



What's new in Elastic APM? ○ A whole lot!

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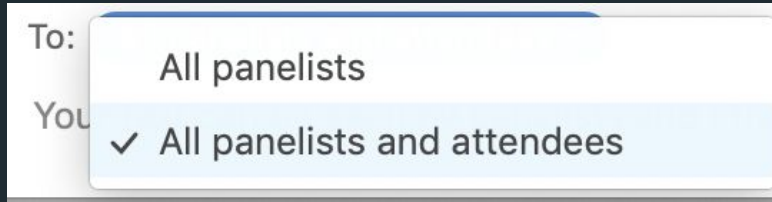
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Housekeeping & Logistics

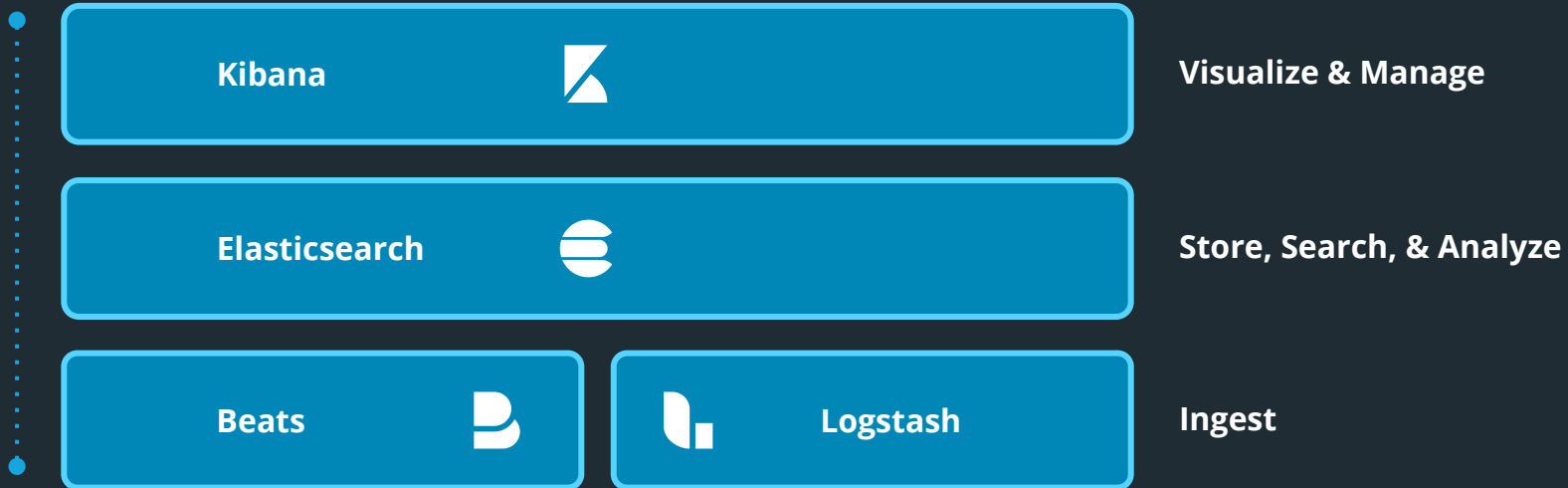
- Attendees are automatically muted when joining Zoom
- Q&A will be at the end of the webinar
 - Ask questions for us in the Zoom chat during the webinar
 - Set chat settings **To: All panelists and attendees**



- Ask more questions on our discuss forum: **discuss.elastic.co**
- **Recording** will be available after the webinar and emailed to all registrants

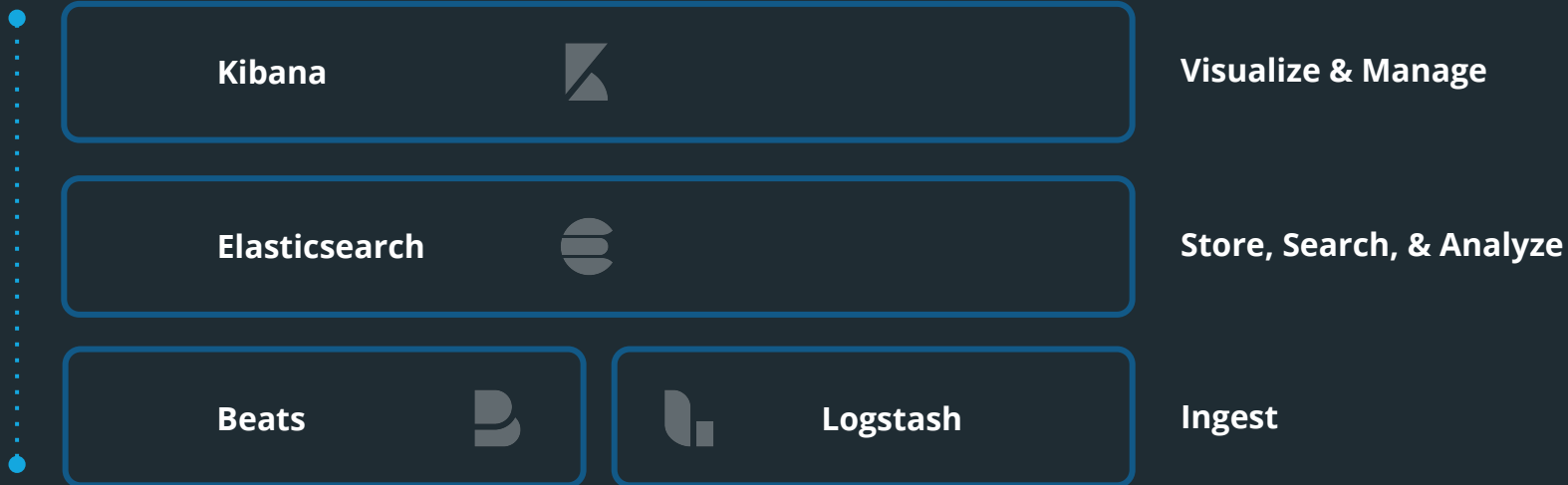


Elastic Stack





Elastic Stack

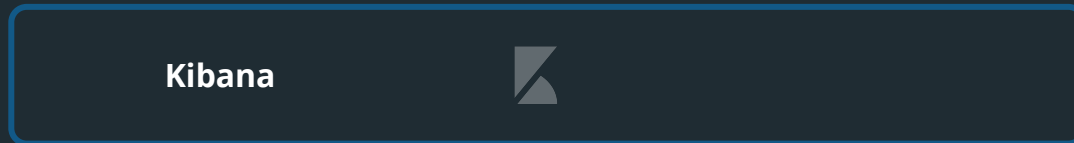




Elastic Stack



Solutions



Visualize & Manage



Store, Search, & Analyze



Ingest



Deployment

SaaS



Elastic Cloud



Elasticsearch
Service



Elastic
Site Search
Service



Elastic
App Search
Service

Self Managed



Elastic Cloud
Enterprise



Standalone

Monitoring with Elastic

Full-stack observability integrated behind a single pane of glass



APM

Real User Monitoring (RUM)



APM

Application-level monitoring



Beats

Server-level monitoring



Beats



Logstash

Logging

Application Performance Monitoring (APM)

- **End-to-end visibility**
 - Distributed Tracing. Visualize bottlenecks and how services interact including frontend application
- **Plug and play experience**
 - Out of the box instrumentation of database queries, cache, external requests, etc. for multiple language support: Java, Go, Python, Node.js, Ruby, .NET
- **Correlation with logs and metrics solutions**
 - Integration with log, metrics and application data for deeper troubleshooting
- **Error analysis**
 - Grouped exception tracking

Themes

Integrations: Unified Logs, Metrics, APM, and Uptime

One-click UI integrations between the monitoring solutions

Even more agent support

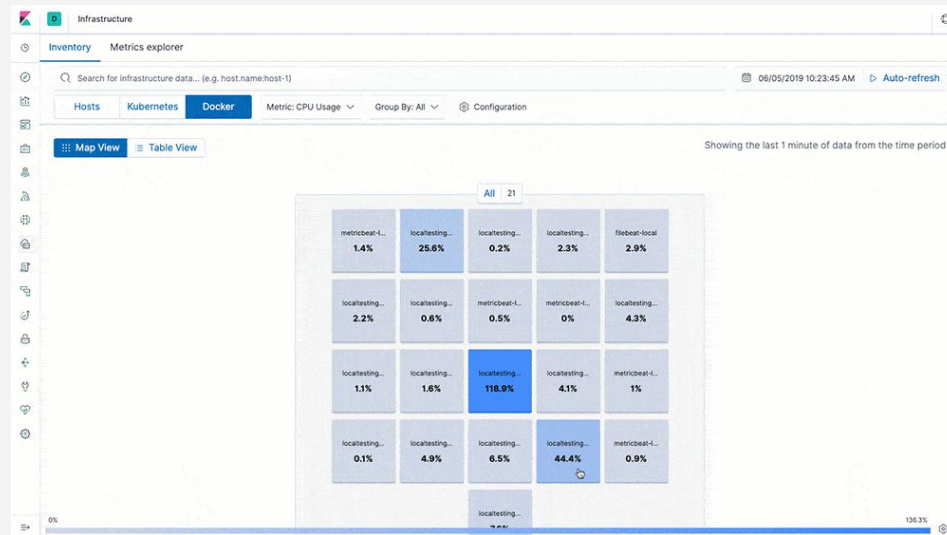
Support for .NET, RUM SPA, more Java frameworks for more turnkey APM & distributed tracing

Troubleshooting capabilities

Aggregate Service Breakdown charts, Agent runtime metrics, related errors in distributed tracing UI, GeoIP & User Agent pipelines

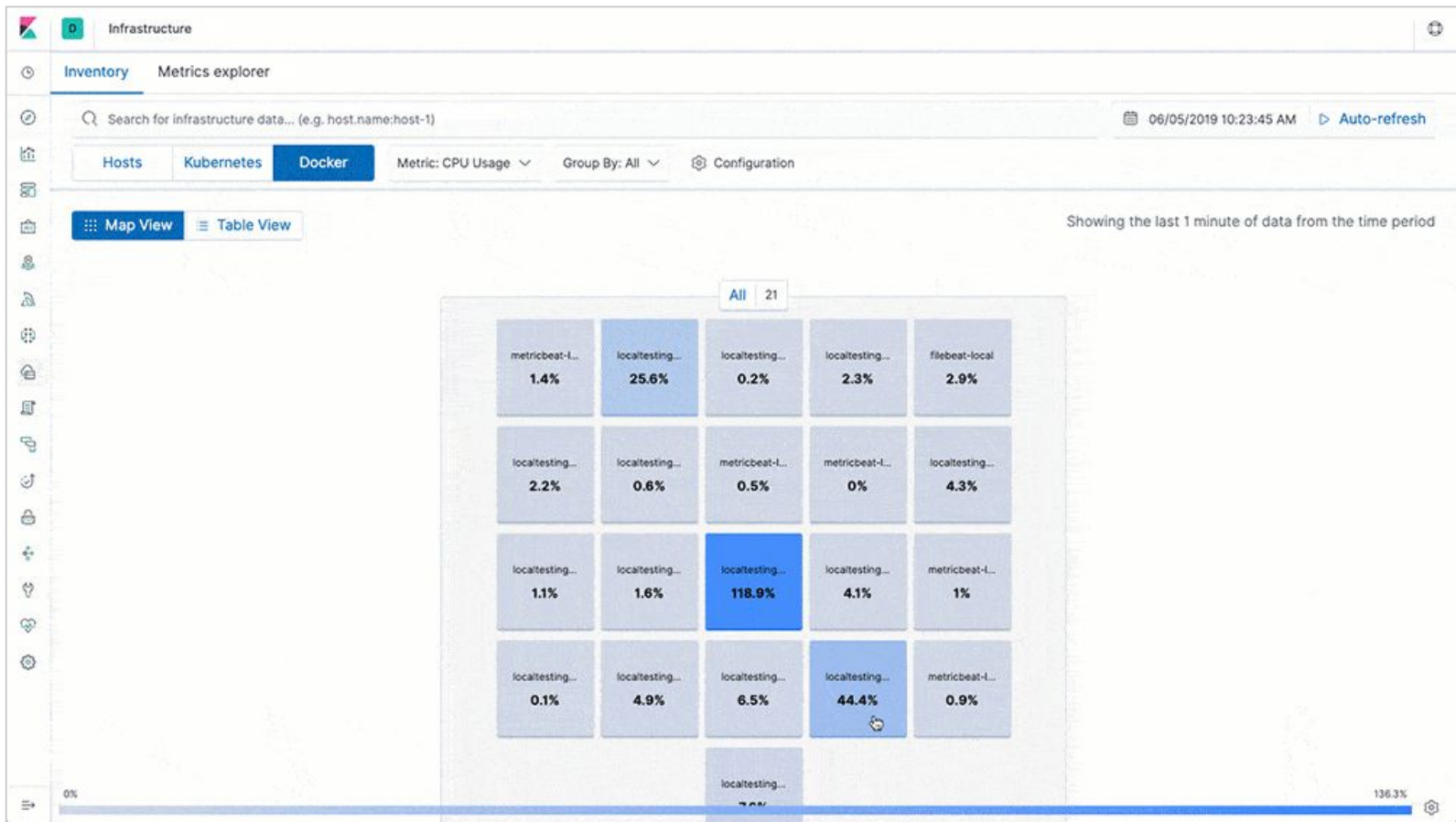
Improved administration options

Support for ILM, Sample Rate configuration from Kibana, and Environment Support



Unified visibility across logs, metrics, APM, uptime

One-click integrations between APM, logs and metrics



Strengthening APM integrations

Agent Updates

.NET APM Agent

Framework Support

ASP.NET Core 2.x+

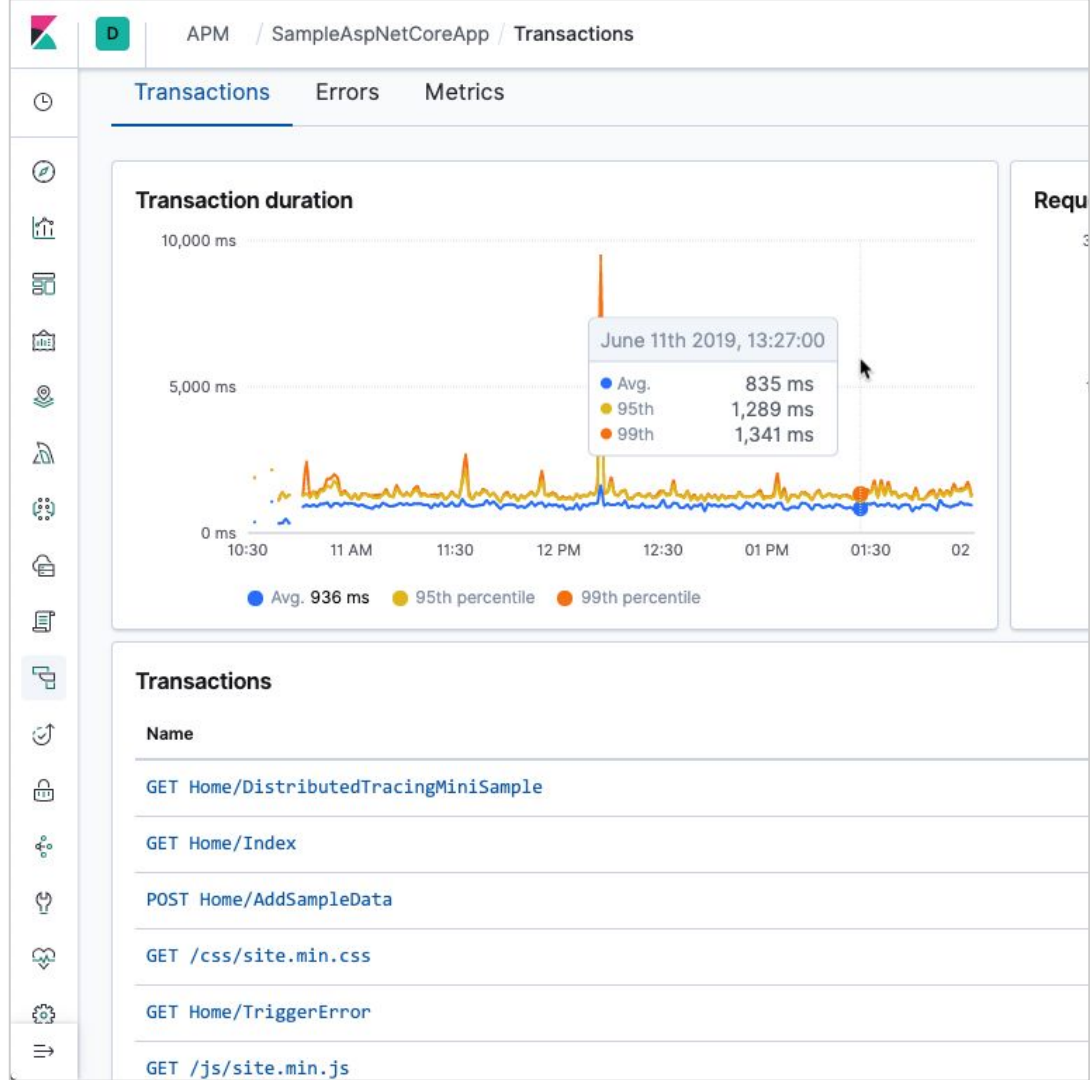
ASP.NET Core is the open-source version of ASP.NET, that runs on macOS, Linux, and Windows

Entity Framework Core 2.x+

Open-source, cross-platform version of Entity Framework, to support development of data-oriented software applications

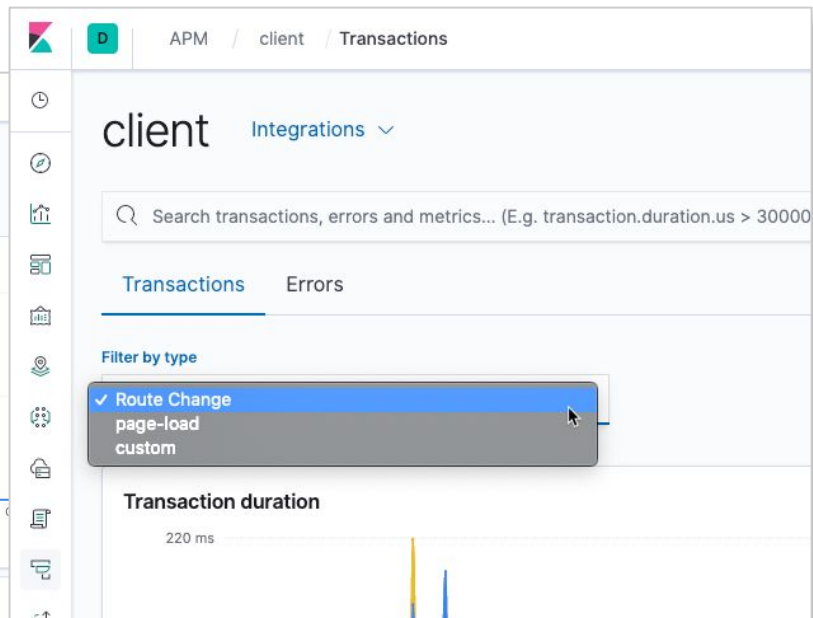
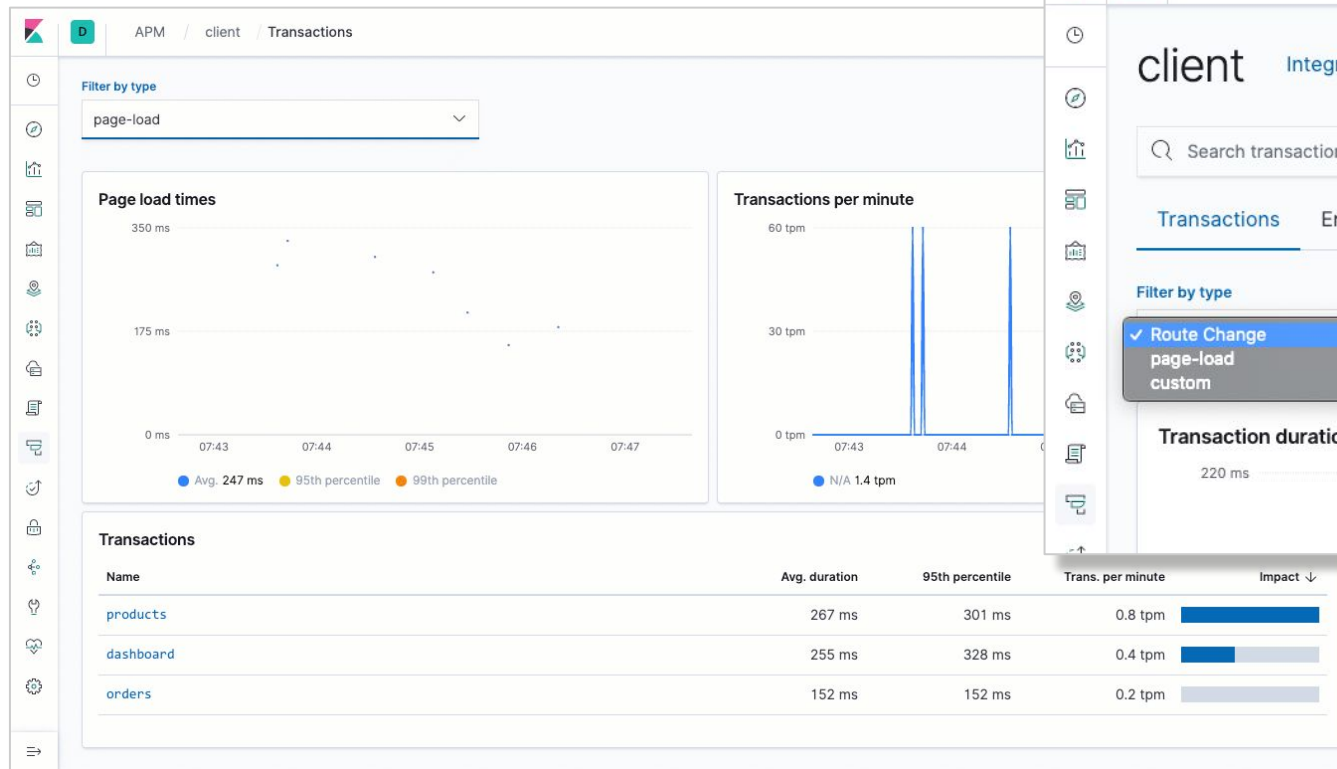
Public Agent API

For other frameworks



RUM Agent - React SPA support

Single Page Applications now get some RUM

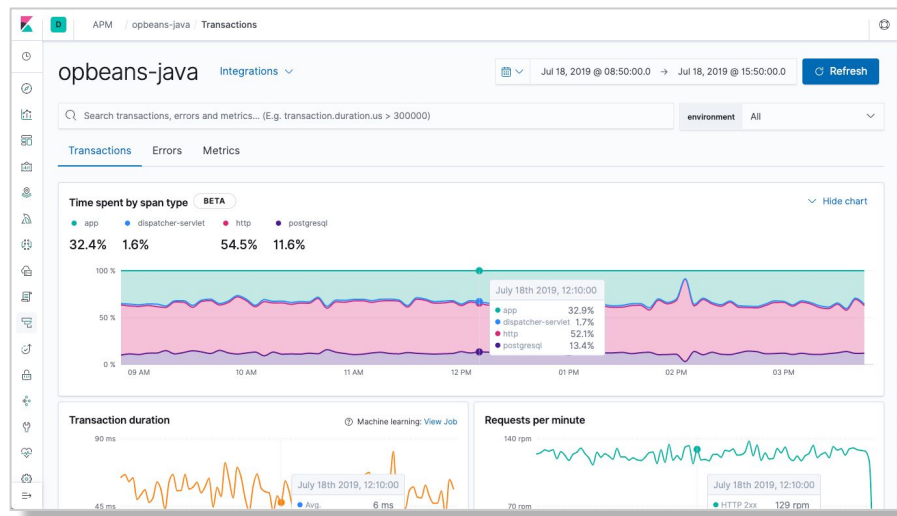


Additional troubleshooting capabilities

Aggregate Service Breakdown Charts

Birds-eye view of where your app spends time

- Identify performance bottlenecks by visualizing aggregate time spent in app code, database or external call
- Automatically collected
- Available in Beta for all agents (except .NET and Ruby)



Agent Runtime Metrics

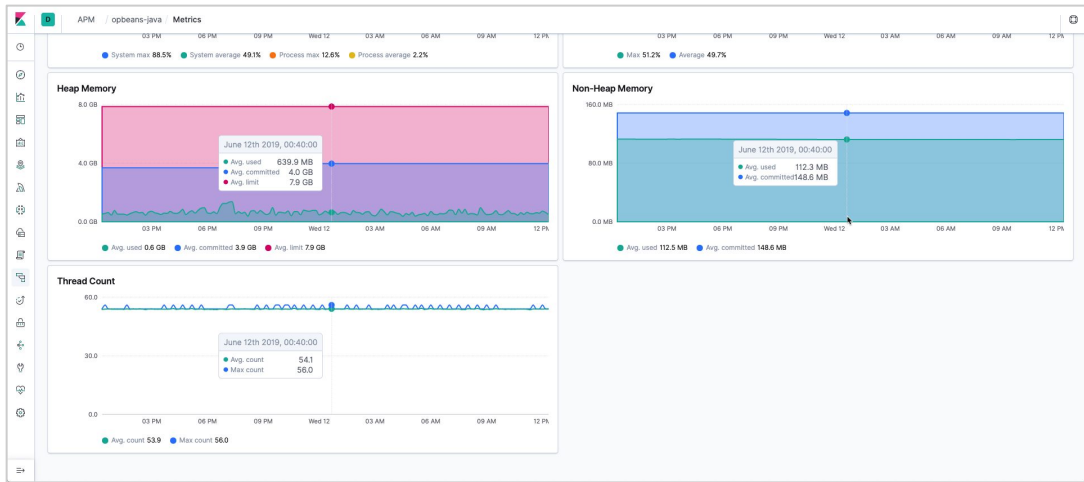
Finding performance issues with application runtime

Metrics collected:

Vary by agent, such as:

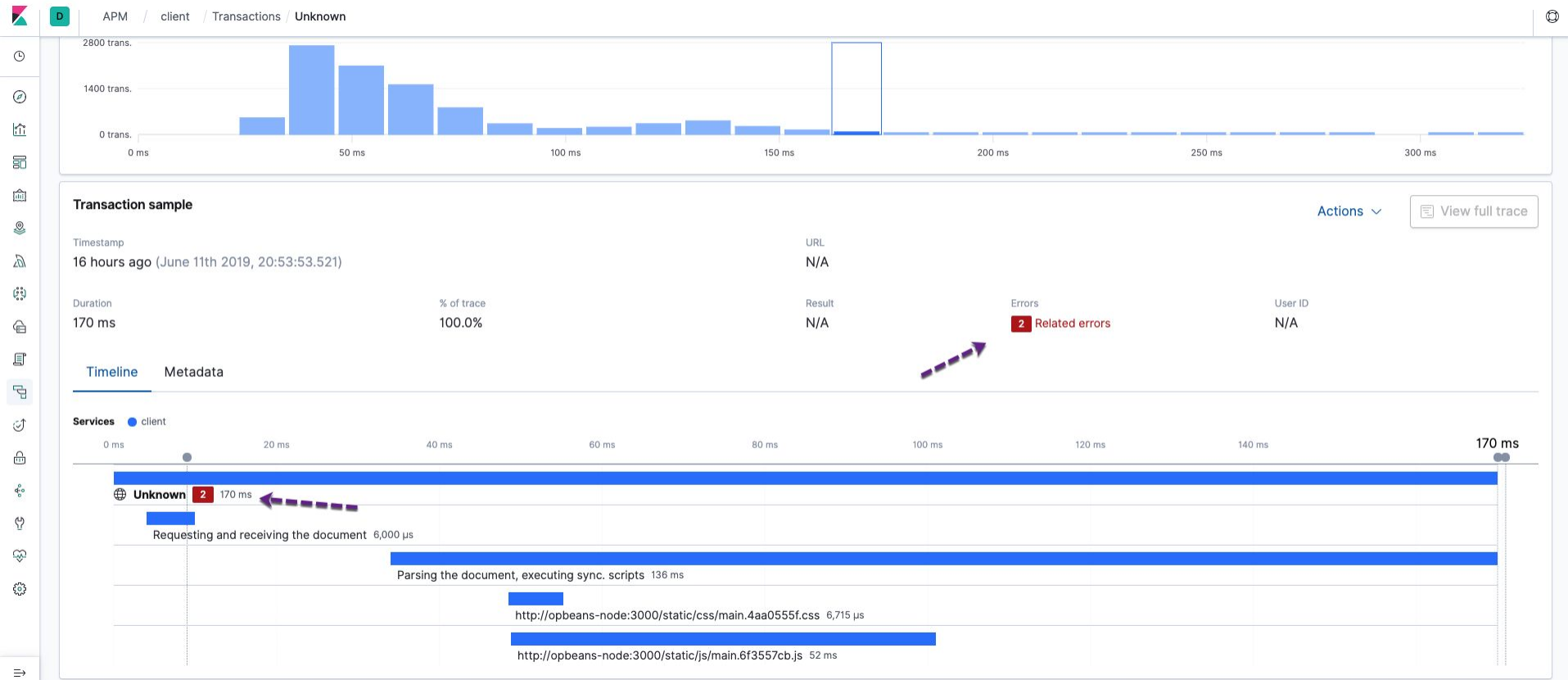
- Garbage Collection
- Memory Usage
- Thread Count
- File Handles
- CPU

APM-contrib repo has dashboards for all agents



APM App Updates

"Related errors" on transaction view



APM App Updates

Environment Support for easy navigation between environments

APM / Services

APM [Setup Instructions](#)

📅 Last 24 hours

Show dates

Refresh

environment

✓ All

Not defined

- Select environment -

production

Services

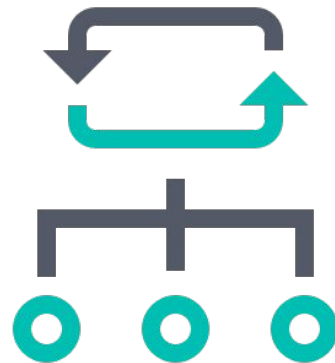
Traces

Name ↑	Environment	Agent	Avg. response time	Trans. per minute	Errors per minute
SampleAspNetCoreApp		dotnet	916 ms	1.6 tpm	0 err.
WebApiSample		dotnet	918 ms	1.5 tpm	0 err.
apm-server		go	1,019 ms	311.2 tpm	0 err.
client		js-base	67 ms	6.7 tpm	13.5 err.
opbeans-dotnet		dotnet	0 ms	5.9 tpm	0 err.
opbeans-go		go	46 ms	51.3 tpm	0 err.
opbeans-java		java	95 ms	133.6 tpm	19.7 err.
opbeans-node		nodejs	43 ms	50.5 tpm	4.5 err.
opbeans-python		python	34 ms	142.2 tpm	62.4 err.
opbeans-ruby	production	ruby	26 ms	103.8 tpm	16.5 err.

Improved administration options

ILM support

- Automatically manage indices over time
- Editable in Kibana
- Multiple ways to get started
 - ILM default policy
 - Manual ILM



Default APM ILM Policy

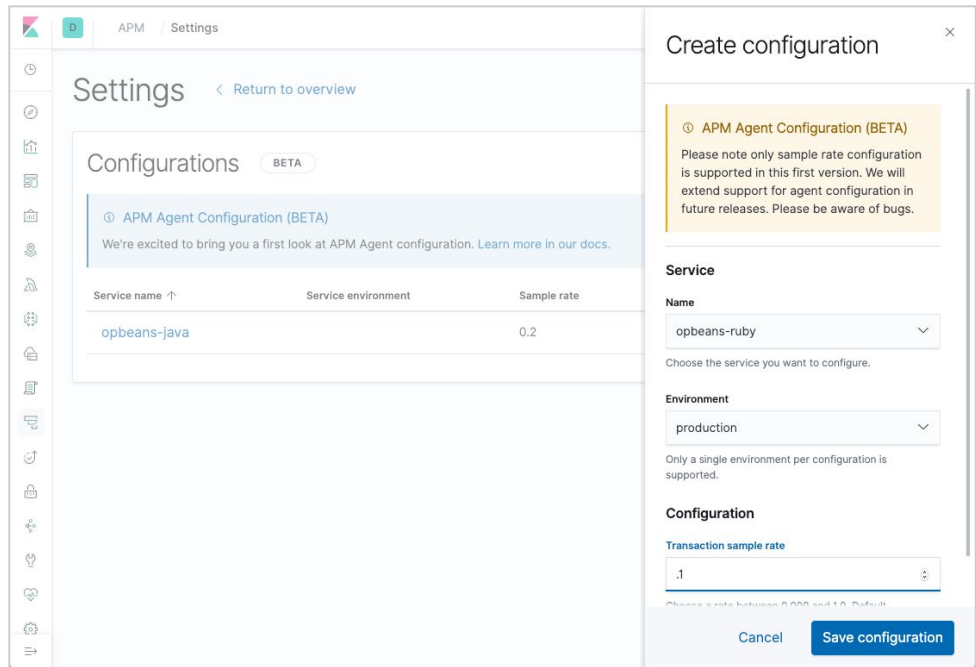
[Info is available on docs](#)

Event type	Hot	Warm
Errors & Spans	Rollover: <code>max_size: 50gb</code> , <code>max_age: 1 day</code> , <code>priority: 100</code>	<code>min_age: 7 days</code> , <code>readonly</code> , <code>priority: 50</code>
Transactions & Metrics	Rollover: <code>max_size: 50gb</code> , <code>max_age: 7 days</code> , <code>priority: 100</code>	<code>min_age: 31 days</code> , <code>readonly</code> , <code>priority: 50</code>

Agent Configuration right from Kibana!

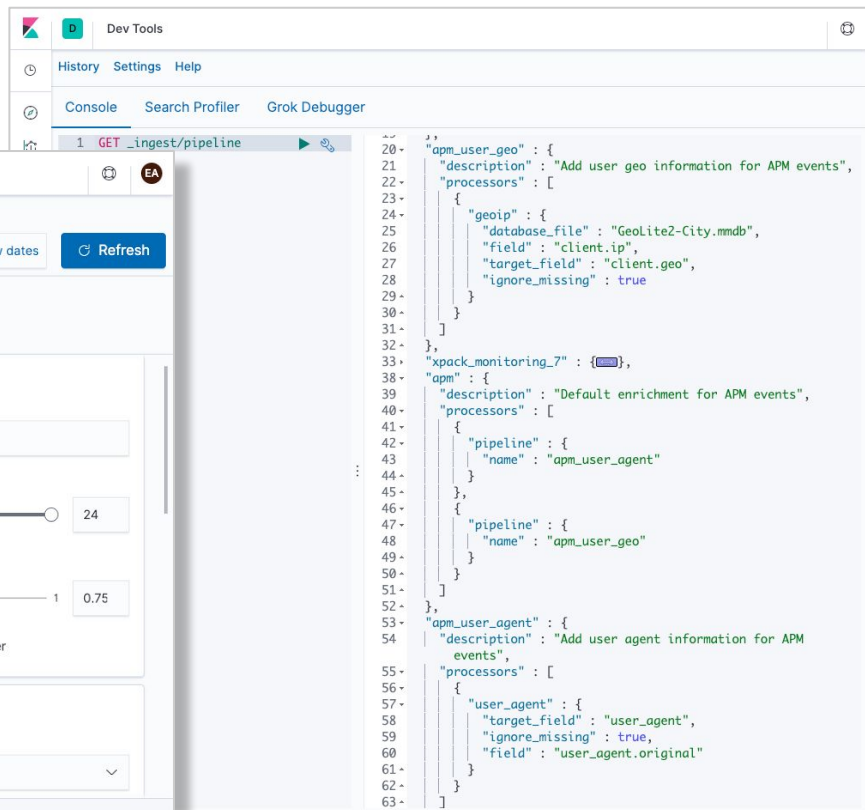
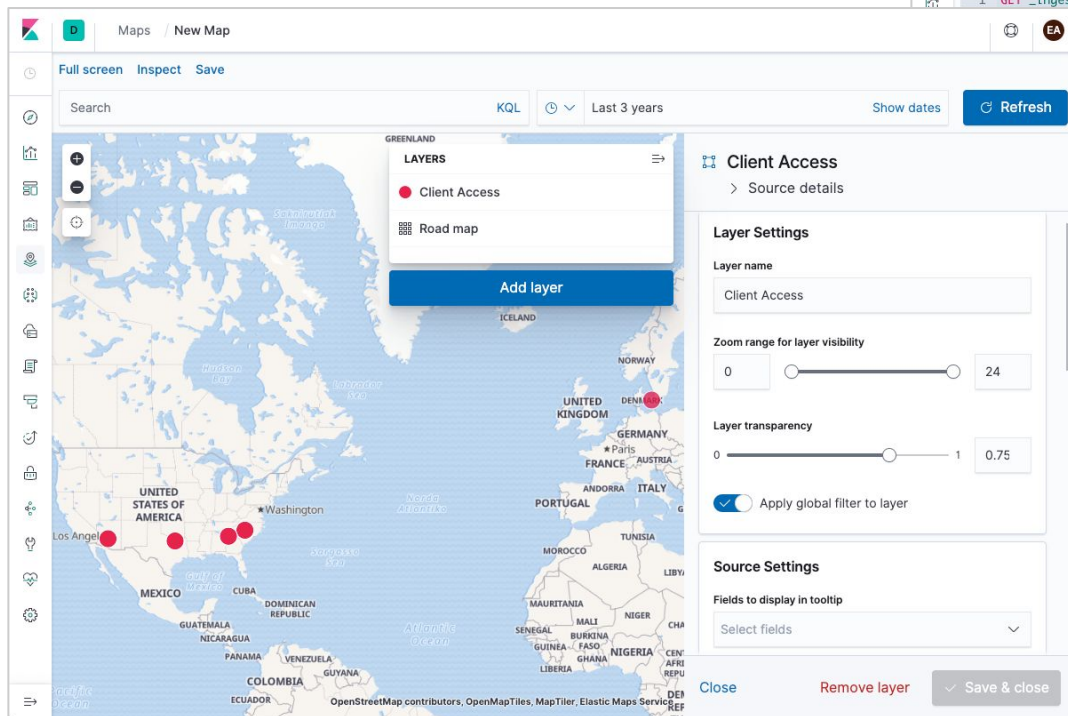
Sample rate configuration

- Per-agent sample rate config
 - 0 - 1.0
 - Default is 1.0
- Environment Selector
 - Allows different rates for services in different envs
- **Errors** are *always* captured no matter sample rate



GeoIP & User Agent pipelines

Enabled by default



The background is a solid blue color, decorated with numerous small, colorful confetti pieces. These pieces include yellow stars, green squares, white circles, and orange plus signs, scattered across the entire surface.

Tour Time!



Thank You

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- Forums : <https://discuss.elastic.co/>
- Community : <https://www.elastic.co/community/meetups>
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Questions?
