

Digital Experience Management Redefined

Steve Tack, SVP Products

 dynatrace
Perform

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



Application
performance monitoring



Cloud infrastructure
monitoring



AIOps



Digital experience
management

Software Intelligence Platform

Democratize information

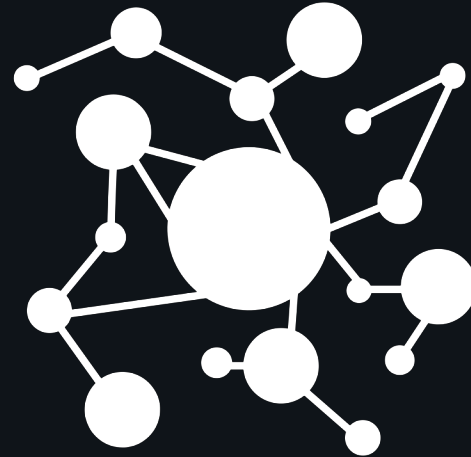


Democratize information





modern



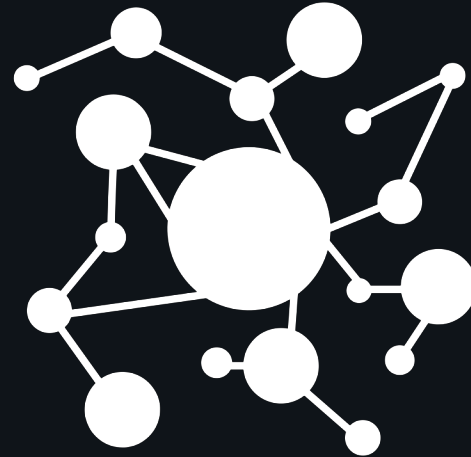
complete



business-centric



modern



complete



business-centric

Filter user types

easytravel-ang.lab.dynatrace.org

> Properties, tags, and JavaScript frameworks

easyTravel X

Analyze user sessions

Pin to dashboard

...

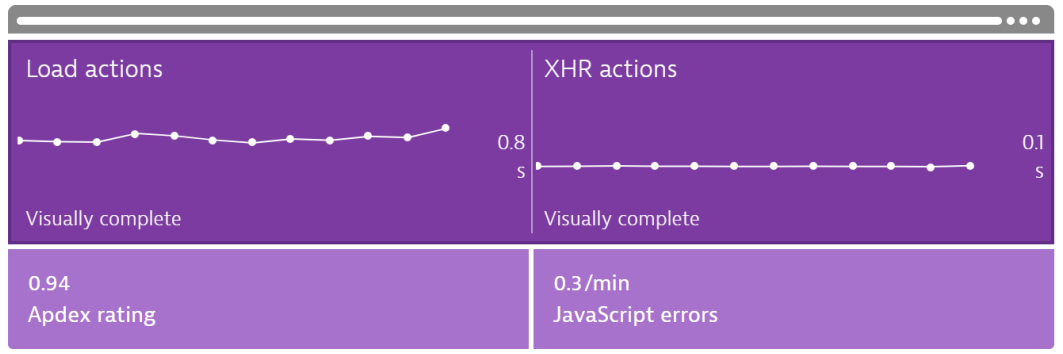
Performance analysis

Actions /min, Action duration, Apdex rating, JavaScript errors, 3rd party providers and Services.

42% Chrome
Top browser

76% Real users
Top user type

View geolocation breakdown



Resources

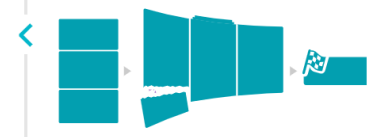
10.5/action
3rd party/CDN resources

5.2/action
Resources

7
Services

User behavior

Active sessions, Actions per session, Entry/Exit actions, Bounce rate, and Conversion goals.



Impact of user actions on performance

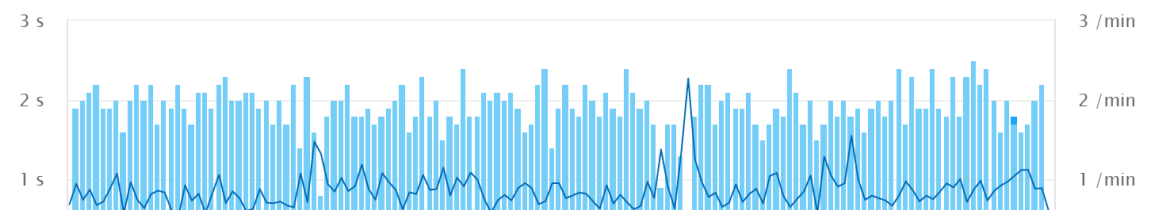
To view the details of individual user actions, click specific time intervals in the charts below. Then click Analyze.

Load actions

Median

Slowest 10%

Fastest 10%



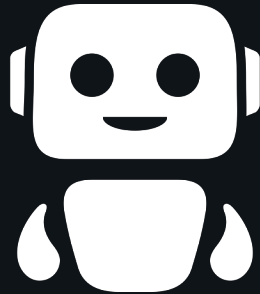
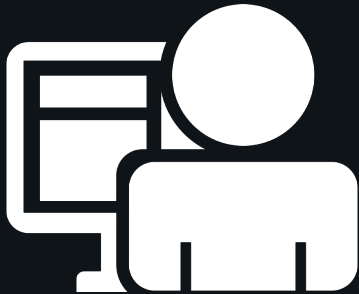
2 Problems Yesterday, 05:52 - Today, 05:52

- Problem 163: Browser monitor global outage

easyTravel Angular
Jan 29 20:59 - Jan 29 21:10 (11 minutes)
- Problem 119: Browser monitor global outage

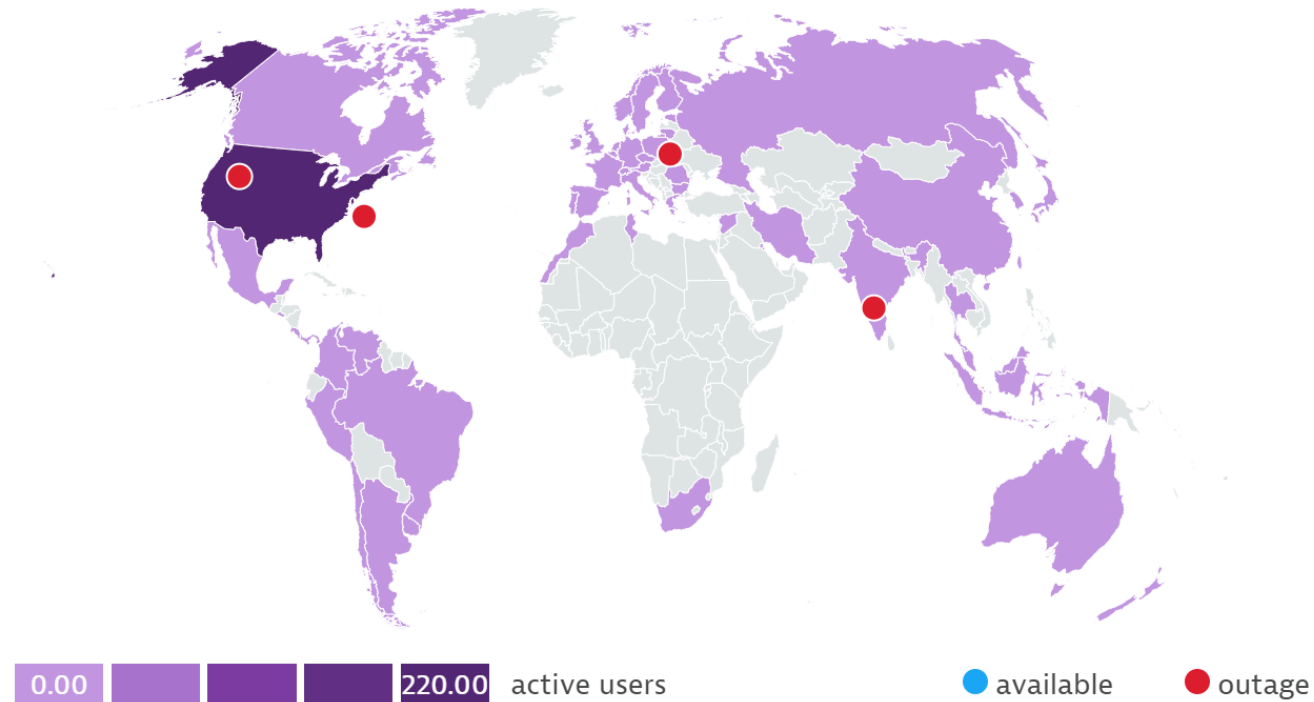
easyTravel Angular
Jan 29 12:00 - Jan 29 12:10 (10 minutes)

Seamless real user and synthetic monitoring



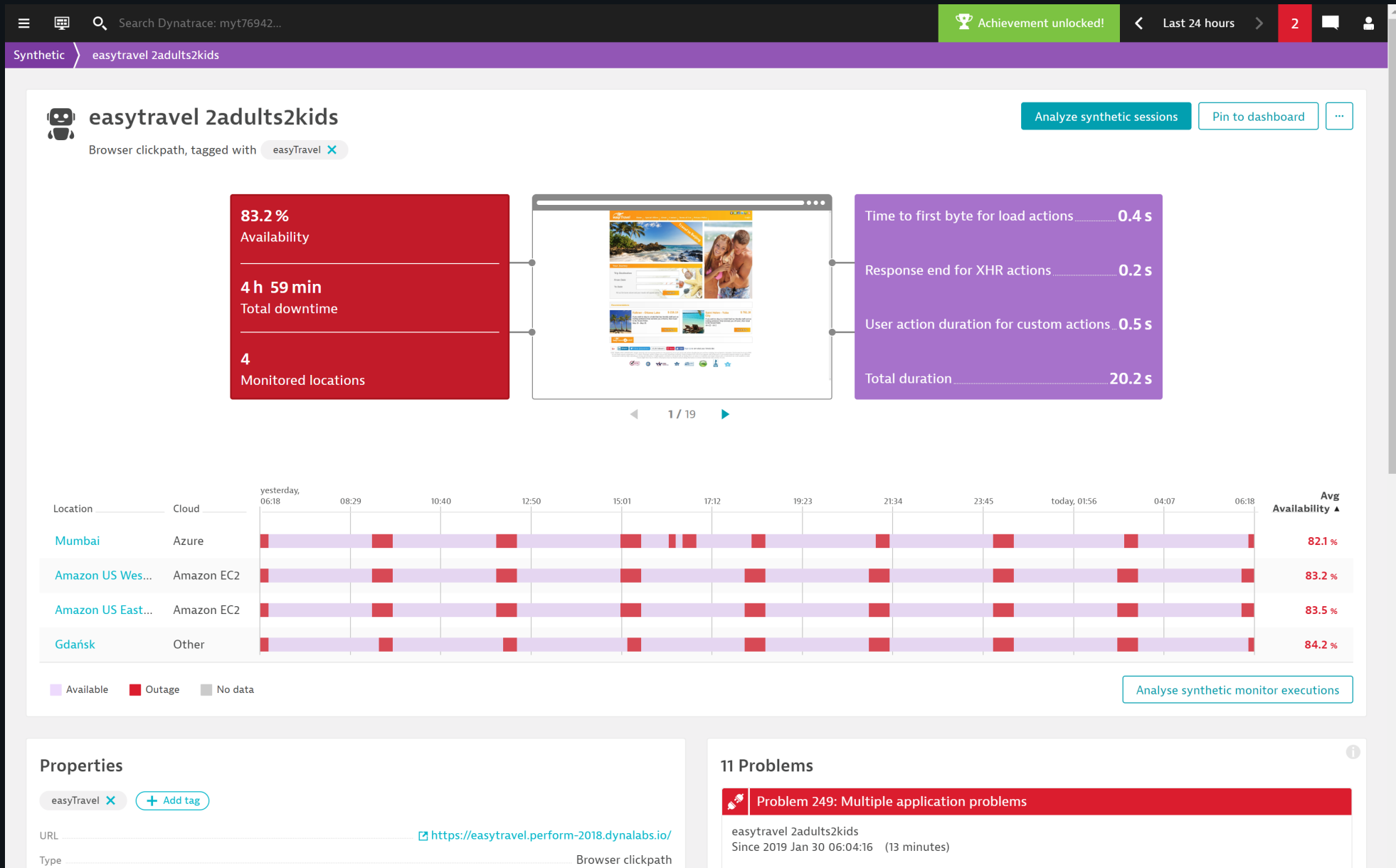
Worldmap

☒ Show aggregated real-user traffic



[View real-user worldmap](#)

AI-powered synthetic monitoring



easytravel 2adults2kids

Browser clickpath, tagged with easyTravel

83.2 %

Availability

4 h 59 min

Total downtime

4

Monitored locations

Location	Cloud	yesterday, 06:18	08:29
Mumbai	Azure	<div></div>	<div></div>
Amazon US Wes...	Amazon EC2	<div></div>	<div></div>
Amazon US East...	Amazon EC2	<div></div>	<div></div>
Gdańsk	Other	<div></div>	<div></div>

Available Outage No data

Root cause

Based on our dependency analysis all incidents have the same root cause

easyTravel Customer Frontend

Web request service

Metric anomalies detected

Review the metrics which show abnormal or outlying behavior.

Client failure rate

+ 0.11 %

Now

Before

Analyze findings

Show 1 more

Properties

easyTravel

+ Add tag

URL <https://easytravel.perform-2018.dynalabs.io/>

Type Browser clickpath

11 Problems

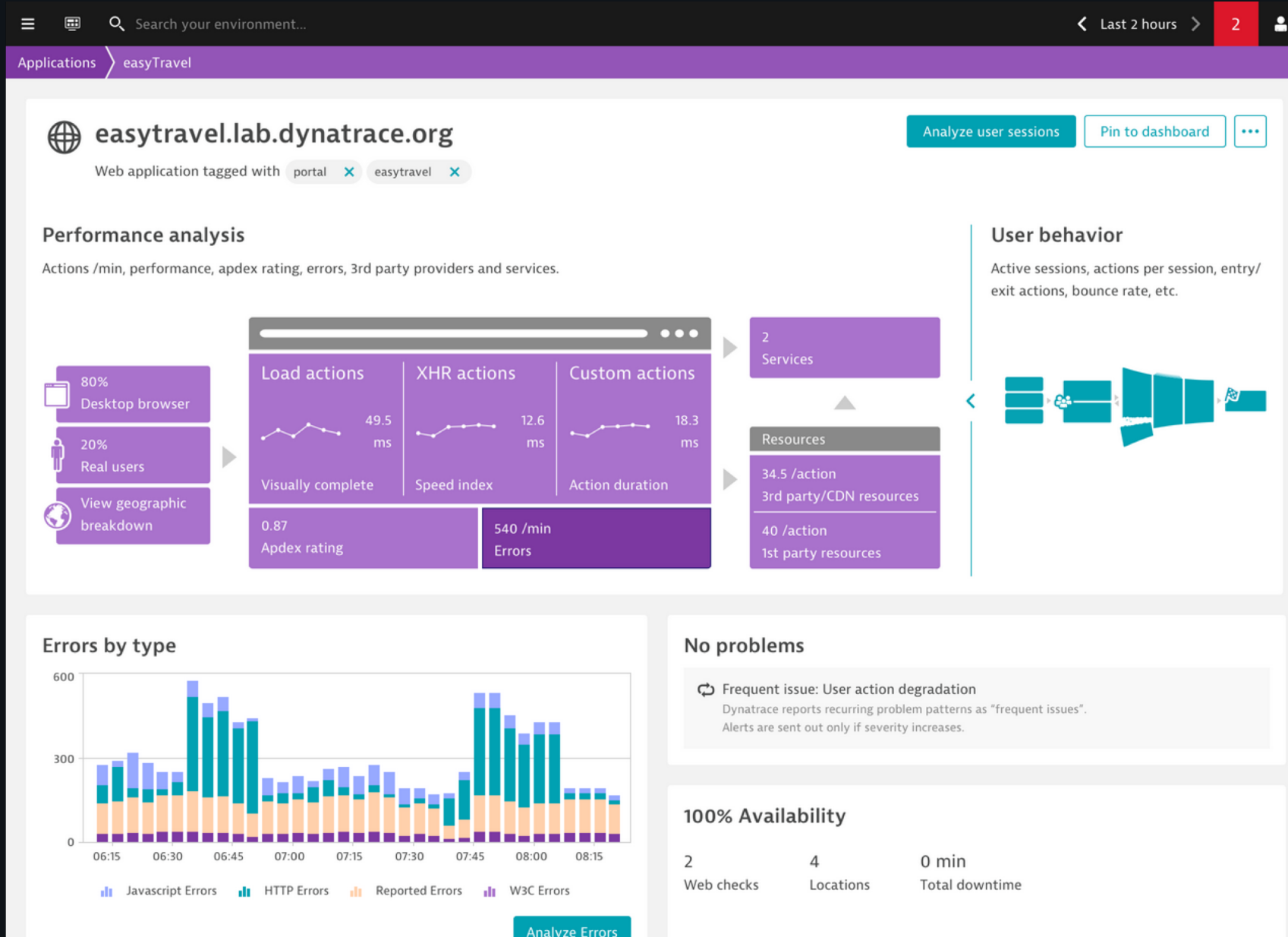
Problem 249: Multiple application problems

easytravel 2adults2kids

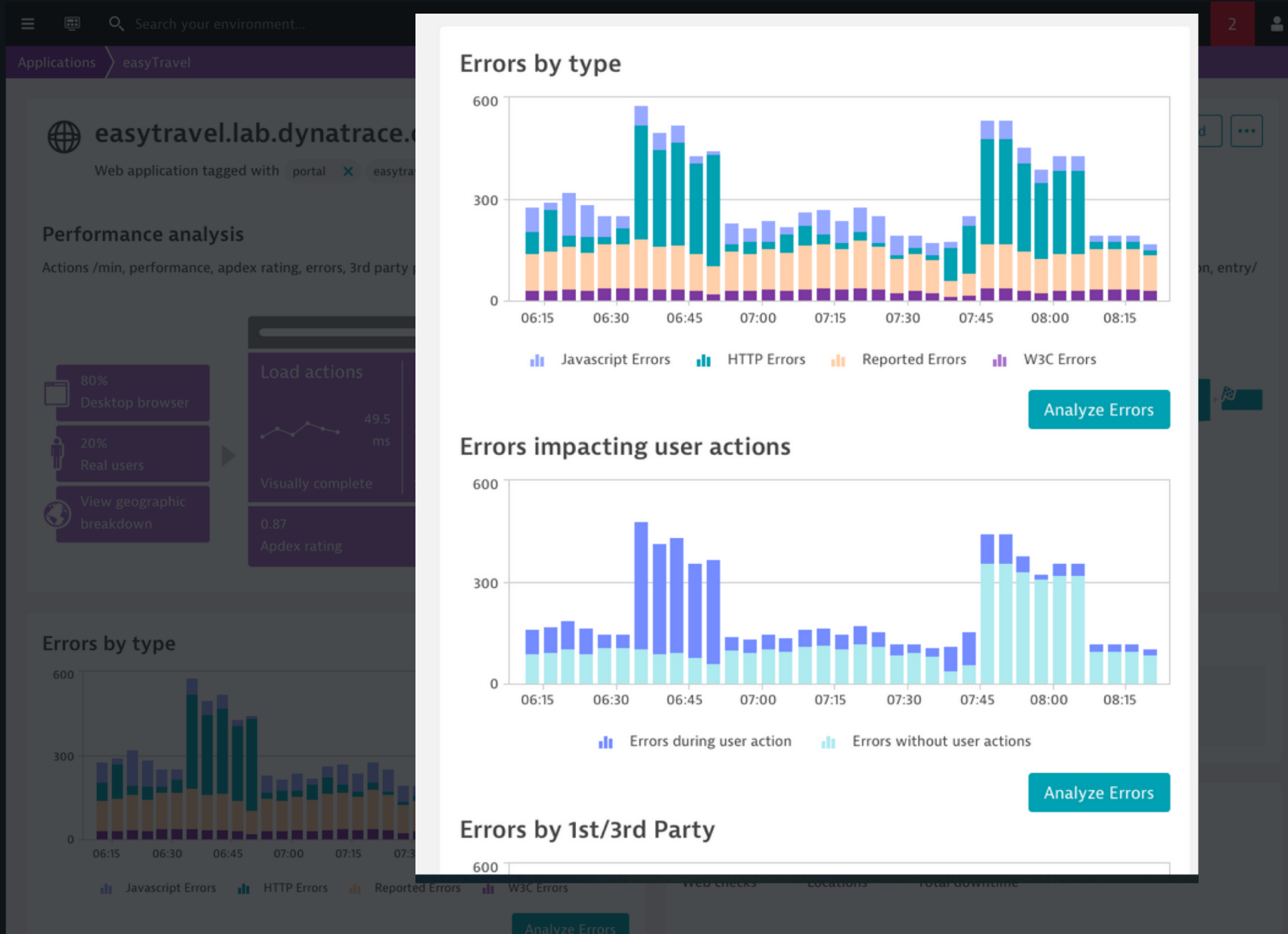
Since 2019 Jan 30 06:04:16 (13 minutes)

Confidential

Powerful error analysis




Powerful error analysis



AI-powered mobile application monitoring

Problems **Problem 840** easyTravel Demo

 **easyTravel Demo: Slow user actions**
Problem 840 since 11:59 for 12 minutes.

▼ Slow user actions (1 event)

Slow user actions
Action duration (0.2 ms) exceeds the auto-detected baseline (0.1 ms) by 100 %

Affected actions	Action name
150	Touch on <journey details>

Start typing to filter

easyTravel Demo
Mobile application (Android, Windows, iOS)

easyTravel portal [+ Add tag](#)

User experience

217 Users 1.00 Apdex rating
38/min User actions

Network performance

707 Web requests 58.3% Error rate

Crashes


15 Crashes 93.1% Crash-free users
1/min Crashes

Called services


1 Services
dev: easyTravel Customer Frontend

Crashes and affected users
Compares total number of crashes with numbers of affected users during selected time period.


3 Problems Today, 11:59 - 12:12

 **Problem 945: Error rate increase**







easyTravel Demo
Since 2018 Sep 3 12:00:06 (12 minutes)

 **Problem 698: Unexpected high usage**

easyTravel Demo
Since 2018 Sep 3 11:59:55 (12 minutes)

 **Problem 840: Slow user actions**

easyTravel Demo
Since 2018 Sep 3 11:59:06 (13 minutes)

Type	User action	Actions	Duration	Apdex	Details
	Touch on <journey details>	15.50 /min	7 ms	1.00	▼
	AppStart easyTravel	10.12 /min	7 ms	1.00	▼
	Display SearchJourneyActivity	4.42 /min	27 ms	1.00	▼
	Checkout	4.27 /min	23 ms	1.00	▼
	Show user account details	4.23 /min	7 ms	1.00	▼
	Book journey	0.96 /min	23 ms	1.00	▼

[View all user actions](#)

Automate your monitoring strategy

Synthetic Manage synthetic monitors, locations, and push external synthetic data to Dynatrace

POST `/synthetic/ext/events` Pushes external synthetic events to Dynatrace

POST `/synthetic/ext/stateModifications` Modifies the operation state of all external monitors

POST `/synthetic/ext/tests` Pushes external synthetic monitors, locations, and results to Dynatrace

GET `/synthetic/locations` Lists all public locations available for your environment

GET `/synthetic/locations/{locationId}` Gets properties of the specified location

GET `/synthetic/monitors` Lists all synthetic monitors in your Dynatrace environment

POST `/synthetic/monitors` Creates a new synthetic monitor

GET `/synthetic/monitors/{monitorId}` Gets parameters of the specified synthetic monitor

PUT `/synthetic/monitors/{monitorId}` Updates parameters of the specified synthetic monitor

DELETE `/synthetic/monitors/{monitorId}` Deletes the specified synthetic monitor

Threshold Manage thresholds





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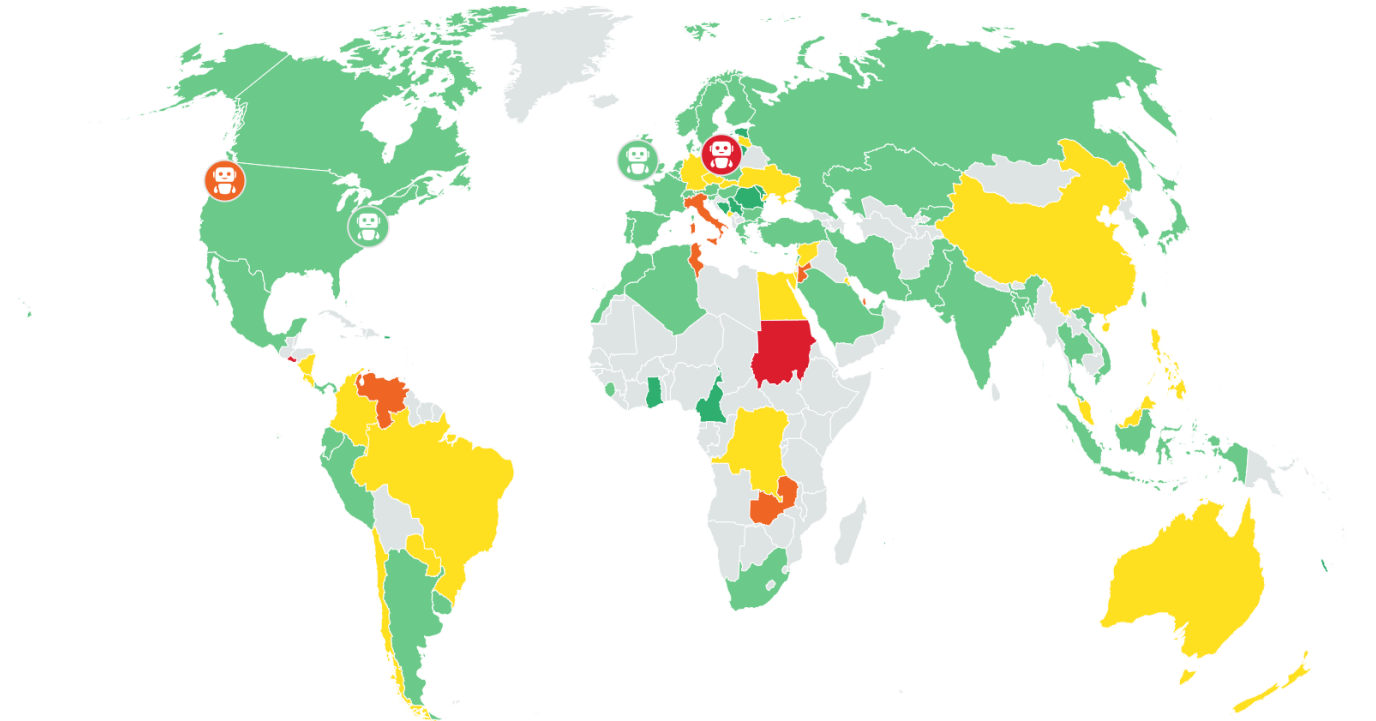
business-centric

360-degree view of digital experience

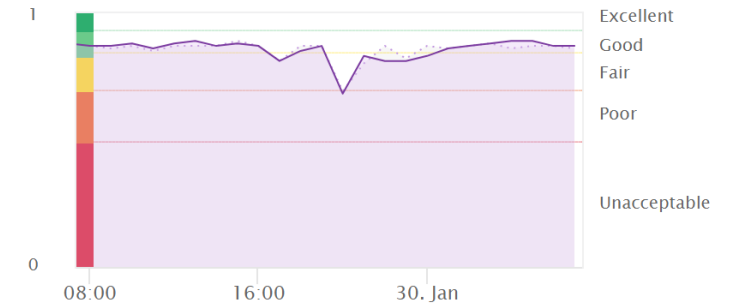
Worldmap

[Pin to dashboard](#)

Apdex User actions Load actions XHR actions Custom actions JS errors






Excellent Good Fair Poor Unacceptable




● yesterday, 07:21 - today, 07:21 ● Jan 22 2019, 07:21 - Jan 23 2019, 07:21

Countries (103)		Synthetic locations (4)	
	Apdex ▼	User actions	
Bosnia and Herzegovina	1.00 Excellent	<0.01 /min	
Estonia	1.00 Excellent	<0.01 /min	
Puerto Rico	1.00 Excellent	<0.01 /min	
New Caledonia	0.98 Excellent	0.02 /min	
Romania	0.97 Excellent	0.10 /min	
Republic of Lithuania	0.97 Excellent	0.04 /min	
Republic of Moldova	0.97 Excellent	0.02 /min	
Barbados	0.97 Excellent	0.01 /min	
Serbia	0.96 Excellent	0.06 /min	

Global footprint with extensibility









Private synthetic locations

Setup private synthetic monitoring locations to execute browser and HTTP monitors from your own infrastructure. For example to monitor internal applications synthetically. It is not possible to delete a private location as long as there are monitors assigned to it.

Create location

Location name _____ ActiveGate addresses _____ Delete — Edit

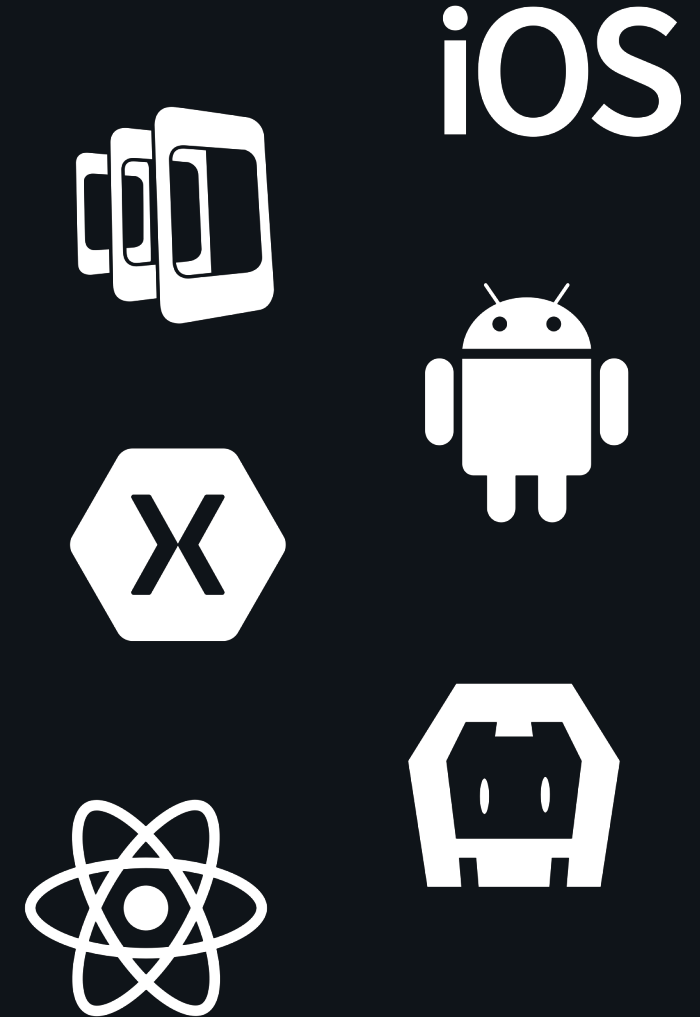
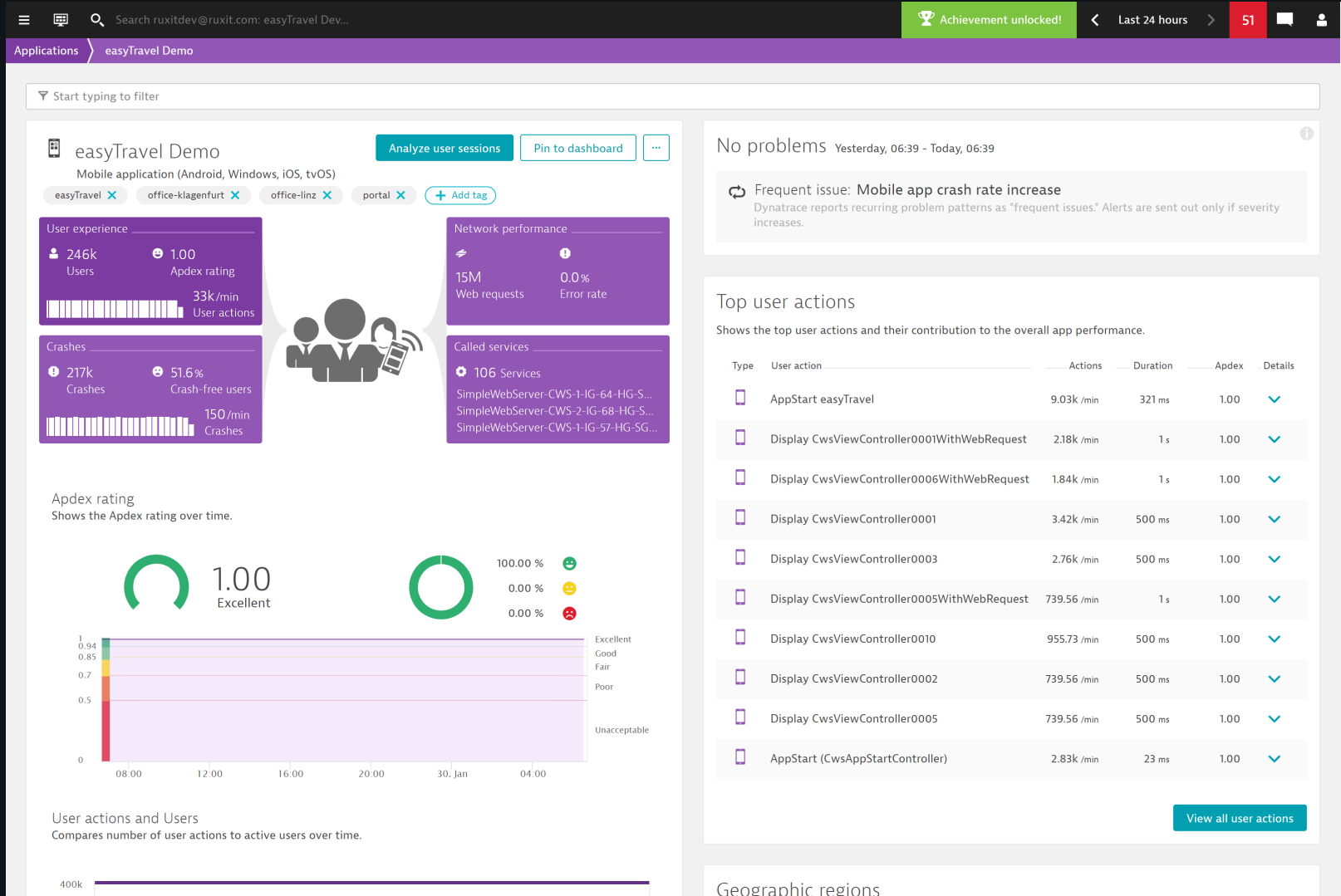
	AWS Ireland Http Monitor	ip-172-31-44-230.eu-west-1.compute.internal (172.31.44.230)	✕	✓
	AWS Virginia Browser Mo	ip-172-31-51-108.ec2.internal (172.31.51.108)	✕	✓
	AWS Virginia Http Monitc	ip-172-31-87-150.ec2.internal (172.31.87.150)	✕	✓
	Linz Office (actually AWS)	ip-172-31-0-152.eu-west-1.compute.internal	✕	✓
	demperform2019-location	ip-10-175-29-22.ec2.internal (10.175.29.22), ip-10-175-29-131.ec2.in...	✕	✓
	demperform2019-location	ip-10-175-29-25.ec2.internal (10.175.29.25), ip-10-175-29-241.ec2.in...	✕	✓

47 locations selected

Filter by cloud provider, continent, country, city or by IP address ☐ Hide inactive locations

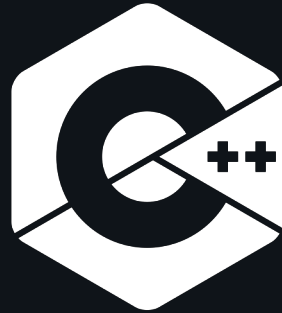
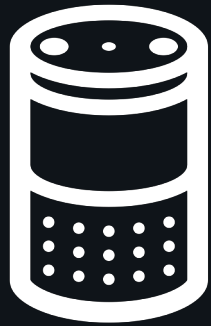
<input checked="" type="checkbox"/> Location name	Country	Continent
<input checked="" type="checkbox"/> Beijing (cn-beijing) Beta	China	Asia
<input checked="" type="checkbox"/> Busan (koreasouth)	Republic of Korea	Asia
<input checked="" type="checkbox"/> Hong Kong (eastasia)	Hong Kong	Asia
<input checked="" type="checkbox"/> Osaka (japanwest)	Japan	Asia
<input checked="" type="checkbox"/> Seoul (ap-northeast-2)	Republic of Korea	Asia
<input checked="" type="checkbox"/> Seoul (koreacentral) Beta	Republic of Korea	Asia
<input checked="" type="checkbox"/> Tokyo (ap-northeast-1)	Japan	Asia
<input checked="" type="checkbox"/> Tokyo (japaneast) Beta	Japan	Asia

Mobile monitoring



19

All digital touchpoints with OpenKit



.NET



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



RUM for SaaS vendor experience


servicenow®

 Office 365


NETSUITE


salesforce


ORACLE®
CLOUD

 **+ a b l e a u®**


workday®
Built for the future.™

RUM for SaaS vendor experience

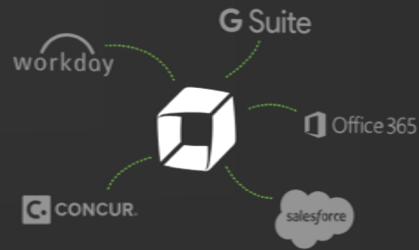
Set up monitoring via browser extension

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

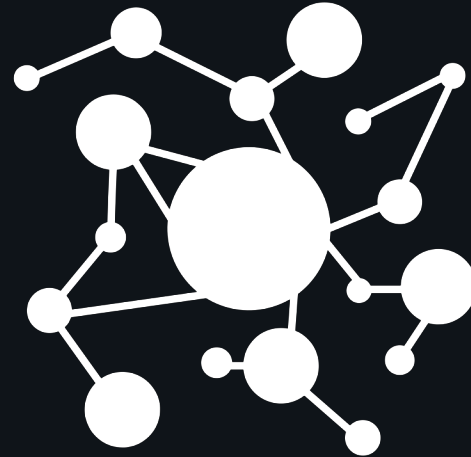
Monitor all user sessions and the performance of your application

Set up monitoring





modern

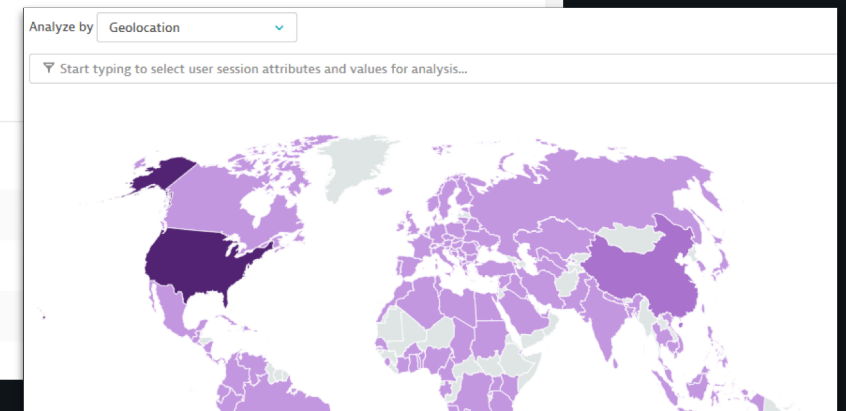
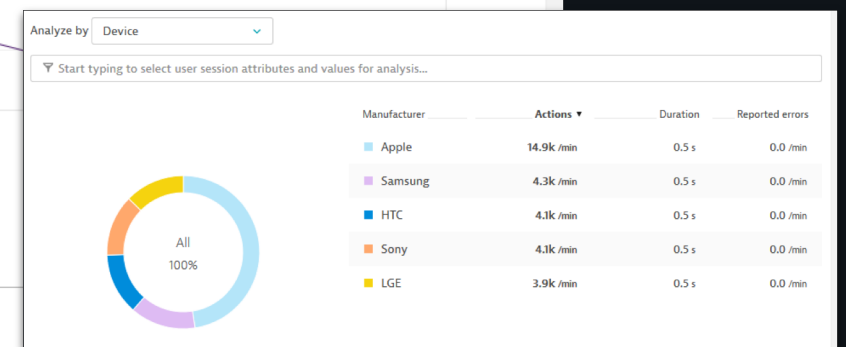
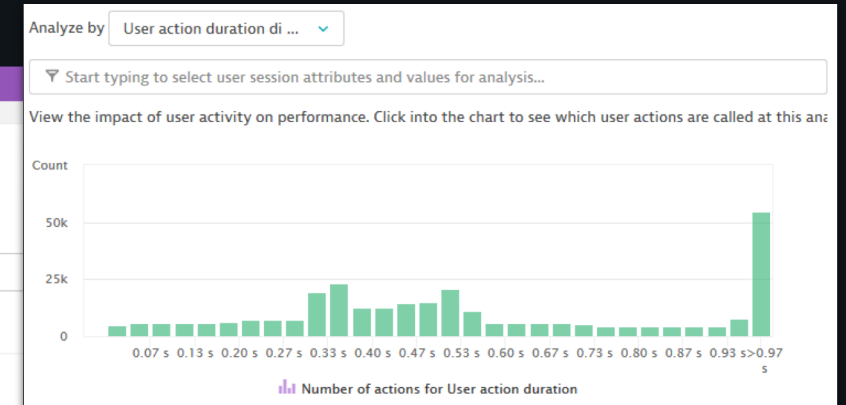
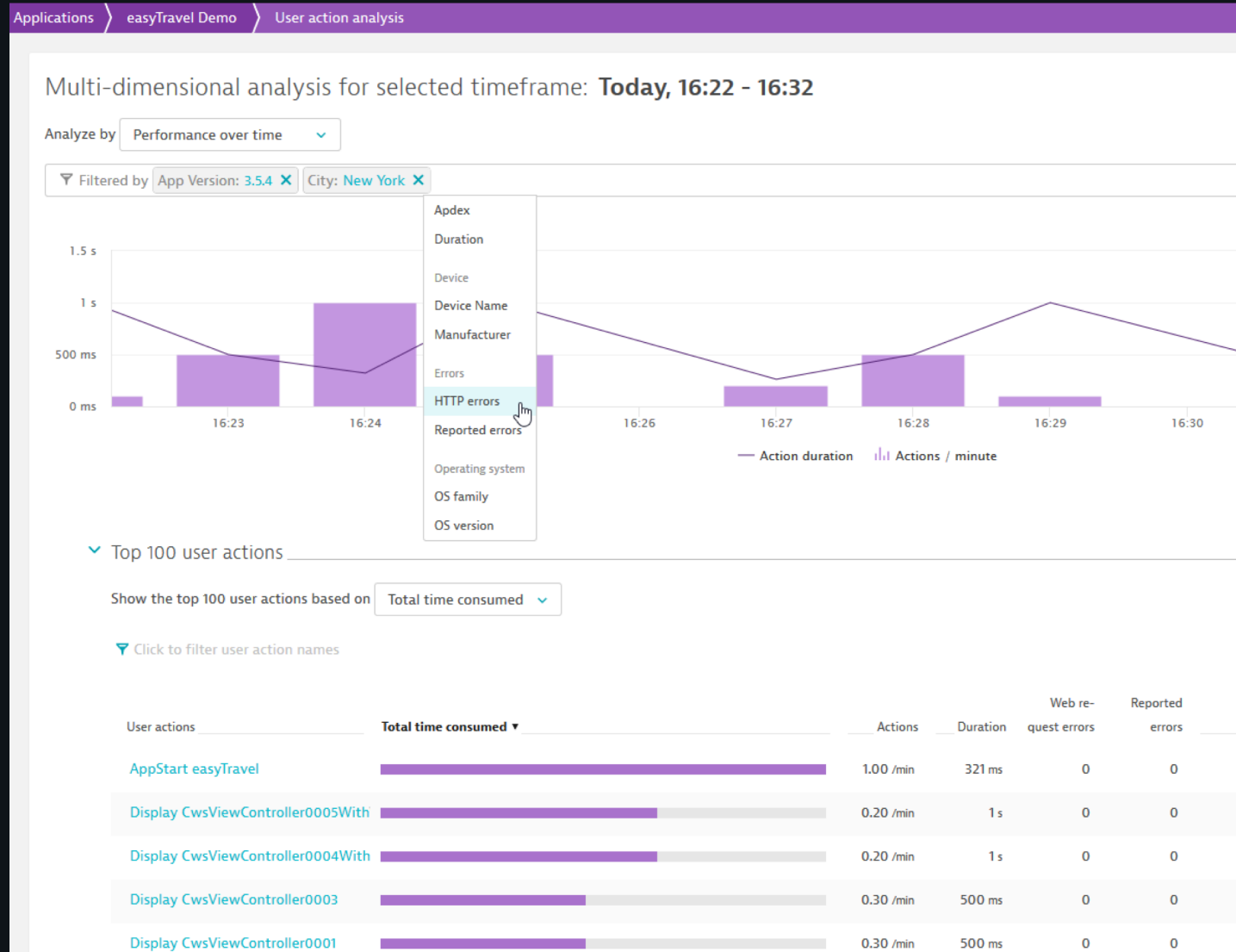


complete

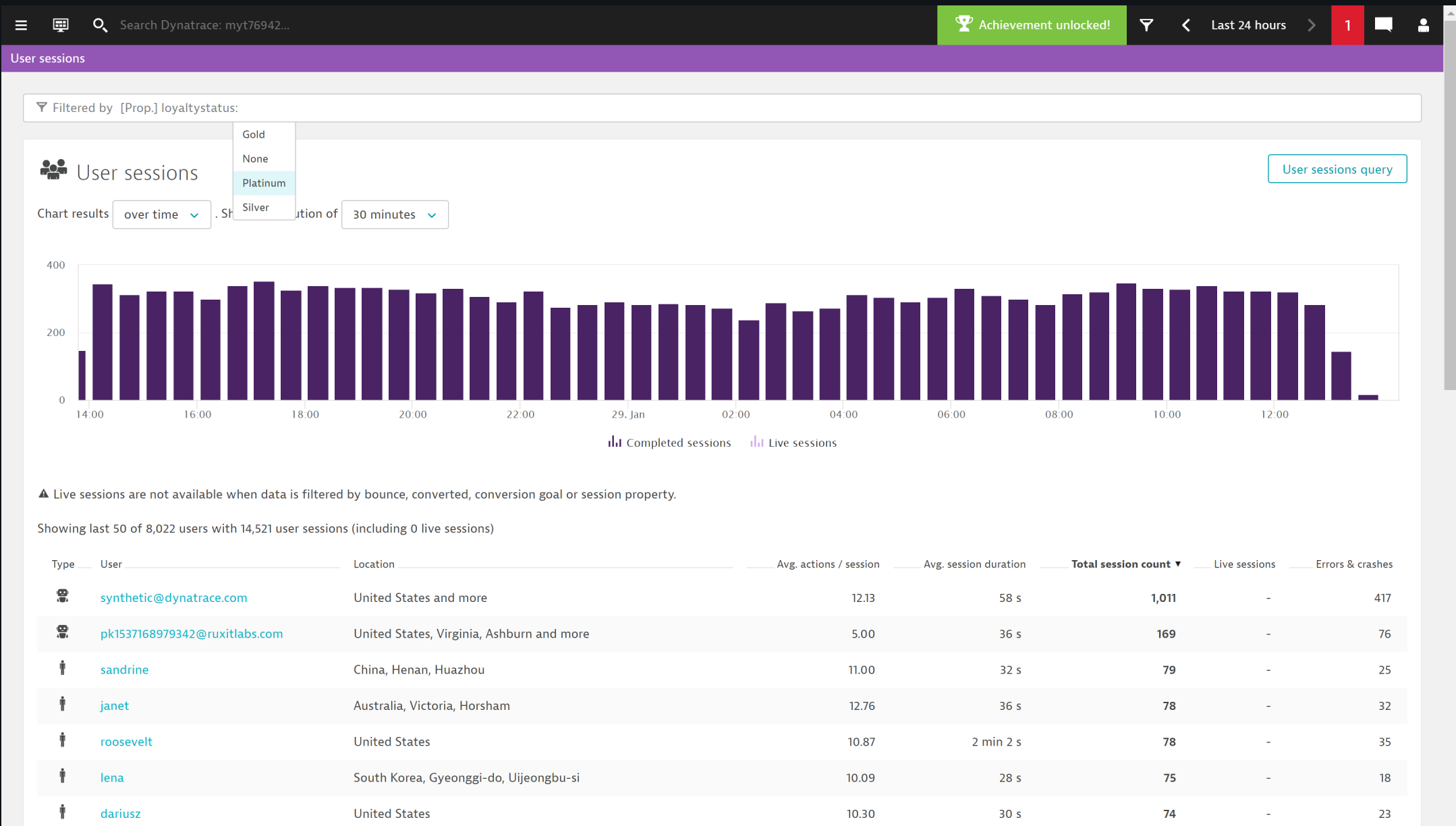


business-centric

Multi-dimensional analysis



User segmentation with session properties

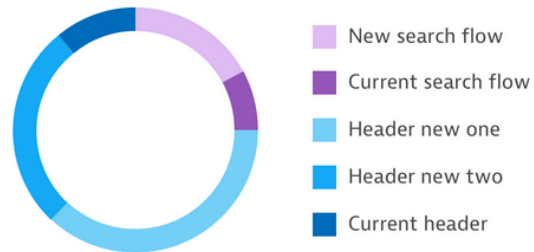


Extend reporting and analysis

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
	Loading of page /logout.jsf	easytravel.ruxitlabs.com	<div></div>	0.18 s
	Homepage	easytravel-win.ruxitlabs.com	<div></div>	1.35 s
	Loading of page /Booking	easytravel.ruxitlabs.com	<div></div>	4.88 s

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

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

Metric name


This subscription will produce 10 metric.

[View advanced settings](#)

Subscribe

Dynatrace API for user session insights





Select a spec Environment API

Dynatrace Environment API ^{1.0}

[Base URL: myt76942.dev.dynatrace.com/api/v1]
[/api/v1/spec2.json](#)

Documentation of the Dynatrace Environment API. Refer to the [help page](#) to read about use-cases and examples. Note that operations marked as beta may be changed in non compatible ways.

Authorize

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

>

Topology & Smartscape - Application

Manage applications

>

Dynatrace API for user session insights



User sessions

Obtain user sessions data

GET

/userSessionQueryLanguage/table

Execute a query and receive results as table-structure even if groupings are specified. The result is a flat list of rows containing the requested columns.

Parameters

Try it out

Name	Description
query <small>required</small> string (query)	The user session query to execute. The table scheme corresponds to the definition of 'usersession'. Example: SELECT country, city, COUNT(*) FROM usersession GROUP BY country, city
startTimestamp integer (query)	The query start time for usersessions in milliseconds since January 1st, 1970. If 0, then the current time minus 2 hours is used. Attention: If exact times are important, add this to the query string.
endTimestamp integer (query)	The query end time for usersessions in milliseconds since January 1st, 1970. If 0, then the current time is used. Attention: If exact times are important, add this to the query string.

Responses

Response content type application/json

Code	Description
200	<div>The result of the query.</div> <div>Example Value Model</div> <pre>{ "extrapolationLevel": 1, "columnNames": ["string"], "values": [[{}]] }</pre>
400	The query is missing.
404	The query is invalid, see the query message for more information.
999	See the data scheme for detailed information on queries and returned values (this response code is never returned).

Harness business-relevant KPIs



User sessions query

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

For example: `SELECT userid, COUNT(*), AVG(duration), device FROM usersession WHERE country IN('Austria') GROUP BY userid, device`

Run query



Start writing your query and get suggestions of possible syntax or check the [documentation](#) for more in-depth information.





Explore the results in a table & chart view. Get a deeper understanding of your data by fine-tuning your query.








Pin your query to the dashboard for easy retrieval at a later date.

Custom queries, segmentations and aggregations

  Search Dynatrace: myt76942...

 Achievement unlocked!

  Last 24 hours   

User sessions > User sessions query



User sessions query

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

```
select AVG(duration), MAX(duration), browserfamily FROM usersession where country IN("Austria","Germany", "United States") GROUP BY browserFamily ORDER BY  
AVG(duration) DESC
```

Run query

User sessions query results

[Pin to dashboard](#)

Visualization:

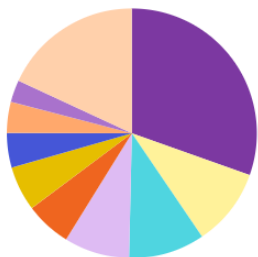
Bar Chart

Line Chart

Pie Chart

Single Value

Table Only








30% 25968.16
10% 54346.91
10% 36992.41
8% 25980.85
6% 45910.33
6% 46362.30
4% 23779.91
4% 22998.77
3% 277805
18% Others (+14)

avg(duration)	max(duration)	browserfamily
277805	277805	IE Mobile
73548.80	142733	UC Browser mobile
54346.91	978771	Chrome Mobile
48083.20	164970	Opera Mobile
46362.30	563852	Mobile Samsung Browser

Understand business results in real-time

 Search Dynatrace:

 Achievement unlocked!

  Last 24 hours   

User sessions > User sessions query



User sessions query

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

```
select matchingConversionGoals, count(matchingConversionGoals) FROM useraction where matchingConversionGoals IS NOT NULL AND usersession.country="United States" GROUP BY matchingConversionGoals
```

Run query

User sessions query results

Pin to dashboard

Visualization:

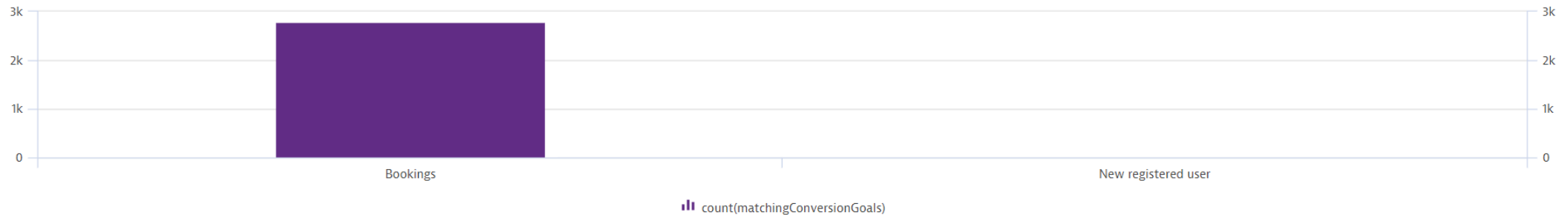
Bar Chart

Line Chart

Pie Chart

Single Value

Table Only



matchingConversionGoals

count(matchingConversionGoals)

Bookings

2791

New registered user

24

Announcing Today Session Replay Extends Dynatrace DEM