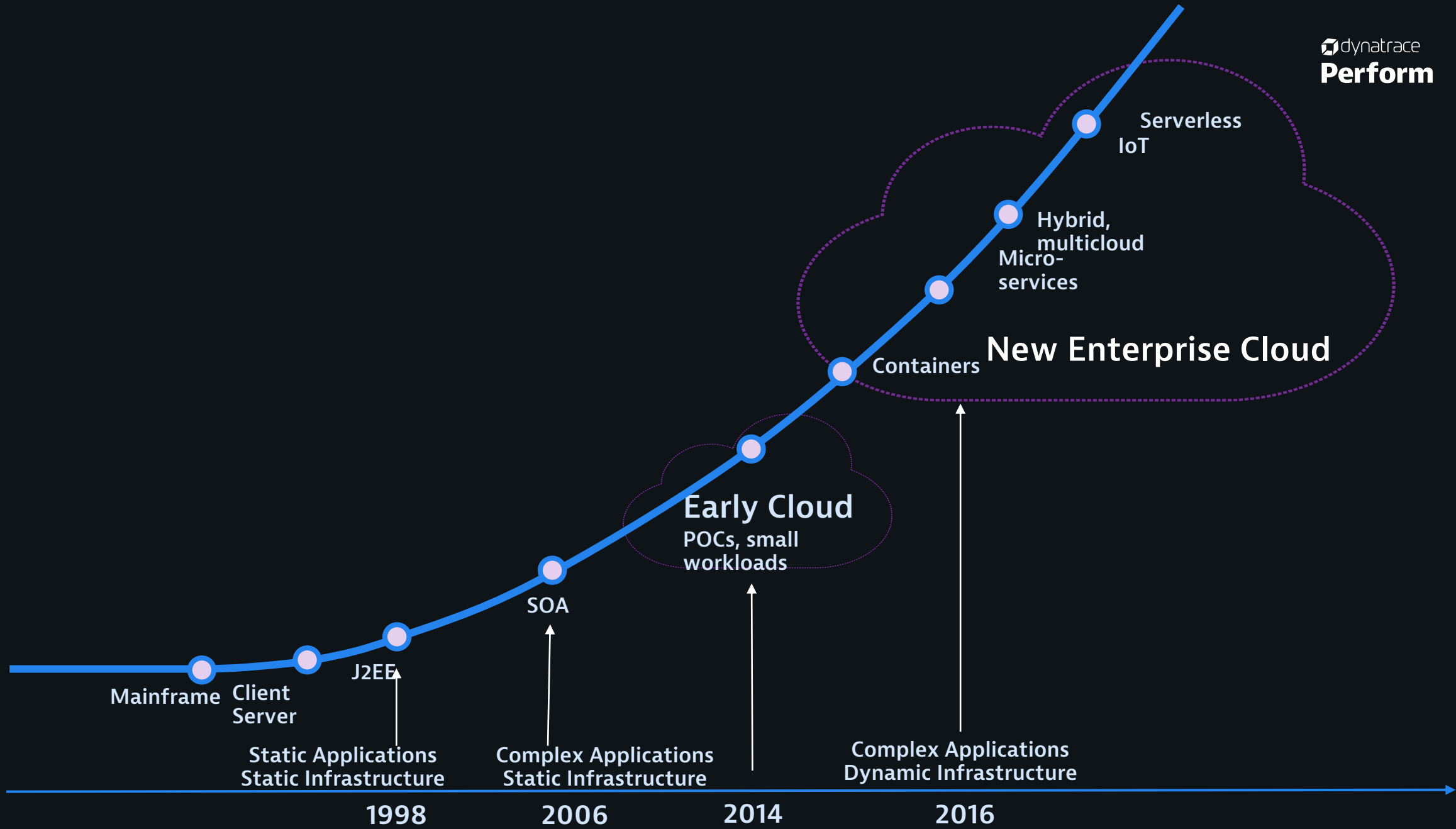


Go beyond APM with Software Intelligence for the enterprise cloud

Steve Tack, SVP Products

 dynatrace
Perform

Beyond APM



**Convergence of
Apps and Infra**

**Automation at
web-scale**

**DevOps & new org
collaboration**

**Digital experience as
true ROI measure**

Go beyond APM with the Dynatrace all-in-one platform



Application
performance monitoring



Cloud infrastructure
monitoring



AIOps



Digital experience
management

Software Intelligence Platform

Database
easyTravelBusiness (Derby Client)

017 /min	297 /min	1ms	5100	2	6
Transactions	Statements	Response time	Web	Messaging	RMI/Custom
			100		
Transactions	Statements	Response time	Web		

Product news

What's new – Product updates & new feature announcements

[Show all categories](#)



Dynatrace Managed feature update, Version 1.160

January 23, 2019

Wolfgang Schreiner



Get ready for extended container-monitoring capabilities

January 21, 2019

Alois Mayr



Extend native Cloud Foundry support with BOSH Process Manager (bpm) monitoring (Beta)

January 21, 2019

Alois Mayr



OneAgent & ActiveGate release notes (version 1.159)

January 21, 2019

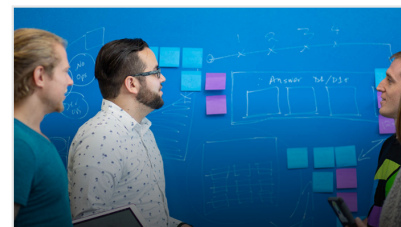
Bartek Gatz



Improved host memory metrics now include Reclaimable memory

January 21, 2019

Bartek Gatz



Get automatic code-level insights into your Go applications and cloud platform components

January 17, 2019

Gernot Reisinger





all-in-one



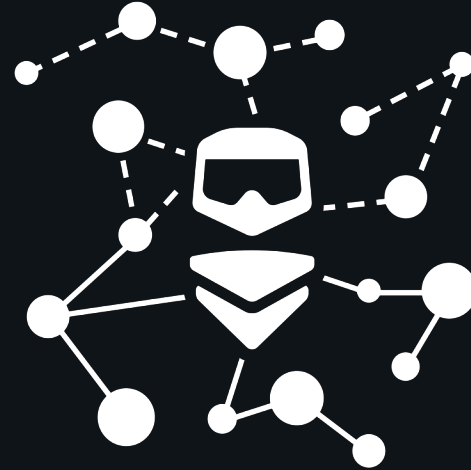
end-to-end



enterprise-grade



all-in-one

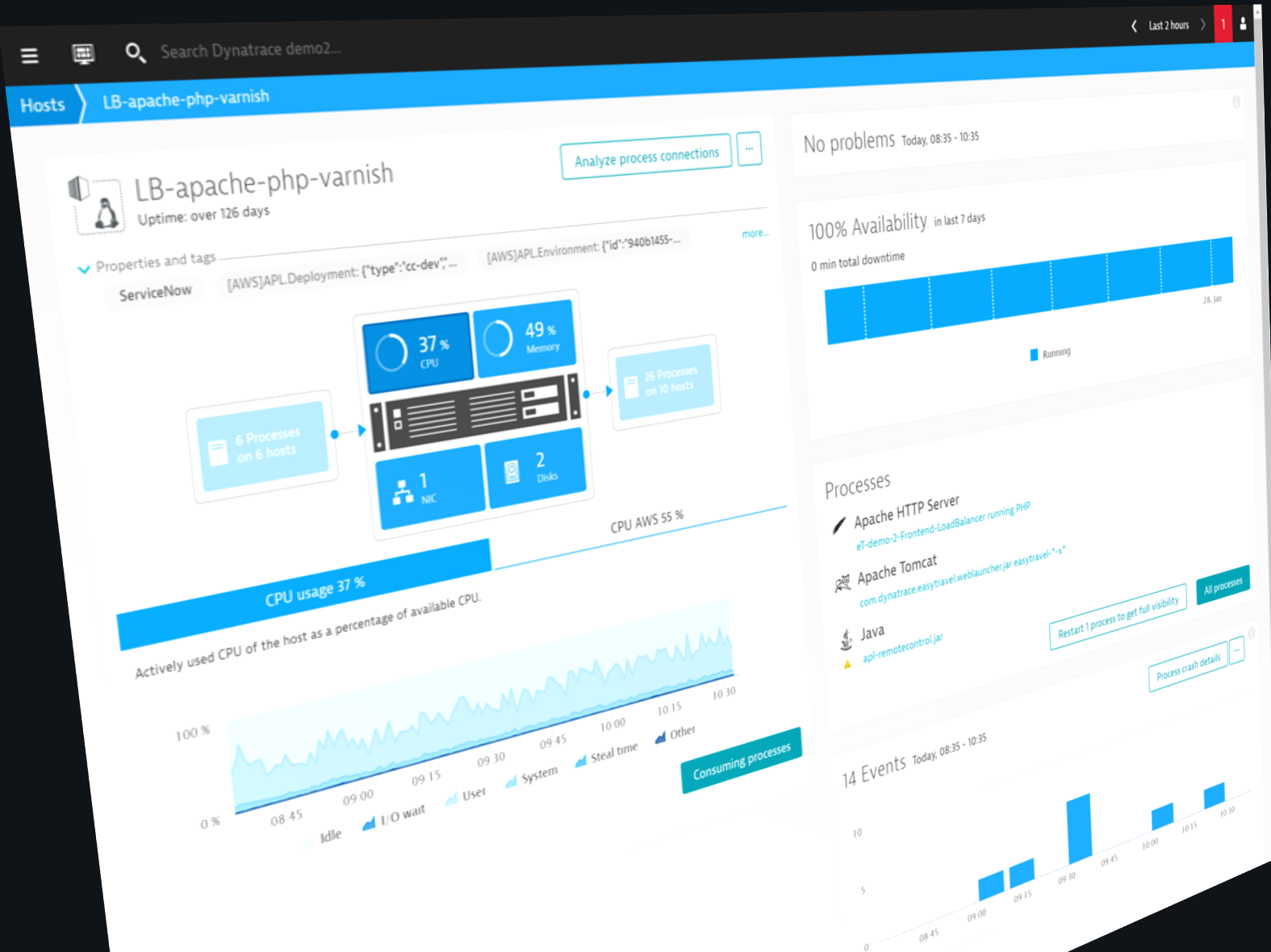


end-to-end



enterprise-grade

AI-powered cloud infrastructure monitoring



Plugins

Log ingestion

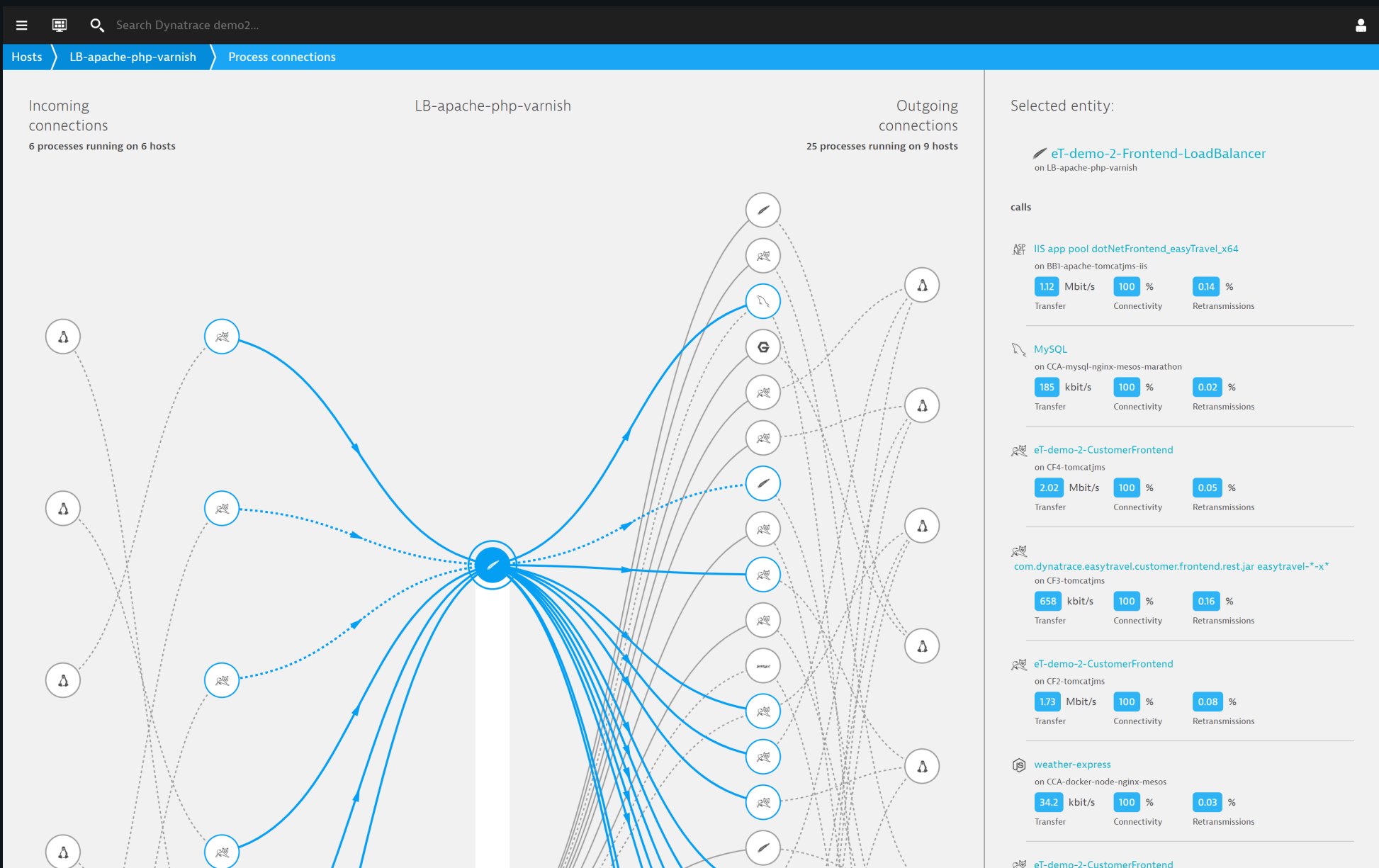
Processes

Containers and orchestration

Hosts

Cloud and virtualization

Process health and communication, built for cloud



Log entry problem analysis in-context

☰
🔍 Search Dynatrace demo2...
📄 Problem 408: Jan 27, 19:58 - 20:27
👤

Problems > Problem 408 > Log Analytics > Log files

Log viewer

Here you can browse through the contents of individual process log files or search selected log files using keywords and filtering. Search queries can be saved and reused later. Log results can be returned in either raw or aggregated form. Please note that only hosts or process groups active during selected time frame will be shown.

Search for text pattern in selected log files using [advanced query language](#) (or leave blank to return all results):

☆

Selected log files:

📄 couch.log on CouchDB_ET running on CouchDB selected
Change selection

Define event
Download log files
Display log

View chart by log level ▼

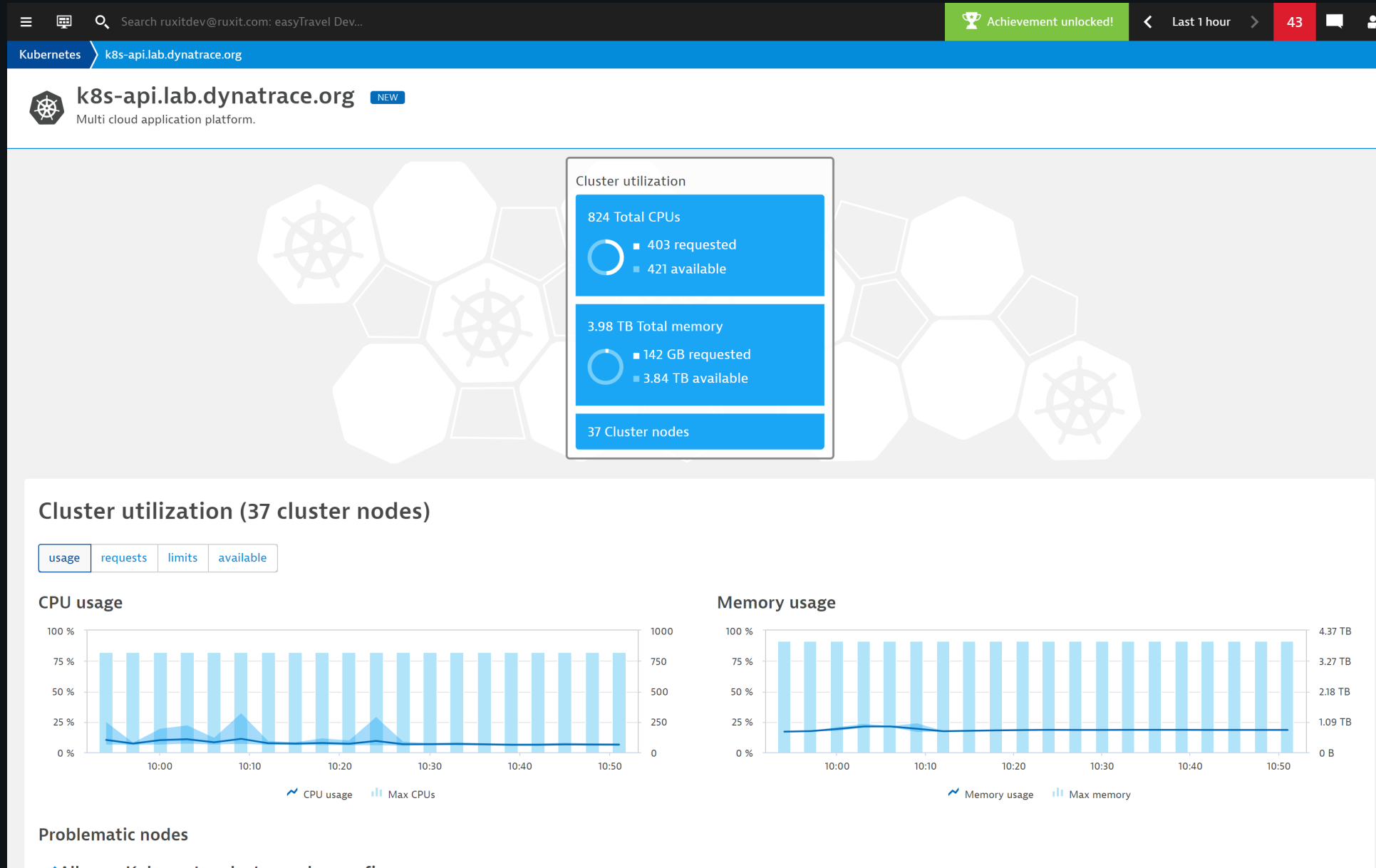
← Share
Export results

Other

> Configure column display BETA

.Timestamp ▲	.Content	⋮
2019-01-27 20:01:48 GMT-05:00	[Mon, 28 Jan 2019 01:01:48 GMT] [error] [<0.20677.1>] OS Process Error exit value: {system_limit, [{erlang, spawn_link, [erlang, apply, [#Fun<shell.1.103280319>, [], []], {erlang, spawn_link, 1, [{file, "erlang.erl"}, {line, 2208}]}], {shell, get_command, 5, [{file, "shell.erl"}, {line, 298}]}], {shell, server_loop, 7, [{file, "shell.erl"}, {line, 229}]}]}	⋮

PaaS platform and component monitoring



PaaS platform and component monitoring



Search ruxitdev@ruxit.com: easyTravel Dev... Achievement unlocked! Last 1 hour 43

Kubernetes k8s-api.lab.dynatrace.org Node analysis

Kubernetes nodes analysis NEW

of k8s-api.lab.dynatrace.org environment. Analyze performance of cluster nodes.

Show CPU usage requests limits available

Time	CPU available (%)	Max CPUs
09:55	90	1000
10:00	88	1000
10:05	85	1000
10:10	88	1000
10:15	85	1000
10:20	88	1000
10:25	90	1000
10:30	88	1000
10:35	85	1000
10:40	88	1000
10:45	85	1000
10:50	88	1000
10:55	85	1000

0 Nodes with open problems

✓ All your Kubernetes cluster nodes are fine.

37 Nodes

Node	Status	CPU usage	CPU requested	CPU limits	Memory usage	Memory requested	Memory limits	Details
ls-ub-h05.dynatrace.vmta	Ready	0%	48 CPU	82 CPU	0%	4 GB	8 GB	✓
ls-ub-h03.dynatrace.vmta	Ready	0%	100 mCPU	300 mCPU	0%	104 GB	115 GB	✓
gr-ub-h06.lab.dynatrace.org	Ready	0%	100 mCPU	300 mCPU	0%	512 MB	1.5 GB	✓
ls-ub-h13.dynatrace.vmta	Ready	0%	9.85 CPU	300 mCPU	0%	512 MB	1.5 GB	✓
ls-ub-h07.dynatrace.vmta	Ready	0%	10.1 CPU	40.3 CPU	0%	512 MB	1.5 GB	✓
ls-ub-h01.dynatrace.vmta	Ready	0%	2 CPU	6 CPU	0%	5 GB	6.75 GB	✓

stay tuned for more on DEM tomorrow...



all-in-one

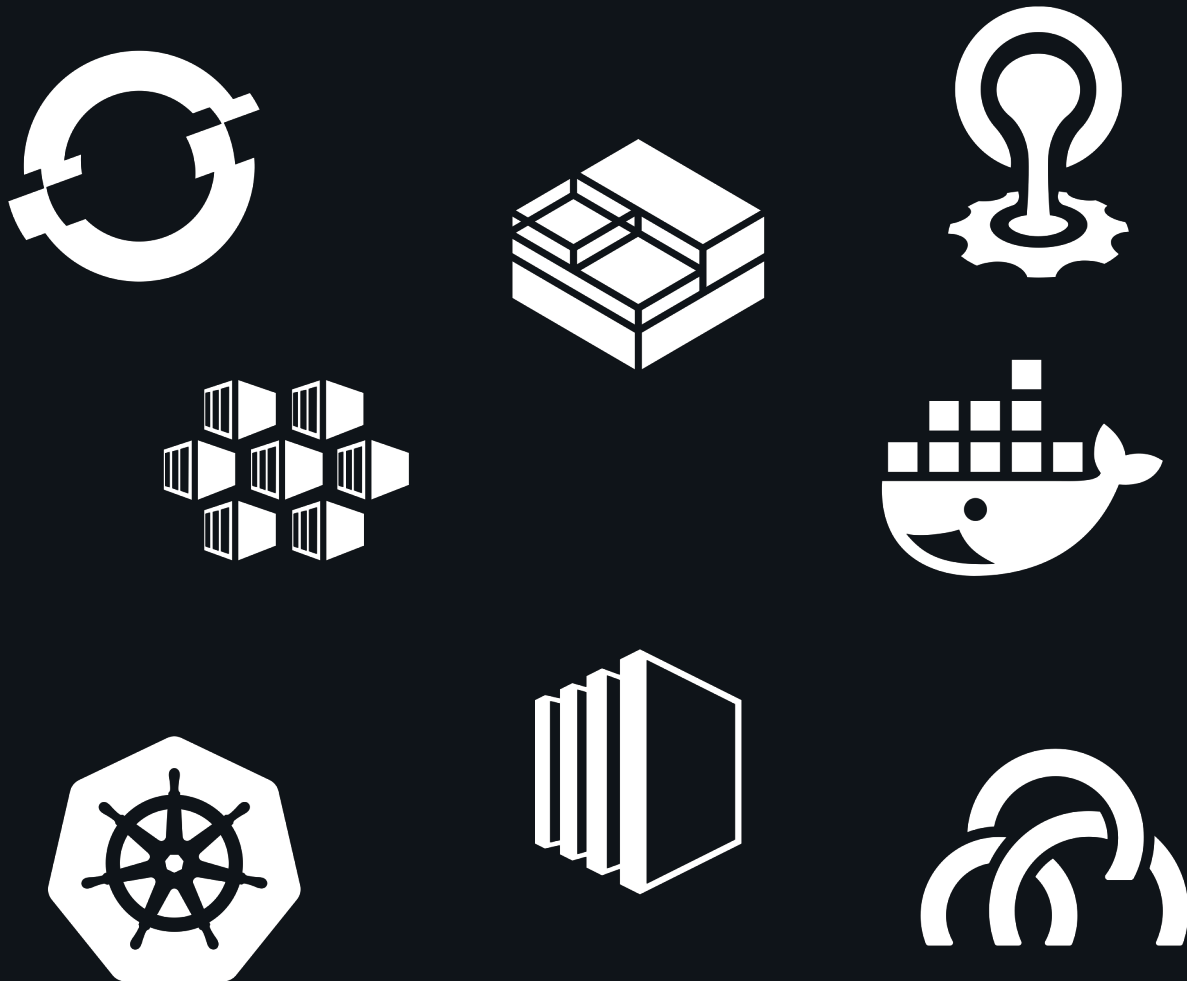


end-to-end



enterprise-grade

Modern container monitoring



Settings > Processes and containers > Container monitoring

Settings

- Monitoring Setup and overview ▼
- Processes and containers Detection and naming ▲
 - Processes
 - Process group monitoring
 - Process group detection
 - Process group naming
 - Containers
 - Container monitoring**
- Web & mobile monitoring Real user & synthetic monitoring ▼
- Cloud and virtualization Connect vCenter, Azure, Cloud Foundry, K... ▲
- Overview
- AWS
- VMware
- Azure
- Cloud Foundry
- Kubernetes

Container monitoring

Dynatrace OneAgent automatically monitors all processes that are running on your monitored hosts. Within container environments (for example, Kubernetes, OpenShift, Cloud Foundry, or Docker), OneAgent automatically injects code modules into containers to provide out of the box full-stack visibility into applications running within containers. Dynatrace provides complete control over automatic injection of code modules into the container technologies listed below. For full details see [Supported container versions](#).

▼ Automatic container injection for deep monitoring

Enable/disable automatic injection of code modules into specific containers. Enabling injection provides deep monitoring for all processes within containers, at both the re... and PurePath levels. [More...](#)

Container technology _____

- Docker containers
- Docker for Windows Server containers
- Garden containers
- BOSH Process Manager (BPM) containers

Serverless and function insights

☰
🔍 Search Dynatrace demo2...
🏠
👤

Transactions & services > demo2WeatherBackend in us-east-1

demo2WeatherBackend in us-east-1

Last call 4 minutes ago

Smartscape view

⋮

i

▼ Properties and tags

0
Applications

4.17 /min
Throughput

1
Service

1
Service

▶

7 Node.js

▶

0
Databases

Requests

Response time

233 ms

Failure rate

0 %

CPU

5.19 ms/req

Throughput

4.17 /min

View requests

☰
🔍 Search Dynatrace demo2...
🏠
👤

Transactions & services > demo2WeatherBackend in us-east-1 > Details > PurePaths > PurePath

'demo2WeatherBackend in us-east-1' PurePath

Start time
2019 January 27 20:26:02

Response time
1.83 s

Total processing time
200 ms

Breakdown of PurePath processing time

- 194 ms other
- 5.71 ms CPU time

Top findings
 1 third party resource consuming 1.73 s

i

🔍 Search name, url, sql, attribute,...

✓ invoke
demo2WeatherBackend in us-east-1
🌐 https://dynamodb.us-east-1.amazonaws.com/
Requests to public networks

invoke

Summary
Timing

🔍 Search name, url, sql, attribute,...

- ✓ asynchronous execution of exports.handler
/var/task/app.js
- ✓ → Asynchronous invocation
- ✓ 2 stack frames expand
- ✓ exports.handler
/var/task/app.js
- ✓ 71 stack frames expand
- ✓ exports.request
Object (https.js)
- ✓ → Asynchronous invocation
- ✓ asynchronous execution of exports.request
Object (https.js)
- ✓ ↺ Synchronous invocation

Cloud to the mainframe & everything in between

Transactions & services > Interaction with CICS on ET01 > Details > Backtrace

Service-level backtrace of requests of 'Interaction with CICS on ET01'

Today, 11:53 - 13:53 (2 Hours) Apply

Add filter

The services and applications listed below make calls to this service. The tree view represents the sequence of services and application user actions that led to this service call, beginning with the page load or user action in the browser that triggered the sequence. Click to see which specific requests and user actions called this service

Incoming requests to this service

IBM	Interaction with CICS on ET01 CICS-TOR		515 Requests 0 Failed requests	⌵ ...
IBM	CICS on ET01 CICS-TOR		515 Requests 0 Failed requests	⌵ ...
IBM	IBM MQ Queue Listener CICS-TOR		515 Requests 0 Failed requests	⌵ ...
	creditcardauthrequest on IBM MQ com.dynatrace.easytravel.business.backend.jar easyTravel (x*)		176 Requests 0 Failed requests	⌵ ...
	BookingService com.dynatrace.easytravel.business.backend.jar easyTravel (x*)		176 Requests 0 Failed requests	⌵ ...
	easyTravel Customer Frontend com.dynatrace.easytravel.customer.frontend.jar easyTravel (x*)		176 Requests 0 Failed requests	⌵ ...
	EasyTravelWebserver:8079 Apache Web Server easyTravel		176 Requests 0 Failed requests	⌵ ...
	easytravel Application		139 User actions	⌵ ...

User actions from easytravel

Loading of page /orange-booking-finish.jsf		137 User actions	⌵ ...
http://apm-et-mf.dtwlab.dynatrace.org:8079/orange-booking-payment.jsf		1 User action	⌵ ...
http://apm-et-mf.dtwlab.dynatrace.org:8079/orange-booking-finish.jsf		1 User action	⌵ ...

Analysis of easytravel user actions





all-in-one



end-to-end



enterprise-grade

Manage web-scale with ease

Mgmt. Zones

Edit management zone

Management zone name
pcf-org:easytravel

[Add new rule](#)

Active	Rule
<input checked="" type="checkbox"/>	Services tagged with 'org:easytravel'

Rule applies to Services of the following process group, service type, technology, and topology

Rule applies to entities matching the following properties

All process groups ▼ All service types ▼

All technologies ▼ All service topologies ▼

Conditions

Service tags ▼ exists in collection ▼

org ▼

Host Groups

ip-172
Uptime: 0

[Edit](#) [...](#)

Properties and tags

[Environment]HotDayTag [+ Add tag](#)

Red Hat Enterprise Linux Server 7.4 (Maipo) (kernel 3.10.0-693.11.6.el7.x86_64)

Instance type	t2.medium
Availability Zone	us-west-2a
AMI ID	ami-f30eb38b
Virtualization	Xen
Instance ID	i-0038763e313409c18
Private host name	ip-172-31-17-200.us-west-2.compute.internal
Security group	university-labs-perform2018-fynboh-rollingeffectively-g...
Host group	MyCustomHostGroup
OneAgent version	1.137.100.20180125-105516
Architecture	x86, 64-bit
Physical CPU cores	2
Logical CPU cores	2
Cloud	EC2
Public IP address	52.33.70.240
Private IP address	172.31.17.200
Monitoring mode	Full-stack
Host units	0.25

0 % CPU

28 % Memory

1 NIC

1 Disk

Tagging

[Add new rule](#)

Rule

Services on process groups where Owner (Environment) exists

Matching entities

Services(14) Process group... Hosts(1) Custom devic...

Name

- :80 easytravel-nginx
- :8080 easytravel-nginx

API-first design

Dynatrace cluster

Updates are fully automated and zero downtime

OneAgent roll-out

Zero-config and fully scriptable; automatic & secure updates

Configuration API

DevOps need automation scripts <config-is-code>

Multi tenancy

Auto-setup and configure thousands of environments



OPENAPI
INITIATIVE

API-first design

Dynatrace
Updates are
OneAgent
Zero-config
Configura
DevOps nee
Multi ten
Auto-setup

The screenshot displays the Dynatrace Environment API documentation page. At the top, the Dynatrace logo is on the left, and a dropdown menu labeled 'Select a spec' is set to 'Environment API'. The main heading is 'Dynatrace Environment API' with a '1.0' version indicator. Below the heading, there is a base URL: '[Base URL: demo.dev.dynatrace1abs.com/api/v1]' and a link to the OpenAPI spec: '/api/v1/spec2.json'. A paragraph of text provides documentation details and a link to a help page. An 'Authorize' button is located on the right side of the page. A list of API endpoints follows, each with a description and a right-pointing arrow:

- Anonymization** Remove sensitive user data from your sessions
- Cluster time** View the time of the Dynatrace server
- Cluster version** View the version of the Dynatrace server
- Deployment** Download OneAgent and ActiveGate installers
- Events** Manage events
- Host logs** Manage the analysis of operating system logs
- Maintenance window** Manage maintenance windows
- Problem** Manage problems and comments to them
- Process group logs** Manage the analysis of process group logs
- Synthetic** Manage synthetic monitors, locations, and push external synthetic data to Dynatrace
- Threshold** Manage thresholds
- Timeseries** Manage metrics

API
E

Deterministic answers for automation and self-healing

Continuous Delivery



Application Platforms



Cloud Platforms



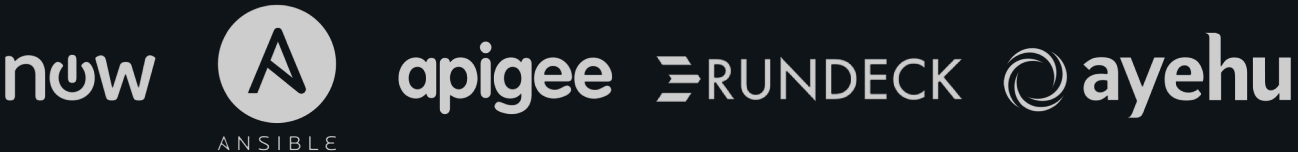
Version Control



Testing Platforms



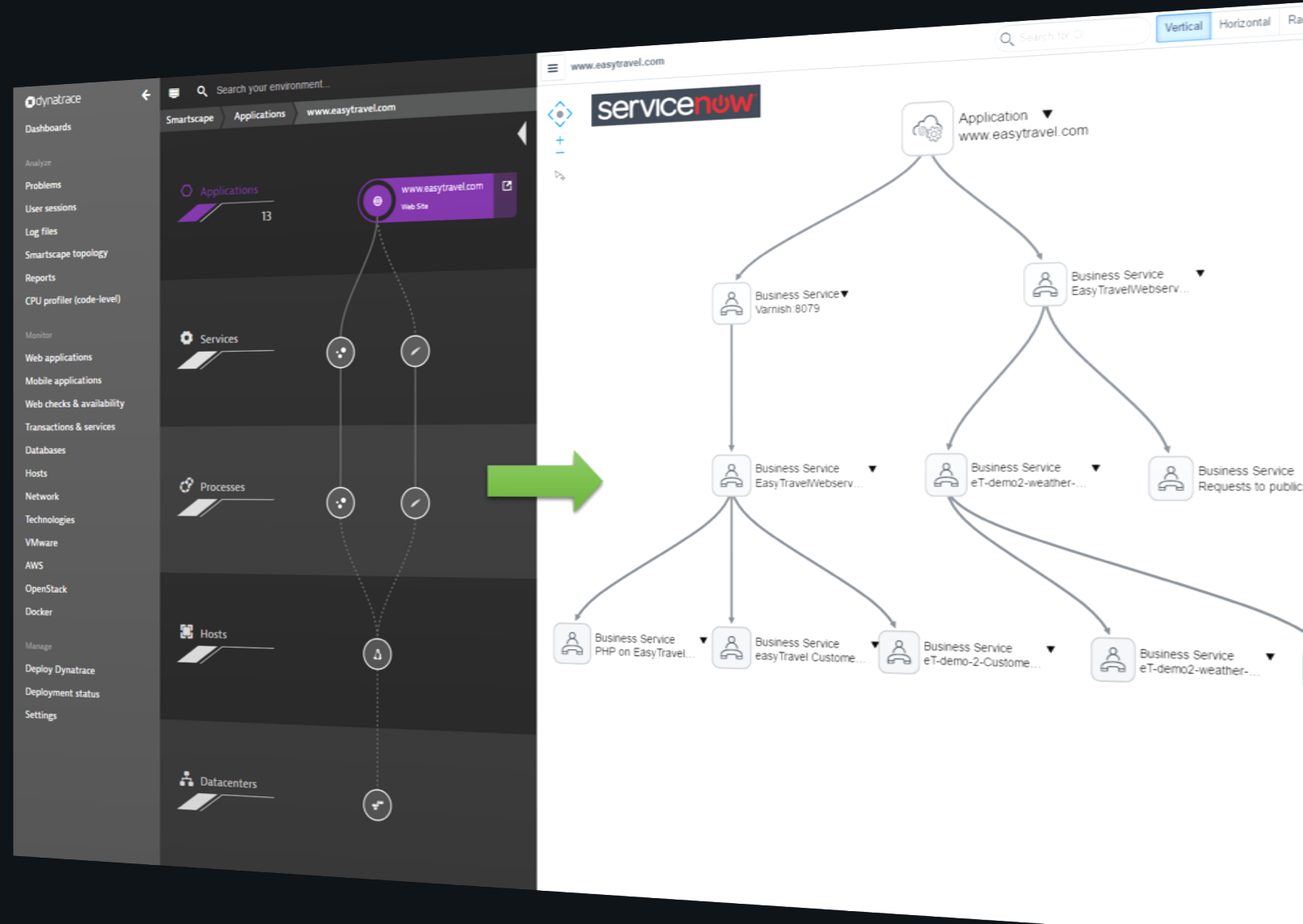
Runbook Automation



Collaboration



Put your IT Operations on auto-pilot



Secure and compliant above all else

High availability

FIPS 140-2

GDPR

HTTPS/TLS

Multi-data center

**Management
Zones**

Segmentation

SSO

Democratize information

Performance breakdown

Timeframe: Last 2 hours Management zone: easyTravel Owned by roman.windischhofer@ruxit.com

Overall health

Problems

1

Application health



All fine 4

Service health



All fine 6

Host health



All fine 2

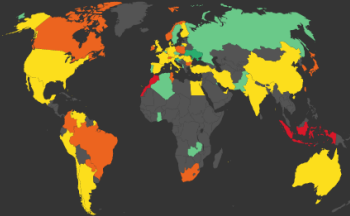
Database health



User behavior

Worldmap (Apdex)

easytravel.lab.dynatrace.org | most activ...



Live user activity



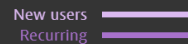
183

Live users



42

Live locations



Top applications by live users

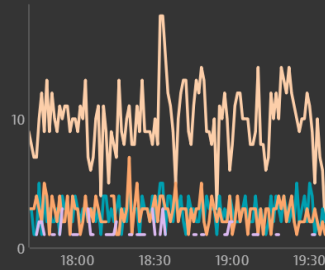
easytravel...natrace.org	133
easytravel...natrace.org	33
easytravel...natrace.org	12

Top converting apps



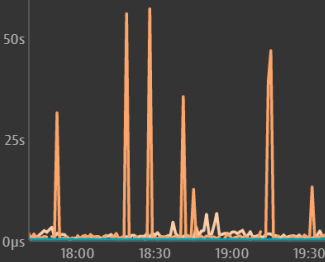
Frontend

Active user sessions



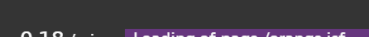
Active sessions (Count)

Visually complete for load actions



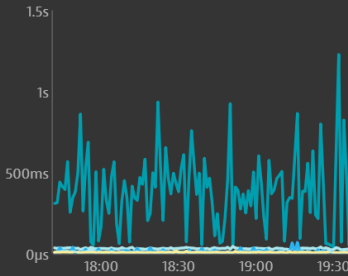
Visually complete for load actions (Median)

Most affected user actions by JavaScript errors



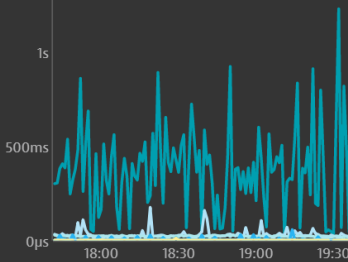
Backend

Client side response time



Client side response time

Server side response time



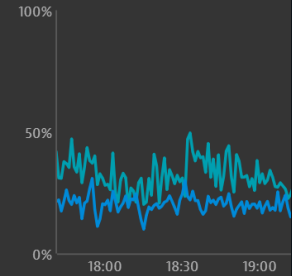
Server side response time

Failure rate



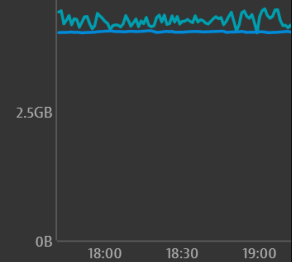
Infrastructure & network

Host CPU usage



CPU usage

Host memory usage



Memory Used

Network metrics



business KPIs
single-value metrics
timeframe compares

Demo Dashboard

host.example.org

80.7%

CPU usage (Average)

Service | Go Metron frame custom service

80.7%

Requests

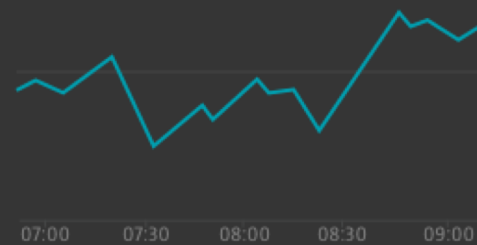
70%

Failure Rate

Host 1

80.7%

Average



Service | Go Metron frame custom service

4.8 k/min

Requests



Service | Go Metron frame custom service

4.8 k/min

Requests

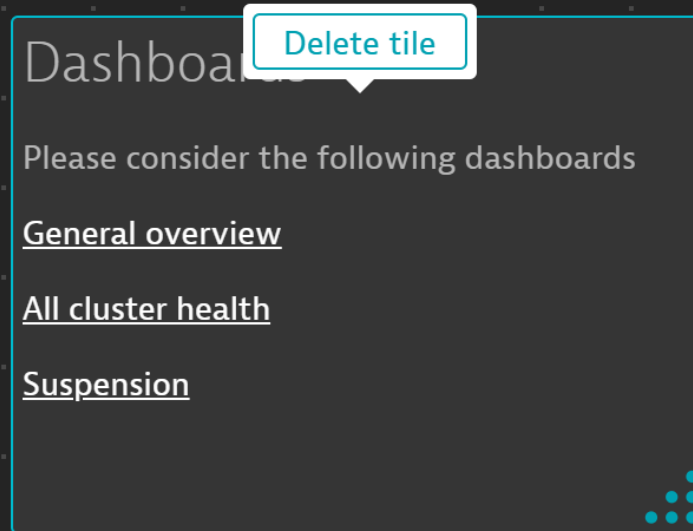
50%

Failure Rate

8.8 ms

Response Time

Personalize, drive workflow and more



Markdown

Done

Markdown enables you to put rich text on a dashboard.

```
#Dashboards
```

```
Please consider the following dashboards
```

```
[General overview]
```

```
(https://demo.dev.dynatracelabs.com/#edit;gtf=1_2_HOURS;id=0193ca81-bf21-4cf5-bf94-e15b64eafe80)
```

```
[All cluster health]
```

```
(https://demo.dev.dynatracelabs.com/#edit;gtf=1_2_HOURS;id=0193ca81-bf21-4cf5-bf94-e15b64eafe80)
```

```
[Suspension]
```

```
(https://demo.dev.dynatracelabs.com/#edit;gtf=1_2_HOURS;id=0193ca81-bf21-4cf5-bf94-e15b64eafe80)
```

Timeframe Mode

Use default timeframe

Use comparison timeframe


Increase the Dynatrace audience

Mo, 28.01.2019 01:03

DT Dynatrace team <no-reply@dynatrace.com>
Custom report <Application overview> - week 4


To: Zahrer, Peter

! If there are problems with how this message is displayed, click here to view it in a web browser.



Your custom report is ready

Application overview



[View complete report online](#)

Application overview

Overall health

Problems: 1

Application health: All fine 4

Service health: All fine 6

Host health: All fine 2

Database health: 0

User behavior

Worldmap (Apdex)
easytravel.lab.dynatrace.org | most activ...

Live user activity: 224 Live users, 45 Live locations

New users: Recurring

Top applications by live users:

easytravel...natrace.org	156
easytravel...natrace.org	42

Frontend

Slowest applications:

1.38 s	easytravel.lab.dynatrace.org
1.3 s	easytravel-ang.lab.dynatrac...
301 ms	easytravel-bf.lab.dynatrace....
175 ms	easyTravel AMP

Visually complete for load actions

Response time

Most affected user actions by JavaScript errors:

0.23 /min	Loading of page /orange.jsf
0.21 /min	click on "Book Now"
0.12 /min	Loading of page /privacy-or...

Dashboard

Clone

Share

Subscribe

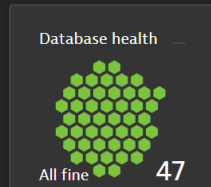
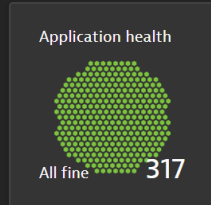
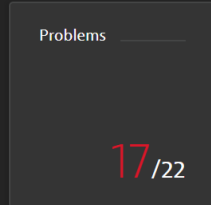
Delete

Democratize information

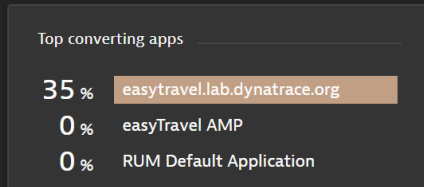
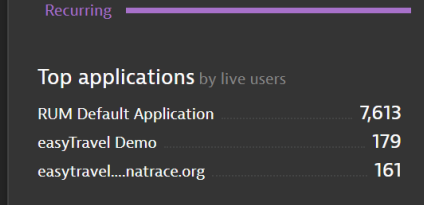
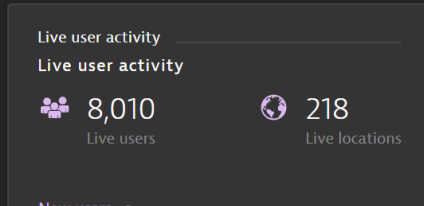
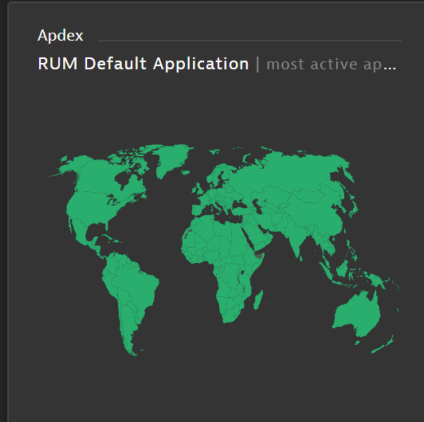
New Home

Edit ⋮

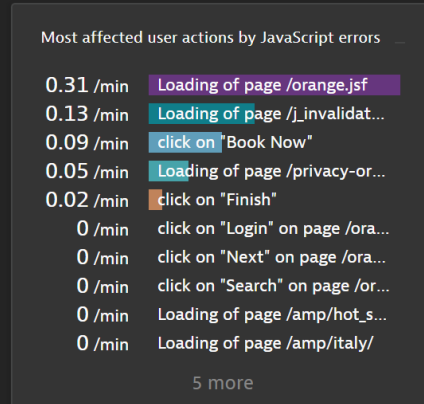
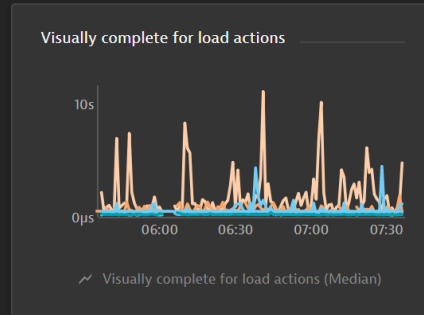
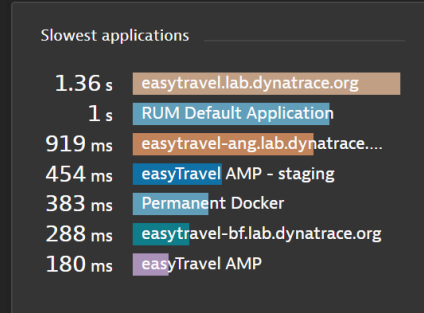
Overall health



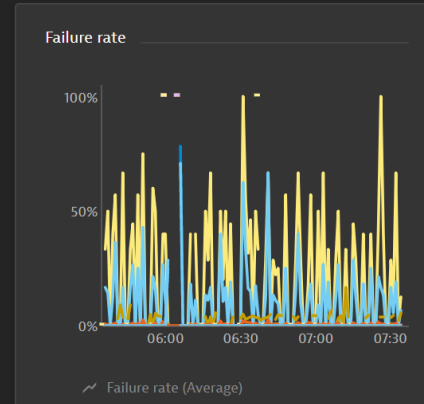
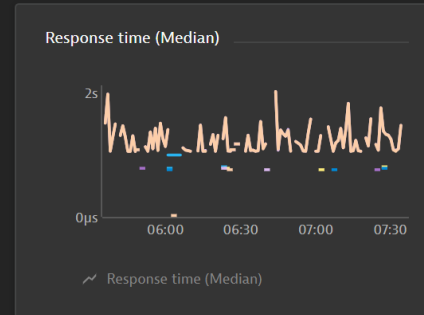
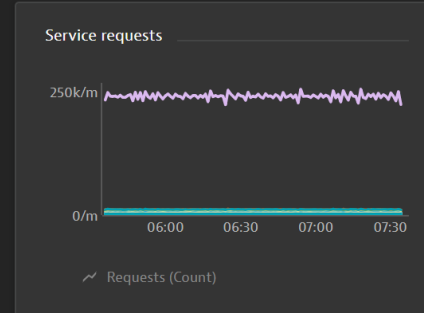
User behavior



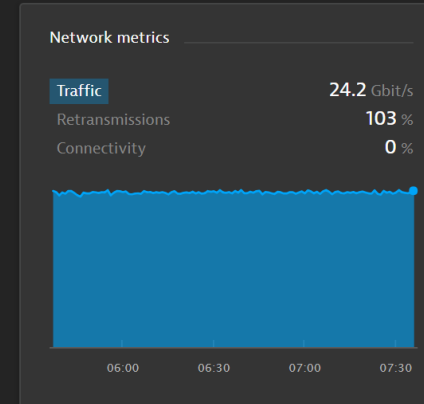
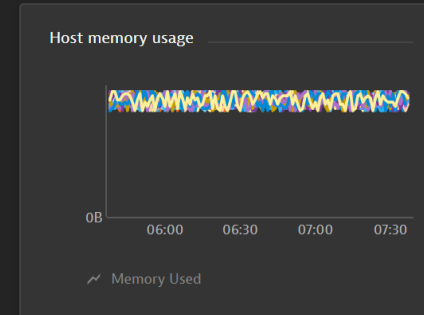
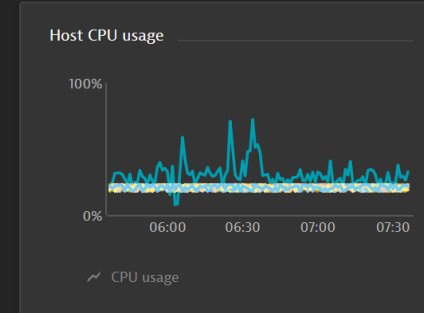
Frontend



Backend



Infrastructure & network





all-in-one







end-to-end



enterprise-grade

Go beyond APM with Dynatrace

 Application performance management		
Microservices & containers Lifecycle analytics	Code-level Transaction tracing	Database monitoring Monolith and mainframe
 Cloud infrastructure monitoring		
Cloud monitoring Container monitoring	Virtualization monitoring Server monitoring	Network monitoring Log monitoring
 AIOps		
Continuous auto-discovery Automatic topology	Anomaly detection Root cause analysis	Prediction Third party data & metrics
 Digital experience management		
Real user monitoring Session replay	Mobile app monitoring Synthetic monitoring	RUM for SaaS vendors Digital experience insights

All-in-one software intelligence platform.

Thank you

 dynatrace
Perform