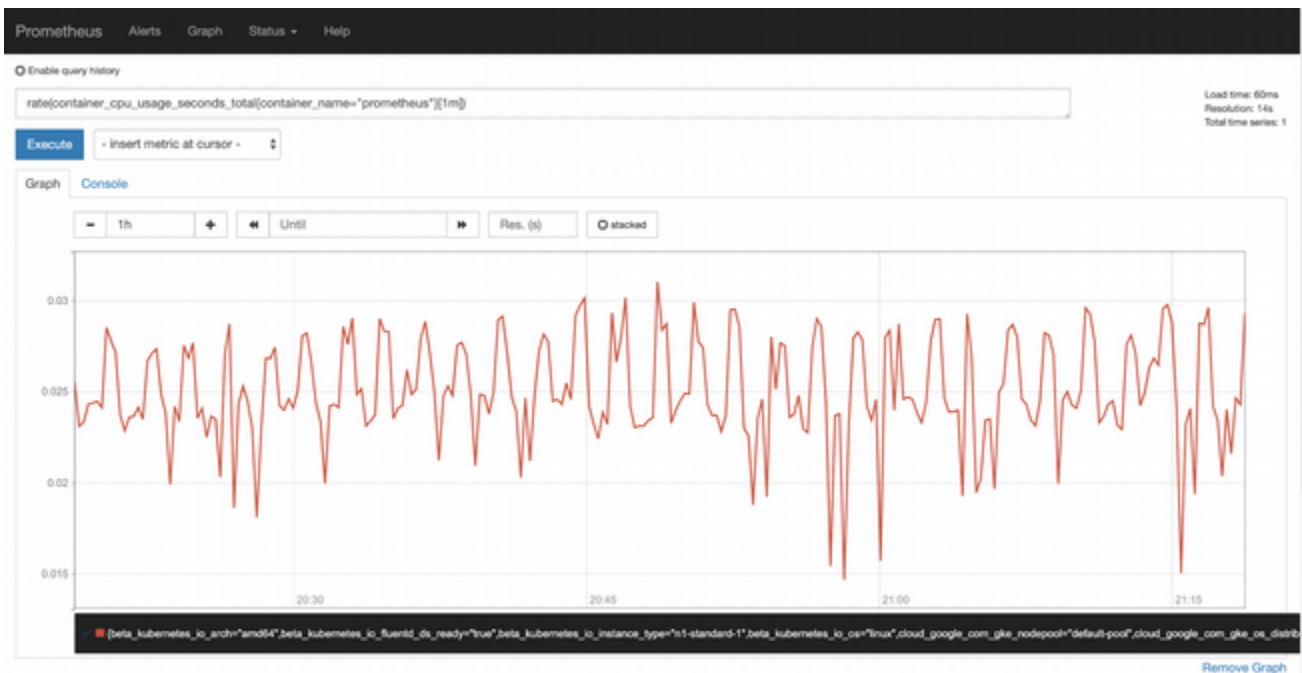
- Monitoring
- x Grafana

Data visualization using graphs to monitor metrics, logs, creating alerts etc.



- x Prometheus

Metrics monitoring using graphs.



x Sentry

Application monitoring focusing on error reports

E

Error, Inc / Frontend

Issues

Events

Overview

Releases

User Feedback

Star project

Project settings

Unresolved issues

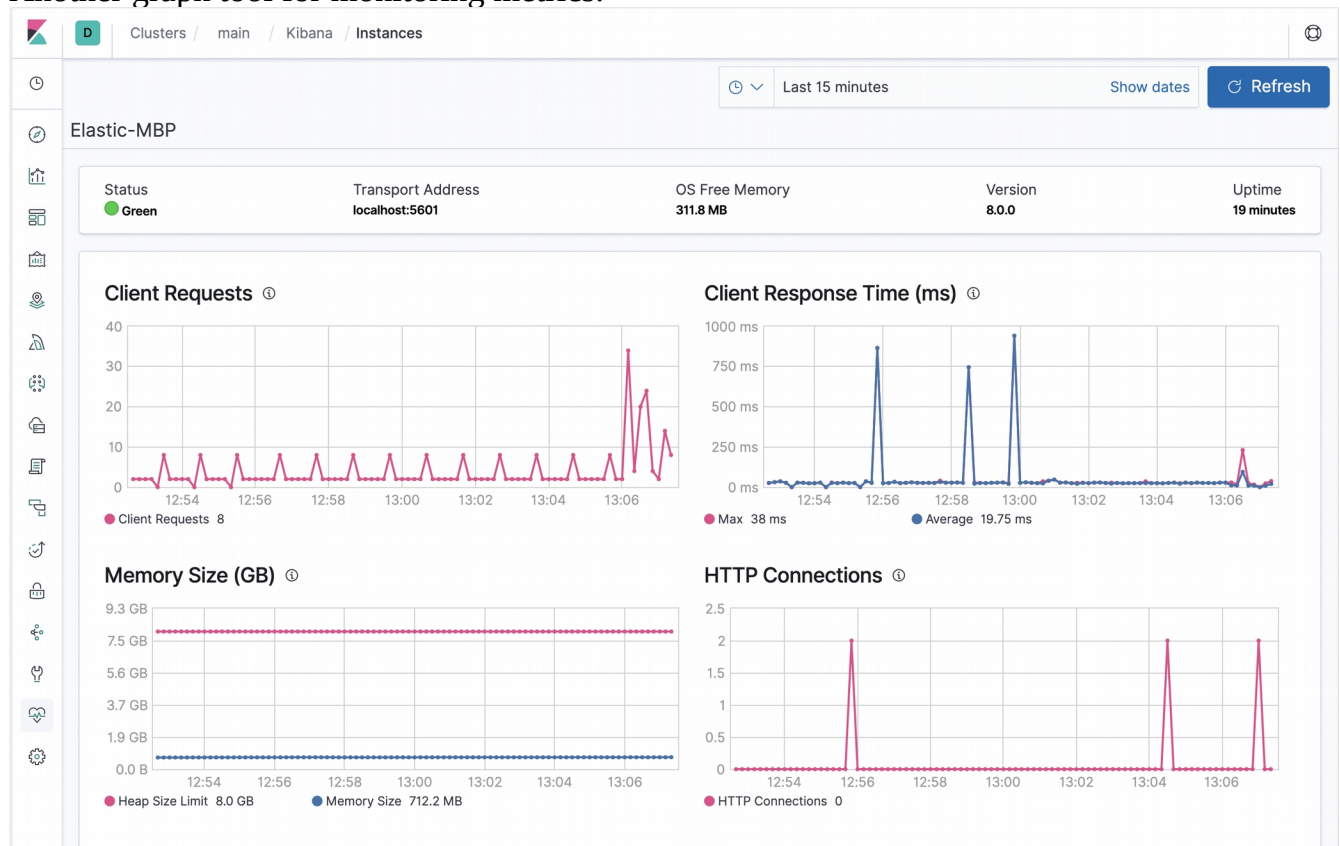
Sort by: Last seen

is:unresolved

| | GRAPH: | 24H | 14D | EVENTS | USERS |
|--|--------|-----|-----|--------|-------|
| <div>Error</div> <div>TypeError /components/eventList in map</div> <div>Cannot read property 'map' of undefined</div> <div>FRONTEND-ZWZ 🕒 a few mins ago - 2 hours old javascript</div> | | | | 29.1k | 1.2k |
| <div>Info</div> <div>Stripe /views/checkout/billCard</div> <div>We were unable to charge your credit card.</div> <div>FRONTEND-Z1U 🕒 a few mins ago - 2 hours old stripe</div> | | | | 17.3k | 821 |
| <div>Error</div> <div>ReferenceError /views/home in render</div> <div>baseURL is not defined</div> <div>FRONTEND-H1Z1 🕒 2 hours ago - 2 months old javascript</div> | | | | 16k | 738 |
| <div>Error</div> <div>URIError <anonymous> in decodeURIComponent</div> <div>URI malformed</div> <div>FRONTEND-D41 🕒 7 hours ago - 2 months old javascript</div> | | | | 12.3k | 540 |
| <div>Error</div> <div>SyntaxError /issues/stream/ in streamActions</div> <div>Unexpected identifier</div> <div>FRONTEND-T4C0 🕒 9 hours ago - a year old javascript</div> | | | | 9.3k | 200 |
| <div>Error</div> <div>TypeError /auth/login/ in ?</div> <div>Object [object Object] has no method 'select2'</div> <div>FRONTEND-1TP 🕒 9 hours ago - a year old javascript</div> | | | | 5.2k | 1 |
| <div>Error</div> <div>SalesforceError /views/salesforce/ in update</div> <div>You're creating a duplicate record. We recommend you use an existing record...</div> <div>FRONTEND-1TP 🕒 9 hours ago - a year old javascript</div> | | | | 1.1k | 182 |
| <div>Error</div> <div>ReferenceError /components/button</div> <div>handleClick is not defined</div> <div>FRONTEND-D4D 🕒 9 hours ago - a year old javascript</div> | | | | 781 | 19 |
| <div>Error</div> <div>TypeError /auth/login/ in ?</div> <div>Object [object Object] has no method 'select2'</div> <div>FRONTEND-1TP 🕒 9 hours ago - a year old javascript</div> | | | | 327 | 82 |
| <div>Error</div> <div>SalesforceError /views/salesforce in removeLead</div> <div>Failure detected. Have you tried turning it off and then on again?</div> <div>FRONTEND-H1S 🕒 3 days ago - 2 years old javascript</div> | | | | 100 | 19 |

x Kibana

Another graph tool for monitoring metrics.



ature

- Logging

- x Fluentd

Collects operations and applications log data, features data search and filtering, alerting, data analytics etc.

- x Elasticsearch

Elasticsearch writes its own logs to /var/log/elasticsearch. Log levels go from least to most severe: TRACE, DEBUG, INFO, WARN, ERROR, FATAL.

- x Logstash

Logstash writes its own logs to /var/log/logstash and has similar to Elasticsearch, different severity levels. Its used to ingest data, transform and stash it using a variety of different output options.

- Tracing

- x Jaeger

This is a distributed tracing system initially developed by Uber and is used for monitoring and troubleshooting microservices based distributed systems. Uses an agent to listen for UDP spans

that it sends to the collector, the collector receives these traces and processes them in a pipeline that validates, indexes, transforms and stores them.

- ✕ Zipkin

Has a relatively simple approach to tracing, every operation has a unique ID that is collected by a Reporter that is implemented inside each host. The Reporter reports all traces to a Zipkin collector, whom persist the data in databases. Initially developed by Twitter.

- ✕ OpenTracing

This provides a vendor neutral standard for instrumentation, meaning that it can be implemented without vendor lock-in.

- Observability Stacks

- ✕ Istio

Generates detailed telemetry for in-mesh communication, providing interaction observability of service behaviour.

- ✕ Elastic Stack

ELK stack has powerful observability capabilities, it features a dedicated log UI, application performance monitoring (APM), index lifecycle management, uptime and more.