

# Dynatrace Digital Experience Innovation and Roadmap

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Digital Experience Monitoring (DEM) news, highlights and next innovations

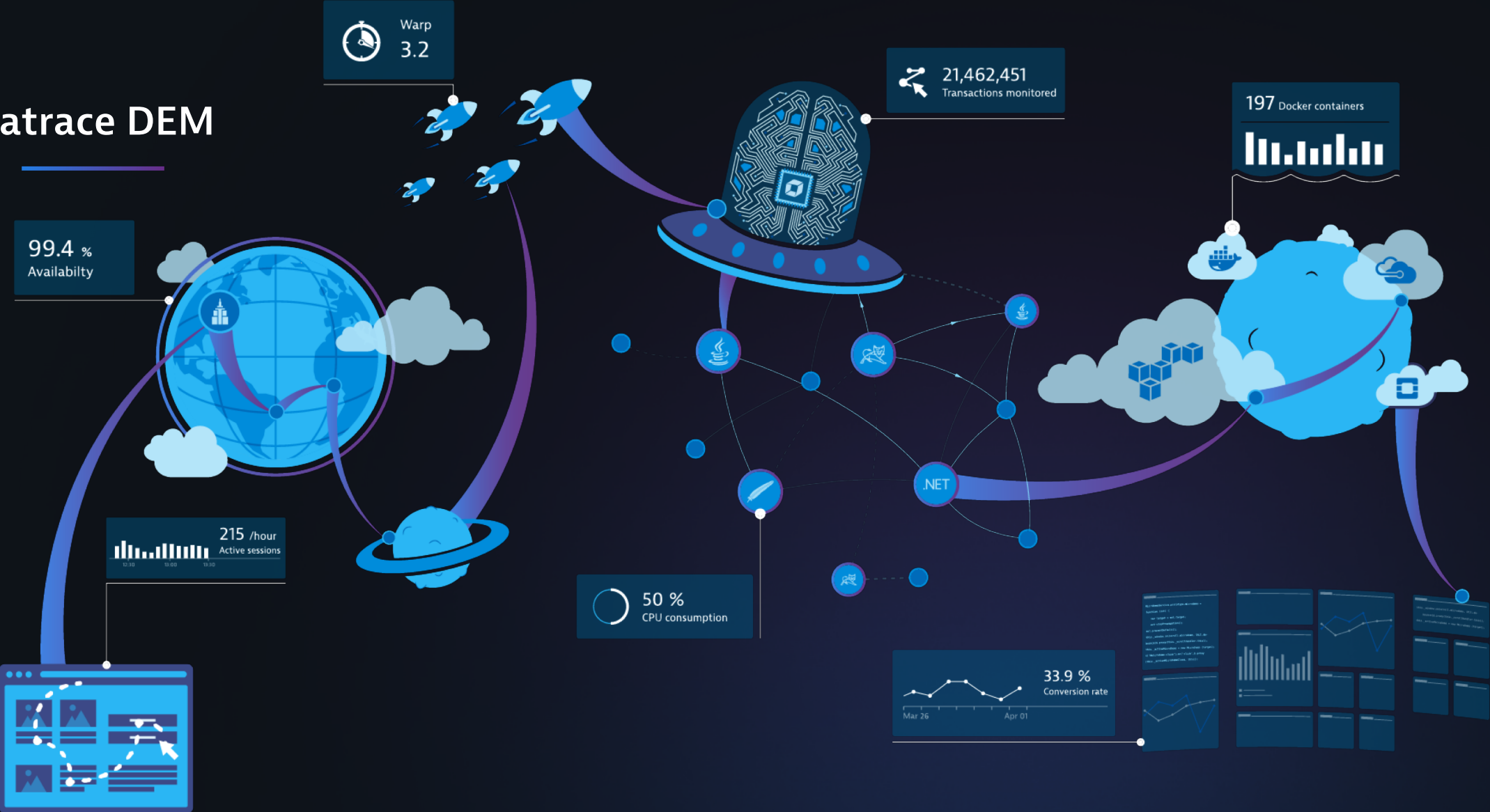


**Alex Sommer**

Sr. Director Product Management,  
Dynatrace



# Dynatrace DEM





DEM

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Enterprise Scale ◀

Modern &  
Complete

Analytics & AI

Beyond APM

## Scale – support more user actions and user sessions

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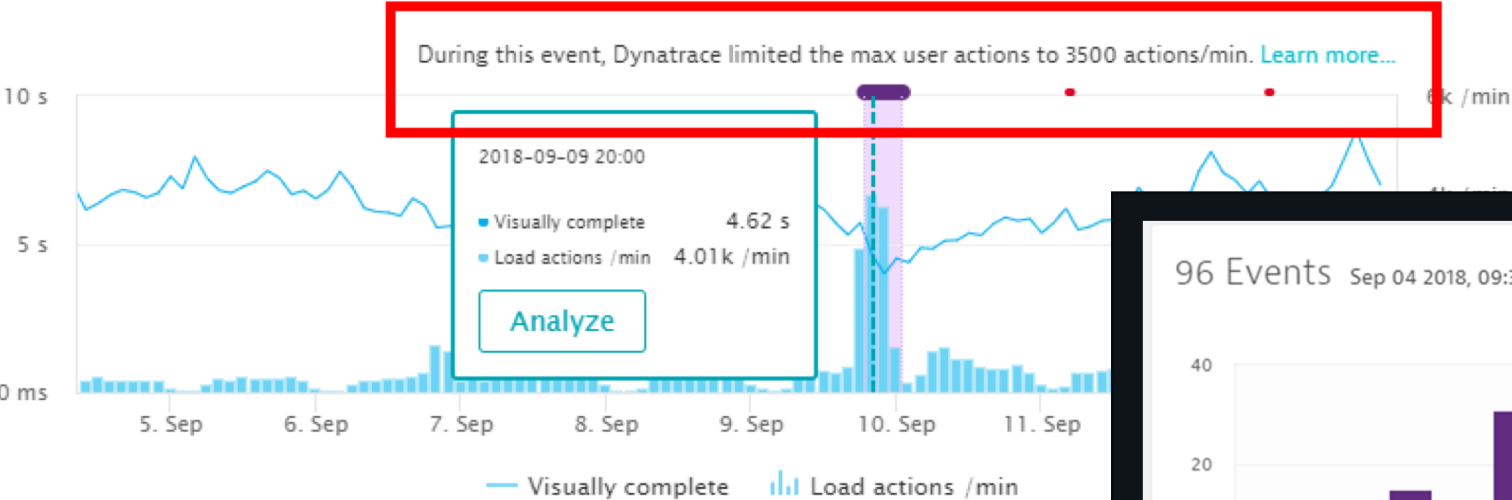
- Traffic numbers
  - Today: Dynatrace supports 4k ua/sec on one cluster
  - Planned - end of Q3: support for 8k ua/sec on one cluster
- Max number of applications per environment (tenant)
  - Today:
    - SaaS 250, Managed 500
  - Planned - end of Q2:
    - SaaS & Managed: 1000
- Traffic control
  - to protect our SaaS environment
  - or your managed clusters (not turned on by default)



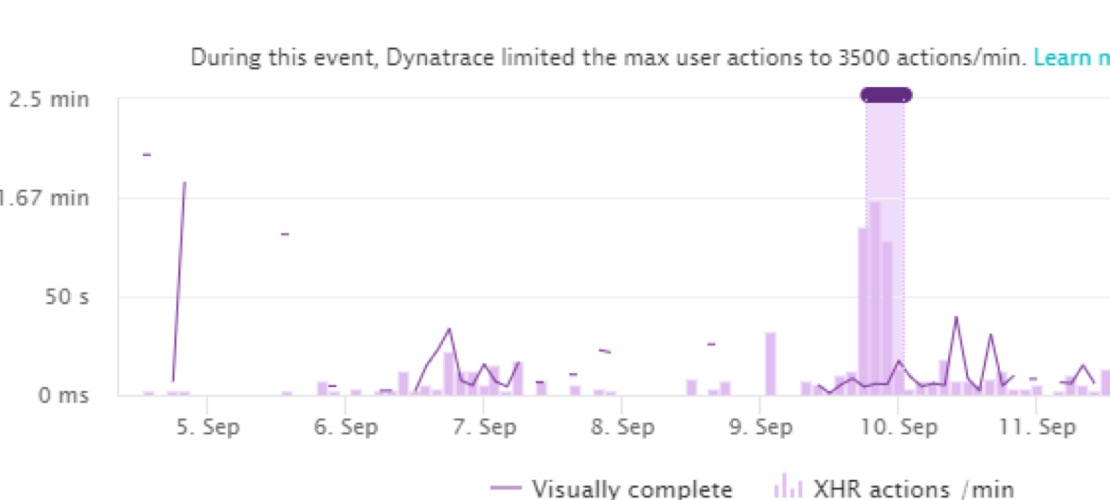
# Impact of user actions on performance

To view the details of individual user actions, click specific time intervals in the charts below. Then click Analyze.

Load actions Median Slowest 10% Fastest 10%



XHR actions Median Slowest 10% Fastest 10%



## 5 Problems Sep 04 2018, 09:38 - Sep 13 2018, 09:38

↻ Frequent issues: User action duration degradation  
Dynatrace reports recurring problem patterns as "frequent"

### 96 Events Sep 04 2018, 09:38 - Sep 13 2018, 09:38



- 86 JavaScript error rate increased
- 9 User action duration degradation
- 1 Max user actions per minute exceeded

Events Time Details

Max user actions per minute exceeded Sep 09 2018, 18:30

Entity www.\*\*\*

Time Sep 09 2018, 18:30 - Sep 10 2018, 00:45 (6 h 14 min)

Max user actions per minute 3500 actions/min

Learn more <https://www.dynatrace.com/support/help/shortlink/max-user-actions-per-minute-exceeded>



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## SaaS – monitor your SaaS applications

- If you can't add our RUM JavaScript tag to the SaaS application
- Use our browser extension

Deploy Dynatrace > Monitoring via browser extension

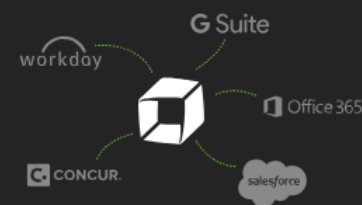
### Set up monitoring via browser extension

For applications where you can't install OneAgent and also don't have access to the HTML you can use the Dynatrace browser extension to enable real user monitoring.



#### 1. Install browser extension

Install the browser extension locally and [learn how to deploy the browser extension company wide](#)



#### 2. Configure applications

Choose which application you want to monitor with the extension.



#### 3. Start monitoring

Monitor all user sessions and the performance of your application

Set up monitoring



Dashboards & reports

Dashboards

Create custom chart

Reports

Analyze

Problems

User sessions

Log files

Smartscape topology

Diagnostic tools

Monitor

Applications

Synthetic

Transactions & services

Databases

Hosts

Network

Technologies

VMware

AWS

Azure

Docker

Cloud Foundry

Manage

Deploy Dynatrace

Deploy Dynatrace

Monitoring via browser extension

Create new application

# Create new application

## 1. Install browser extension

Install the browser extension and provide the configuration URL. [Learn how to deploy the browser extension company wide.](#)

Google Chrome

Firefox

Microsoft Edge

Dynatrace browser extension is already installed.

URL used by the browser extension to fetch the configuration

https://[redacted]/api/v1/browserextension/config?Api-Token=[redacted]

Copy

Firefox & Edge  
within next 3  
weeks

Firefox Add-ons

Dynatrace Real User Monitoring by Dynatrace LLC

This extension allows you to monitor (SaaS) applications where installation of Dynatrace OneAgent is not possible.

+ Add to Firefox

Rate your experience

How are you enjoying Dynatrace Real User Monitoring?

Log in to rate this extension

Report this add-on for abuse

Read 1 review

Screenshots

3 Users 1 Review 5 Stars

5 Stars 1

4 Stars 0

3 Stars 0

2 Stars 0

1 Star 0

Additional information

Published by Dynatrace LLC

Category Developer tools > Utilities

Language supported English (United States)

Seizure warnings Photosensitive seizure warning

Microsoft Store

Dynatrace Real User Monitoring

Dynatrace LLC • Developer tools > Utilities

Wish list

This extension allows you to monitor (SaaS) applications where installation of Dynatrace OneAgent is not possible. Injects a JavaScript tag into defined applications to gather real user monitoring data.

More

EVERYONE Shares Location

Available on

PC

Description

This extension allows you to monitor (SaaS) applications where installation of Dynatrace OneAgent is not possible. Injects a JavaScript tag into defined applications to gather real user monitoring data. Currently available as part of the real user monitoring for SaaS vendor experience BETA. https://www.dynatrace.com/support/help/shortlink/rum-browser-extension

Screenshots

Additional information

Published by Dynatrace LLC

Category Developer tools > Utilities

Language supported English (United States)

Seizure warnings Photosensitive seizure warning



## DEM

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## SaaS – monitor your SaaS applications

- Chrome extension has around 12,000 downloads
- More than 280 customers are using it
- Monitoring more than 150 different applications





DEM

Enterprise Scale

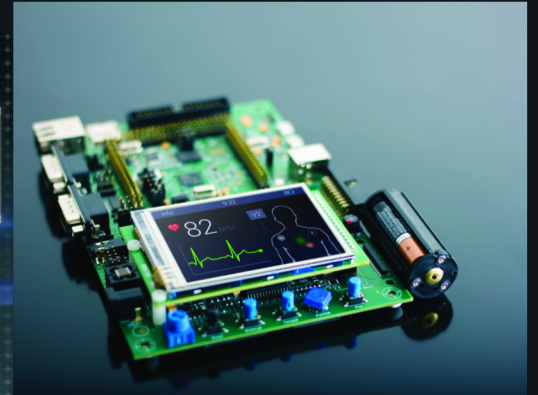
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## Custom applications: Digital touchpoint monitoring with Dynatrace OpenKit for RUM

- The monitoring demand for apps that are not running in the browser nor at the smartphone is rising sharply
- Rich client applications are still in use, but more and more embedded and industry 4.0 driven applications are emerging





DEM

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## Custom Applications: Digital touchpoint monitoring with Dynatrace OpenKit for RUM

- Difference between IoT and digital touchpoint monitoring

### IoT

- Millions of measurements
- Apps process this metrics – domain knowledge
- Users access this apps (digital touchpoints)

### Dynatrace

- Monitor these apps and the user interaction





Dashboards

Create custom chart

Reports

Analyze

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User sessions

Log files

Smartscape topology

Diagnostic tools

Monitor

Applications

Synthetic

Transactions & services

Databases

Hosts

Network

Technologies

VMware

AWS

Azure

Docker

Cloud Foundry

Manage

Deploy Dynatrace

Deployment status

Settings

Devops

Dashboard

Deploy Dynatrace

Monitor a custom application

# Monitor a custom application

Type in the name of the custom application you want to monitor. Once set up, you'll receive detailed instructions on how to instrument your application with OpenKit.

For example, MyCustomApplication

If your application is a conventional web or mobile application, it's not necessary to set up custom application monitoring with OpenKit. [Dynatrace OneAgent](#) supports the monitoring of conventional web and mobile applications out of the box.

Select one of the following icons to represent your custom application in the Dynatrace UI.



Cancel

Monitor custom application

Need help?

For help with custom application monitoring, see [Dynatrace Help](#) or [chat with a service rep.](#)

OpenKit for RUM is an API

Create user sessions and user actions

Easy to use

Powerful and fully integrated







Applications HoloX



Custom application

+ Add tag

Analyze user sessions

Pin to dashboard



User experience



11  
Devices



0.43  
Apdex rating



0/min  
Actions

Crashes



267  
Crashes



63.6%  
Crash-free devices



0/min  
Crashes

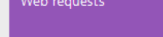
Network performance



4  
Web requests



0.0%  
Error rate



Called services



0 Services



Apdex rating

Shows the Apdex rating over time.

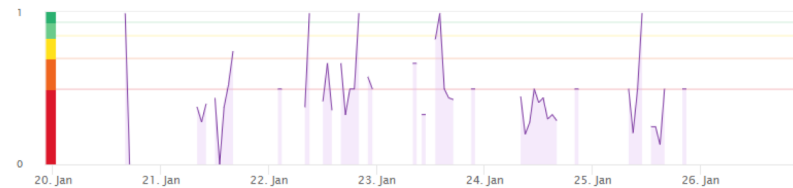


0.43  
Unacceptable



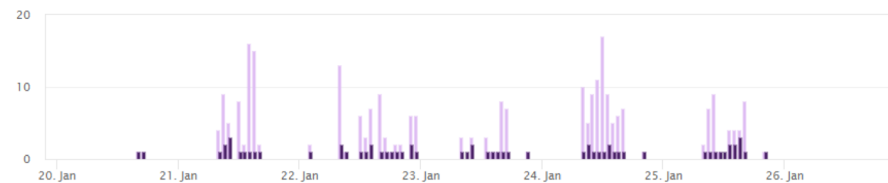
32.47 %  
21.03 %  
46.49 %

Excellent  
Good  
Fair  
Poor  
Unacceptable



Devices and actions

Compares number of actions to active devices over time.



Actions Devices

New devices

Number of new devices connected during selected timeframe.

No problems Jan 19 2019, 22:17 - Today, 22:17

Top actions

Shows the top actions and their contribution to the overall app performance

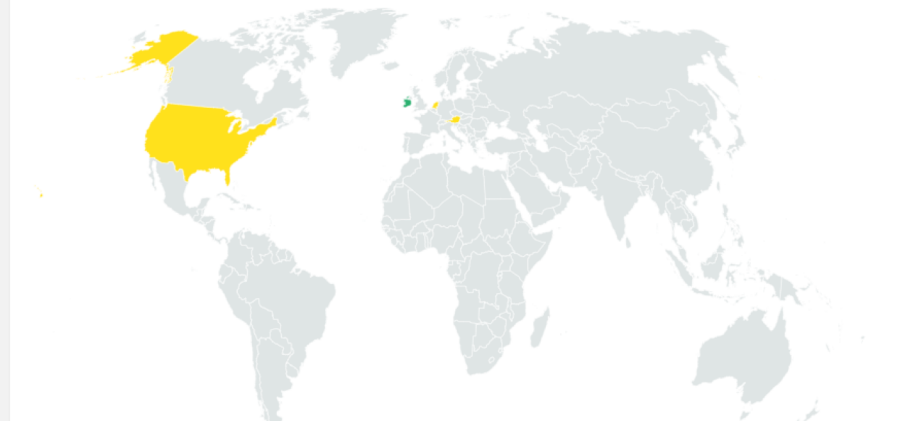
Type	Name	Actions	Duration	Apdex	Details
📱	Connect to Photon	0.01/min	41.3 s	0.06	✓
📱	Connect to Cloud	< 0.01/min	18.8 s	0.24	✓
📱	Register Device	< 0.01/min	1.47 s	0.74	✓
📱	Server timeout	< 0.01/min	4.07 s	0.55	✓
📱	Scan QR Code	< 0.01/min	9.45 s	0.50	✓
📱	GET Request	< 0.01/min	853 ms	1.00	✓
📱	Server startup	< 0.01/min	1 ms	1.00	✓

View all user actions

Geographic regions

Analysis of application usage across regions.

View: Apdex



Our HoloLens team  
monitors HoloLens  
with Dynatrace  
OpenKit for RUM



## DEM

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## Modern & Complete DEM – RUM + Synthetic

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- RUM



All devices, all browsers, all locations



100% coverage of your app



Zero maintenance



Wide spread of measurements (bad vs. good connectivity, slow vs. fast devices ...)

- Synthetic

Availability before your user are online



Clean room “testing” – always the same



Only top click paths and scenarios of your apps can be tested



Maintenance effort is high compared to RUM



- Both together give full picture

- Same technology and integrated in one system



easytravel 2adults2kids

Analyze synthetic sessions

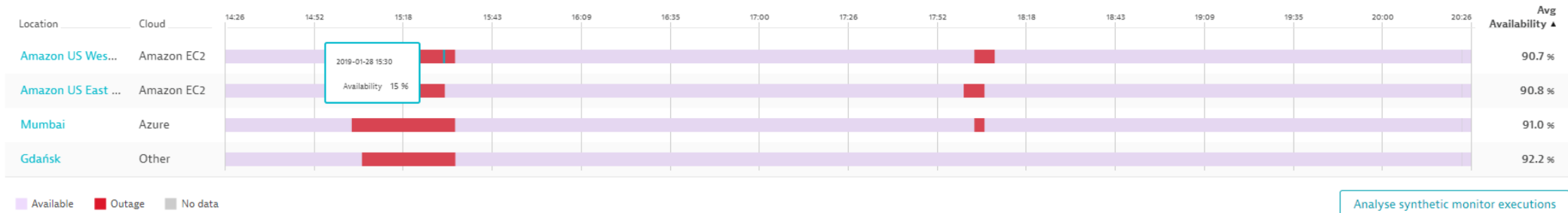
Pin to dashboard

Browser clickpath, tagged with

easyTravel



1 / 19





### Synthetic actions

☒ Show synthetic events

Action	Type	Duration	Details
Loading of page /	Load	5.2 s Visually complete	✓
click on "Login" on page /	XHR	0.4 s Visually complete	✓
Password on page /	XHR	0.3 s Visually complete	✓
Password on page /	XHR	0.3 s Visually complete	✓
click on "Login" on page /	XHR	0.4 s Visually complete	✓
keypress on "Trip Destination" on page /	XHR	0.3 s Visually complete	✓
click on "Paris" on page /	XHR	0.2 s Visually complete	✓
click on "Search" on page /	XHR	0.3 s Visually complete	✓
Loading of page /orange-booking-review.jsf	Load	1.6 s Visually complete	✓
click on "2 adults+2 kids" on page /orange-booking-review.jsf	XHR	0.2 s Visually complete	✓

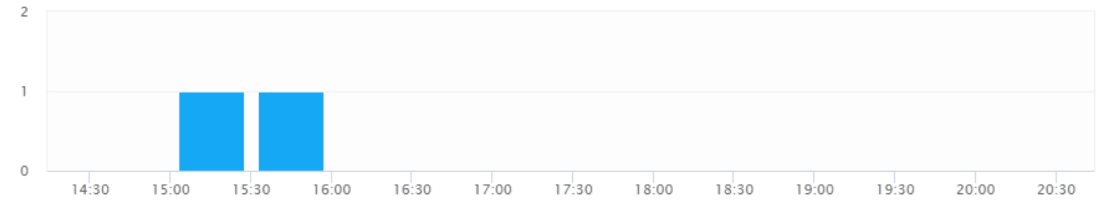
< 1 2 >

Edit clickpath

See all events

Show real user traffic

### 1 Event Today, 14:29 - 20:29



1 Browser monitor global outage

Events

Time ▾ Details

500 Internal server error, Wait for page complete timeout from Mumbai

today, 15:04

✓

### Monitored applications

Name Load actions XHR actions Custom actions Actions ▲

easyTravel Frontend

Visually complete: 0.6 s

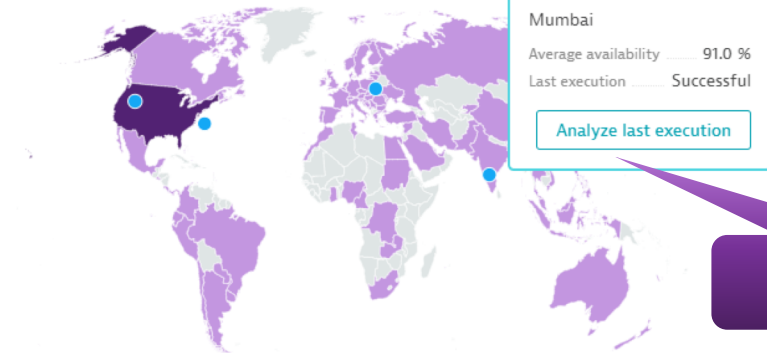
Visually complete: 0.2 s

User action duration: 0.0 s

91.9 /min

### Worldmap

☒ Show aggregated real-user traffic



0.00 446.00 active users

● available ● outage

View real-user worldmap

Direct drill down

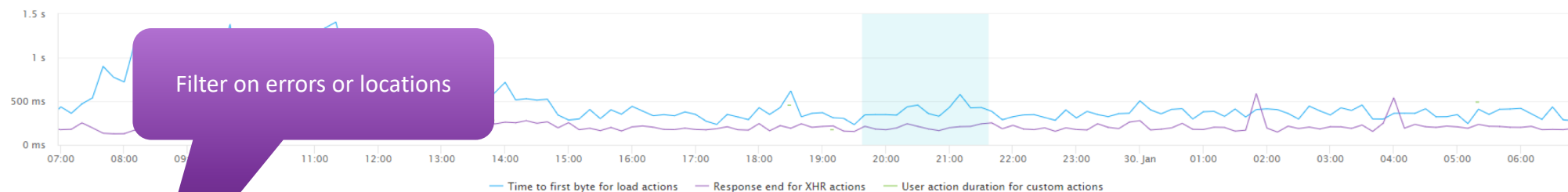


# easytravel 2adults2kids

Analyze this monitor across multiple dimensions

Location All locations Action type All actions Performance metric Key performance metric

Analyse executions during the past 2 hours. Click anywhere in the chart below to adjust the analysis timeframe.



## Multi-dimensional analysis for selected timeframe: Yesterday, 19:37 - 21:37

Filter executions

Execution time

Yesterday, 21:38

Yesterday, 21:36

Yesterday, 21:35

Yesterday, 21:34

Yesterday, 21:33

Yesterday, 21:31

Yesterday, 21:31

Yesterday, 21:30  
500 - Internal server error

Yesterday, 21:29  
500 - Internal server error

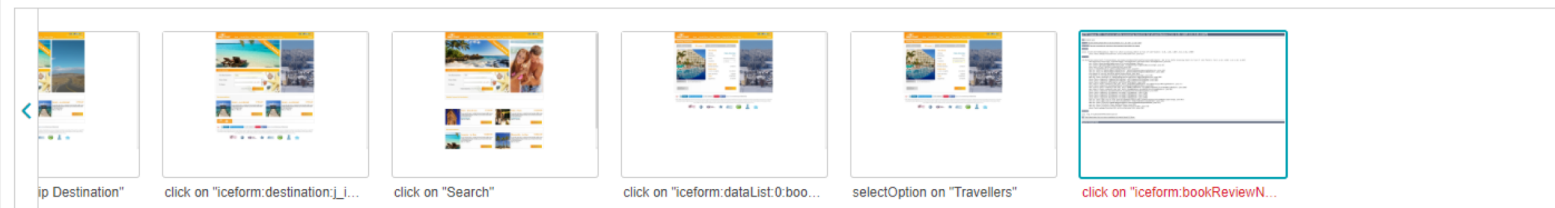
Yesterday, 21:27  
500 - Internal server error

Yesterday, 21:26  
500 - Internal server error

Yesterday, 21:25  
500 - Internal server error

## Synthetic run on Jan, 29 2019 21:30:00

Error 500: Internal server error



## click on "iceform:bookReviewNext"

Failure



Expected



Analysis view





- Yesterday, 19:56
- Yesterday, 19:58
- Yesterday, 19:59
- Yesterday, 20:00
- Yesterday, 20:01
- Yesterday, 20:04
- Yesterday, 20:04
- Yesterday, 20:05
- Yesterday, 20:06
- Yesterday, 20:09
- Yesterday, 20:09
- Yesterday, 20:10
- Yesterday, 20:11
- Yesterday, 20:13
- Yesterday, 20:14
- Yesterday, 20:15
- Yesterday, 20:16
- Yesterday, 20:18
- Yesterday, 20:19
- Yesterday, 20:20
- Yesterday, 20:21
- Yesterday, 20:23
- Yesterday, 20:24
- Yesterday, 20:25
- Yesterday, 20:26
- Yesterday, 20:29


Show difference (22.35%)

### Detailed breakdown

Focus on full waterfall , and don't group resources

 1 PurePath failed

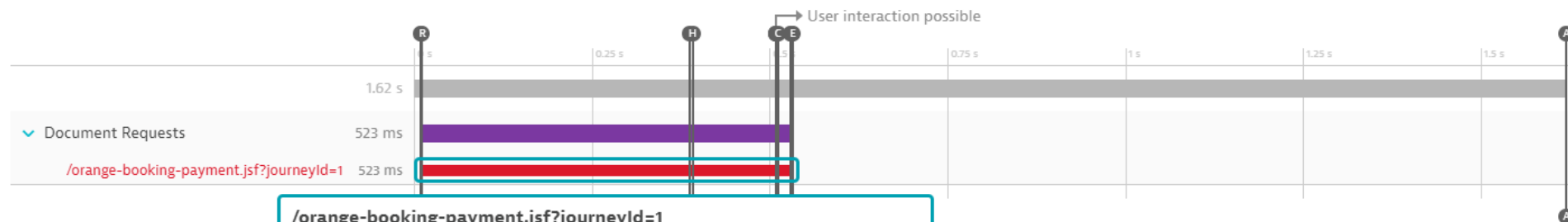
 1 Request & resource error

 4.94 kB Transfer size

Dynatrace captured 1 PurePath that was triggered by this user action. Resources that can be mapped to a specific PurePath are highlighted below. Select one of the following services for a complete list of PurePaths:

1 PurePath for EasyTravelWebserver:8079 failed

[View service flow for this action](#)



- N Navigation start
  - R Request start
  - F
  - A User action duration
  - D
- Blocking Application Cache

#### /orange-booking-payment.jsf?journeyId=1

<https://easytravel.perform-2018.dynalabs.io/orange-booking-payment.jsf?journeyId=1>

This call failed with **HTTP 500**.

[View PurePath](#)

Overall	
Load time	523 ms
Started at	9 ms
Completed at	532 ms

Phases	
Blocking	2 ms
Application Cache	< 1 ms
DNS lookup	< 1 ms
TCP connect	< 1 ms
Secure connect	< 1 ms
Request	376 ms
Response	4 ms
Processing	139 ms
OnDOMContentLoaded	2 ms
OnLoad	2 ms

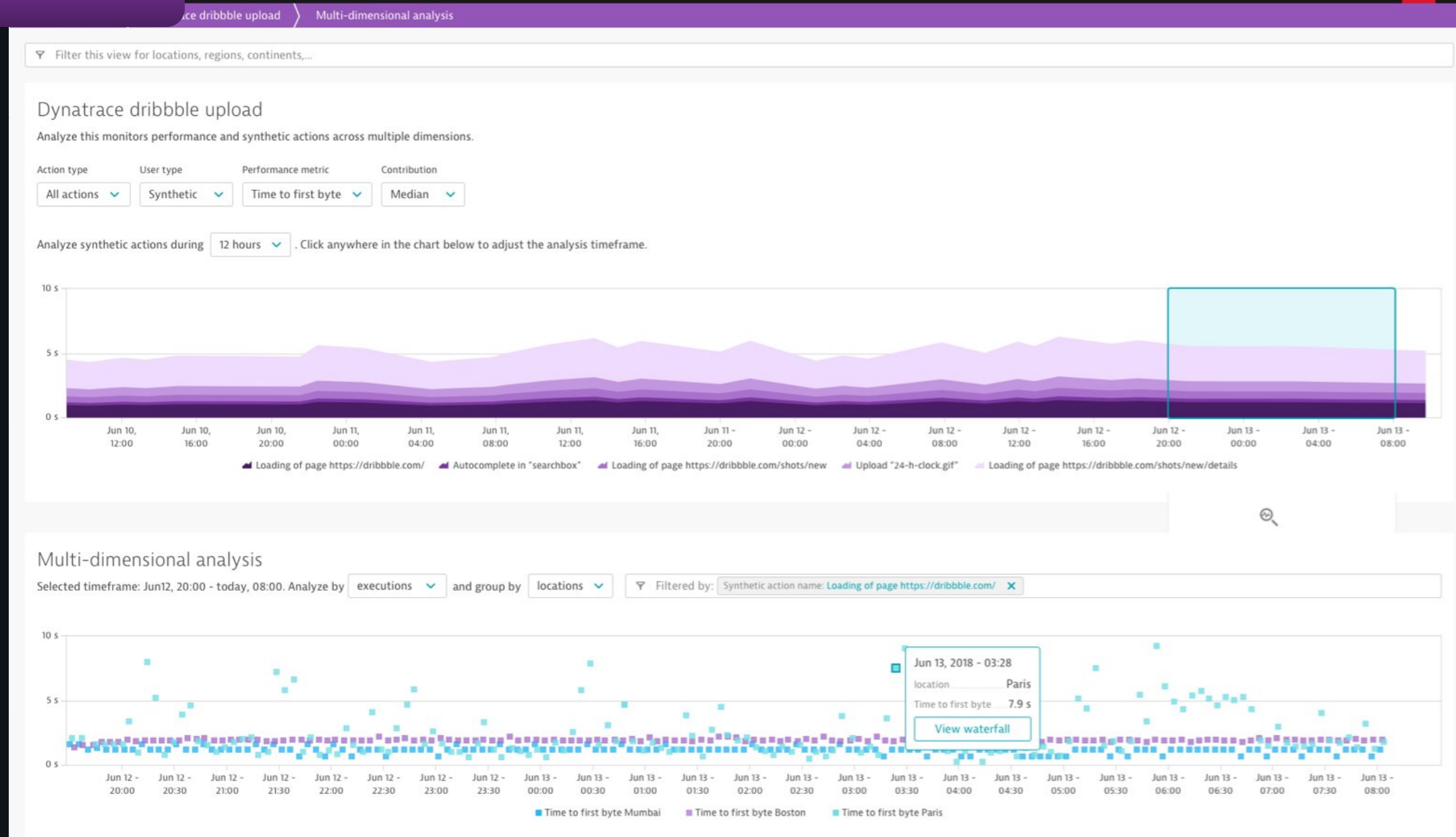
Sizes	
Transfer size	4.94 kB

Waterfall with all details

Drill down to the server side pure path



Scatter plot will come in 2019





DEM

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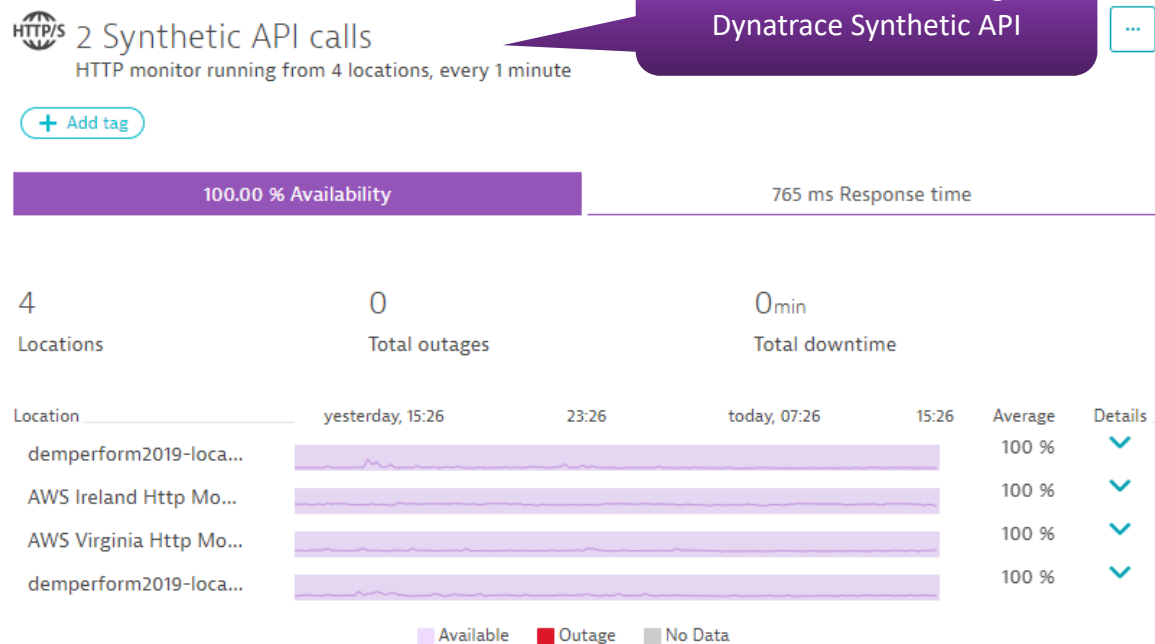
Beyond APM

## HTTP Monitors

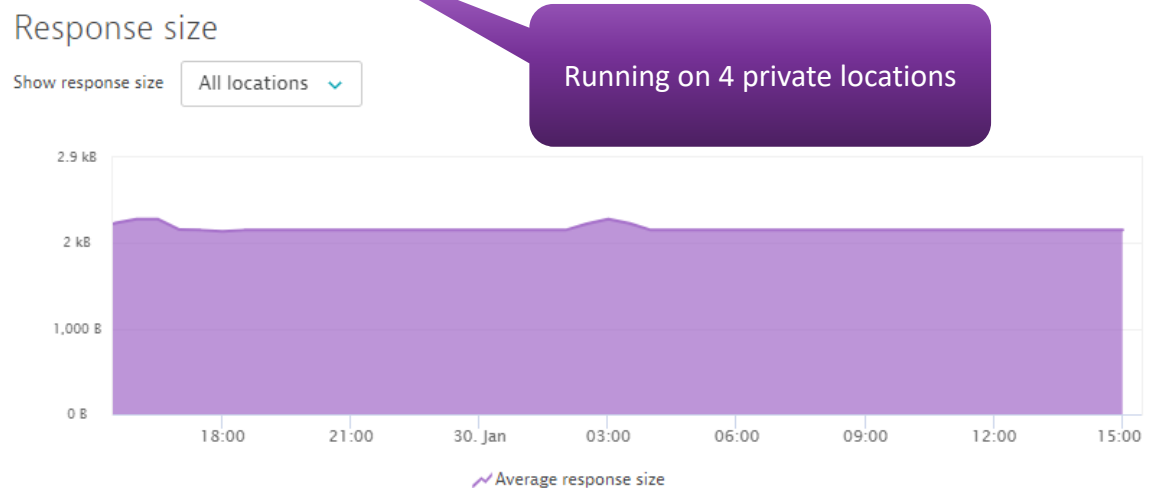
---

- Availability monitor for web requests
- Mobile and API monitoring
- Today:
  - Single request HTTP monitor for private locations
- Planned:
  - Early access for multi request HTTP monitors starts early Q2





HTTP Monitor testing  
Dynatrace Synthetic API



Running on 4 private locations

No problems in the selected time frame

### HTTP status codes



200 (OK)

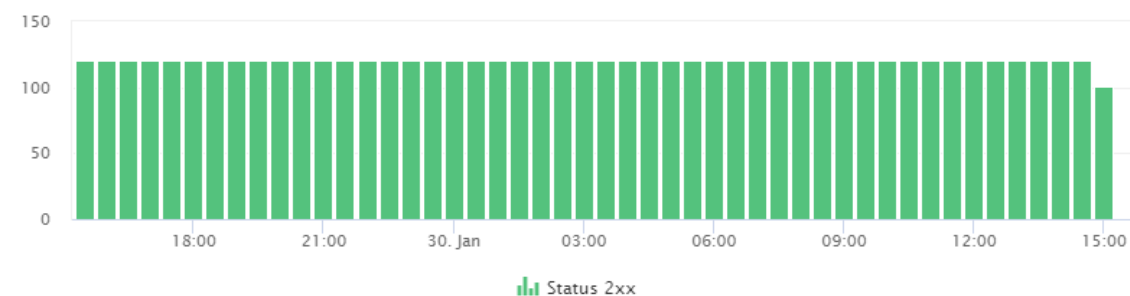
Last status code (15:24)



200 (OK)

Top HTTP status code (last 24 hours)

Show status codes of All locations



### 2 HTTP requests

Show data for All locations

HTTP method	Request name	Response time	Details
GET	Lists all public locations	379 ms	✓
GET	List details for Beijing (by entity ID)	385 ms	✓

Get a list of all public locations  
Fetch the details for Beijing

### Assign HTTP monitor to web application



If this check monitors one or more of your web applications, you should connect the check with them. This will bring availability information to your web application and failed tests will result in problems correlated to these web applications.

[Assign monitor to application](#)



# User actions analysis view

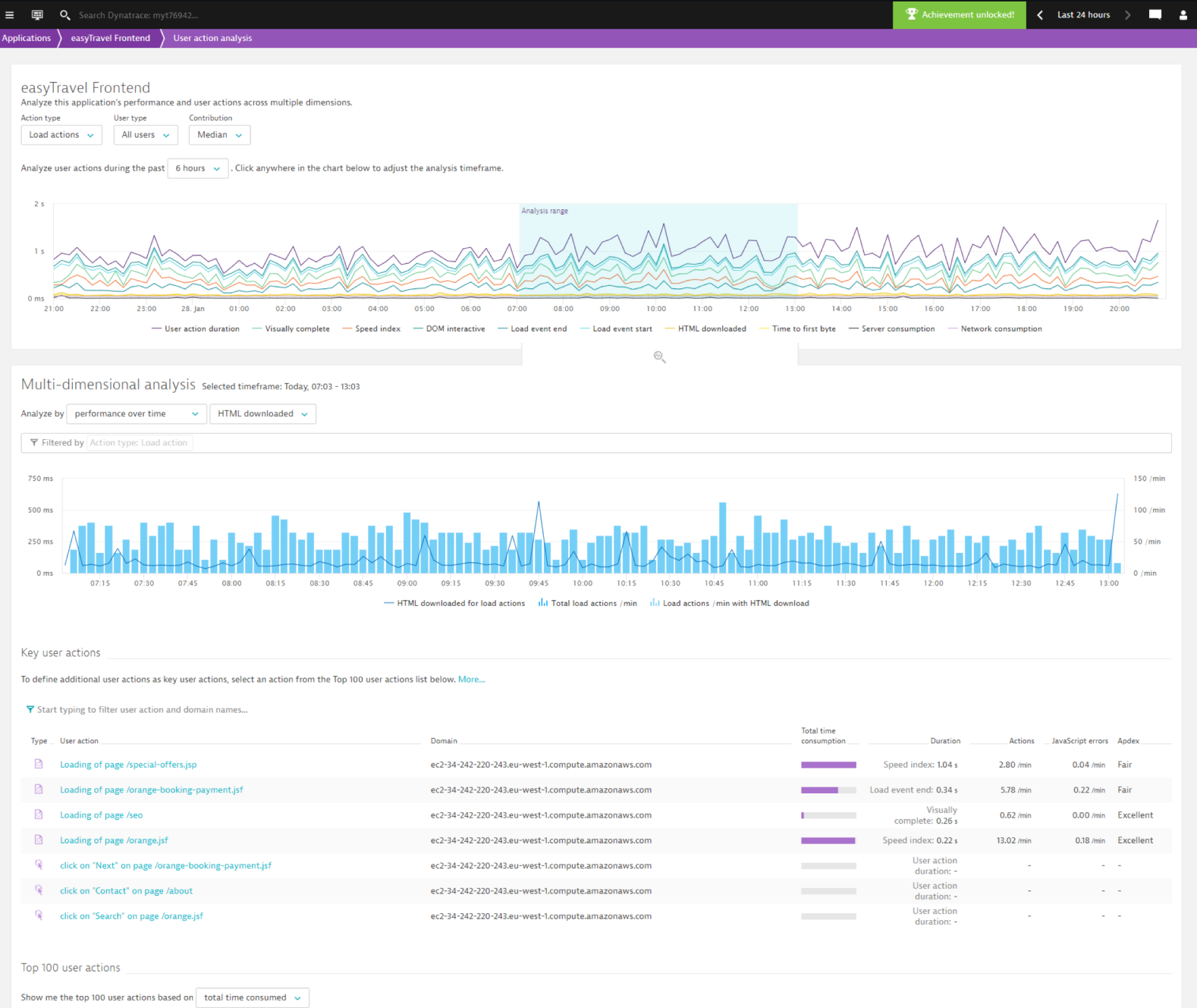
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Action type

User type

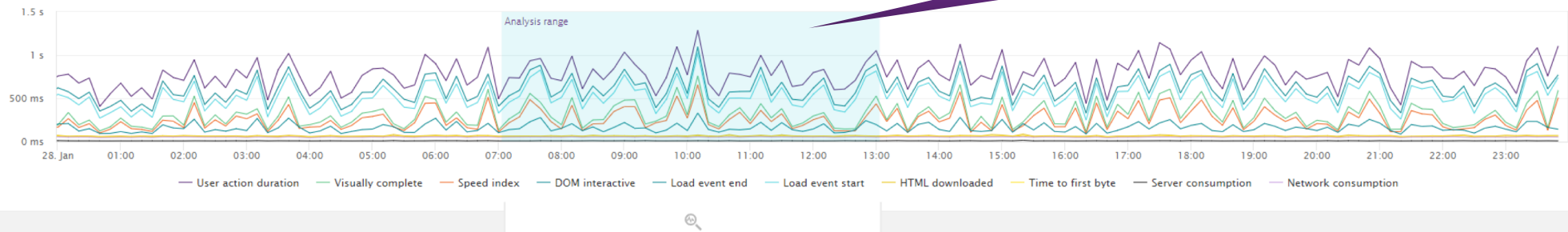
Contribution

Load actions

Real users

Median

Analyze user actions during the past 6 hours. Click anywhere in the chart below to adjust the analysis timeframe.



Multi-dimensional analysis Selected timeframe: Yesterday, 07:03 - 13:03

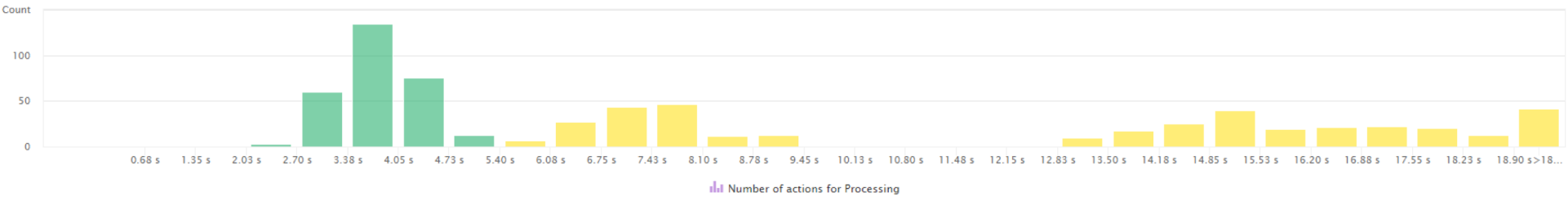
Analyze by

distribution

Processing

Filtered by Action type: Load action User type: Real users Browser family: Chrome Action duration:  $\geq 4.0s$

View the impact of user activity on performance. Click into the chart to see which user actions are called at this analysis time frame.



Key user actions

To define additional user actions as key user actions, select an action from the Top 100 user actions list below. [More...](#)

Start typing to filter user action and domain names...

Type	User action	Domain	Total time consumption	Duration	Actions	JavaScript errors	Apdex
	Loading of page /special-offers.jsp	ec2-34-242-220-243.eu-west-1.compute.amazonaws.com		Speed index: 12.99 s	0.17 /min	<0.01 /min	Unacceptable
	Loading of page /seo	ec2-34-242-220-243.eu-west-1.compute.amazonaws.com		Visually complete: 6.68 s	0.01 /min	0.00 /min	Good
	Loading of page /orange.jsf	ec2-34-242-220-243.eu-west-1.compute.amazonaws.com		Speed index: 4.70 s	0.63 /min	<0.01 /min	Good
	Loading of page /orange-booking-payment.jsf	ec2-34-242-220-243.eu-west-1.compute.amazonaws.com		Load event end: 3.64 s	0.24 /min	0.01 /min	Unacceptable
	click on "Next" on page /orange-booking-payment.jsf	ec2-34-242-220-243.eu-west-1.compute.amazonaws.com		User action duration: -	-	-	-

User action lists will be refreshed



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## User actions analysis view

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- DEMO
  - Analysis Views
  - Action Properties



Analyze this application's performance and user actions across multiple dimensions.

Action type

User type

Performance metric

Contribution

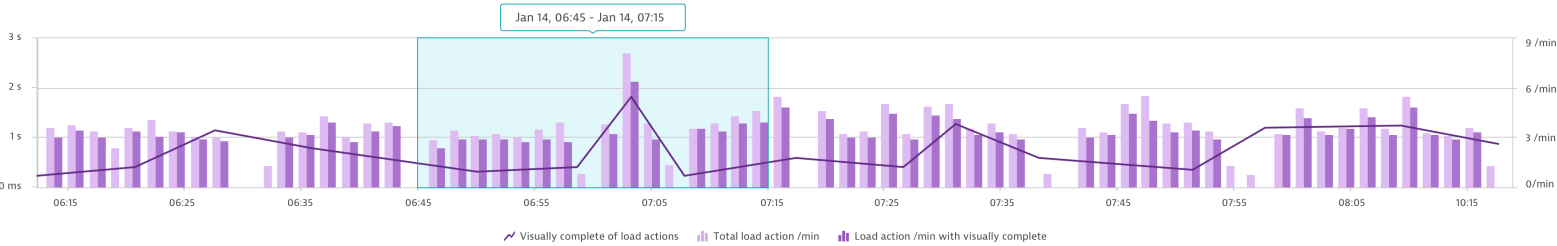
Load actions

All users

Visually complete

Median

Analyze user actions during the past 30 minutes. Click anywhere in the chart below to adjust the analysis timeframe.



Multi-dimensional analysis for selected timeframe: Jan 14, 06:45 - 07:15

Analyse by string property AB test

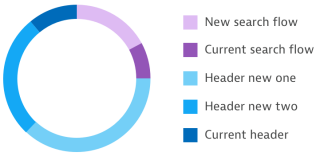
Filtered by

BrowserType: Desktop

VisuallyComplete > 5s

Affiliate: Yes

Subscribe as time series



Key user actions

Type	User action	Domain	Time consumed	Visually complete	Actions	JavaScript errors	Apdex
	Loading of page /logout.jsf	easytravel.ruxitlabs.com		0.18 s	4.32 /min	4.3 /min	Excellent
	Homepage	easytravel-win.ruxitlabs.com		1.35 s	7.3 /min	2.2 /min	Excellent
	Loading of page /Booking	easytravel.ruxitlabs.com		4.88 s	2.65 /min	0.8 /min	Excellent

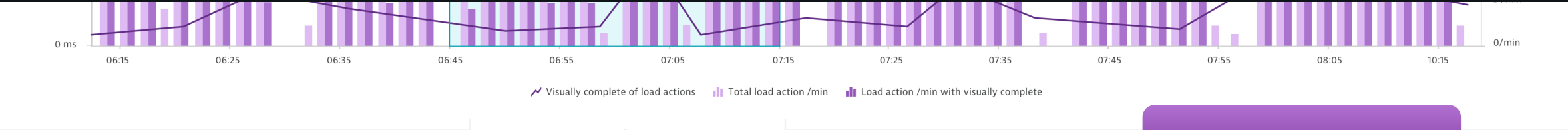
Top user actions

Filter this table

Type	User action	Domain	Time consumed	Visually complete	Actions	JavaScript errors	Apdex
	Homepage	easytravel.ruxitlabs.com		7.77 s	2.14 /min	11.2 /min	Excellent
	Loading of page /about-orange.jsf	easytravel.ruxitlabs.com		1.52 s	4.13 /min	0.00 /min	Excellent
	Loading of page /legal-orange.jsf	easytravel.ruxitlabs.com		4.88 s	8.11 /min	5.2 /min	Excellent
	Loading of page /logout.jsf - Key user action	easytravel.ruxitlabs.com		0.18 s	4.32 /min	4.3 /min	Excellent
	Homepage - Key user action	easytravel-win.ruxitlabs.com		1.35 s	7.3 /min	2.2 /min	Excellent
	Journey	easytravel.ruxitlabs.com		0.18 s	5.12 /min	0.4 /min	Excellent
	Loading of page /contact-orange.jsf	easytravel.ruxitlabs.com		0.22 s	4.32 /min	0.2 /min	Excellent

Subscribe as time series





Multi-dimensional analysis for selected timeframe: Jan 14, 06:45 - 07:15

Analyse by string property AB test

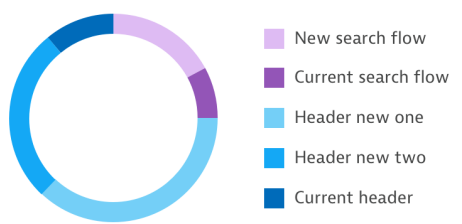
Analyze by user action property  
"AB test"

Subscribe custom metric

Filtered by BrowserType: Desktop VisuallyComplete > 5s Affiliate: Yes

Subscribe as time series

Add filters



Key user actions

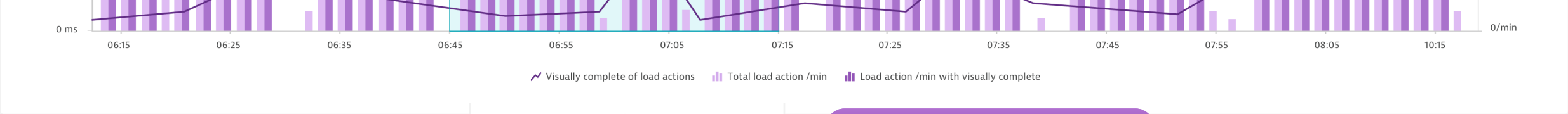
Type	User action	Domain	Time consumed	Visually complete	Actions	JavaScript errors	Apdex
	Loading of page /logout.jsf	easytravel.ruxitlabs.com	<div></div>	0.18 s	4.32 /min	4.3 /min	Excellent
	Homepage	easytravel-win.ruxitlabs.com	<div></div>	1.35 s	7.3 /min	2.2 /min	Excellent
	Loading of page /Booking	easytravel.ruxitlabs.com	<div></div>	4.88 s	2.65 /min	0.8 /min	Excellent

Top user actions

Filter this table

Type	User action	Domain	Time consumed	Visually complete	Actions	JavaScript errors	Apdex
	Homepage	easytravel.ruxitlabs.com	<div></div>	7.77 s	2.14 /min	11.2 /min	Excellent
	Loading of page /about-orange.jsf	easytravel.ruxitlabs.com	<div></div>	1.52 s	4.13 /min	0.00 /min	Excellent
	Loading of page /legal-orange.jsf	easytravel.ruxitlabs.com	<div></div>	4.88 s	8.11 /min	5.2 /min	Excellent
	Loading of page /logout.jsf - Key user action	easytravel.ruxitlabs.com	<div></div>	0.18 s	4.32 /min	4.3 /min	Excellent
	Homepage - Key user action	easytravel-win.ruxitlabs.com	<div></div>	1.35 s	7.3 /min	2.2 /min	Excellent

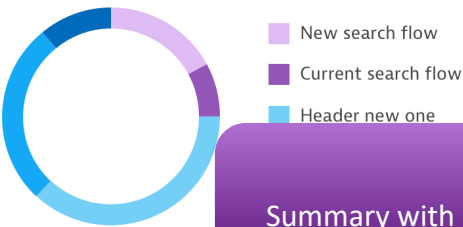




## Multi-dimensional analysis for selected timeframe: Jan 14, 06:45 - 07:15

Analyse by string property AB test

Filtered by BrowserType: Desktop VisuallyComplete: > 5s Affiliate: Yes



## Key user actions

Type	User action	Domain	Time consumed	Visually complete	Actions	JavaScript errors
	Loading of page /logout.jsf	easytravel.ruxitlabs.com	<div></div>	0.18 s	4.32 /min	4.3 /min
	Homepage	easytravel-win.ruxitlabs.com	<div></div>	1.35 s	7.3 /min	2.2 /min
	Loading of page /Booking	easytravel.ruxitlabs.com	<div></div>	4.88 s	2.65 /min	0.8 /min

## Top user actions

Filter this table

Type	User action	Domain	Time consumed	Visually complete	Actions	JavaScript errors	Apdex
	Homepage	easytravel.ruxitlabs.com	<div></div>	7.77 s	2.14 /min	11.2 /min	Excellent
	Loading of page /about-orange.jsf	easytravel.ruxitlabs.com	<div></div>	1.52 s	4.13 /min	0.00 /min	Excellent
	Loading of page /legal-orange.jsf	easytravel.ruxitlabs.com	<div></div>	4.88 s	8.11 /min	5.2 /min	Excellent
	Loading of page /logout.jsf - Key user action	easytravel.ruxitlabs.com	<div></div>	0.18 s	4.32 /min	4.3 /min	Excellent
	Homepage - Key user action	easytravel-win.ruxitlabs.com	<div></div>	1.35 s	7.3 /min	2.2 /min	Excellent

Subscribe you current analysis settings as a time series for dashboarding, APIs and long time data retention

Summary with metric and filters

Define your splittings

### Subscribe custom metric

You can subscribe your setup as time series to use as metric in custom charting and the time series API.

Metric Visually complete

#### Filter

Action type Load actions

Browser type Desktop

Visually complete > 5s

Affiliate Yes

☒ Split by

Top 5 AB tests

Name your subscription

This subscription will produce 1 metric.

[View advanced settings](#) Subscribe



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## Actions analysis view

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- Last year we released the new user action analysis view for web applications
- Mobile and custom apps will be available in the next 4 weeks
- Analysis view for browser monitors is in work, planned for Q2
- User action properties will come in Q2 2019
- More metrics and filters will come in 2019
- Subscribe custom metric is planned for Q3 2019



# New error analytics views

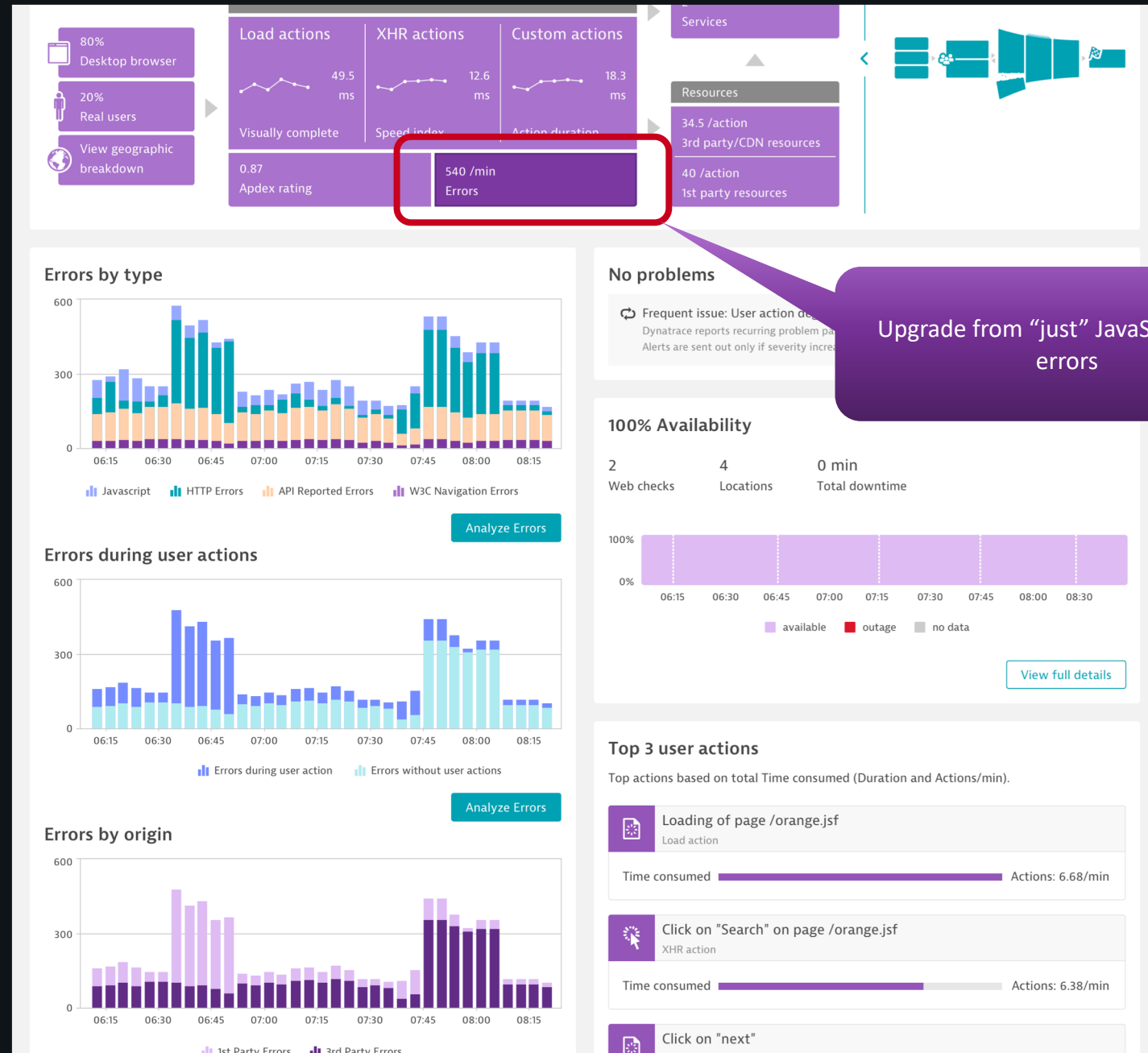
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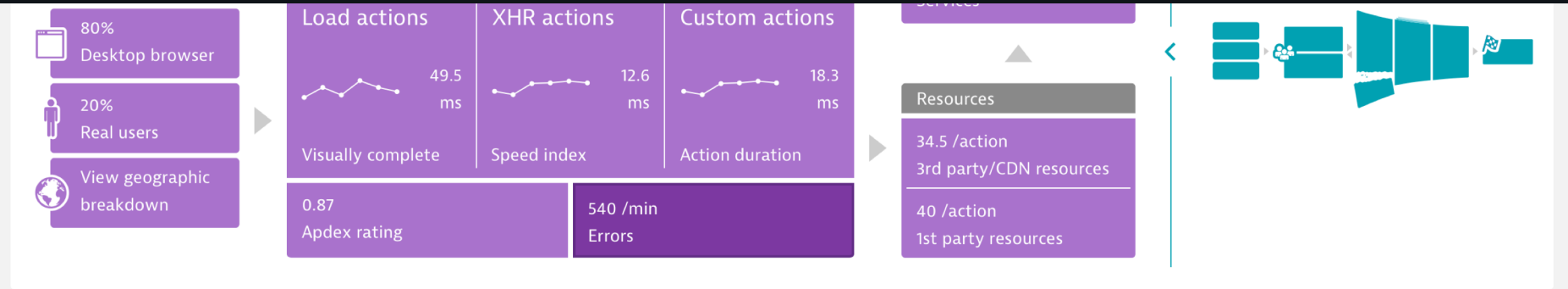
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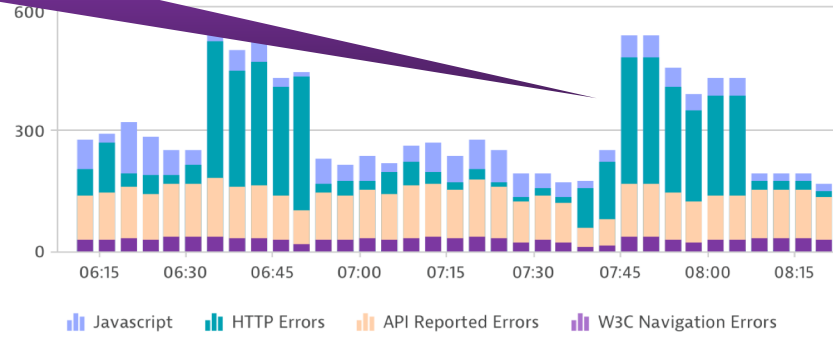


Which types of errors?  
Http errors are very high!

Most of them are not happening  
during a user action

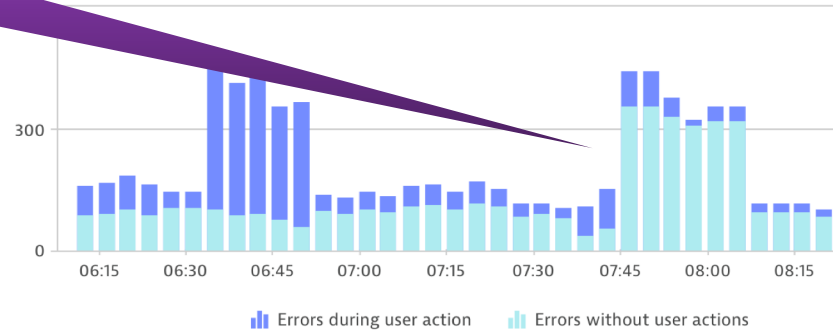


### Errors by type



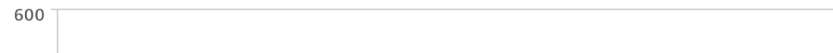
Analyze Errors

### Errors during user actions



Analyze Errors

### Errors by origin

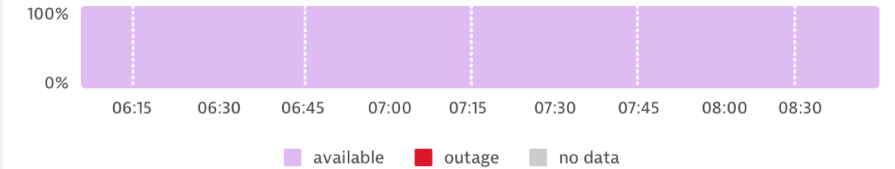


### No problems

Frequent issue: User action degradation  
Dynatrace reports recurring problem patterns as "frequent issues".  
Alerts are sent out only if severity increases.

### 100% Availability

2 Web checks  
4 Locations  
0 min Total downtime



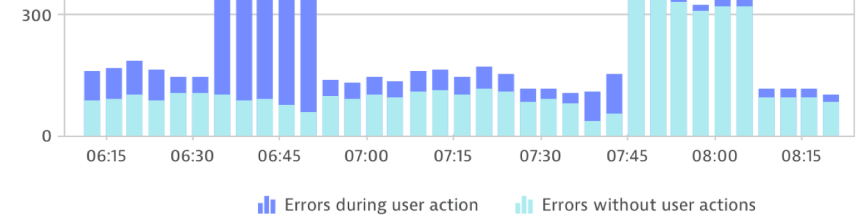
View full details

### Top 3 user actions

Top actions based on total Time consumed (Duration and Actions/min).

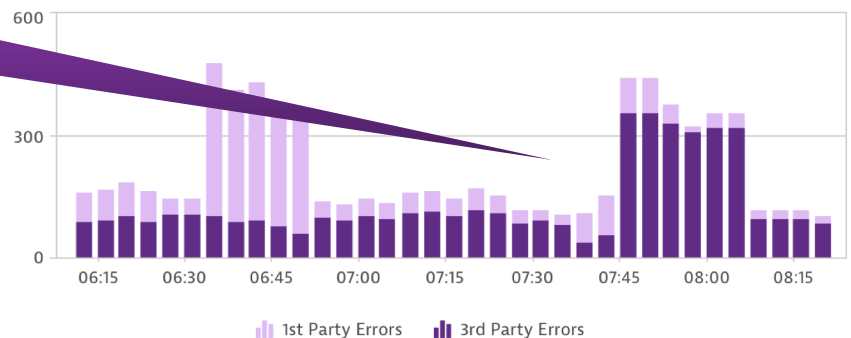






Analyze Errors

### Errors by origin



Analyze Errors

### Top errors

A change in error levels may indicate a device- or browser-specific problem.

Error	Frequency
HTTP (95%)	
JavaScript (5%)	
W3C Navigation (0)	
API Reported (0)	
HTTP 404: <a href="https://images-na.ssl-images-amazon.com/images/G/ama">https://images-na.ssl-images-amazon.com/images/G/ama</a>	180 /min
HTTP 500	140 /min
HTTP 404: <a href="https://www.easytravel.com/api/journey/123456">https://www.easytravel.com/api/journey/123456</a>	0.18 /min

View full details

### Composite metrics across response times

View Median Slowest 10% Fastest 10% metrics of load actions

View full details

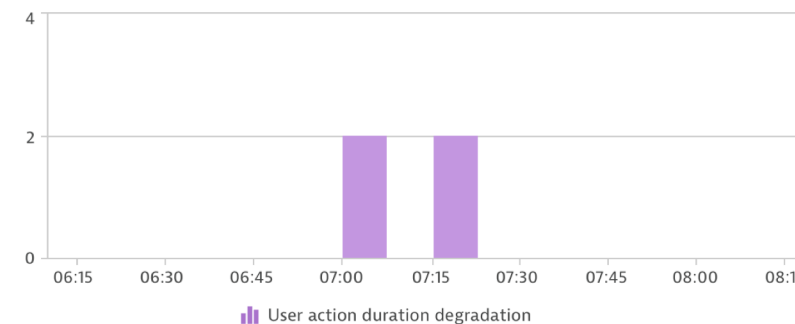
### Top 3 user actions

Top actions based on total Time consumed (Duration and Actions/min).

	<b>Loading of page /orange.jsf</b> Load action	Time consumed <div></div> Actions: 6.68/min
	<b>Click on "Search" on page /orange.jsf</b> XHR action	Time consumed <div></div> Actions: 6.38/min
	<b>Click on "next"</b> Load action	Time consumed <div></div> Actions: 2.65/min

View full details

### 2 Events



Event  Time  Details

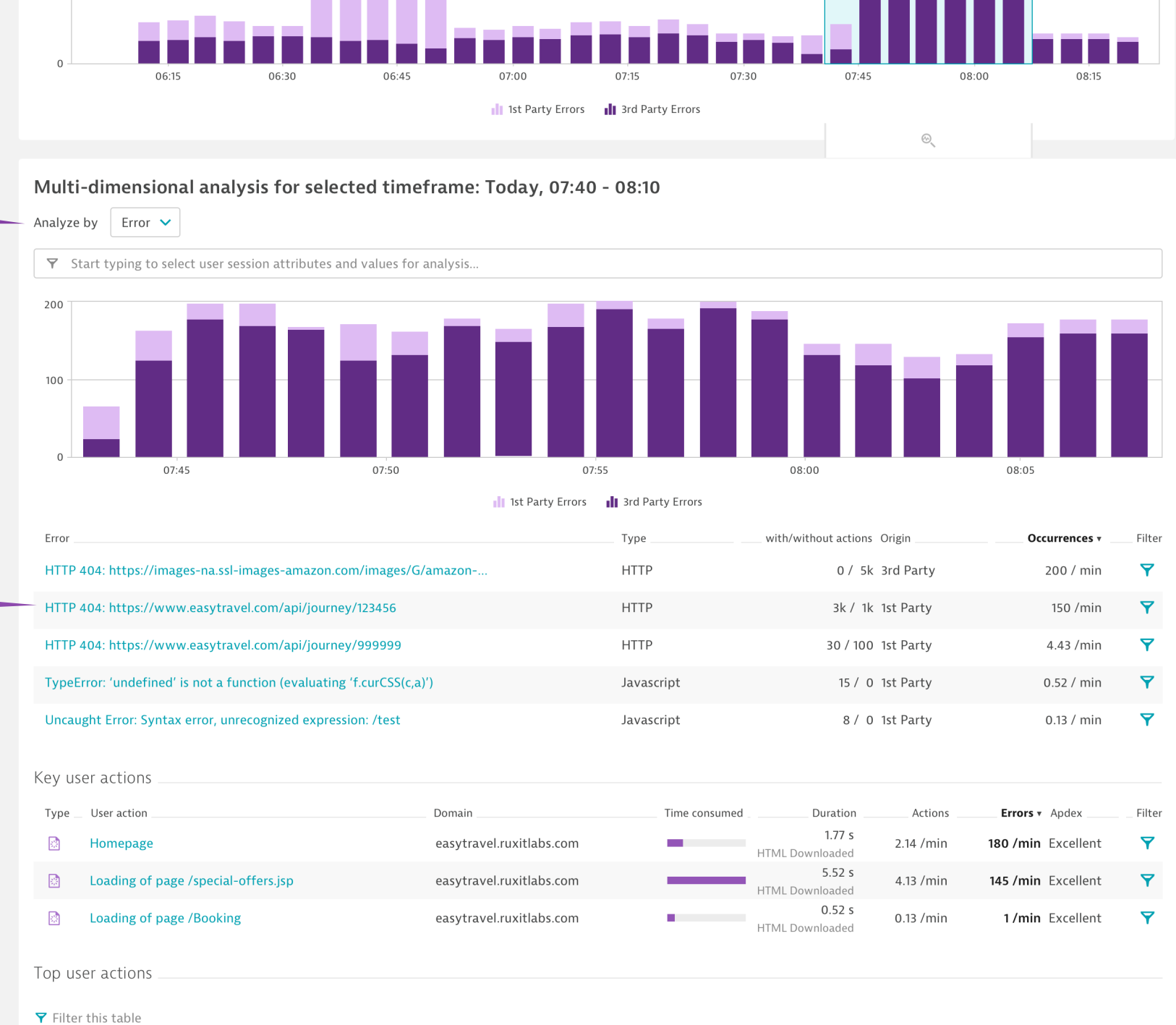
User action duration degradation

today, 07:00



Analyze by error in the user action analytic views

Filter user actions on specific errors







https://www.easytravel.com/api/journey/123456

Analyze Pure-path

Ignore this error

HTTP 404

Have a detailed look under which conditions the error has occurred by clicking on the occurrence statistics findings.

New error detail view:  
occurrence statistics

⚠ HTTP 404

Occured **526** times

Impacting **423** sessions from **283** users

Occurrence statistics



100% 1st Party origin



100% occurring during user action



Multiple browsers



Multiple operating systems



Multiple locations

Error details

Error details

HTTP Error Code	404
1st party domain	https://www.easytravel.com
URL	https://www.easytravel.com/api/journey/123456
Error Count	526
Impacted users	283
Errors detected via	JavaScript Failed resource module OneAgent

Top Actions

- Click on "Search"
- Loading of /index.html

Affected user sessions

Showing 60 user sessions affected by this error

Type	User	Error on user action	Origin	Browser	Operating System	Location	Detail
👤	hunun	Yes	1st Party	Safari 54	MacOS 11.4	Italy, The Marches	<a href="#">Detail</a>
👤	hunun	Yes	1st Party	Firefox 51	iOS 12	Austria	<a href="#">Detail</a>
👤	piotr	Yes	1st Party	Chrome 56	Window 7	Sweden	<a href="#">Detail</a>
🤖	Bob Synthetic	Yes	1st Party	Firefox 51	Linux (Ubuntu)	Hungary	<a href="#">Detail</a>
👤	mike	Yes	1st Party	Edge 13	Windows 10	Poland	<a href="#">Detail</a>

Direct linkage to user sessions



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## New error analytics views

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- Waterfall improvements are planned for end of Q1
  - Failed images with and without server side purepaths
  - JS API for error reporting beyond JavaScript errors
- New views and workflows will be released in steps till Q3 2019



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## More than just performance and functional health

- Session replay adds visualization to RUM data
- More user behavior and user session analytics will come to the product

The screenshot displays the Dynatrace User Session Replay interface. At the top, a purple header bar shows the user's email, alexander.sommer@dynatrace.com, and the session title, User session replay. Below this, a white box contains the session title, Session Replay - recorded on Jan 29, 2019 at 06:22:45, and a note stating, The recording has 47 actions, 2 actions have a problem. See details in session analysis. A banner below the header indicates that this feature is in BETA. The main area features a timeline with a play button, a progress bar, and a legend for Load action and User action or event. The timeline shows a sequence of actions, with a play button at 00:26 / 01:31. To the right of the timeline are navigation controls for events/actions, speed, and a search icon. The main content area shows a preview of the user's journey on the easyTravel website. The website has an orange header with navigation links: Home, Special Offers, About, Contact, Terms of Use, Privacy Policy, and a Logout button. Below the header is a large image of a person relaxing on a beach chair, with a yellow banner reading 'Travel to Paris'. Below this is a 'Your Journey' section with input fields for Trip Destination, From Date, and To Date, and a Search button. At the bottom, there is a 'Recommendations' section with two hotel listings: Hazel Hurst - Porta Westfalica for \$266.50 and Spring Village - Punta Gorda for \$1255.60.





# User sessions query

Create advanced queries on completed user sessions using user sessions query language. [View Documentation](#)

```
select apexCategory as apdex, count(usersession.internalUserId) as nrSessions from useraction WHERE usersession.userType = 'REAL_USER' and apexCategory != 'UNKNOWN' and usersession.bounce = true and application = 'easyTravel Frontend' and usersession.browserType != "Mobile Browser" GROUP BY apdex
```

Run query

## EasyTravel Bounces (no mobile)

Save changes to dashboard Clone to dashboard

Visualization: Bar Chart Line Chart Pie Chart Single Value Table Only

Actions / min90.5/min

Load actions0.6 s

XHR actions0.2 s

Custom actions0.0 s

1Unknown apdex rating

7Key user actions (plus 1 without data)

Entry actions in the last 24h

Entry actions Jan 28, 06:00 - Yesterday, 06:00

17.1k

Top applications by live users

easyTravel Frontend224

easyTravel Angular195

easyTravel Mobile90

12:0030. Jan

6.82 s

Duration

MajorBrowserVersions

cnt

avg VisuallyComplete for orange.jsf

6850.12

avg(visuallyCompleteTime)

User sessions query results

country

Germany

Poland

United K...

Spain

Romania

EasyTravel Bounces (no mobile)

Top key user actions avg

204 ms click on "2 adults+2 kids" on pa...

214 ms click on "Paris" on page /

227 ms click on "2 adults+2 kids" on pa...

236 ms click on "Create Account" on p...

255 ms Password on page /

274 ms /modules/share/service/shrink

330 ms keypress on "Trip Destination" ...

386 ms keypress on "Trip Destination" ...

424 ms click on "Login" on page /

428 ms Loading of page /

5 more

Number of session by time

Network time breakdown (top 50 by cities by usage)

Advanced queries for user sessions





## User sessions

Analyze user sessions from several dimensions or filter your list to find specific users and sessions.

[Pin to dashboard](#)[Save query](#)

Start typing to select user-session attributes and values for analysis

### Overview

123,456 total sessions

2,123 live sessions

1234 session replays

12.3 avg. actions/session

### Application type

- 65% web sessions
- 35% mobile sessions
- 35% custom app sessions

[view](#)

### Applications

68% easyTravel Frontend (web)

32% easyTravel Mobile (mobile)

[view](#)

### Errors & annoyances

1,234 affected sessions (21% of total)

[view](#)

### Locations

52% user sessions in the USA

[view](#)

### User flow

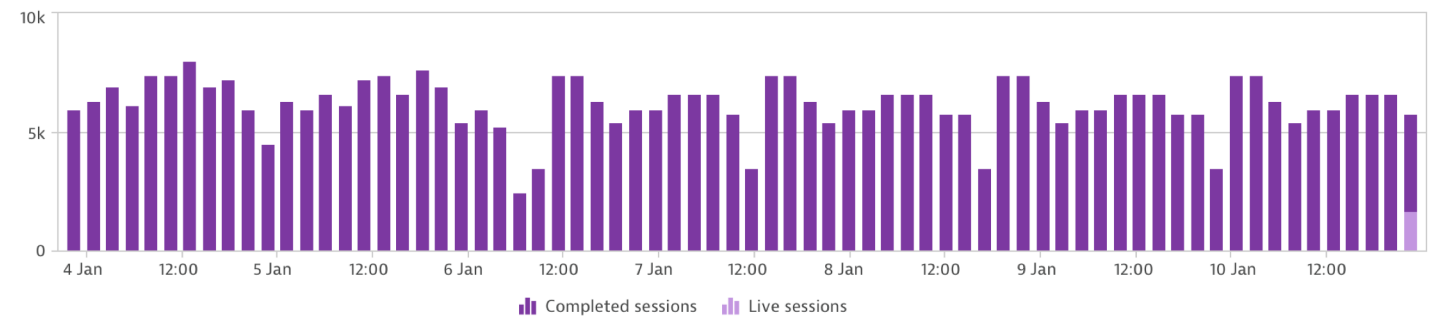
21% bounced sessions

65% converted sessions

[view](#)

### Overview of user sessions

Chart results over time . Show a resolution of 2 hours



Last 50 of 6,086 user sessions (including 659 live sessions) from 3,104 users

				Load actions	User actions & Events	Conversions	Incidents	
User session	User	User type	Duration					Details
Oct 5, 2018 - 08:15:33 <span>live</span>	nolan_witting@powlowski.io	Tolerated	9.3 min					
Oct 5, 2018 - 08:15:33 <span>live</span>	mandy_bartell@gmail.com	Satisfied	9.3 min					
Oct 5, 2018 - 08:15:33 <span>live</span>	lacey_predovic@leffler.biz	Tolerated	9.3 min					
Oct 5, 2018 - 08:15:33 <span>live</span>	corkery_ernesto@karlie.net	Satisfied	9.3 min					
Oct 5, 2018 - 08:15:33 <span>live</span>	vandervort.hector@hotmail.com	Satisfied	9.3 min					
Oct 5, 2018 - 08:15:33 <span>live</span>	guadalupe_hoeger@garth.io	Satisfied	9.3 min					
Oct 5, 2018 - 08:15:33	antonio_grant@jakubowski.com	Tolerated	9.3 min					
Oct 5, 2018 - 08:15:33	carster_berge@romaguera.net	Satisfied	9.3 min					

Refresh all user session views:  
More findings out of the box  
Easier and faster to use



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## More than just performance and functional health

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Visit the next breakout sessions:

***Session Replay with RUM – See your users in 4k***  
*(Track: Digital Experience)*

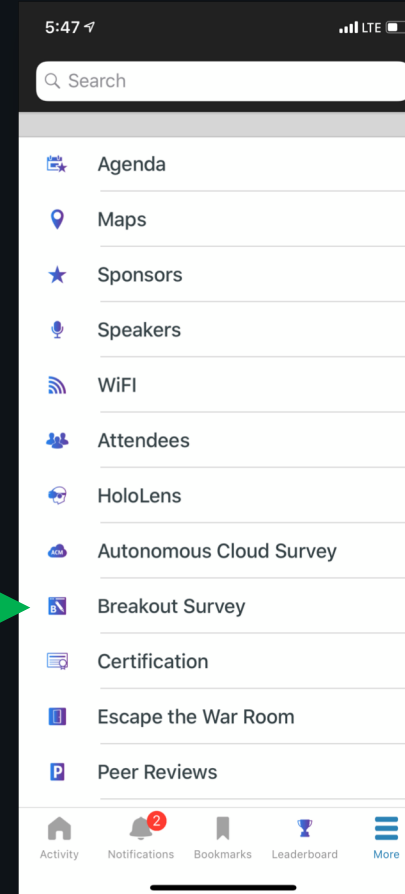
for more details on session replay, advanced user session queries and user session analysis.



## Let us know how we did!

- 2 minute survey
- Find it from the Perform app menu
- Complete survey for each breakout you attend

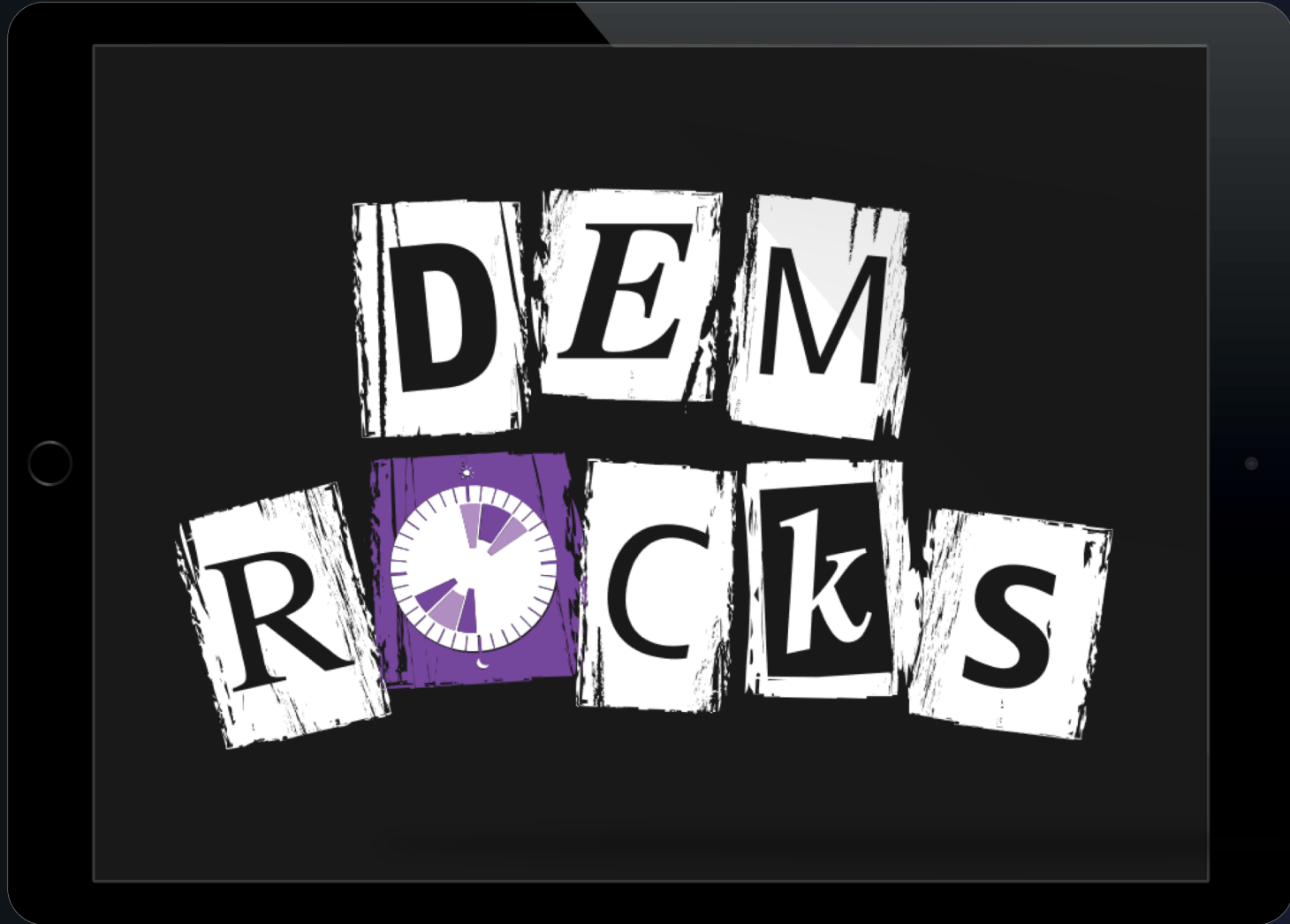
Track = Digital Experience





And don't forget ...

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Thank you





Thank you

 dynatrace  
**Perform**