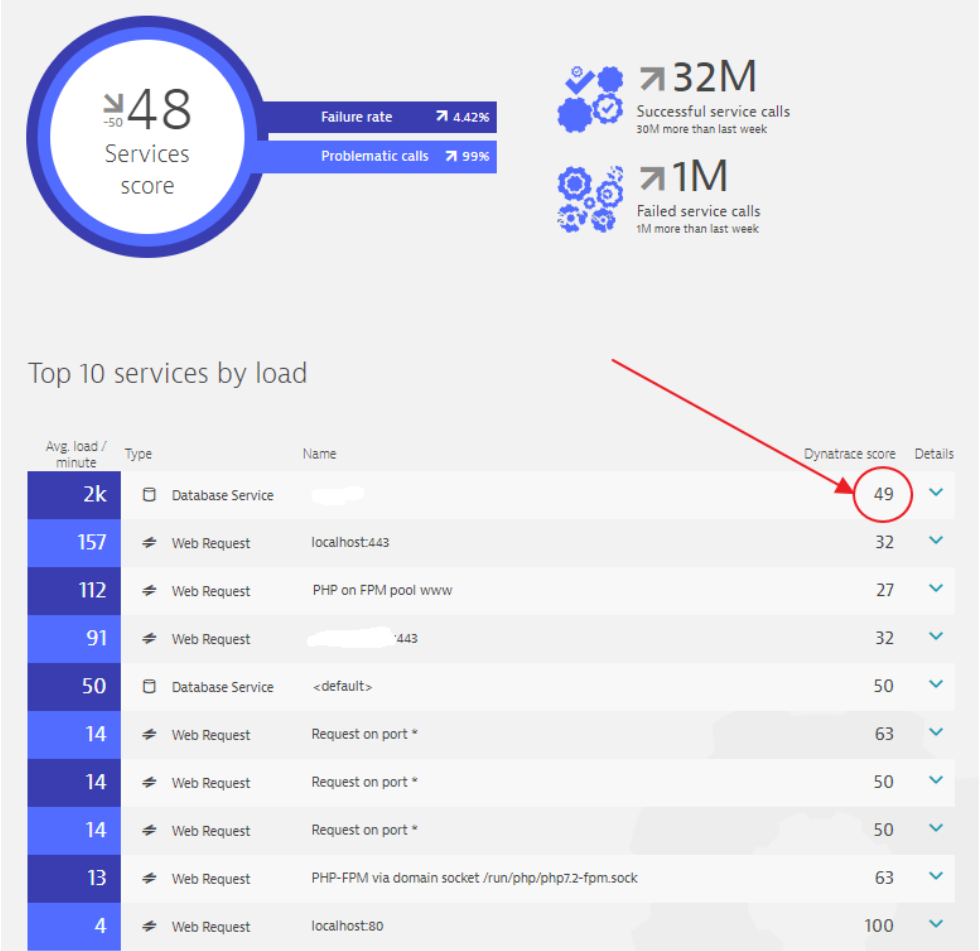
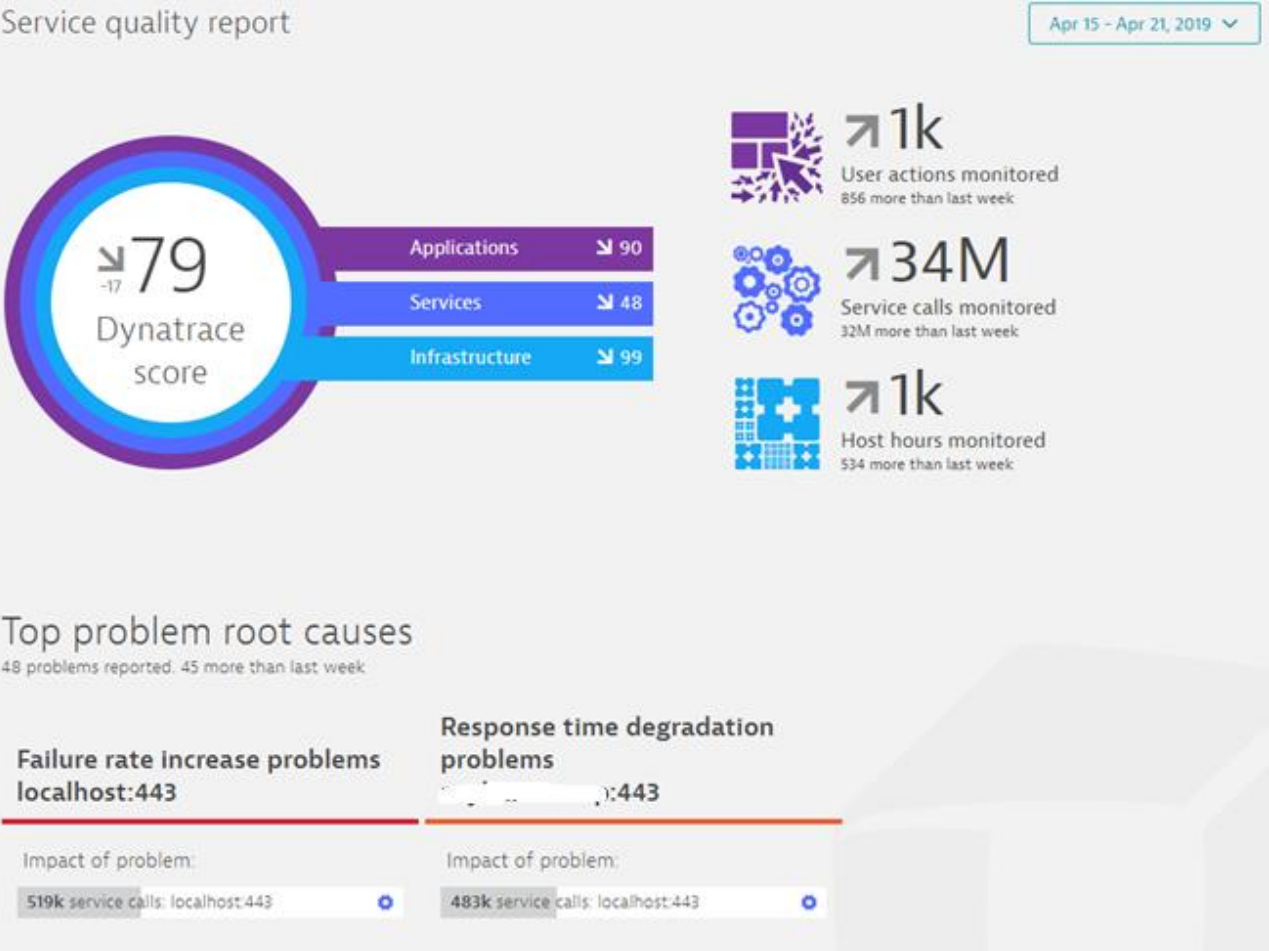


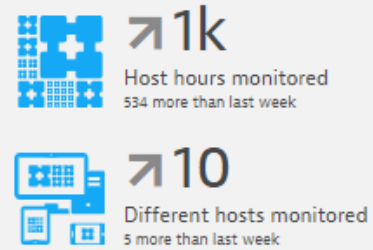
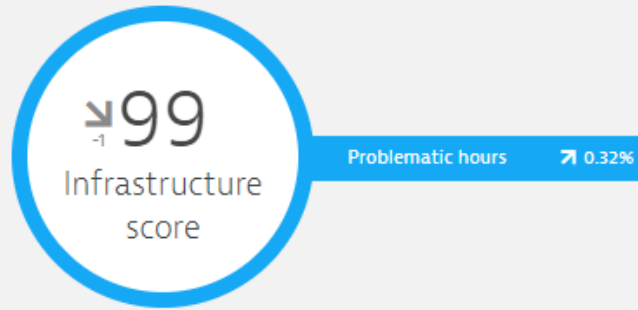
Dynatrace APM Screenshots

Example of a non-containerized app running on Azure without scalable infrastructure. Performance Tests with [OctoPerf](#).






Major issue shown: Database is overloaded during the performance tests because user sessions are saved in mysql database (default setting in Joomla CRM). Two nodes database is setup as 1 master + 1 replica for backup purposes and without load balancing. CDN/WAF is not located in Azure and cannot be monitored by Dynatrace. Not enough “dummy” users are created in the app (registered in Joomla+database). Around the same 10 users are used during the performance test, each one with a unique login/session). Octoperf runs all the tests with shared sessions ( ~10 users). The goal of 40k-140k users per hour is excessive (with several workflows/use cases per session).



## Dynatrace APM Screenshots

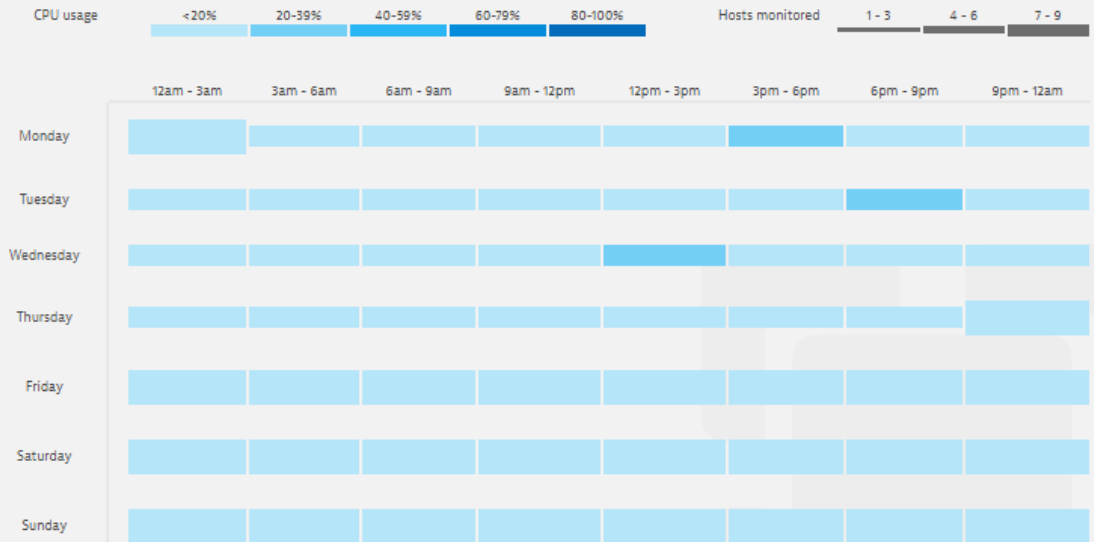


## Top 5 infrastructure problems

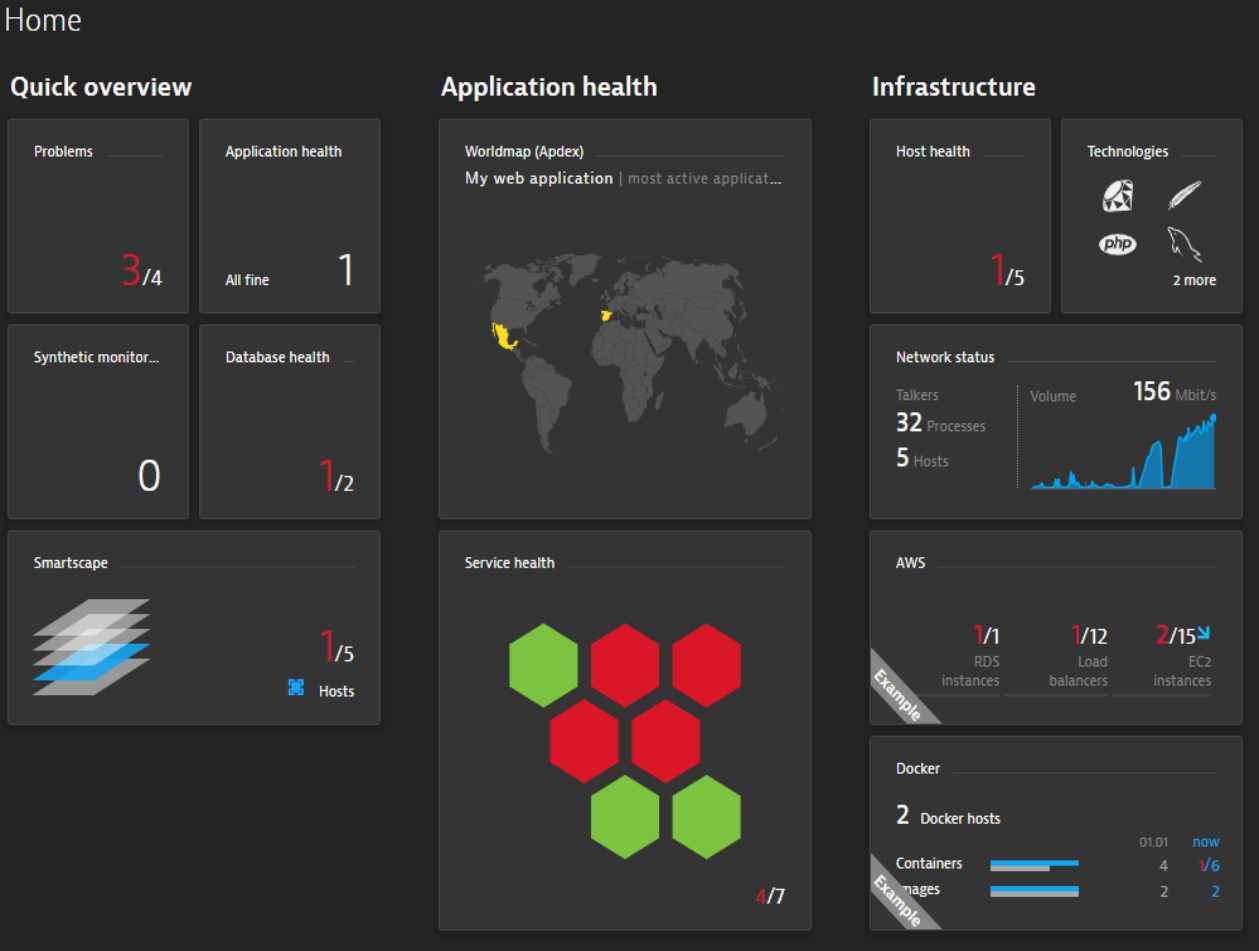
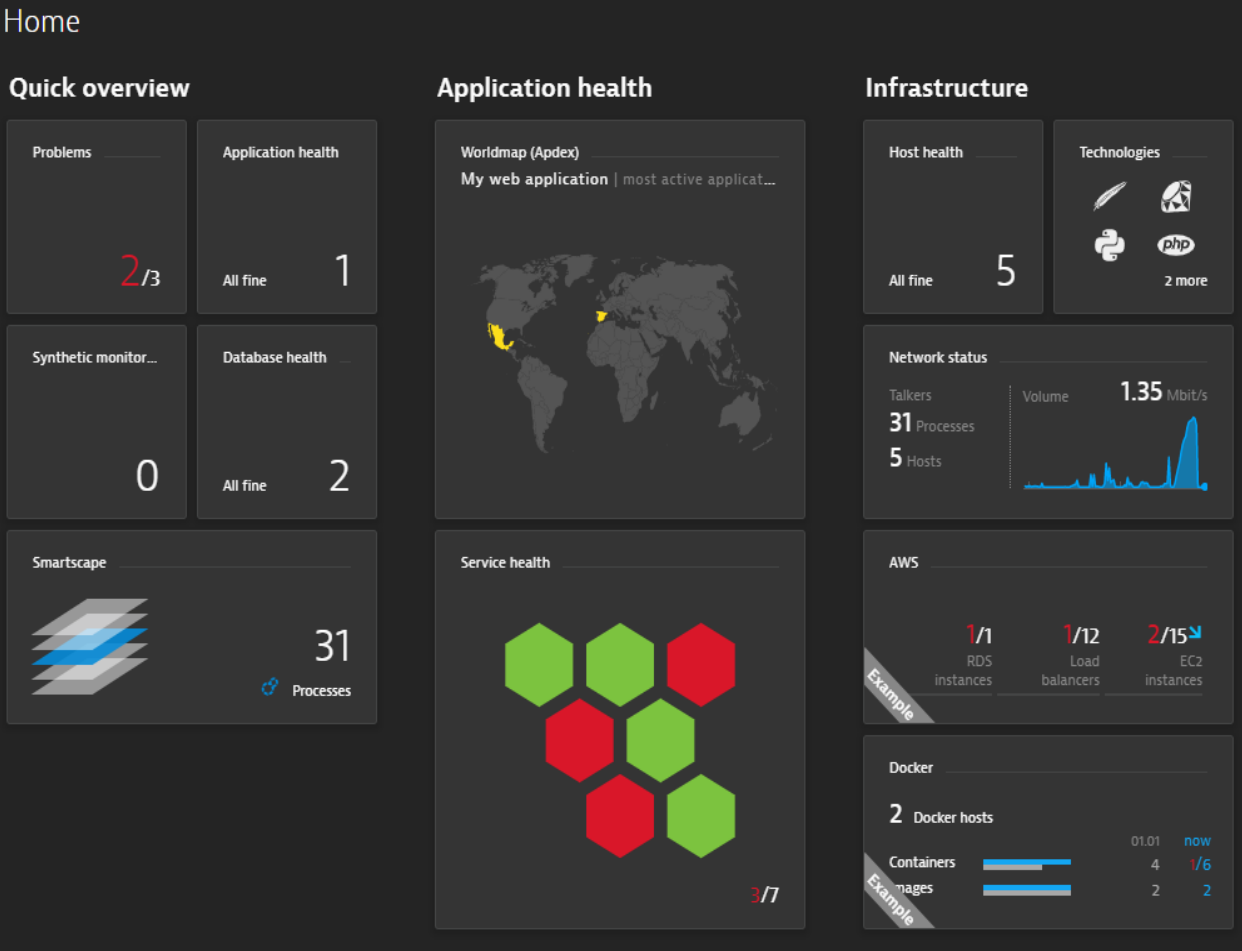
Type	Host name	Duration
 CPU saturation	[REDACTED]	1 h 23 min
 Memory saturation	[REDACTED]	1 h 11 min
 Connectivity problem	nginx	50 min
 CPU saturation	[REDACTED]	38 min
 CPU saturation	[REDACTED]	19 min

## Peak infrastructure usage

Infrastructure usage peaked Monday, 3pm - 6pm. Dynatrace monitored 9 hosts. CPU peak averaged across all hosts: 5%.



# Dynatrace APM Screenshots



# Dynatrace APM Screenshots





# Dynatrace APM Screenshots


## All monitored services

7 services

Filtered by:

Custom service settings


Showing current values

 PHP on FPM pool www


PHP-FPM  
PHP-FPM  
Requests 623/min  
Response time median 917ms

 localhost:443


Apache Web Server apache\*  
Apache Web Server apache\*  
Requests 578/min  
Response time median 933ms

 [redacted]:443


nginx  
nginx  
Requests 313/min  
Response time median 978ms

 Request on port \*

[redacted]  
Requests 32/min

 Request on port \*

[redacted]  
Requests 28/min

 Request on port \*

[redacted]  
Requests 22/min

 localhost:80


Apache Web Server apache\*  
Apache Web Server apache\*  
Requests 3/min

## 3 problems matching selected filter


Filtered by:

 2 services  
Response time degradation  
Problem 683

Since 16:35 for 22 minutes  
Impacted services  
[redacted]:443, PHP on FPM pool www  
Impact  
411 requests/min affected  
all dynamic requests  
Root cause  
[redacted]:443 - Response time degradation  
PHP on FPM pool www - Response time degradation

 2 services  
Response time degradation  
Problem 871


Since 15:46 for 1 hour 11 minutes  
Impacted services  
PHP on FPM pool www, localhost:443  
Impact  
60.2 requests/min affected  
all dynamic requests  
Root cause  
PHP on FPM pool www - Response time degradation




 Slow disk  
Problem 157

From 15:50 - 15:55 for 5 minutes  
Impacted components  
[redacted]



Set up notifications

Problems Problem 683


 5 services: Multiple service problems  
Problem 683 detected at 16:35 (open for 2 hours 6 minutes).

 Affected applications - Affected services 5 Affected infrastructure -

Business impact analysis  
An analysis of all affected service calls and impacted real users during the first 1 hour 1 minute of the problem shows the following potential impact.

 0 Impacted users 1.22M Affected service calls

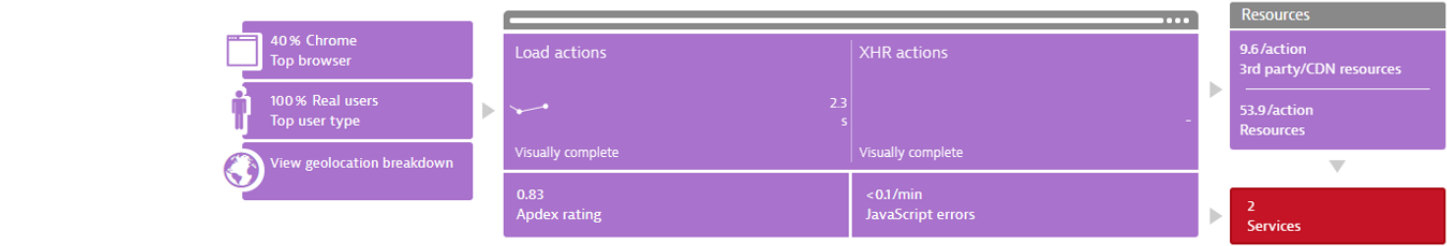
Affected entry point services

 [redacted]:443 (34 % affected)  
Dynamic web request resource (100 % affected)  
Static web request resource (100 % affected)  
localhost:443 (51 % affected)  
JavaScript /index.php (92 % affected)  
502k Affected service calls

# Dynatrace APM Screenshots

My web application  
Properties, tags, and JavaScript frameworks

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



Called services

Service name	Response time	Requests	Error rate
██████████:443	600 ms	268.2 /min	24.33 %
localhost:443	579 ms	490.8 /min	24.57 %

View service flow

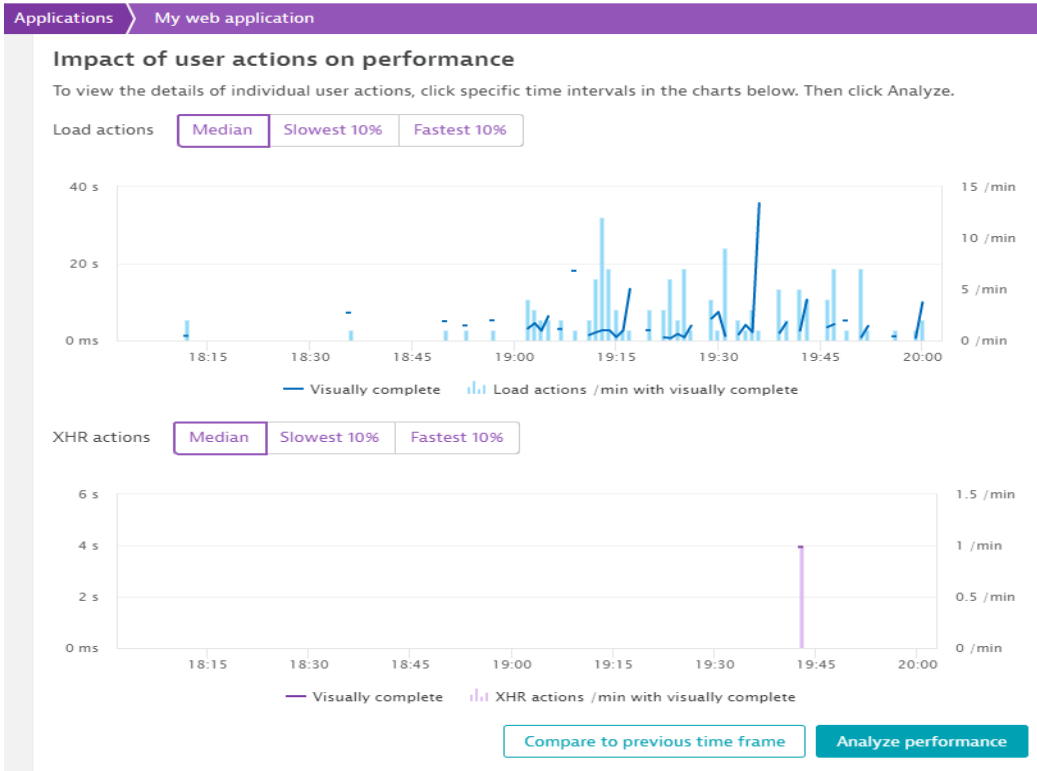
No problems Today, 15:36 - 17:36

Top user actions

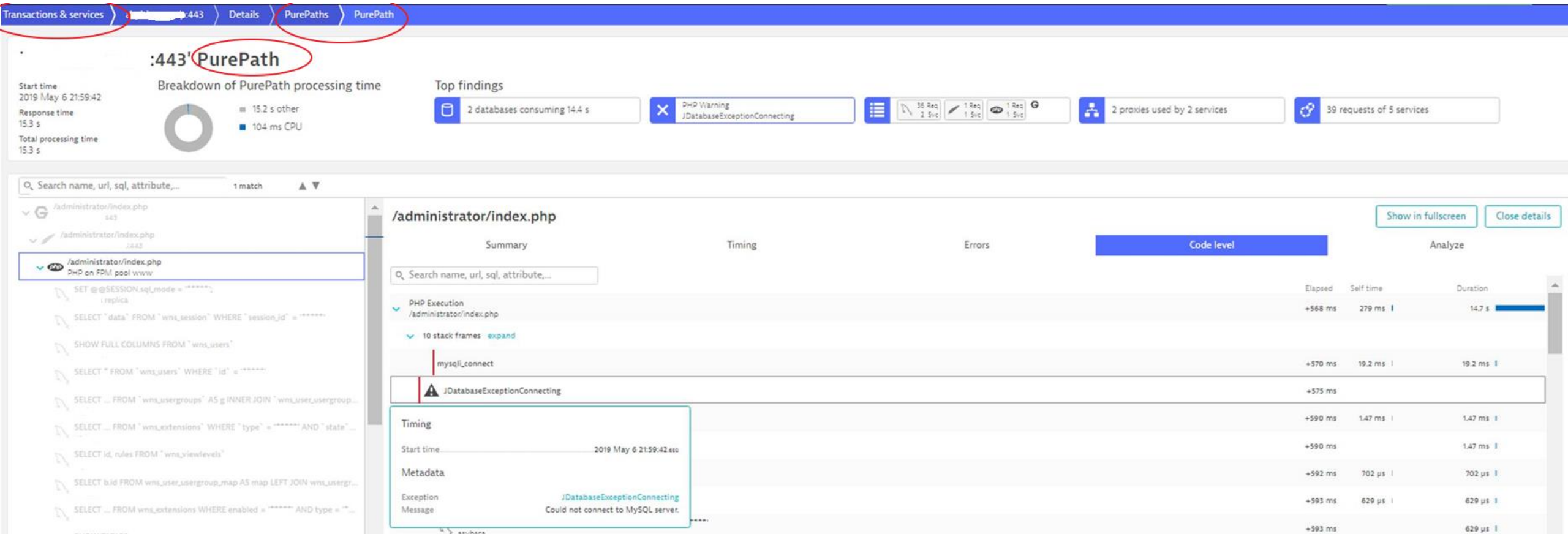
Top actions based on total Time consumed (Duration and Actions/min)

Loading of page /index.php

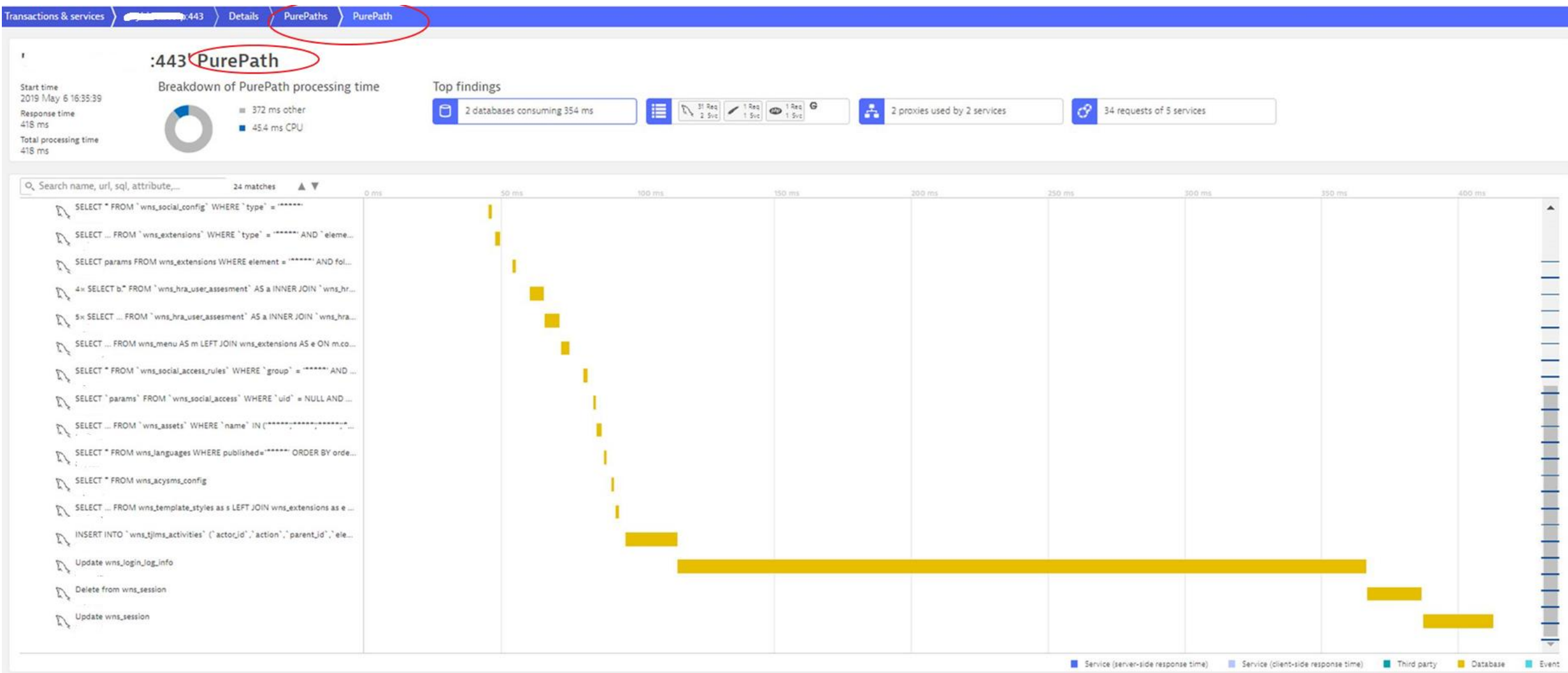
Time consumed



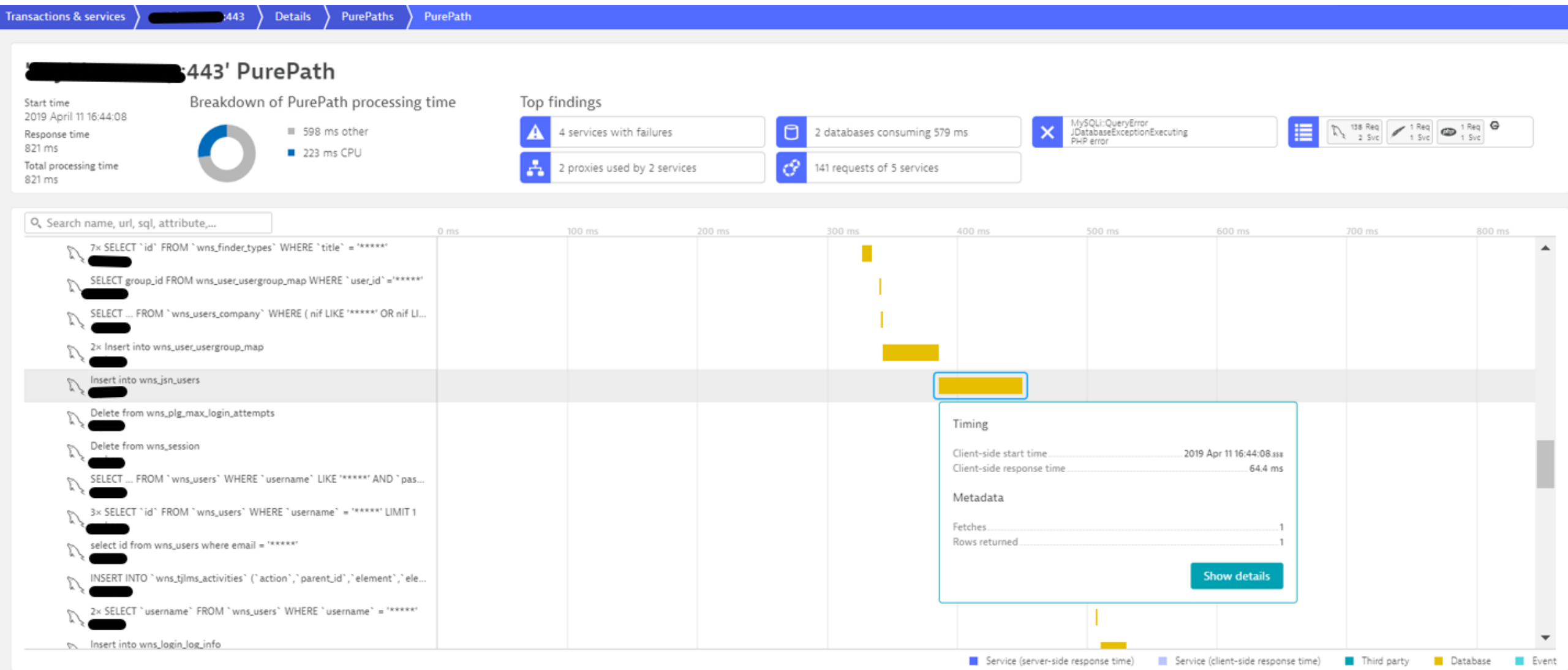
# Dynatrace APM Screenshots



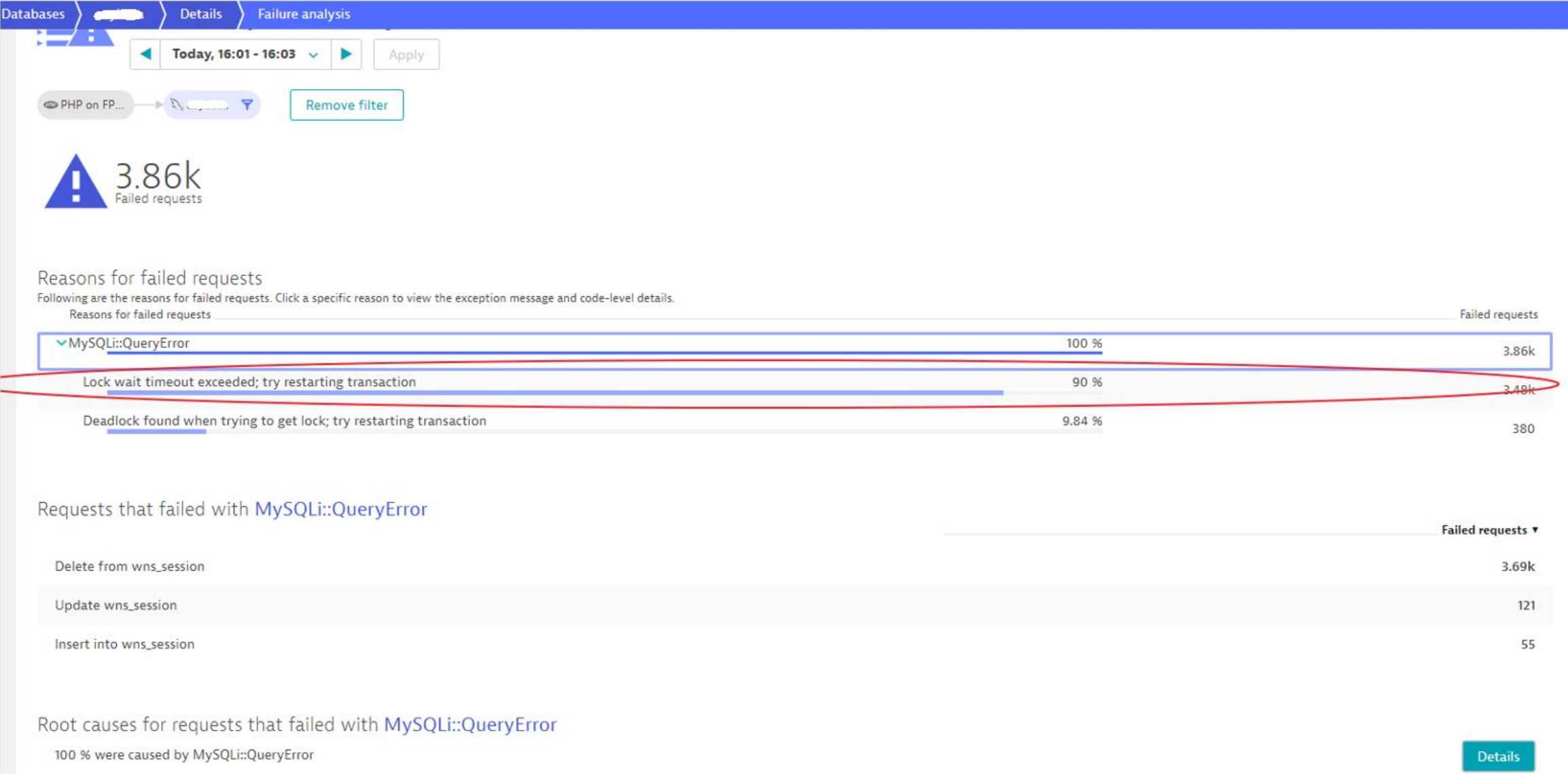
# Dynatrace APM Screenshots



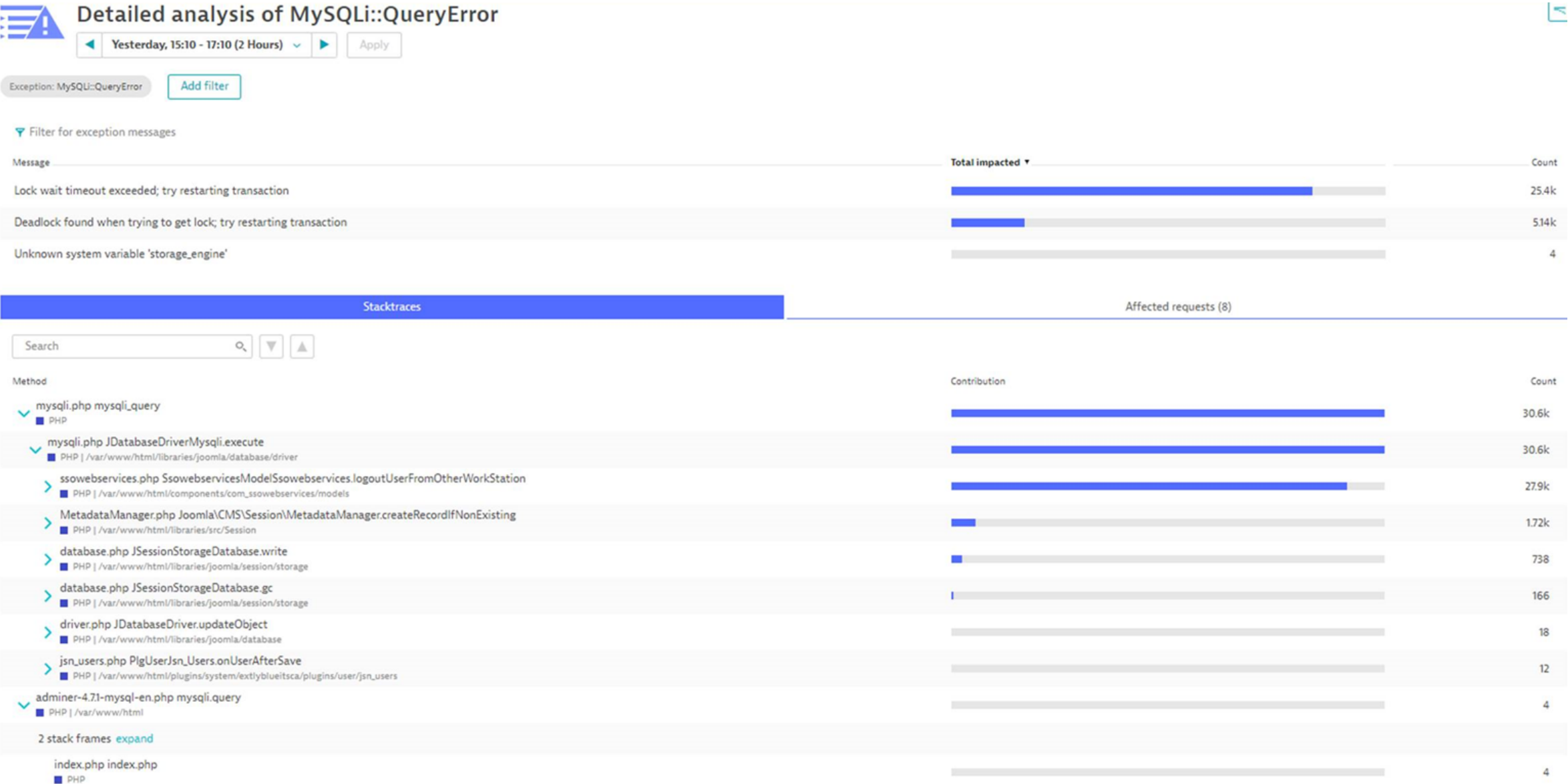
# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

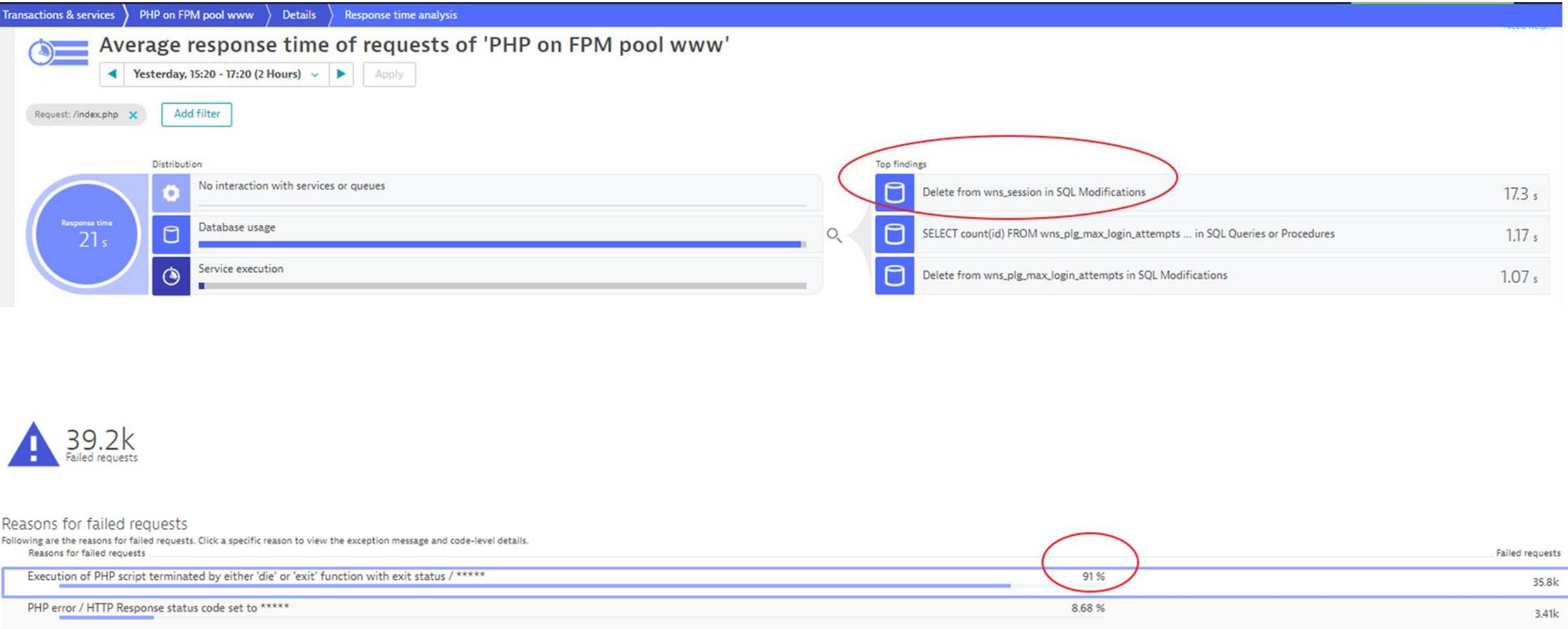


# Dynatrace APM Screenshots





# Dynatrace APM Screenshots





# Dynatrace APM Screenshots

## Top 100 user actions

Show me the top 100 user actions based on total time consumed

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

Type	User action	Total time consumption	Duration	Actions	JavaScript errors	Apdex
	Loading of page /index.php		Visually complete: 1.27 s	0.26 /min	0.02 /min	Good
	Loading of page /administrator/index.php		Visually complete: 1.67 s	0.13 /min	<0.01 /min	Good
	Loading of page /		Visually complete: 0.93 s	0.16 /min	0.00 /min	Fair
	Loading of page /administrator/index.php		Visually complete: 0.73 s	0.04 /min	0.00 /min	Excellent
	/index.php		Visually complete: 0.39 s	0.06 /min	<0.01 /min	Fair
	Loading of page /administrator/		Visually complete: 1.96 s	<0.01 /min	0.00 /min	Excellent
	/administrator/index.php		Visually complete: -	<0.01 /min	0.00 /min	Unknown

### Delete from wns\_session in SQL Modifications

PHP on FPM pool www → 41% → 2.12s → Delete from wns\_session

Response time	21 s
---------------	------

Response time	19.7 s
Percentage of calls	41 %
Invocations per call	2.12 x
Response time contribution	17.3 s

41% of the requests call Delete from wns\_session (averaging 2.12 calls per request).

### Database statements of Delete from wns\_session

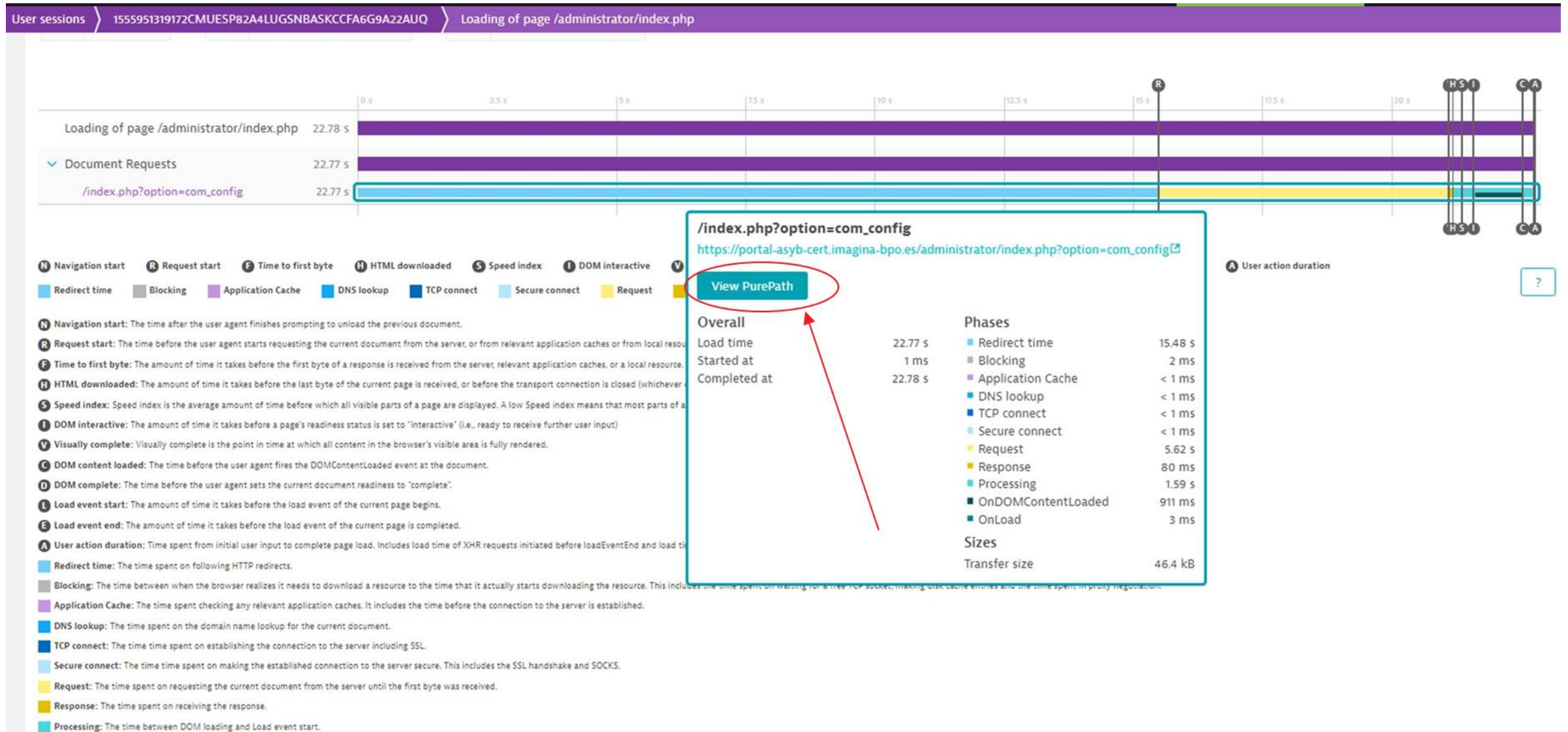
```
delete from `wns_session` where `username` like '*****'
```

17.3 s

```
delete from `wns_session` where `session_id` = '*****'
```

33.7 ms

# Dynatrace APM Screenshots



Dynatrace APM Screenshots

User sessions

Chart results over time . Show a resolution of 2 hours



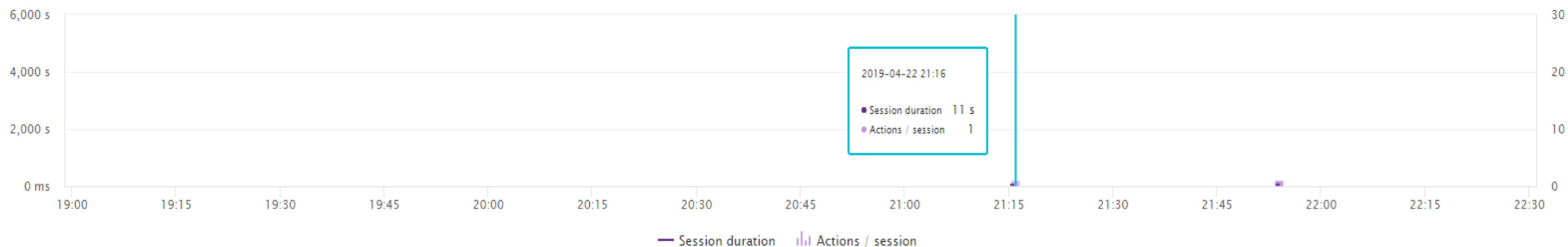
Showing last 32 of 32 users with 67 user sessions (including 0 live sessions)

Type	User	Location	Avg. actions / session	Avg. session duration	Total session count	Live sessions	Errors & crashes
👤	Anonymous (15571407744950BSEEI4NO5CHFLVMUU2MA79JSHBLMN25)	Spain, Madrid, Madrid	10.57	15 min	7	-	7
👤	Anonymous (15571419182451523UT0D0L1K948EDVE7646DEECQTF0E)	Spain, Madrid, Madrid	9.50	8 min 48 s	6	-	10
👤	Anonymous (1555951319172CMUESP82A4LUGSNBASKCCFA6G9A22AUQ)	Spain, Madrid, Madrid	34.00	38 min 18 s	5	-	4
👤	Anonymous (1557140470996FOHK05D3DF13DGJVCHJGMS67Q0NHR9VV)	Spain, Madrid, Madrid	5.40	18 min 46 s	5	-	2
👤	Anonymous (15560048237144LLH0HNNH1318DUF5U5JPOCRCRK13J3VJ)	Spain, Madrid, Madrid	41.00	26 min 51 s	4	-	5
👤	Anonymous (155715112952908AE322ELL18SOSIC9N91U1107KN0QE6)	Spain, Madrid, Madrid	20.00	15 min 39 s	3	-	4
👤	Anonymous (15571511298044707E9397B2OSPKN1EHK14EFJ6HU57ID)	Spain, Madrid, Madrid	9.67	21 min 30 s	3	-	1
👤	Anonymous (1557141112891K4OG4DTGCFMNUQB3OVC0CDVT1C8OPL43)	Spain, Madrid, Madrid	7.00	3 min 33 s	2	-	0
👤	Anonymous (1557151101363LRCT53IHFP17M595EF1RGP11J92TILBV)	Mexico, Mexico City, Mexico City	1.00	11 s	2	-	12
👤	Anonymous (1557163383986FKNR000TUKQ99C4H7H76OVFOP5SHTG3)	Mexico, Mexico City, Mexico City	4.00	6 min 27 s	2	-	2
👤	Anonymous (1557168290949JPR8JHC08F0PQTM3HU2GT3MG6SCKK8J)	Spain, Madrid, Madrid	3.50	13 min 58 s	2	-	0

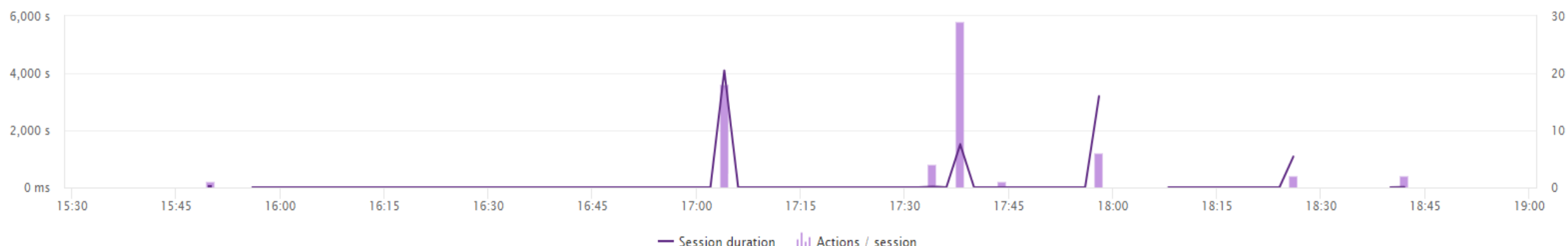
# Dynatrace APM Screenshots

## Engagement

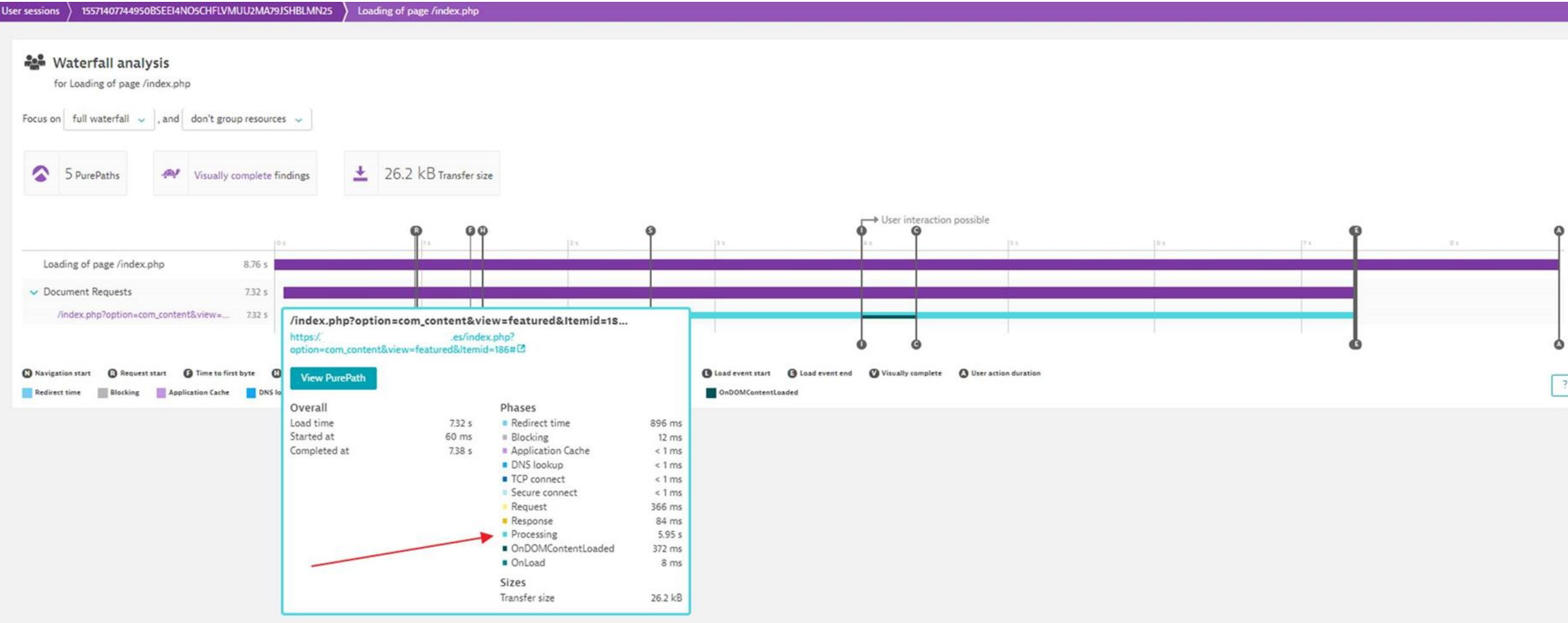
Yesterday, 19:00 - 22:30



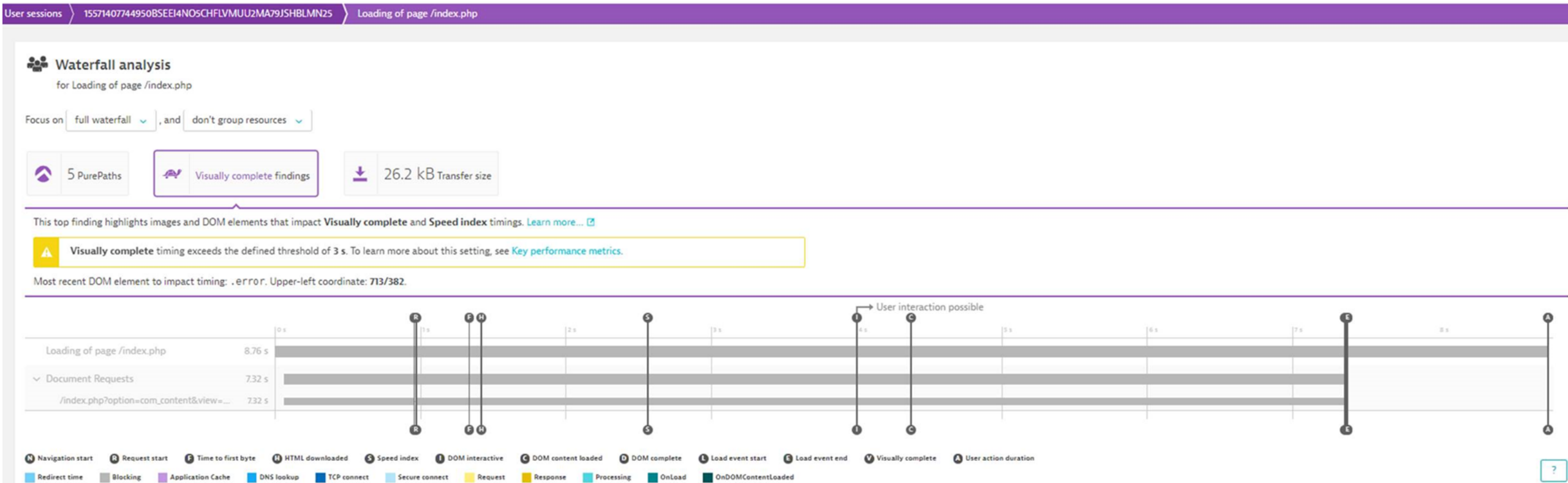
Yesterday, 15:30 - 19:00



# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

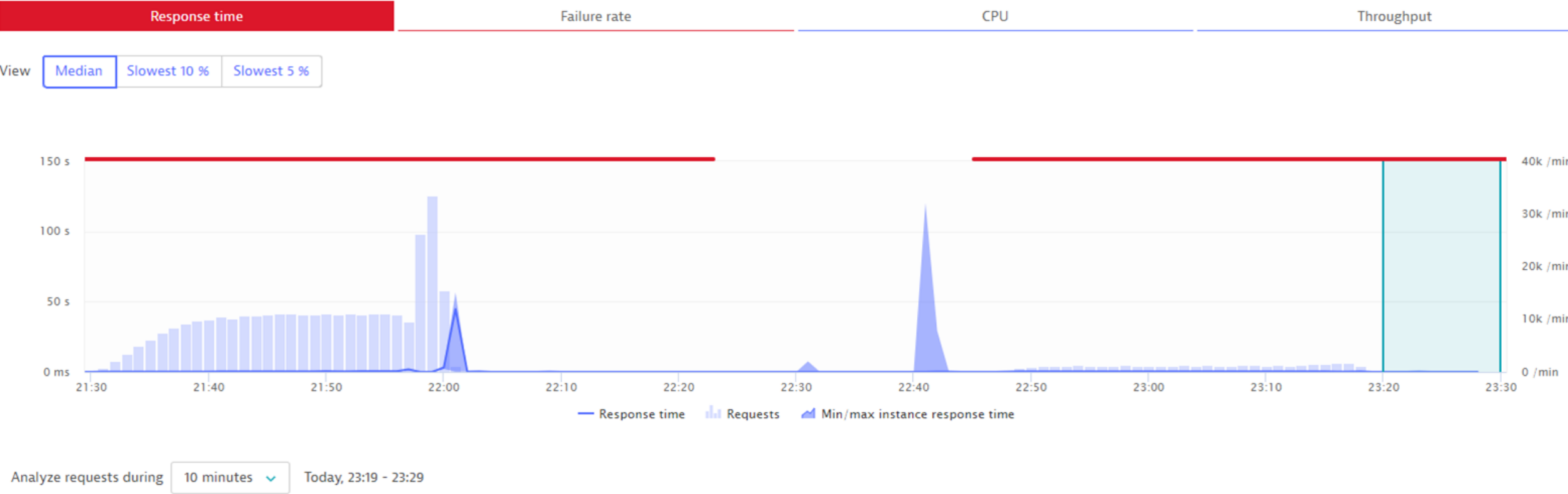


# Dynatrace APM Screenshots



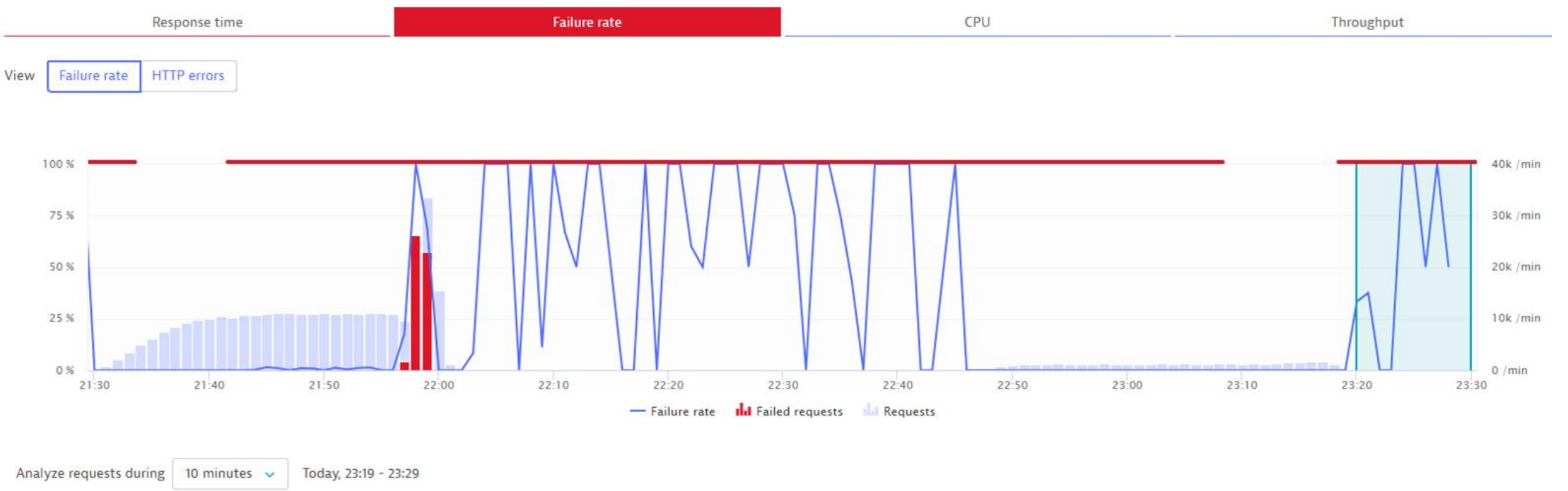


# Dynatrace APM Screenshots





# Dynatrace APM Screenshots



## Dynatrace APM Screenshots

Applications | My web application | Service flow

## Showing service flow of 'My web application' user actions

Today, 21:32 - 23:32 (2 Hours) Apply

Show Response time Throughput

Add filter

**My web application**

Average action duration	3.26 s
User actions	153

Service flow diagram:

- My web application (43 % response time contribution)
- Service 1 (11 % response time contribution)
- Service 2 (9.3 % response time contribution)
- Service 3 (7.7 % response time contribution)
- 4 services (15 % response time contribution)

**Passing transactions** | Infrastructure

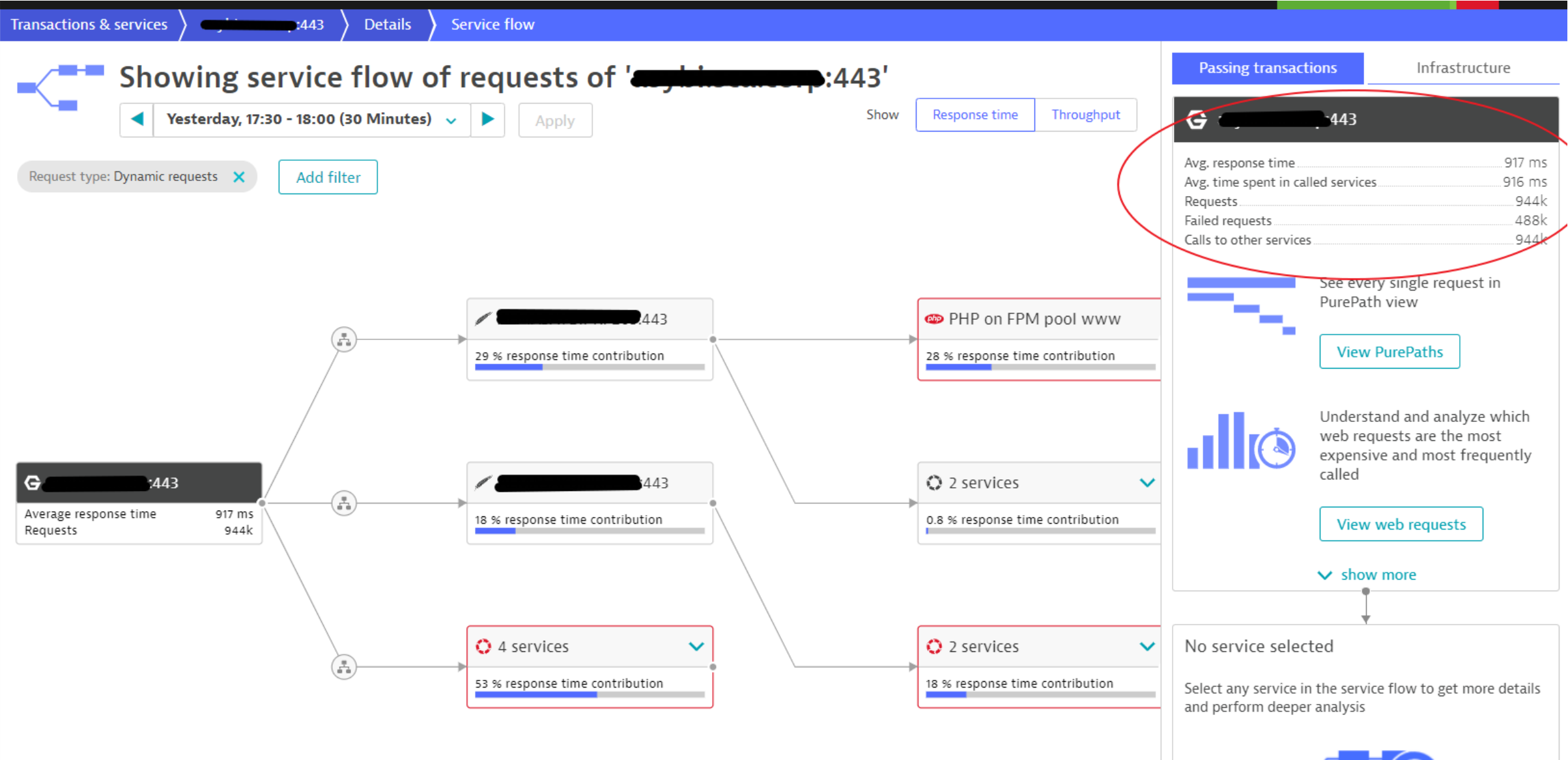
**My web application**

Avg. action duration	3.26 s
Avg. time spent in called services	1.41 s
User actions	153
Calls to other services	808

No service selected

Select any service in the service flow to get more details and perform deeper analysis

# Dynatrace APM Screenshots



Passing transactions

Infrastructure

[redacted]:443

Avg. response time.....917 ms

Avg. time spent in called services.....916 ms

Requests.....944k

Failed requests.....488k

Calls to other services.....944k

See every single request in PurePath view

View PurePaths

Understand and analyze which web requests are the most expensive and most frequently called

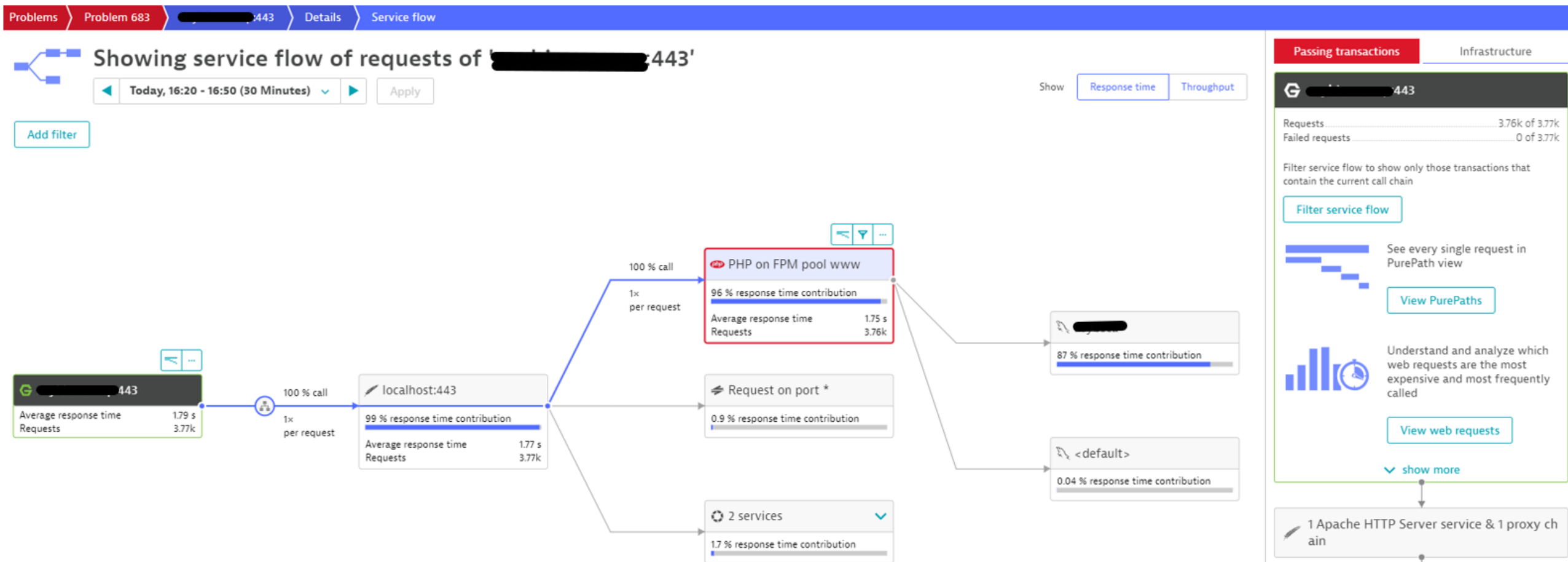
View web requests

show more

No service selected



Select any service in the service flow to get more details and perform deeper analysis

# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

**Problems** **Problem 683** PHP on FPM pool www Details PurePaths

 Showing the 1000 most recent PurePaths of requests of 'PHP on FPM pool www' 











◀ Today, 16:20 - 16:50 (30 Minutes) ▶

Apply

G... → localhost:4... → PHP on FP...

Remove filter

Filter for...

Name	Time	Response time ▼	CPU time	Method	Response code	Details
/index.php /index.php?option=com_hra&view=dashboard&Itemid=162	2019 Apr 15 16:49:32.609	 23.3 s	120 ms	GET	200	✓
/index.php /index.php?option=com_healthindex&view=HealthIndexPanel&tab=recordweight	2019 Apr 15 16:49:32.836	 23.1 s	363 ms	GET	200	✓
/index.php /index.php?option=com_gamification&view=userschallenges&Itemid=180	2019 Apr 15 16:49:32.799	 23 s	81.3 ms	GET	200	✓
/index.php /index.php?option=com_gamification&view=userschallenges&Itemid=180	2019 Apr 15 16:49:32.757	 22.8 s	81.2 ms	GET	200	✓
/index.php /index.php?option=com_gamification&view=userschallenges&Itemid=180	2019 Apr 15 16:49:32.845	 22.7 s	88.3 ms	GET	200	✓
/index.php /index.php?option=com_users&view=profile&layout=edit&Itemid=193	2019 Apr 15 16:49:33.325	 22.6 s	144 ms	GET	200	✓
/index.php /index.php?option=com_gamification&view=userschallenges&Itemid=180	2019 Apr 15 16:49:33.270	 22.6 s	86.7 ms	GET	200	✓
/index.php /index.php?option=com_hra&view=completed&Itemid=166	2019 Apr 15 16:49:33.328	 22.6 s	87.7 ms	GET	200	✓
/index.php /index.php?option=com_hra&view=dashboard&Itemid=162	2019 Apr 15 16:49:33.324	 22.6 s	120 ms	GET	200	✓
/index.php /index.php?option=com_hra&view=dashboard&Itemid=162	2019 Apr 15 16:49:33.399	 22.4 s	129 ms	GET	200	✓

# Dynatrace APM Screenshots


Problems

Problem 683


PHP on FPM pool www



Details

PurePaths






Showing the 1000 most recent PurePaths of requests of 'PHP on FPM pool www'




 Today, 16:20 - 16:50 (30 Minutes) 

Apply


  localhost:4...  PHP on FP...


Remove filter


Filter for...

Name	Time	Response time ▾	CPU time	Method	Response code	Details
/index.php /index.php?option=com_hra&view=dashboard&Itemid=162	2019 Apr 15 16:49:32.609	<div></div> 23.3 s	120 ms	GET	200	

URL: /index.php?option=com\_hra&view=dashboard&Itemid=162

 23.3 s response time

 Analyze callers and callees

 Analyze PurePath

View response time hotspots

Analyze backtrace


View service flow

View PurePath

Problems

Problem 683

PHP on FPM pool www



2 services: Response time degradation

Problem 683 since 16:35 for 28 minutes.  
This Service has been identified as root cause.

✓ Response time degradation (1 event)

Response time degradation

The current response time (112 s) exceeds the auto-detected baseline (199 ms) by 464 %

Affected requests


Service method

186 /min

All dynamic requests


Dynamic web requests

Response time




486 ms

CPU




105 ms/req

Failure rate



1.35 %

Throughput



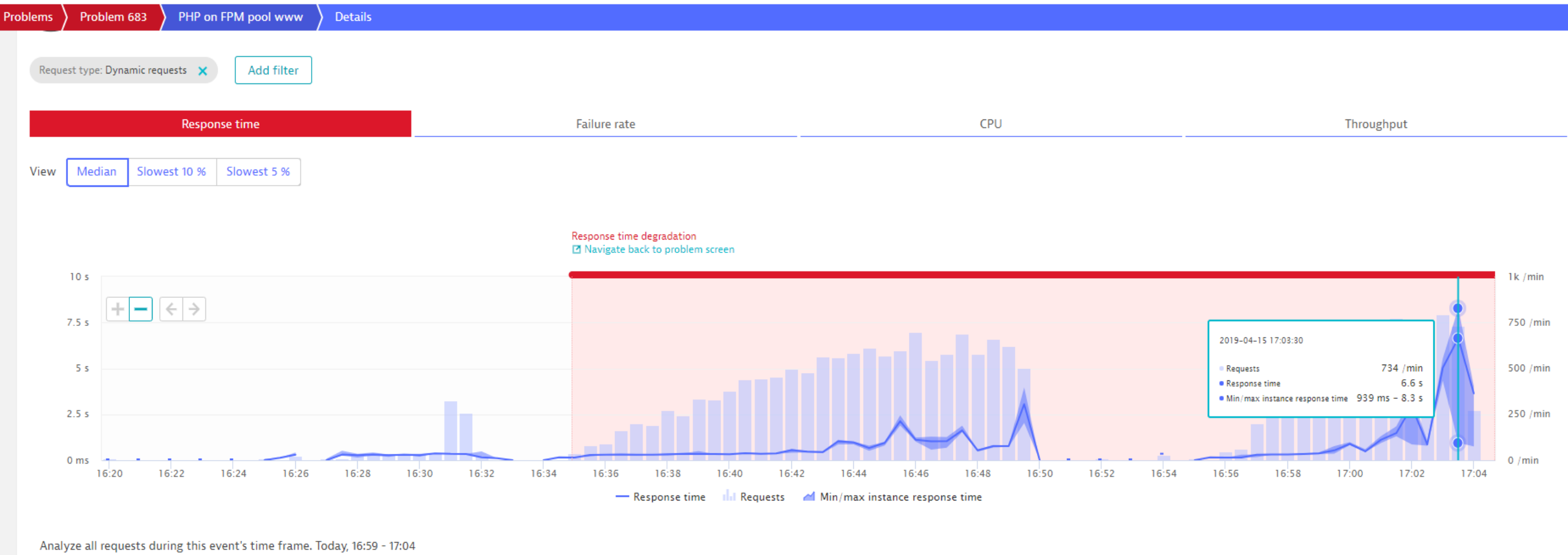
205 /min

View dynamic requests

# Dynatrace APM Screenshots

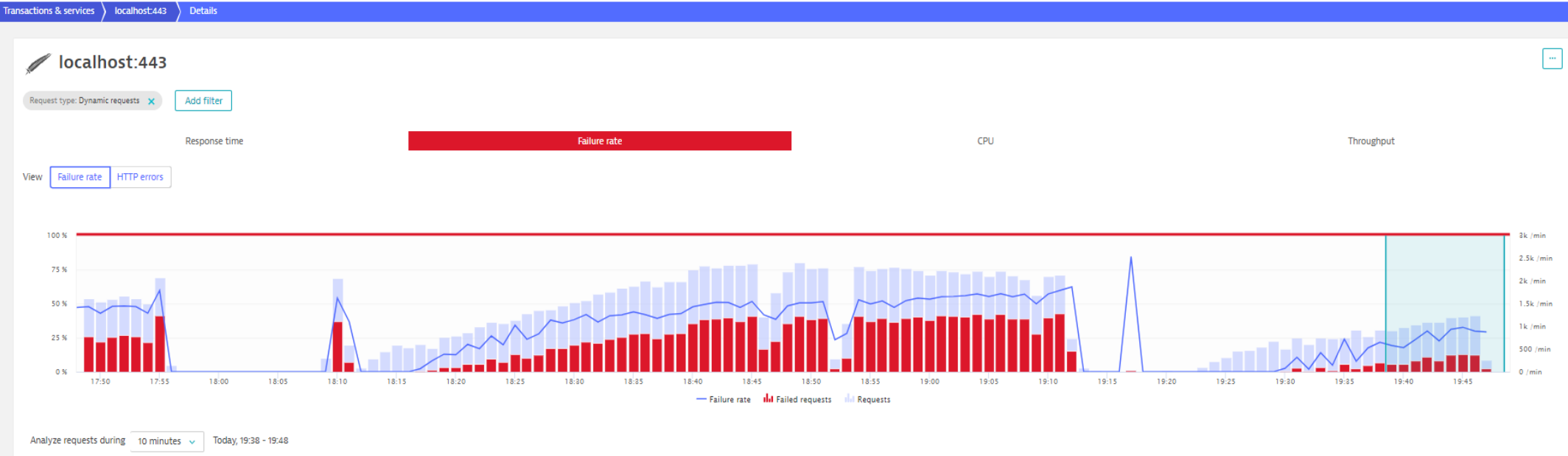


# Dynatrace APM Screenshots

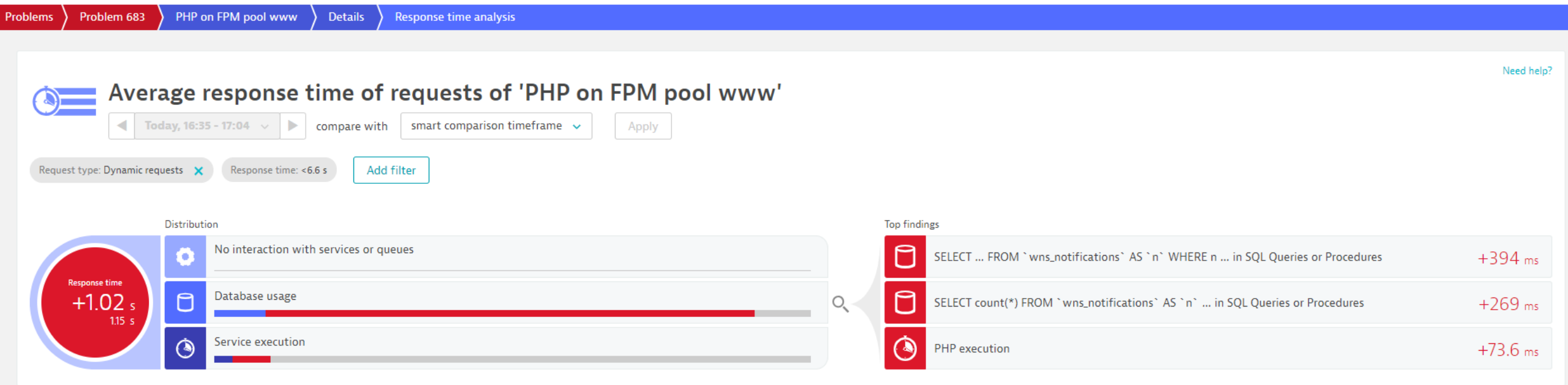




# Dynatrace APM Screenshots



# Dynatrace APM Screenshots



Dynatrace APM Screenshots

Database statements of SELECT ... FROM `wms\_notifications` AS `n` WHERE n ...

```
select n.id, n.description, n.created, n.to_id, n.url from `wms_notifications` as `n`
where n.to_id=***** and n.status = ***** order by n.created DESC limit 5
```

	Average execution time	1 s	<div></div>	+934 ms
×	Percentage of calls	51 %	<div></div>	+23 %
×	Invocations	1 ×		0 ×
<hr/>				
=	Response time contribution	509 ms		+491 ms
<div></div>				

Database statements of SELECT count(\*) FROM `wms\_notifications` AS `n` ...

```
select count(*) from `wms_notifications` as `n` where n.to_id=***** and n.status =
*****
```

+349 ms

	Average execution time	722 ms	<div></div>	+656 ms
×	Percentage of calls	51 %	<div></div>	+23 %
×	Invocations	1 ×		0 ×
<hr/>				
=	Response time contribution	367 ms		+349 ms
<div></div>				

Rows returned per execution 1 | 0 ×

# Dynatrace APM Screenshots

Databases

Details

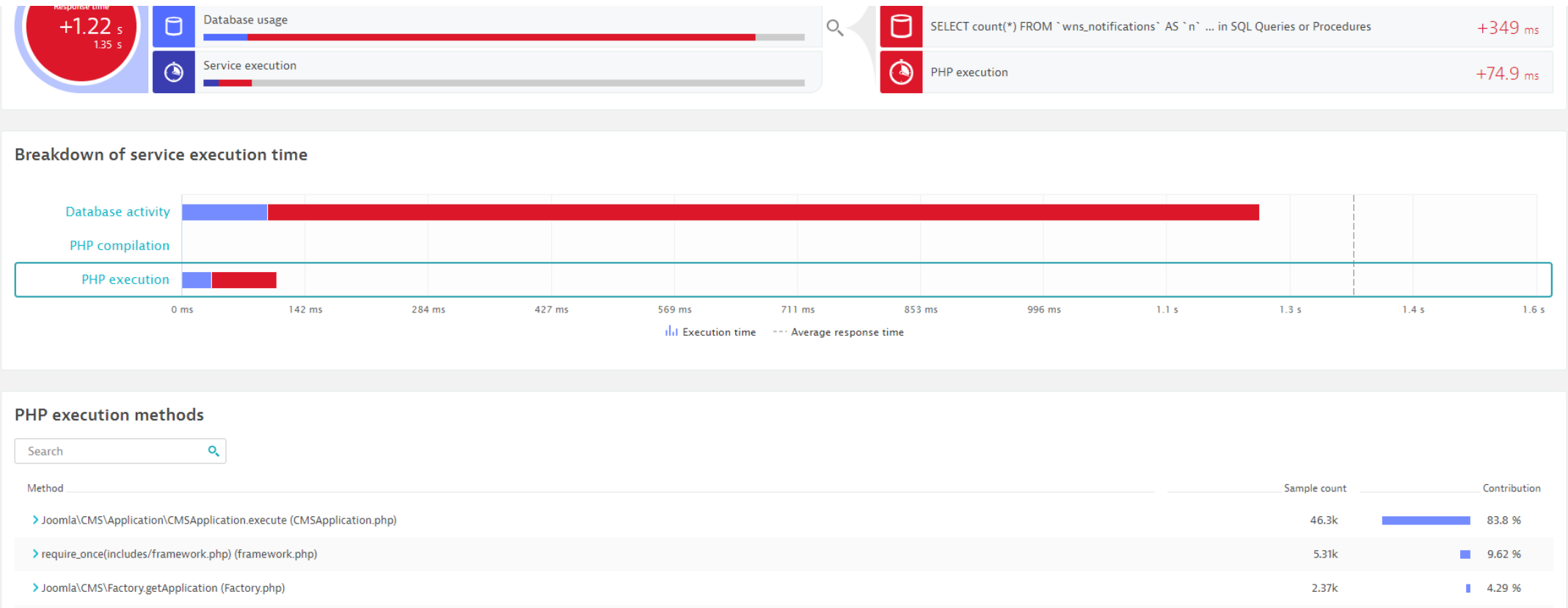
Database statements

Create chart

Filter on statement, database name, vendor, process and hostname.

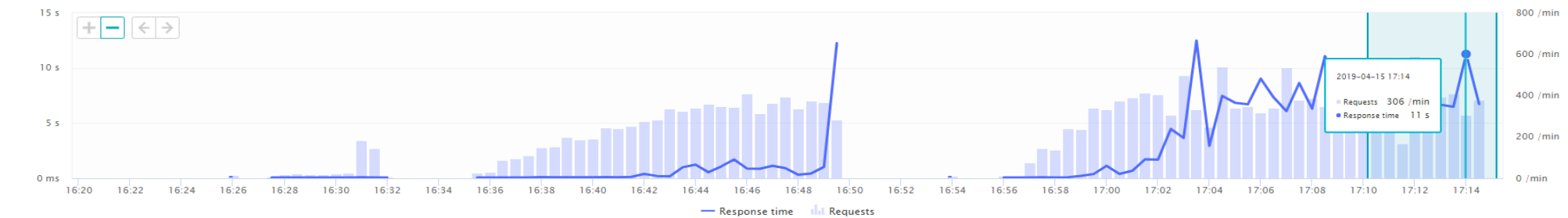
Statement	Executions ▼	Total executions				
update wns_session	922 /min	111k				
delete from wns_session	486 /min	58.4k				
insert into wns_session	435 /min	52.1k				
update wns_jsn_users	369 /min	44.3k				
set SQL_BIG_SELECTS=*****	309 /min	37.1k				
update wns_users	300 /min	36k				
delete from wns_plg_max_login_attempts	161 /min	19.3k				
insert into wns_login_log_info	157 /min	18.8k				

# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

## Response time of requests sent by monitored services



Analyze requests during 5 minutes Today, 17:10 - 17:15

## 1 database statement

Create chart

Filter on statement, database name, vendor, process and hostname.

Statement Total time Response time Slowest 10 % Actions

`select n.id, n.description, n.created, n.to_id, n.url from `wms_notifications` as `n` where n.to_id = '*****' and n.status = '*****' order by n.created DESC limit 5` 13.7 min/min 2.46 s 12.3 s

Executions	186 /min
Total executions	10.3k
Total time	13.7 min/min
Response time	2.46 s
Slowest 10 %	12.3 s
Failure rate	0 %

## 1 database statement

Create chart

Filter on statement, database name, vendor, process and hostname.

Statement Total time Response time Slowest 10 % Actions

`select count(*) from `wms_notifications` as `n` where n.to_id = '*****' and n.status = '*****'` 11.4 min/min 2.67 s 8.9 s

Executions	194 /min
Total executions	11.2k
Total time	11.4 min/min
Response time	2.67 s
Slowest 10 %	8.9 s
Failure rate	0 %

# Dynatrace APM Screenshots

## 2 problems matching selected filter

Filtered by:

5 services

Multiple service problems

Problem 683

Since 16:35 for 46 minutes

Impacted services

██████████, PHP on FPM pool www, Request on port \*, ...

Impact

6.4k requests/min affected

multiple service types

Root cause

██████████ - Response time degradation

PHP on FPM pool www - Response time degradation

Request on port \* - Response time degradation

localhost:443 - Failure rate increase

██████████:443 - Multiple service problems

2 services

Response time degradation

Problem 871

Since 15:46 for 1 hour 35 minutes

Impacted services

PHP on FPM pool www, localhost:443

Impact

60.2 requests/min affected

all dynamic requests

Root cause

PHP on FPM pool www - Response time degradation

### 5 impacted services

6.4k Requests per minute impacted

██████████:443

Web request service

Response time degradation

The current response time (1.75 s) exceeds the auto-detected baseline (489 ms) by 258 %

Affected requests

509 /min

Service method

All dynamic requests

Failure rate increase

by a failure rate increase to 31 %

Affected requests

453 /min

Service method

All dynamic requests

localhost:443

Web request service

Failure rate increase

by a failure rate increase to 32 %

Affected requests

733 /min

Service method

All dynamic requests

## Root cause

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

PHP on FPM pool www

Web request service

Response time degradation

All dynamic requests slow

Today, 16:35 - 17:22

Metric anomalies detected

Review the metrics which show abnormal or outlying behavior.

Server response time

+ 330 ms

Now

Before

Client failure rate

+ 8.62 %

Now

Before

Analyze findings

Request on port \*

Web request service

Response time degradation

The current response time (424 ms) exceeds the auto-detected baseline (213 ms) by 99 %

Affected requests

128 /min

Service method

All dynamic requests

PHP on FPM pool www

Web request service

Response time degradation

The current response time (1.43 s) exceeds the auto-detected baseline (199 ms) by 618 %

Affected requests

186 /min

Service method

All dynamic requests

██████████

Database

Response time degradation

The current response time (150 ms) within the slowest 10% exceeds the auto-detected baseline (39.2 ms) by 282 %

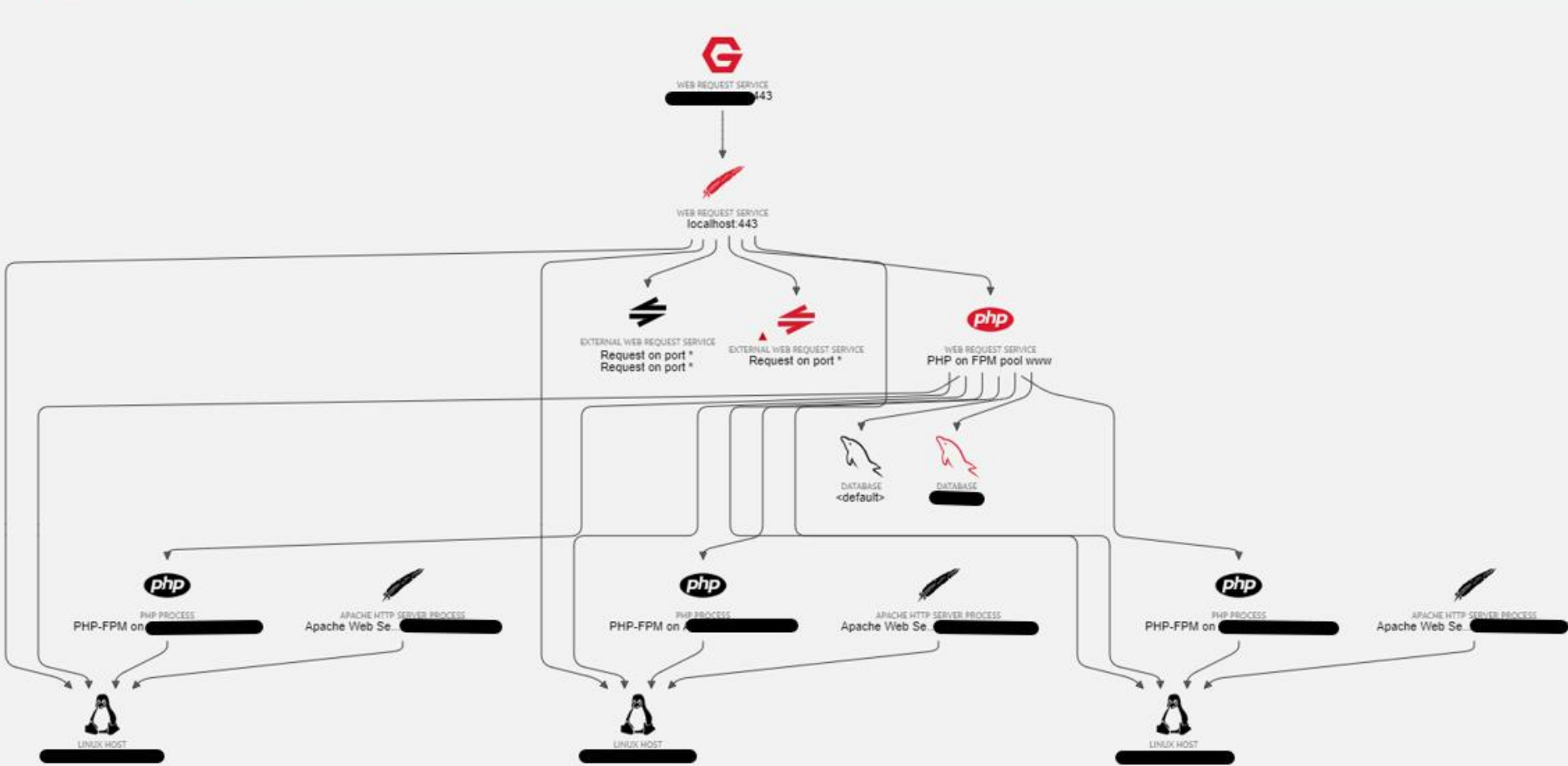
Affected requests

4.39k /min

Service method

SQL Modifications

# Dynatrace APM Screenshots





# Dynatrace APM Screenshots


## Problems

Filtered by:

 CPU saturation Problem 48


Since 17:13 for 12 minutes

Impacted components

 Slow disk Problem 157

From 15:50 - 15:55 for 5 minutes

Impacted components

 5 services Multiple service problems Problem 683

Since 16:35 for 50 minutes

Impacted services

PHP on FPM pool www, asybsca, Request on port \*, ...

Impact

6.4k requests/min affected

multiple service types

Root cause


PHP on FPM pool www - Response time degradation

- Response time degradation

Request on port \* - Response time degradation

localhost:443 - Failure rate increase

- 443 - Multiple service problems

 2 services Response time degradation Problem 871

Since 15:46 for 1 hour 39 minutes

Impacted services

PHP on FPM pool www, localhost:443

Impact


60.2 requests/min affected

all dynamic requests


Root cause


PHP on FPM pool www - Response time degradation


[Set up notifications](#) [...](#)

 CPU saturation


Problem 48 detected at 17:13 (open for 13 minutes).

 Affected applications -

 Affected services -


 Affected infrastructure 1

1 impacted infrastructure component

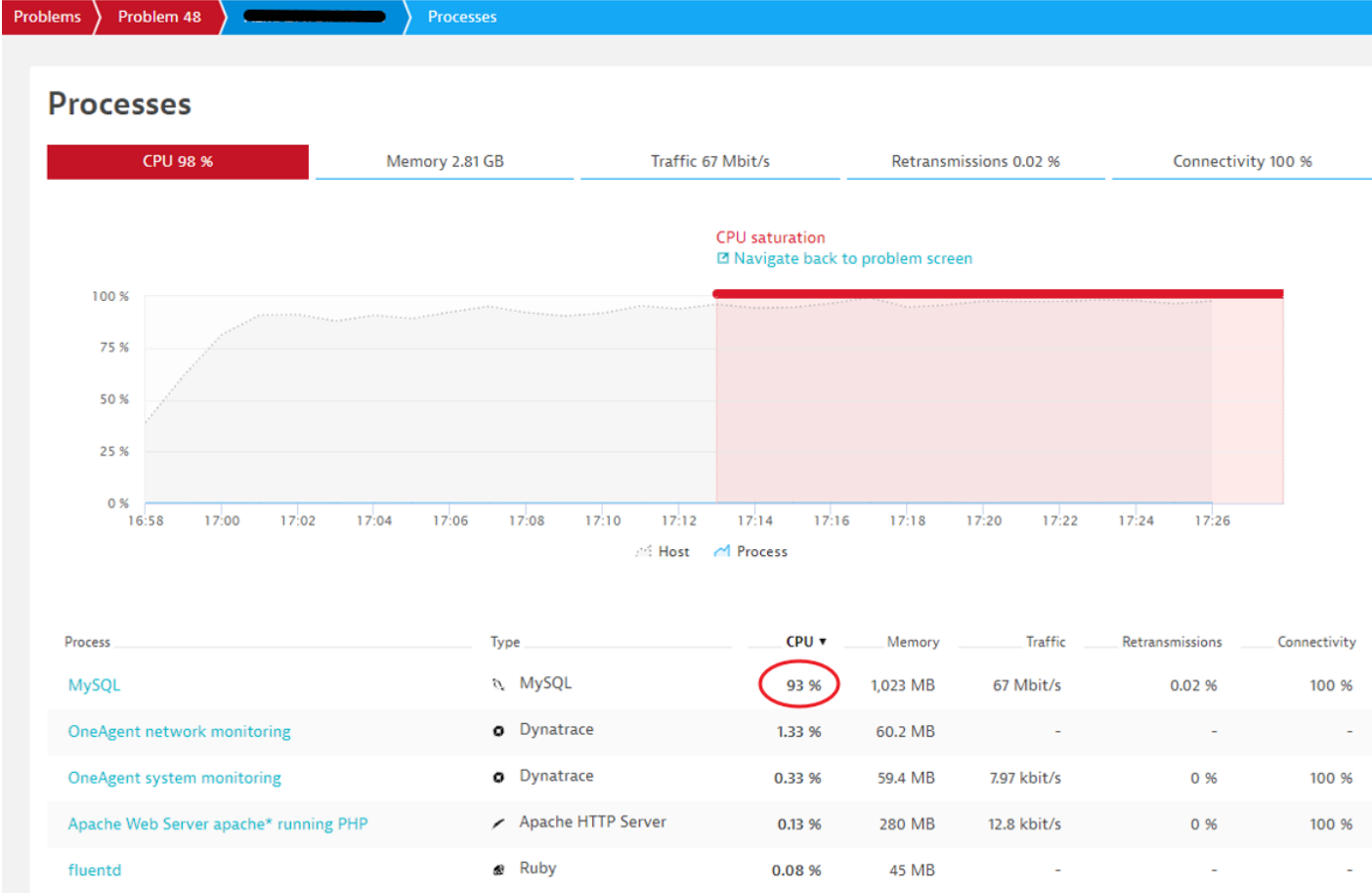
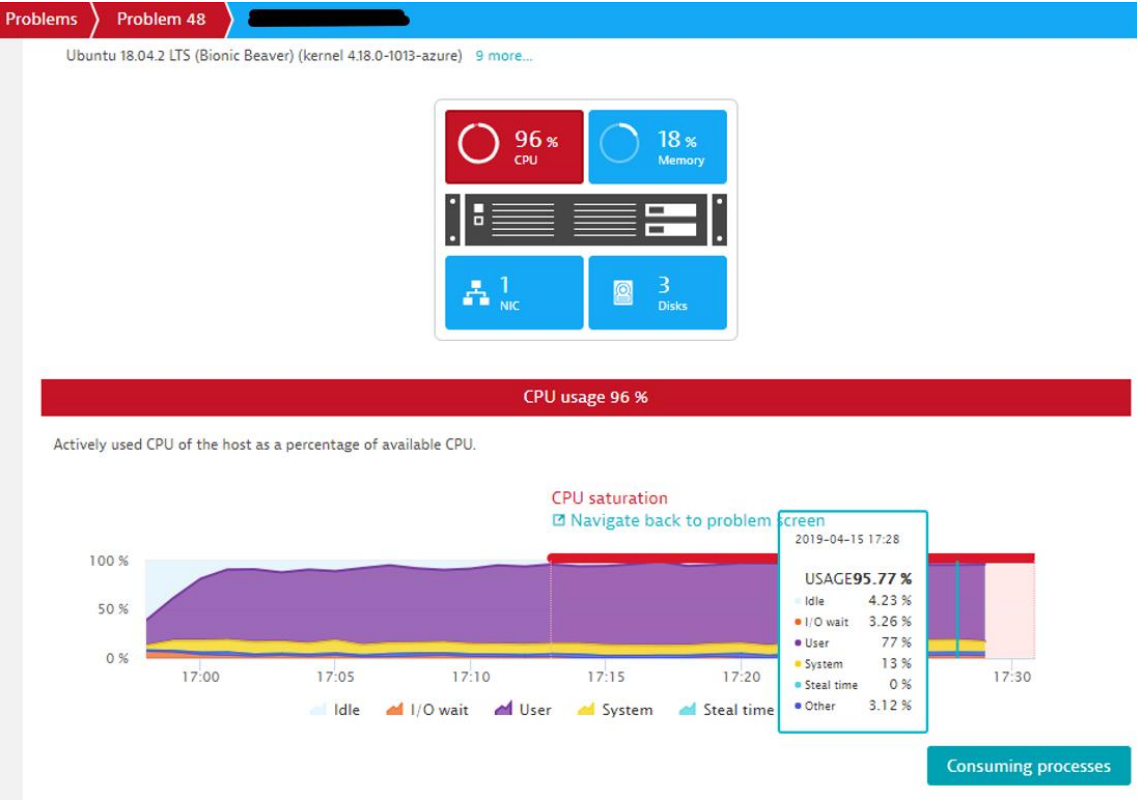
 Host

CPU saturation

99 % CPU usage

 [Analyze logs](#)

# Dynatrace APM Screenshots



**Waterfall analysis**  
for Loading of page /index.php

Filter by user types, browsers, geolocations...

Analysis timeframe: **Last 12 hours** (Timeline view: 06:30 to 18:00)

Display average timings, focus on: **full waterfall**, **don't group resources**, and **don't compare**

Resource	Time	Blocking	Application Cache	DNS lookup	TCP connect	Secure connect	Request	Response	Processing	OnLoad	OnDOMContentLoaded
Loading of page /index.php	13.11 s										
Document Requests	13.08 s										
Initial Requests	13.08 s										
/index.php?option=com_hra&vie...	8.59 s										
/index.php	17.58 s										

Legend: N Navigation start, R Request start, F Time to first byte, H HTML downloaded, I DOM interactive, C DOM content loaded, S Speed index, V Visually complete, D DOM complete, L Load event start, E Load event end, A User action duration

Resource timings could not be calculated since Dynatrace did not receive them. Some older browsers do not support the W3C resource timings specification.

# Dynatrace APM Screenshots

All8

Severity

Error1

Slowdown6

Resource1

Status

Open6

Resolved2

Impact

Services7

Infrastructure1

Alerts

Default2

Context

Non-maintenance8

8 problems matching selected filter

Filtered by:

Request on port \*  
Response time degradation

Problem 939

Since 18:19 for 11 minutes

Impacted services  
Request on port \*

Impact  
69.6 requests/min affected  
all dynamic requests

Root cause  
Request on port \* - Response time degradation

2 services  
Response time degradation

Problem 635

Since 18:06 for 24 minutes

Impacted services  
PHP on FPM pool www

Impact  
1.62k requests/min affected  
multiple service types

CPU saturation

Problem 48

From 17:13 - 17:32 for 19 minutes

Impacted components

Request on port \*  
Response time degradation

Problem 716

Since 18:19 for 11 minutes

Impacted services  
Request on port \*

Impact  
78.2 requests/min affected  
all dynamic requests

Root cause  
Request on port \* - Response time degradation

5 services  
Multiple service problems

Problem 683

Since 16:35 for 1 hour 55 minutes

Impacted services  
PHP on FPM pool www, Request on port \*, ...

Impact  
6.4k requests/min affected  
multiple service types

Root cause  
PHP on FPM pool www - Response time degradation  
 - Response time degradation  
Request on port \* - Response time degradation  
localhost:443 - Failure rate increase  
43 - Multiple service problems

Request on port \*  
Response time degradation

Problem 296

From 17:18 - 17:26 for 8 minutes

Impacted services  
Request on port \*

Request on port \*  
Response time degradation

Problem 220

Since 18:19 for 11 minutes

Impacted services  
Request on port \*

Impact  
76.6 requests/min affected  
all dynamic requests

Root cause  
Request on port \* - Response time degradation

2 services  
Response time degradation

Problem 871

Since 15:46 for 2 hours 44 minutes

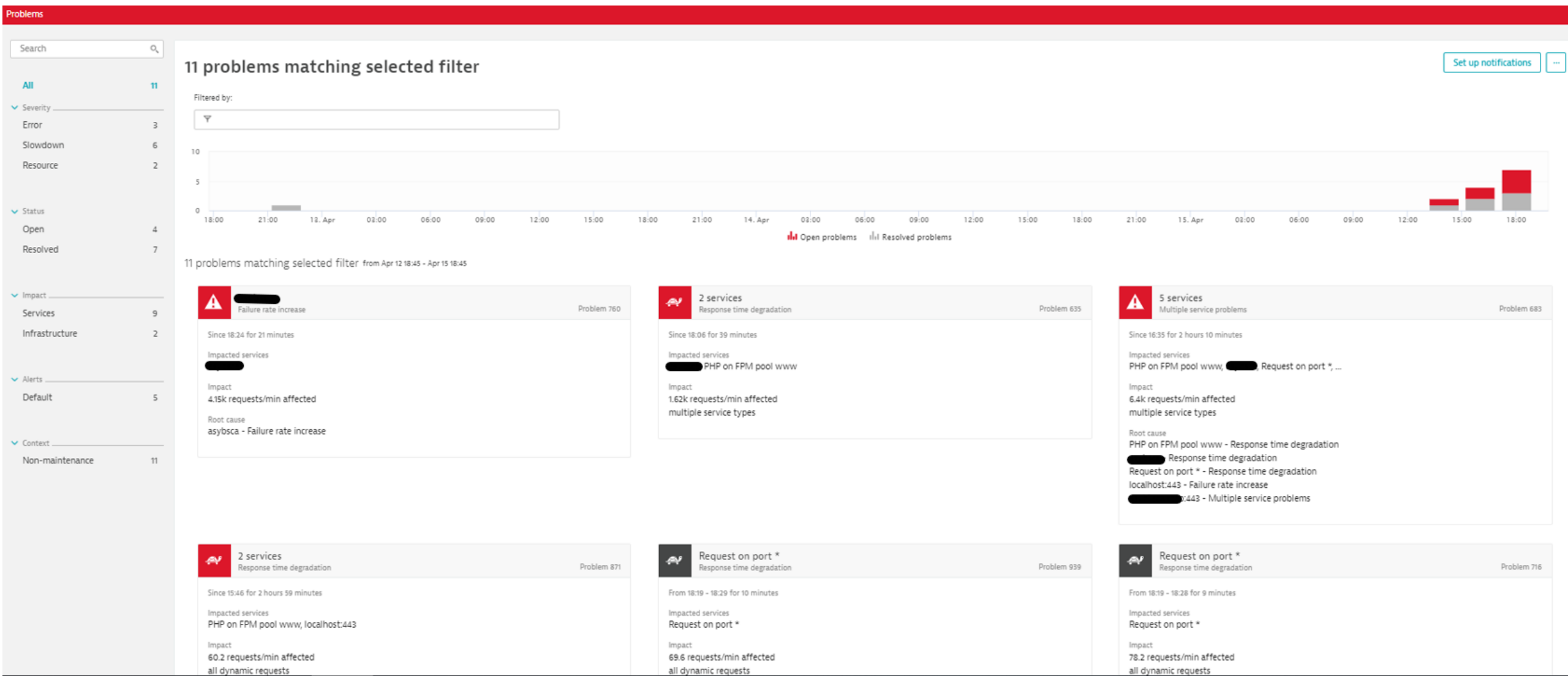
Impacted services  
PHP on FPM pool www, localhost:443

Impact  
60.2 requests/min affected  
all dynamic requests

Root cause  
PHP on FPM pool www - Response time degradation

Set up notifications

# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

## All monitored services

10 services

Filtered by:

Custom service settings

Showing current values

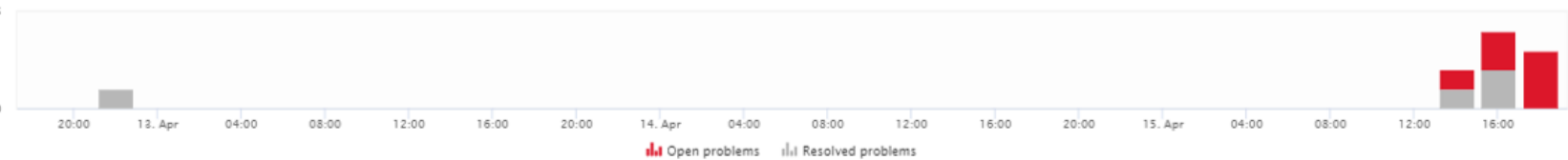
<div><div>php</div><div>PHP on FPM pool www</div></div> <div><div>PHP-FPM</div><div>PHP-FPM</div><div>Requests906/min</div><div>Response time median1.31s</div></div>	<div><div></div><div>localhost:443</div></div> <div><div>Apache Web Server apache*</div><div>Apache Web Server apache*</div><div>Requests836/min</div><div>Response time median1.42s</div><div>Failure rate26%</div></div>	<div><div>G</div><div>██████████.443</div></div> <div><div>nginx</div><div>nginx</div><div>Requests574/min</div><div>Response time median1.5s</div><div>Failure rate24%</div></div>
<div><div></div><div>Request on port *</div></div> <div><div>██████████</div><div>Requests105/min</div><div>Response time median734ms</div></div>	<div><div></div><div>Request on port *</div></div> <div><div>██████████</div><div>Requests101/min</div><div>Response time median708ms</div></div>	<div><div></div><div>Request on port *</div></div> <div><div>██████████</div><div>Requests98/min</div><div>Response time median669ms</div></div>
<div><div></div><div>localhost:80</div></div> <div><div>Apache Web Server apache*</div><div>Apache Web Server apache*</div><div>Requests2/min</div></div>	<div><div>php</div><div>PHP-FPM via domain socket /run/php/php7.2-fpm.sock</div></div> <div><div>PHP-FPM</div><div>PHP-FPM</div><div>Requests0/min</div></div>	<div><div></div><div>Requests to unmonitored hosts</div></div> <div><div></div><div>Requests0/min</div></div>
<div><div></div><div>Incompletely detected WebRequest</div></div> <div><div></div><div>Requests0/min</div></div>		

# Dynatrace APM Screenshots


7 problems matching selected filter

[Set up notifications](#) [...](#)

Filtered by:



7 problems matching selected filter from Apr 12 18:17 - Apr 15 18:17

 2 services  
Response time degradation Problem 635


Since 18:06 for 11 minutes

Impacted services

PHP on FPM pool www

Impact

1.62k requests/min affected  
multiple service types

 5 services  
Multiple service problems Problem 683

Since 16:35 for 1 hour 42 minutes

Impacted services


asybsca, PHP on FPM pool www, Request on port \*, ...

Impact

6.4k requests/min affected  
multiple service types

Root cause

asybsca - Response time degradation  
PHP on FPM pool www - Response time degradation  
Request on port \* - Response time degradation  
localhost:443 - Failure rate increase  
localhost:443 - Multiple service problems

 2 services  
Response time degradation Problem 671

Since 15:46 for 2 hours 31 minutes

Impacted services


PHP on FPM pool www, localhost:443

Impact

60.2 requests/min affected  
all dynamic requests


Root cause

PHP on FPM pool www - Response time degradation

 CPU saturation Problem 48

From 17:13 - 17:32 for 19 minutes

Impacted components

 Request on port \*  
Response time degradation Problem 296


From 17:18 - 17:26 for 8 minutes

Impacted services

Request on port \*

Impact

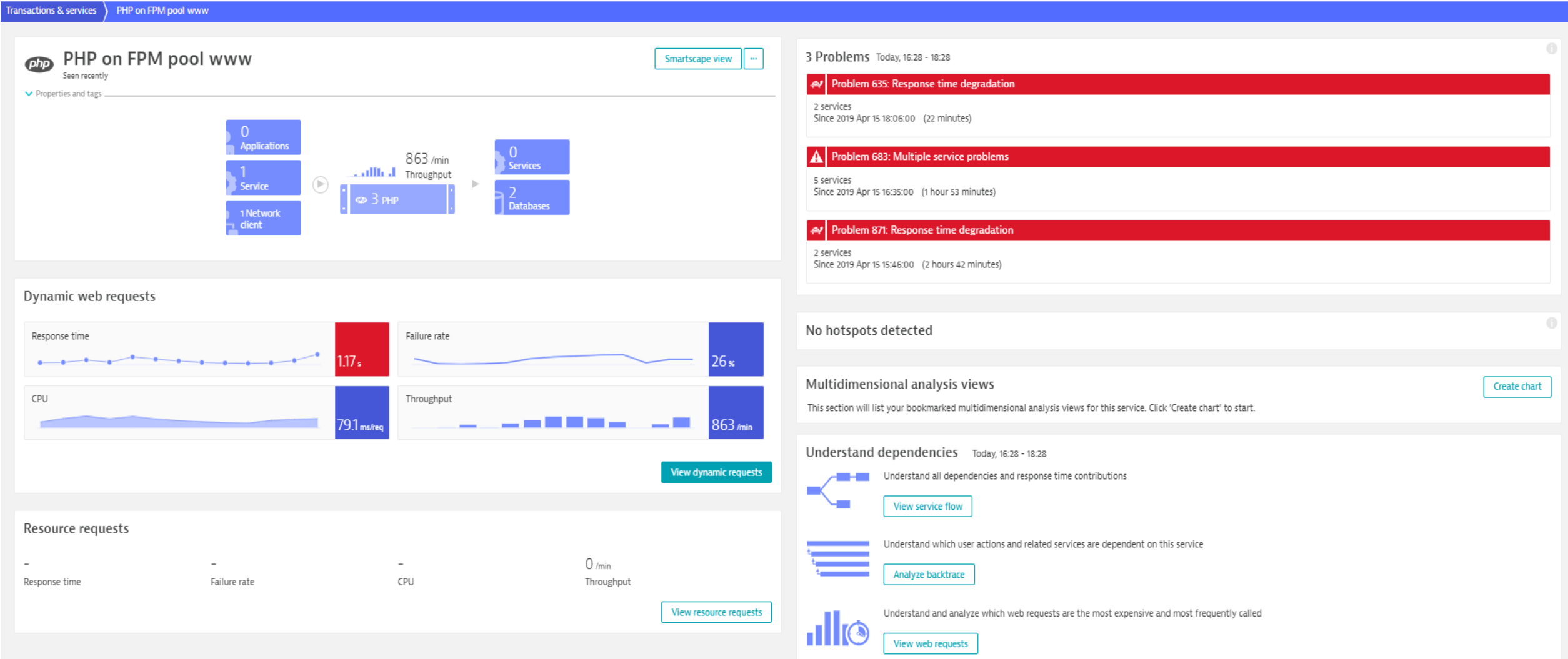
209 requests/min affected  
all dynamic requests

 Slow disk Problem 157

From 15:50 - 15:55 for 5 minutes

Impacted components

# Dynatrace APM Screenshots



3 Problems Today, 16:28 - 18:28

Problem 635: Response time degradation

2 services  
Since 2019 Apr 15 18:06:00 (22 minutes)

Problem 683: Multiple service problems

5 services  
Since 2019 Apr 15 16:35:00 (1 hour 53 minutes)

Problem 871: Response time degradation

2 services  
Since 2019 Apr 15 15:46:00 (2 hours 42 minutes)

No hotspots detected

Multidimensional analysis views

Create chart

This section will list your bookmarked multidimensional analysis views for this service. Click 'Create chart' to start.

Understand dependencies Today, 16:28 - 18:28

 Understand all dependencies and response time contributions

View service flow

 Understand which user actions and related services are dependent on this service

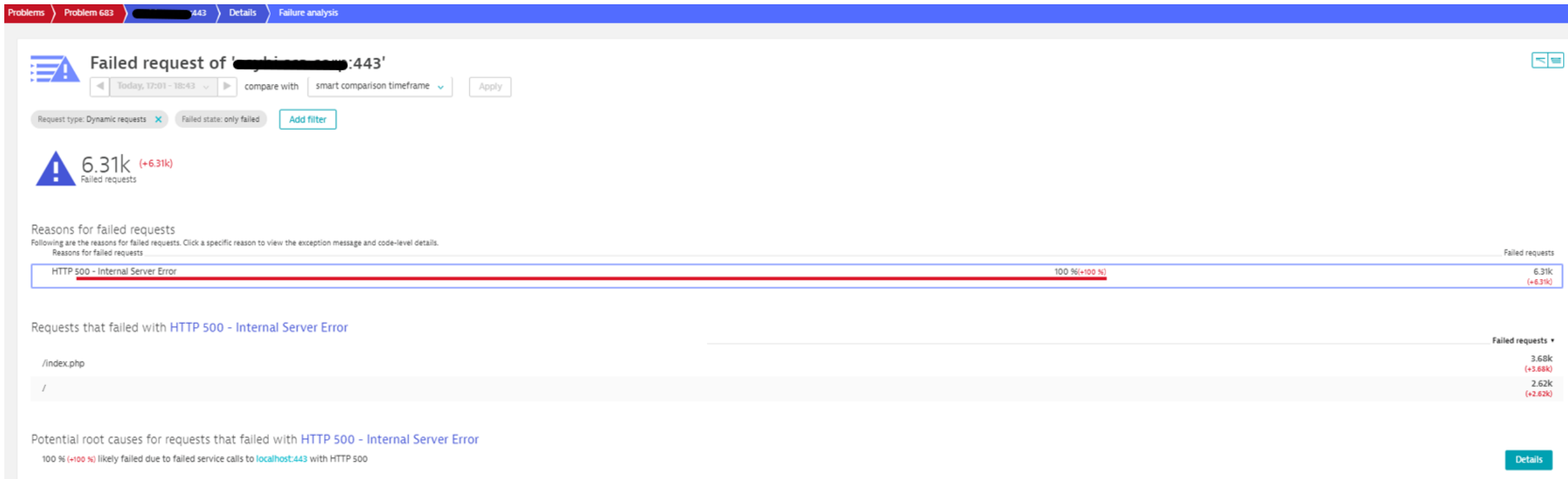
Analyze backtrace

 Understand and analyze which web requests are the most expensive and most frequently called

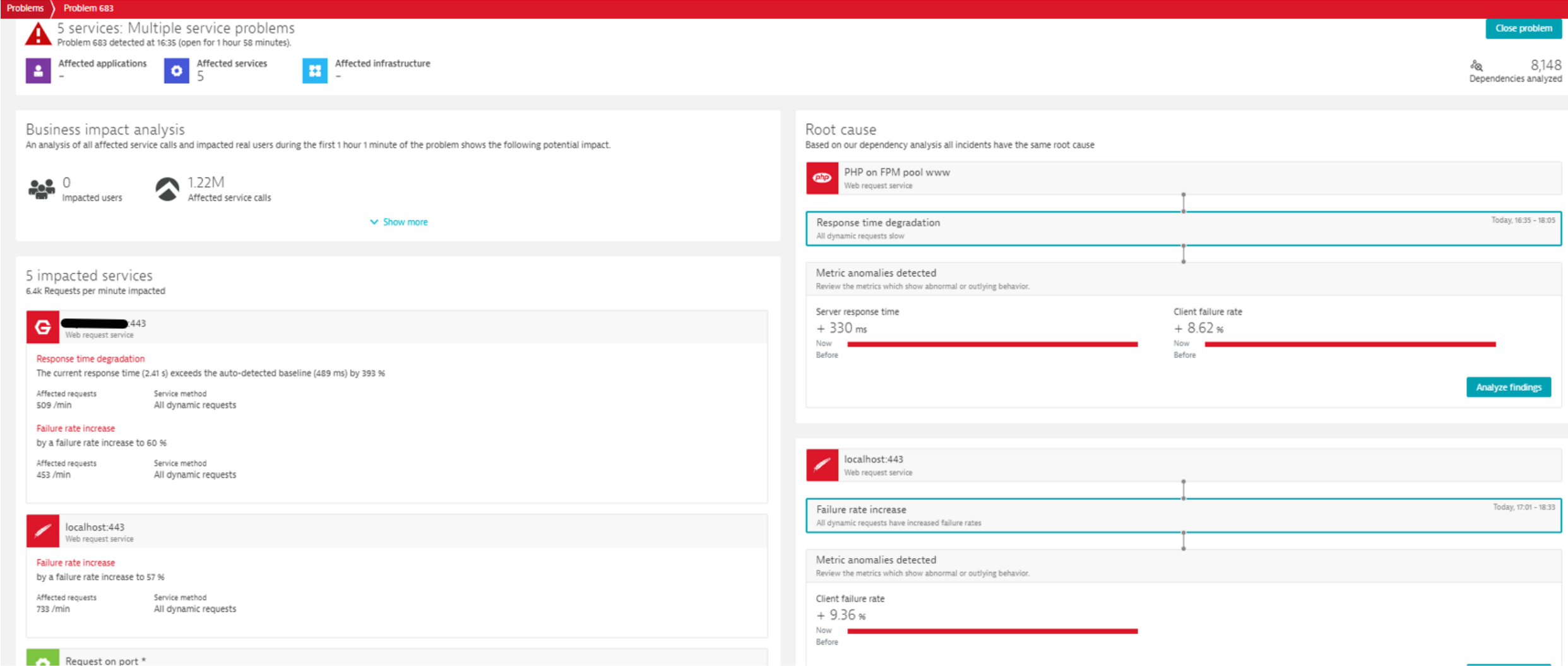
View web requests



# Dynatrace APM Screenshots



# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

Problems

Problem 683

Request on port \*

Web request service / Healthy again for 1 hour 5 minutes

Response time degradation

The current response time (424 ms) exceeds the auto-detected baseline (213 ms) by 99 %

Affected requests

128 /min

Service method

All dynamic requests

[Redacted]

Database / Healthy again for 34 minutes

Response time degradation

The current response time (299 ms) within the slowest 10% exceeds the auto-detected baseline (39.2 ms) by 662 %

Affected requests

4.39k /min

Service method

SQL Modifications

PHP on FPM pool www

Web request service / Healthy again for 28 minutes

Response time degradation

The current response time (1.43 s) exceeds the auto-detected baseline (199 ms) by 618 %

Affected requests

186 /min

Service method

All dynamic requests

Now

Before

Analyze Findings

[Redacted]

Database

Response time degradation

Service asybsca slow down

Today, 17:10 - 17:59

Metric anomalies detected

Review the metrics which show abnormal or outlying behavior.

Server response time

+ 13.6 ms

Now

Before

Analyze Findings

Show 2 less

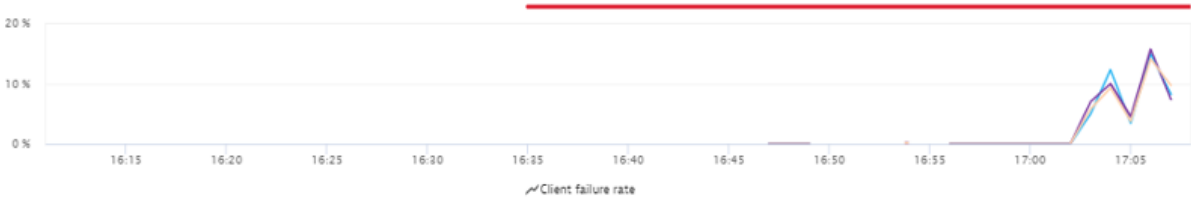
# Dynatrace APM Screenshots

Problems > Problem 683 > Root-cause analysis

Dynatrace automatically followed all problem related transactions and identified this component as showing abnormal metric behavior right before the problem was detected

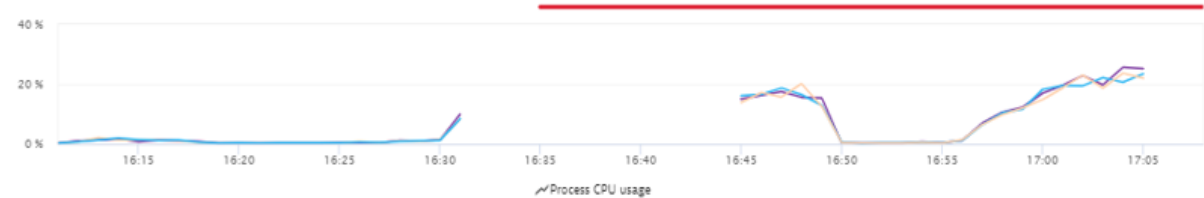
## Service

 PHP on FPM pool www



## Process Group

 PHP-FPM

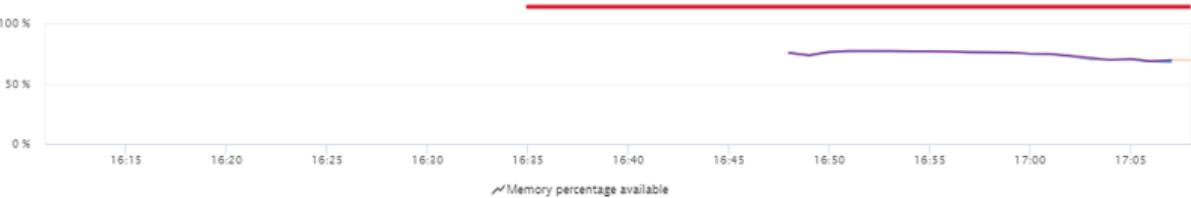


Show 5 more



## Host

 [Redacted Host Name]




# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

## Root cause

Based on time correlation and analysis of all transactions that use these components, this issue has the following root cause



MySQL  
Process Group

Slow disk

Disk slow on [REDACTED]

Today, 17:24 - 17:38

Metric anomalies detected

Review the metrics which show abnormal or outlying behavior.

Process I/O write bytes

+ 42.7 MB/s

Now [red bar]

Before [red bar]

connected threads

+ 1.02k /min

Now [red bar]

Before [red bar]

Process I/O requested read bytes

+ 8.7 MB/s

Now [red bar]

Before [red bar]

Process I/O requested write bytes

+ 24.2 MB/s

Now [red bar]

Before [red bar]


Analyze findings

Problems

Problem 778

3 impacted services

373k Requests per minute impacted



PHP on FPM pool www

Web request service

Response time degradation


The current response time (7.72 min) exceeds the auto-detected baseline (4.57 s) by 10,044 %

Affected requests

311 /min

Service method

All dynamic requests



[REDACTED]

Database

Failure rate increase

by a failure rate increase to 100 %

Affected requests

361k /min

Service method

4 Service methods

Response time degradation

The current response time (7.72 min) exceeds the auto-detected baseline (57.6 ms) by 805,064 %

Affected requests

214 /min

Service method

SQL Queries or Procedures

# Dynatrace APM Screenshots

Databases

Details

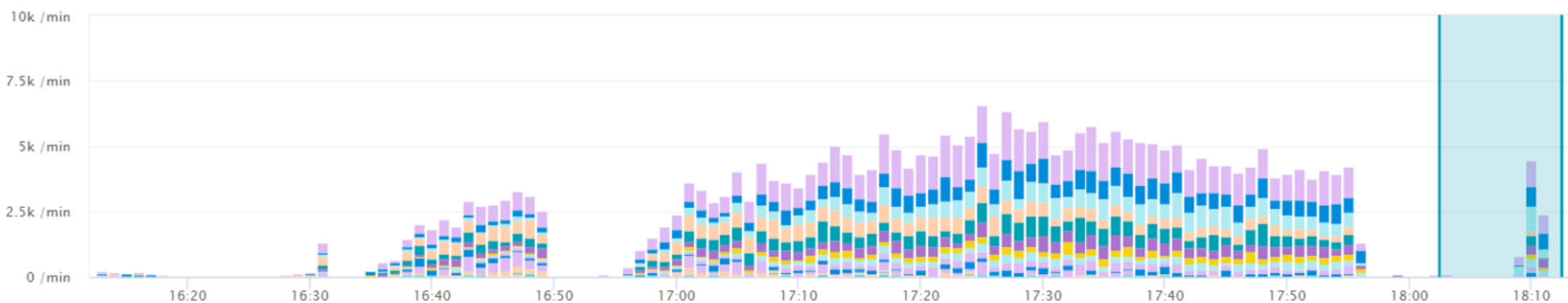
Multidimensional analysis

## Throughput of requests sent by monitored services by request

☆ Save to

Request type: SQL Modifications ✕

Add filter

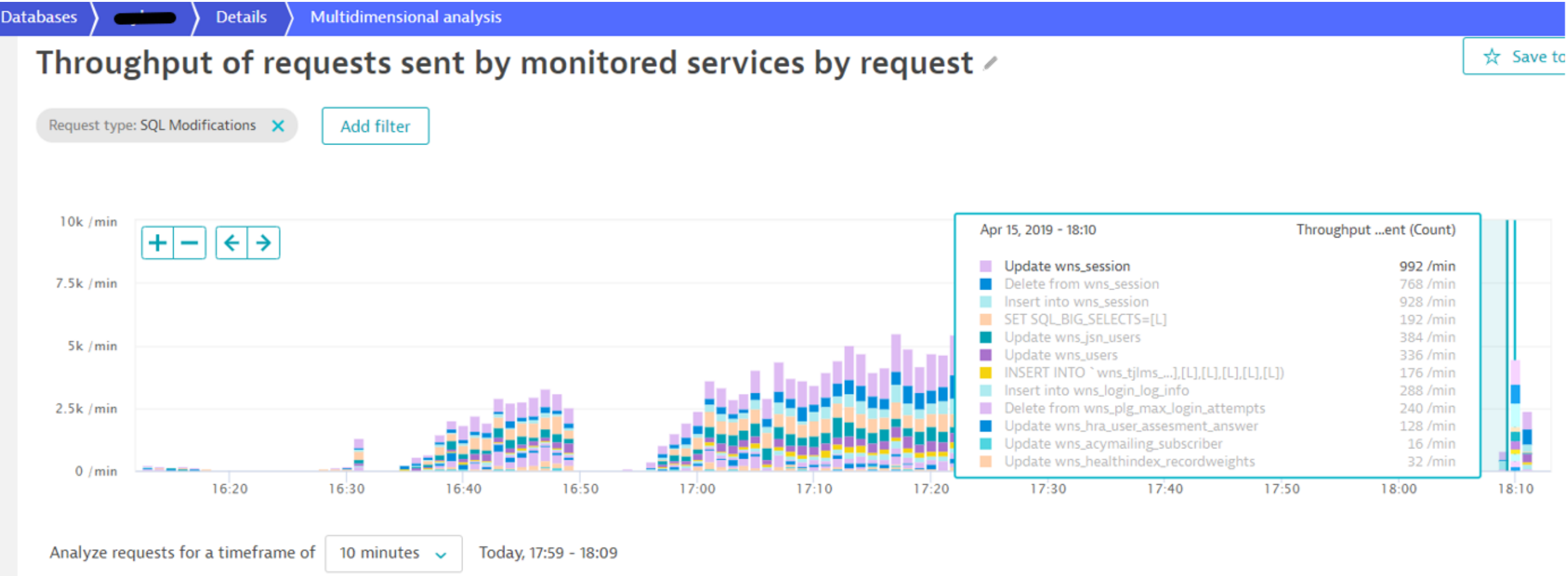


Analyze requests for a timeframe of 10 minutes Today, 18:02 - 18:12

Throughput - Client (Count)

Add metric

# Dynatrace APM Screenshots





# Dynatrace APM Screenshots



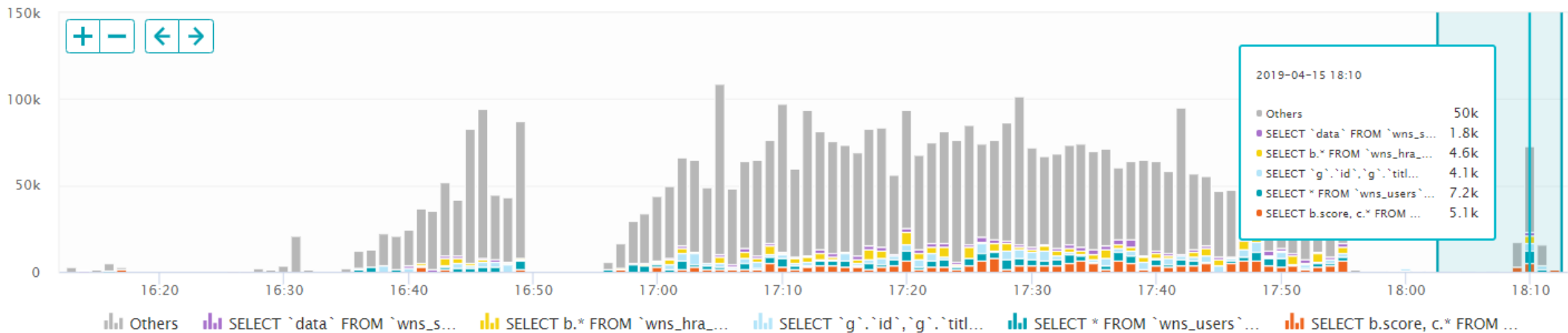


# Top database statements

Today, 16:12 - 18:12

Add filter

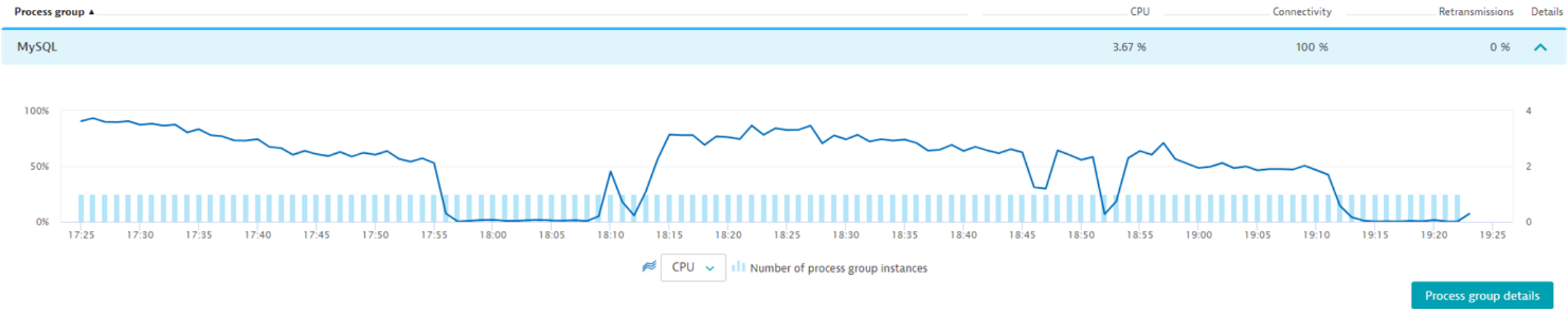
## Distribution of database statements



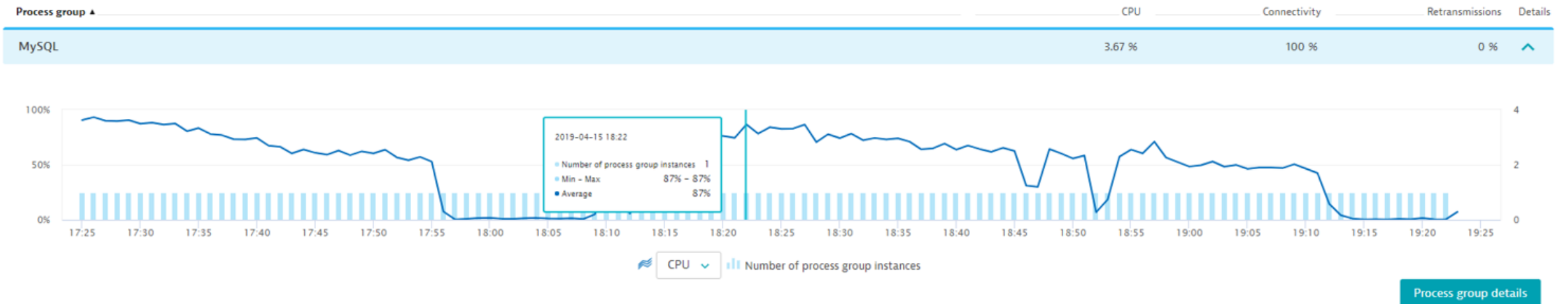
Analyze statements for a 10 minutes timeframe. Today, 18:02 - 18:12



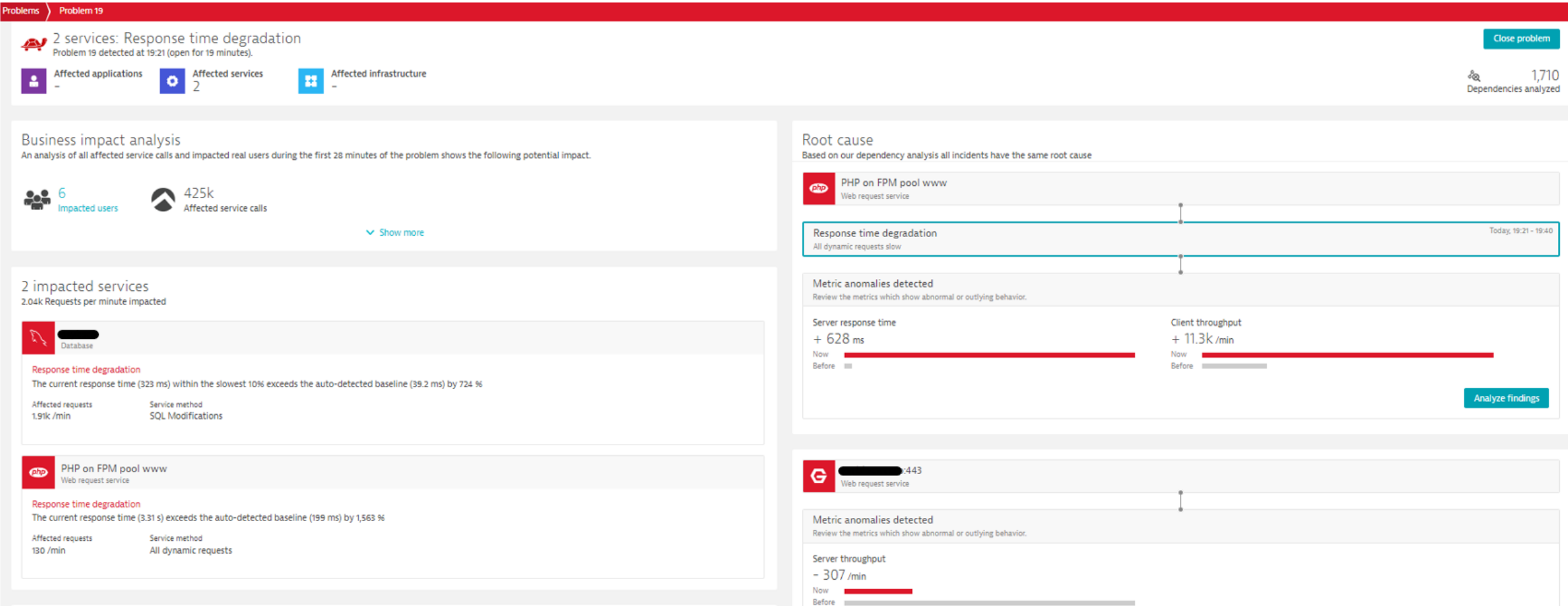
# Dynatrace APM Screenshots



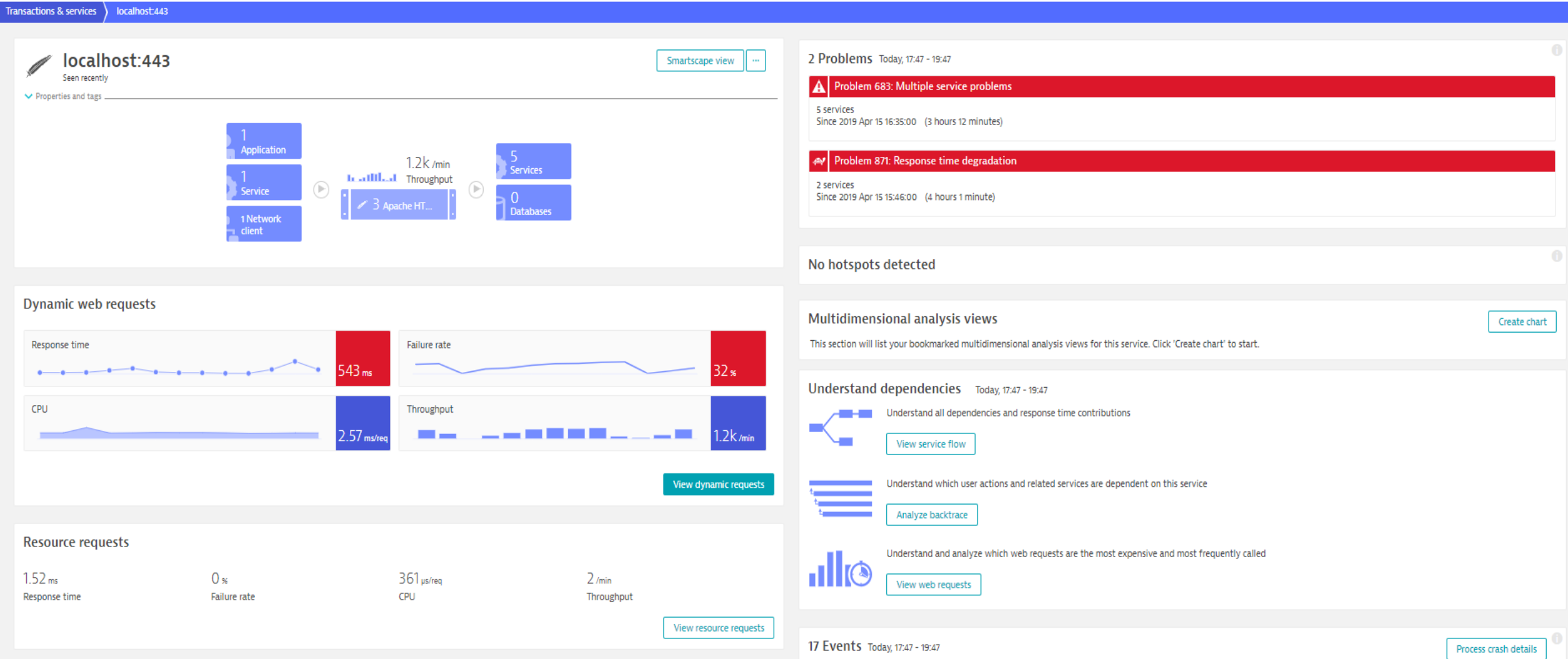
You're missing out on MySQL monitoring insights  
[Set up monitoring extension](#)



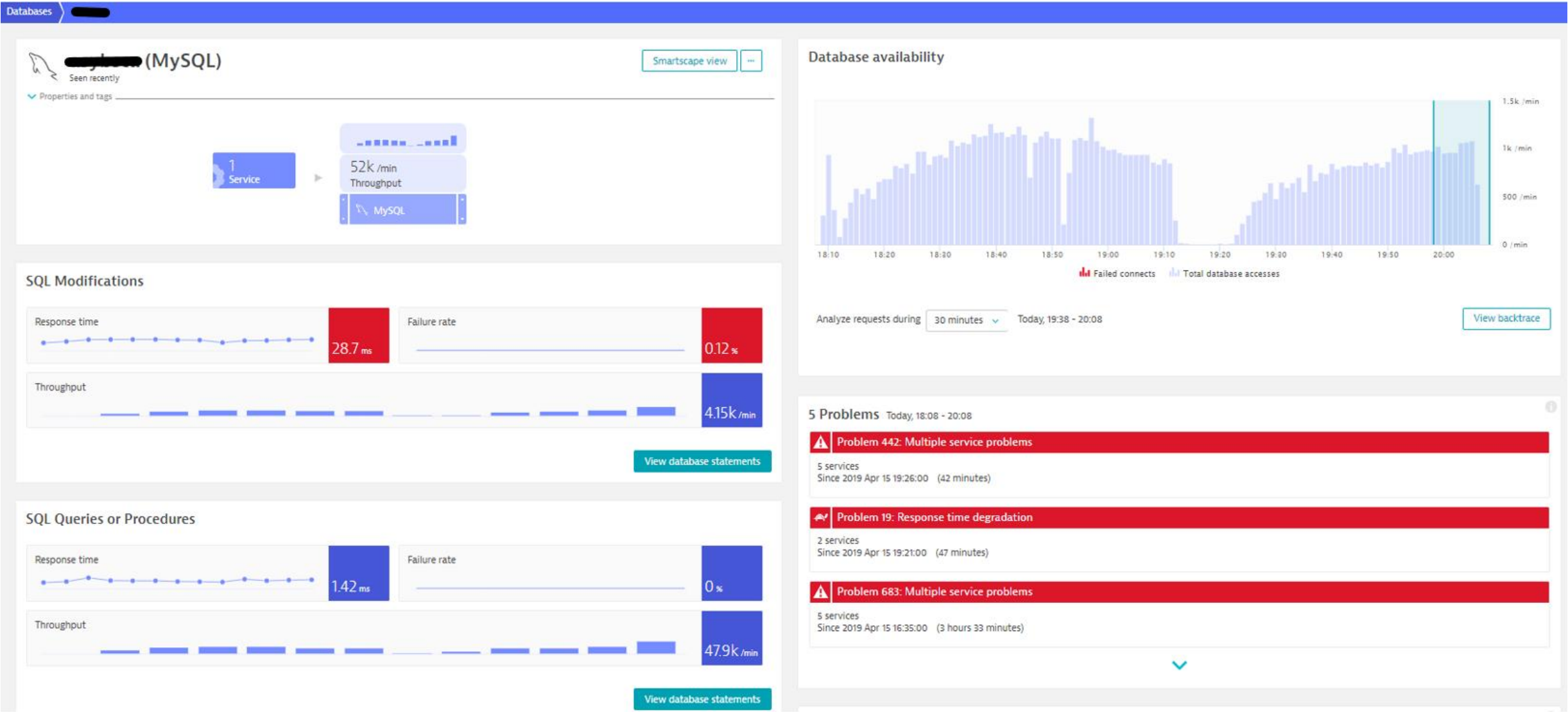
# Dynatrace APM Screenshots



# Dynatrace APM Screenshots



# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

Diagnostic tools

Exception analysis

Exception classes (18)		Affected services (4)	
Filter for exception classes			
Name	Total impacted ▼	Count	Actions
JDatabaseExceptionConnecting	<div></div>	111k	
Execution of PHP script terminated by either 'die' or 'exit' function with exit status	<div></div>	111k	
Exception	<div></div>	59.5k	
RuntimeException	<div></div>	59.5k	
PHP Warning	<div></div>	56k	
FOF30\Factory\Exception\ModelNotFound	<div></div>	20.8k	
MySQLi::QueryError	<div></div>	18.6k	
PHP error	<div></div>	11.3k	
JDatabaseExceptionExecuting	<div></div>	9.27k	
FOF30\Model\DataModel\Exception\TreeIncompatibleTable	<div></div>	8.19k	
FOF30\Factory\Exception\DispatcherNotFound	<div></div>	8.12k	
FOF30\Factory\Exception\FormNotFound	<div></div>	4.97k	
FOF30\Factory\Exception\ToolBarNotFound	<div></div>	2.62k	
FOF30\Factory\Exception\TransparentAuthenticationNotFound	<div></div>	2.13k	
FOF30\Factory\Exception\ViewNotFound	<div></div>	1.73k	
FOF30\Dispatcher\Exception\AccessForbidden	<div></div>	652	
FOF30\Factory\Exception\ControllerNotFound	<div></div>	6	

(MySQL)

Last call 1 minute ago

Smartscope view

1 Service

206 /min Throughput

MySQL

SQL Modifications

Response time

770 ms

Failure rate

51 %

Throughput

136 /min

1 impacted service

15.6k Requests per minute impacted

Database

Failure rate increase

by a failure rate increase to 0.28 %

Affected requests

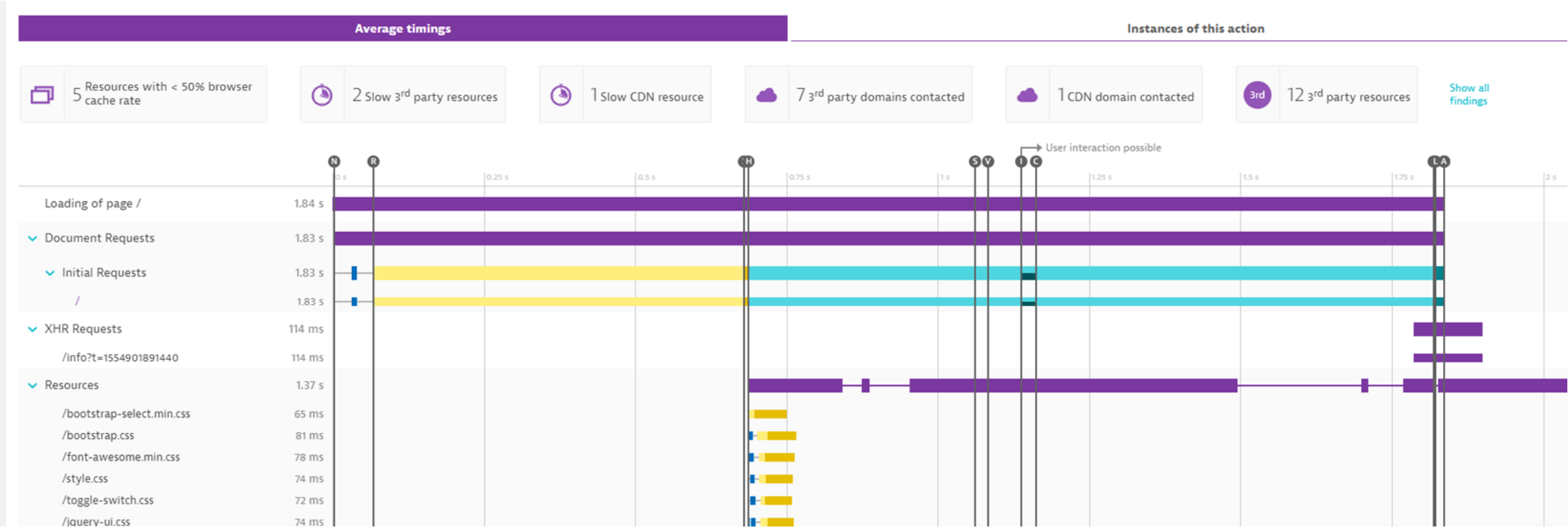
15.6k /min

Service method

SQL Modifications



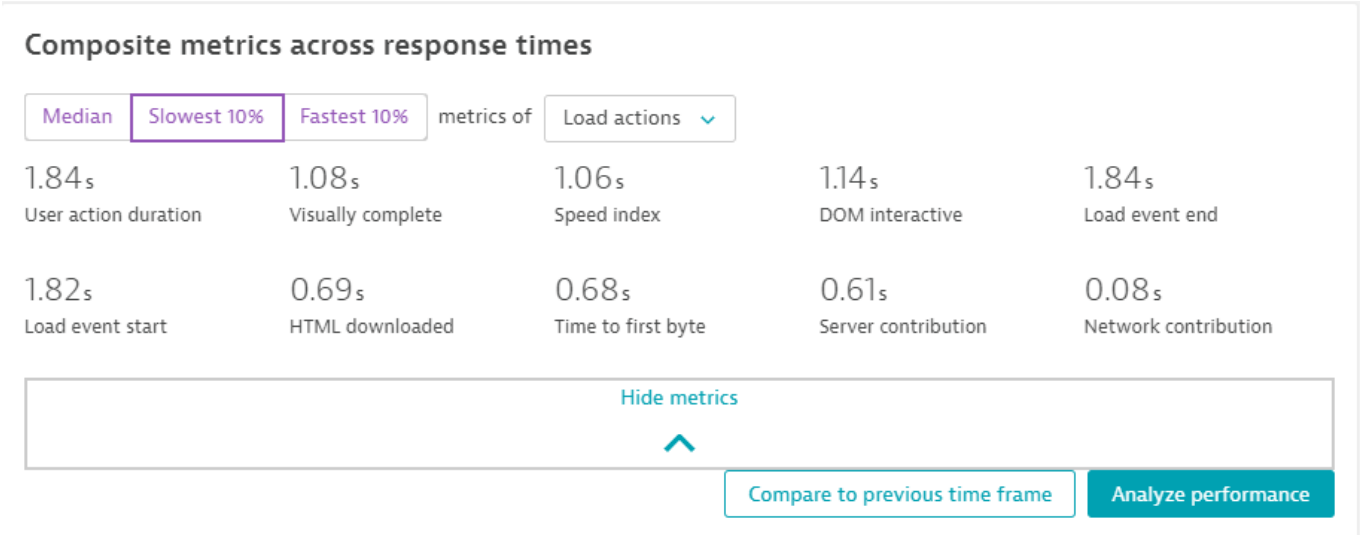
# Dynatrace APM Screenshots



## Top 3 web request contributors

Name	Service	Total time consumption ▾	Response time	Failure Rate	Requests
/	localhost:443	<div></div>	606 ms	0 %	0.2 /min
Images	localhost:443	<div></div>	933 μs	0 %	5.4 /min
CSS	localhost:443	<div></div>	1.83 ms	0 %	2.6 /min

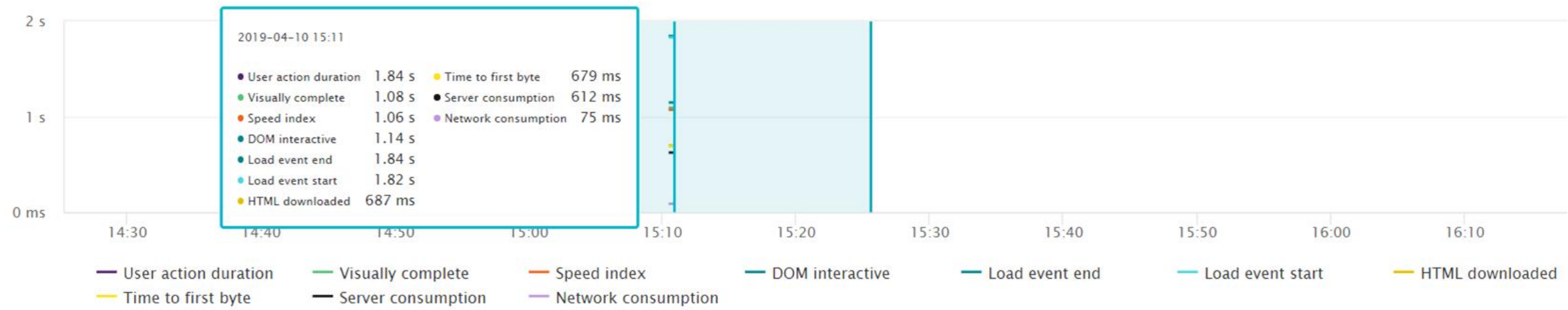
# Dynatrace APM Screenshots



Analyze user actions during the past 

30 minutes

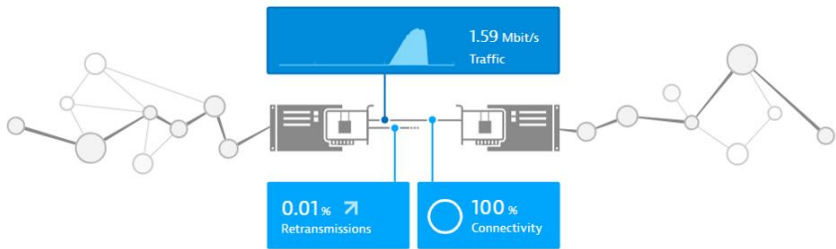
. Click anywhere in the chart below to adjust the analysis timeframe.



# Dynatrace APM Screenshots

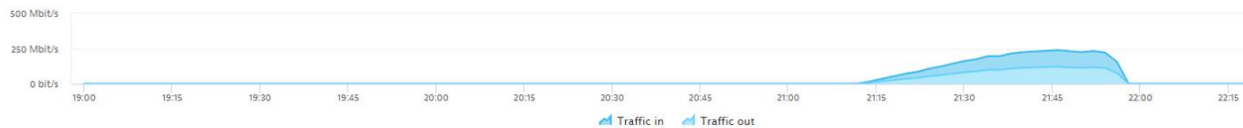
## Network overview

Key network KPIs related to the usage and performance of your network are shown below. Click a metric to view more detail.



### Traffic

Total traffic received/sent by monitored hosts. Click into chart to adjust analysis timeframe.



## All monitored databases

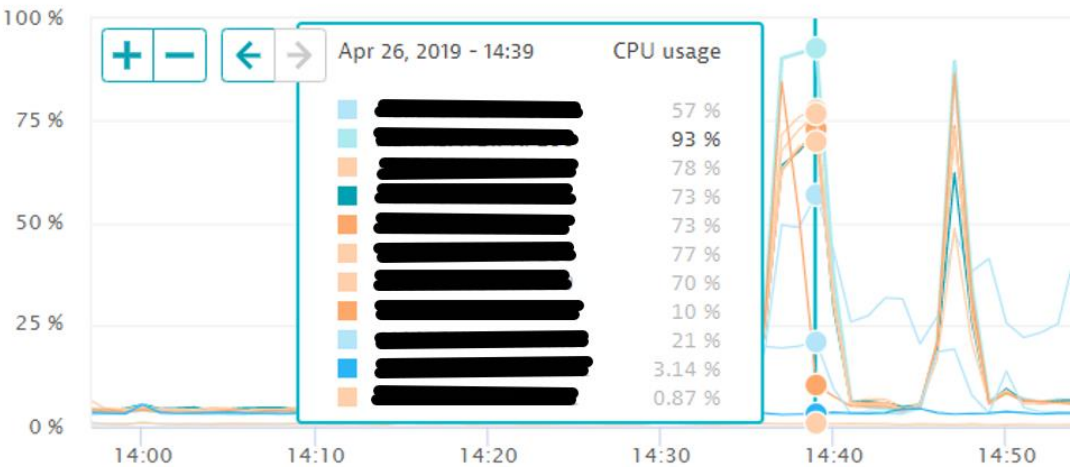
4 databases

Filtered by:

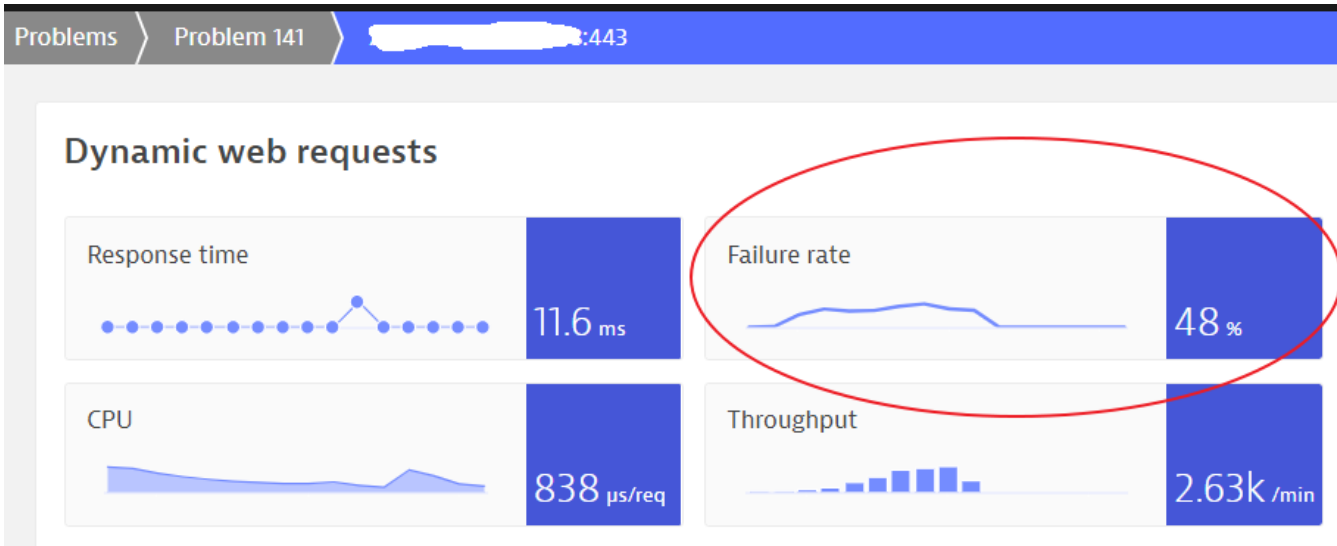
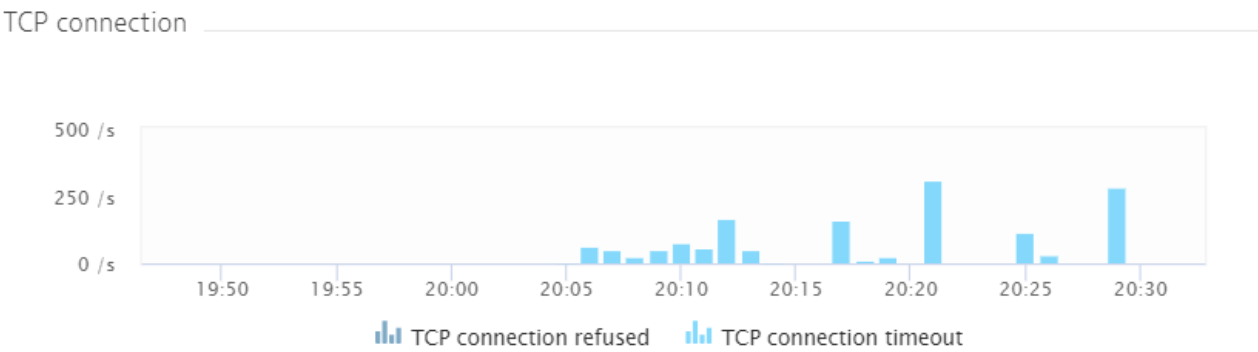
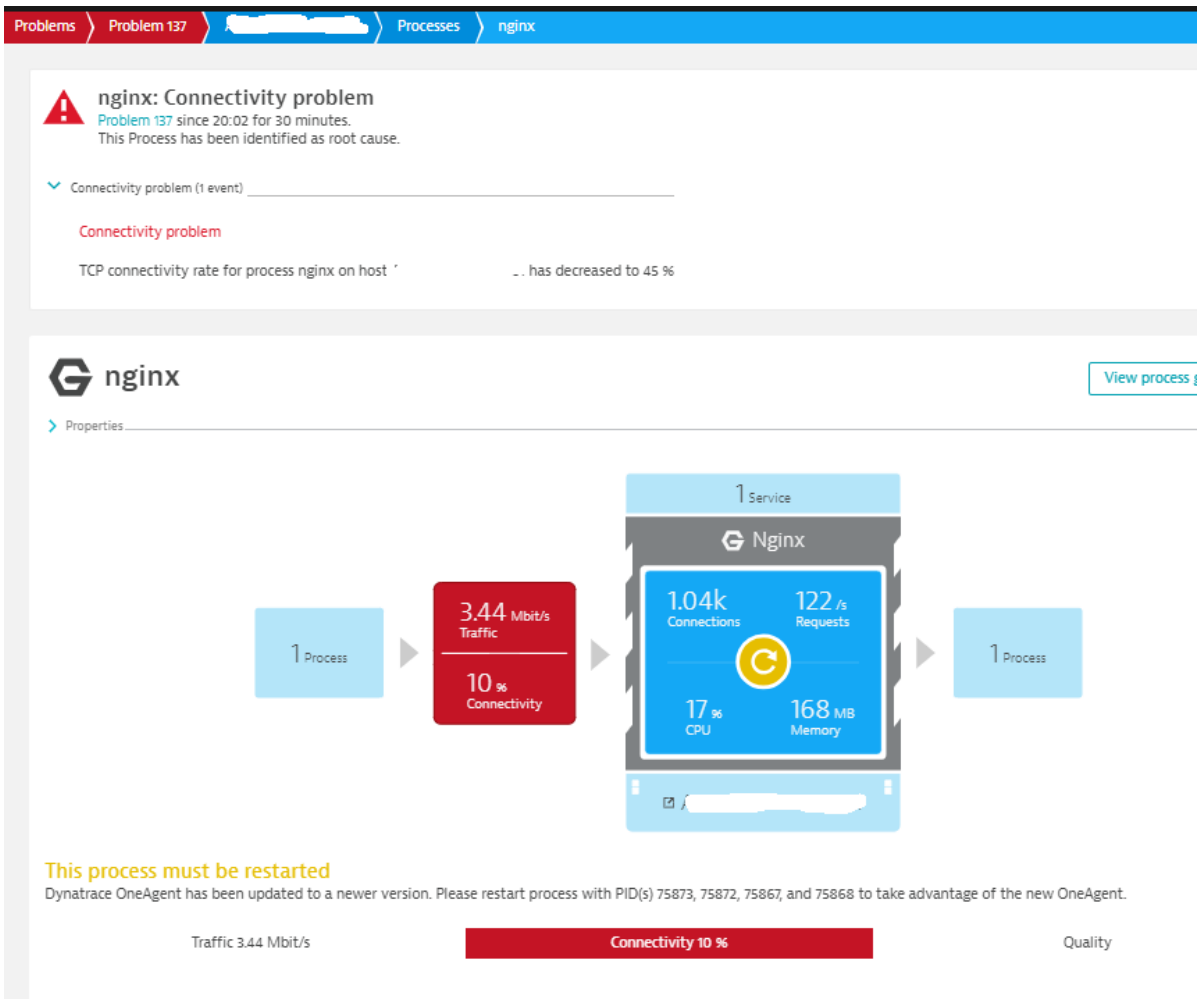
[View top database statements](#)

Showing current values

Name	Response time median	Failure rate	Requests
 MySQL on 	1.57 ms	0.01 %	40.1k /min
 MySQL on 	580 µs	0 %	633 /min
 MySQL on 	-	-	0 /min
 <default> MySQL on 	-	-	0 /min



# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

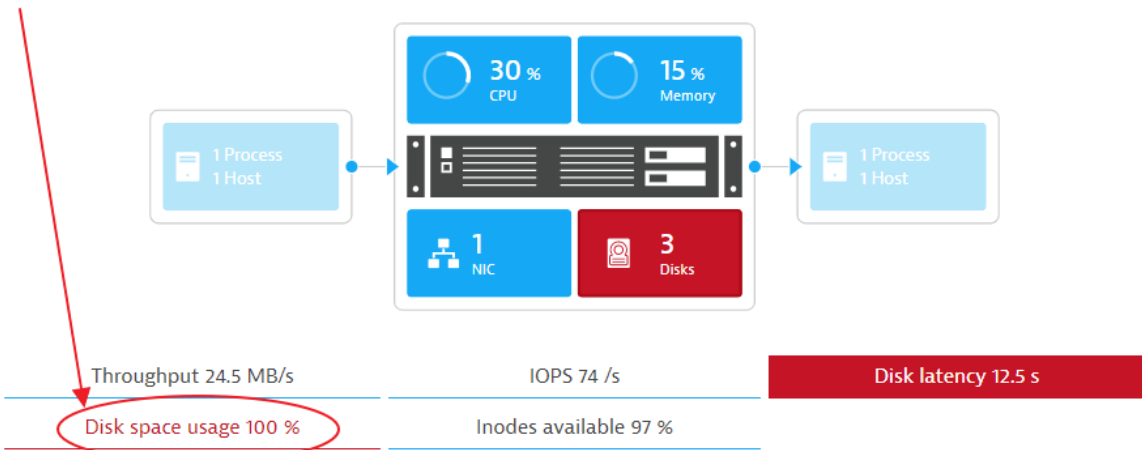
Uptime: over 4 days

Analyze process connections

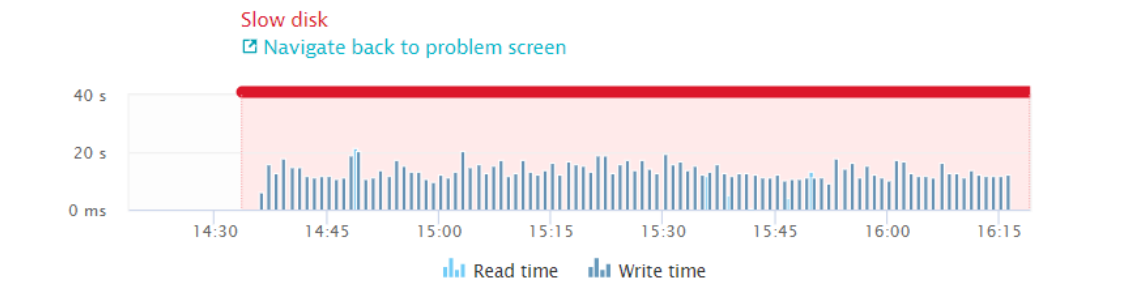
...

Properties

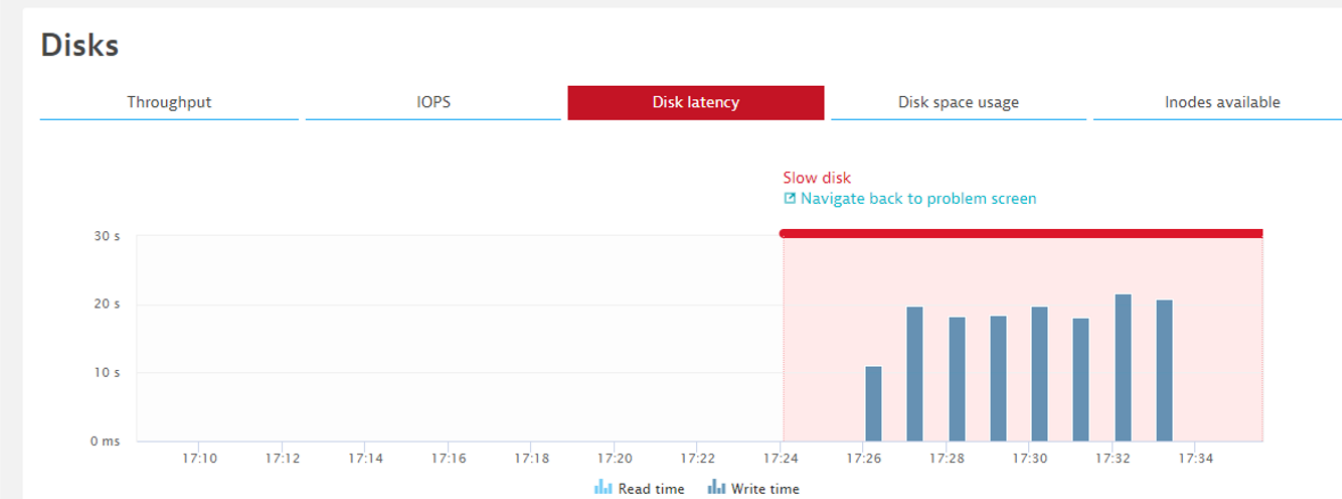
Ubuntu 18.04.2 LTS (Bionic Beaver) (kernel 4.18.0-1014-azure) 9 more...



Time from I/O request submission to I/O request completion.

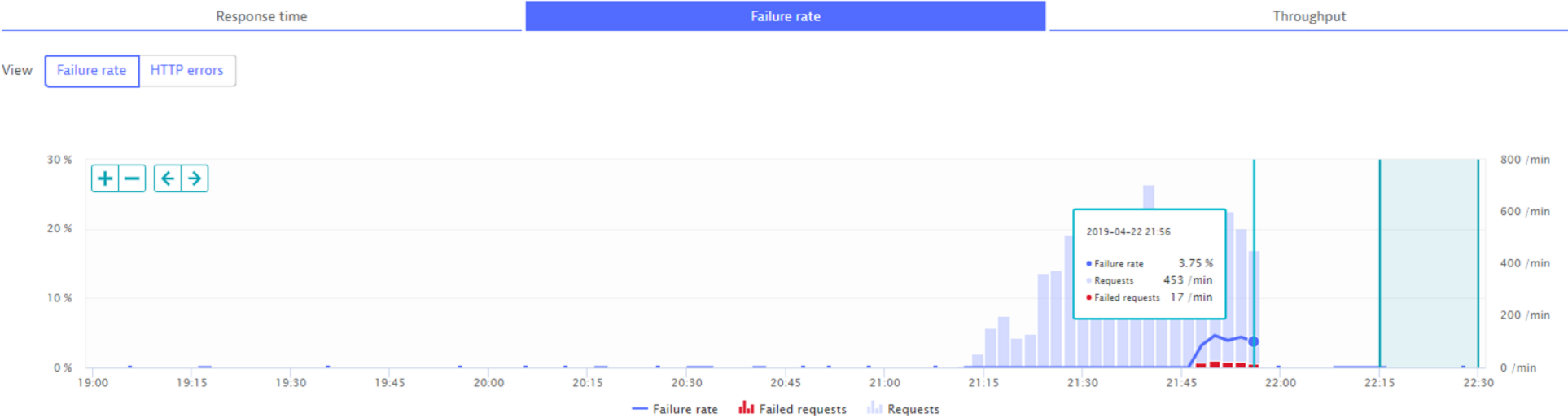
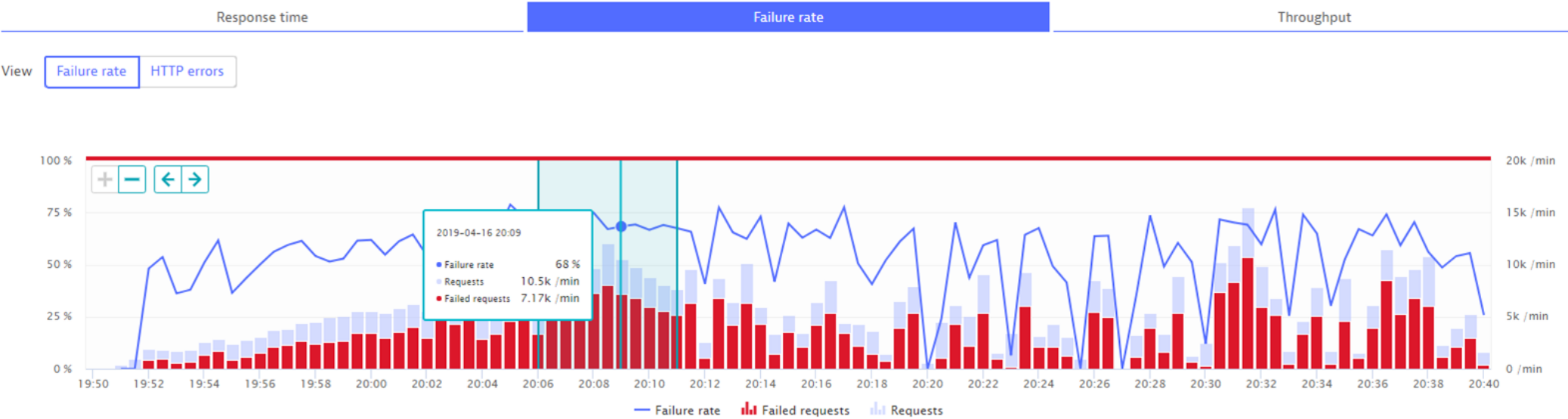


Problems Problem 513  Disks

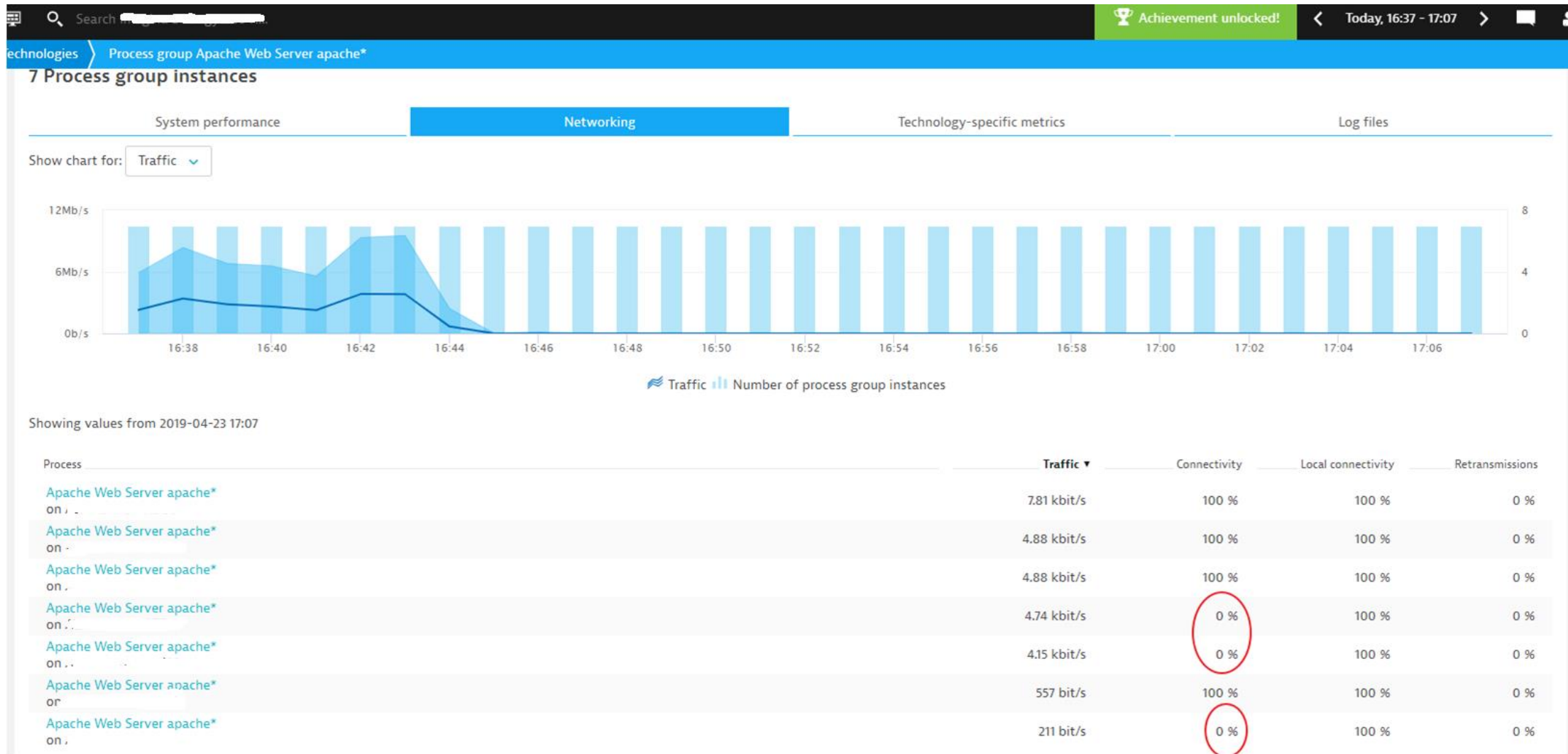


Disk	Disk space usage	Throughput	IOPS	Disk latency	Inodes available
/datadisk	76 % 5.51 GB of 23.2 GB free	0 B/s 24.3 MB/s	0 /s 52.8 /s	- 20,729 ms	100 %
/	31 % 20 GB of 29 GB free	0 B/s 265 kB/s	0 /s 37.6 /s	- 1.22 ms	97 %
/mnt	10 % 53.5 GB of 59.5 GB free	0 B/s 0 B/s	0 /s 0 /s	- -	100 %

# Dynatrace APM Screenshots



# Dynatrace APM Screenshots



# Dynatrace APM Screenshots

asybsca

Details

Backtrace

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

✓ asybsca MySQL on [REDACTED]	<div></div>	1.84M Requests 1.84M Failed requests	⌵ ...
✓ PHP on FPM pool www PHP-FPM	<div></div>	1.84M Requests 0 Failed requests	⌵ ...
> [REDACTED] Apache Web Server apache*	<div></div>	342k Requests 0 Failed requests	⌵ ...
[REDACTED] Apache Web Server apache*	<div></div>	329k Requests 0 Failed requests	⌵ ...
[REDACTED] Apache Web Server apache*	<div></div>	302k Requests 0 Failed requests	⌵ ...
[REDACTED] Apache Web Server apache*	<div></div>	301k Requests 0 Failed requests	⌵ ...
[REDACTED] Apache Web Server apache*	<div></div>	289k Requests 0 Failed requests	⌵ ...
[REDACTED] Apache Web Server apache*	<div></div>	273k Requests 0 Failed requests	⌵ ...

### Requests to [REDACTED]

```
select * from wns_session order by rand() limit 1;
```

```
select b.score, c.* from `wns_hra_user_assessment` as a inner join `wns_hra_user_assessment_score` as b on b.user_assessment_id = a.id and a.user_id = b.user_id inner join `wns_hra_columns` as c on c.id = b.column_id where a.assessment_id = '*****' and a.user_id = '*****' and c.name = '*****' and a.state = '*****' order by b.id DESC
```

```
select * from `wns_social_config` where `type` = '*****'
```

```
select m.id, m.title, m.module, m.position, m.content, m.showtitle, m.params, mm.menuid from wns_modules as m left join wns_modules_menu as mm on mm.moduleid = m.id left join wns_extensions as e on e.element = m.module and e.client_id = m.client_id where m.published = '*****' and e.enabled = '*****' and (m.publish_up = '*****' or m.publish_up <= '*****') and (m.publish_down = '*****' or m.publish_down >= '*****') and m.access in ('*****', '*****', '*****') and m.client_id = '*****' and (mm.menuid = '*****' or mm.menuid <= '*****') order by m.position, m.ordering
```

```
select m.id, m.menutype, m.title, m.alias, m.note, m.path as route, m.link, m.type, m.level, m.language, `m`.`` browserNav`, m.access, m.params, m.home, m.img, m.template_style_id, m.component_id, m.parent_id, e.element as component from wns_menu as m left join wns_extensions as e on m.component_id = e.extension_id where m.published = '*****' and m.parent_id > '*****' and m.client_id = '*****' order by m.lft
```

<

1 2 3 4 5

>

### Analysis of [REDACTED] requests

- 1.84M [REDACTED] requests analyzed
- 1.84M [REDACTED] requests failed

Reasons for failed requests

Stacktrace

Referring pages

Proxies

Analyze

For root cause go to 'Analyze' tab and click 'View details of failures' of selected service.

✓ PHP Warning	<div></div>	1.84M Failed requests
mysql:query(): Couldn't fetch mysqli	<div></div>	1.84M Failed requests



# Dynatrace APM Screenshots

## Incoming requests to this service

✓  MySQL on 		1.3M Requests 1.3M Failed requests	 ...
✓  PHP on FPM pool www PHP-FPM		1.3M Requests 0 Failed requests	 ...
  :443 Apache Web Server apache*		230k Requests 0 Failed requests	 ...
  :443 Apache Web Server apache*		222k Requests 0 Failed requests	 ...
  :443 Apache Web Server apache*		193k Requests 0 Failed requests	 ...
  :443 Apache Web Server apache*		187k Requests 0 Failed requests	 ...
  :443 Apache Web Server apache*		173k Requests 0 Failed requests	 ...
  :443 Apache Web Server apache*		162k Requests 0 Failed requests	 ...
  :443 Apache Web Server apache*		134k Requests 0 Failed requests	 ...

## 1 database statement

Create chart

Filter on statement, database name, vendor, process and hostname.

Statement

Failure rate ▾

Actions

failed-connect

100 %   ... 













# Dynatrace APM Screenshots



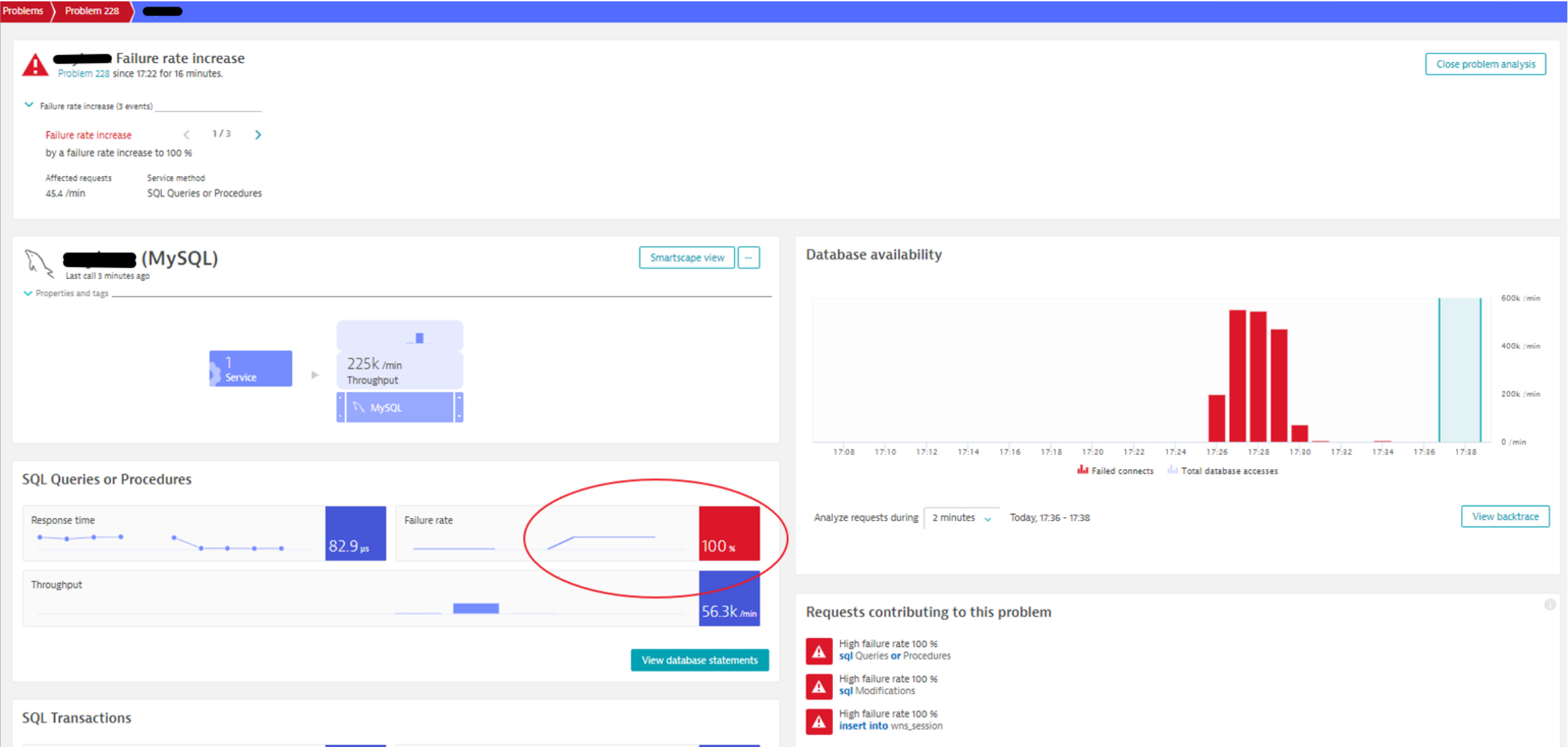
## Database statements

Create chart

Filter on statement, database name, vendor, process and hostname.

Statement	Failure rate	Actions
insert into wns_session	95 %	   
delete from wns_session	94 %	   
update wns_session	0 %	   

# Dynatrace APM Screenshots



Database availability

Failed connects

Total database accesses

Analyze requests during 2 minutes Today, 17:36 - 17:38

View backtrace

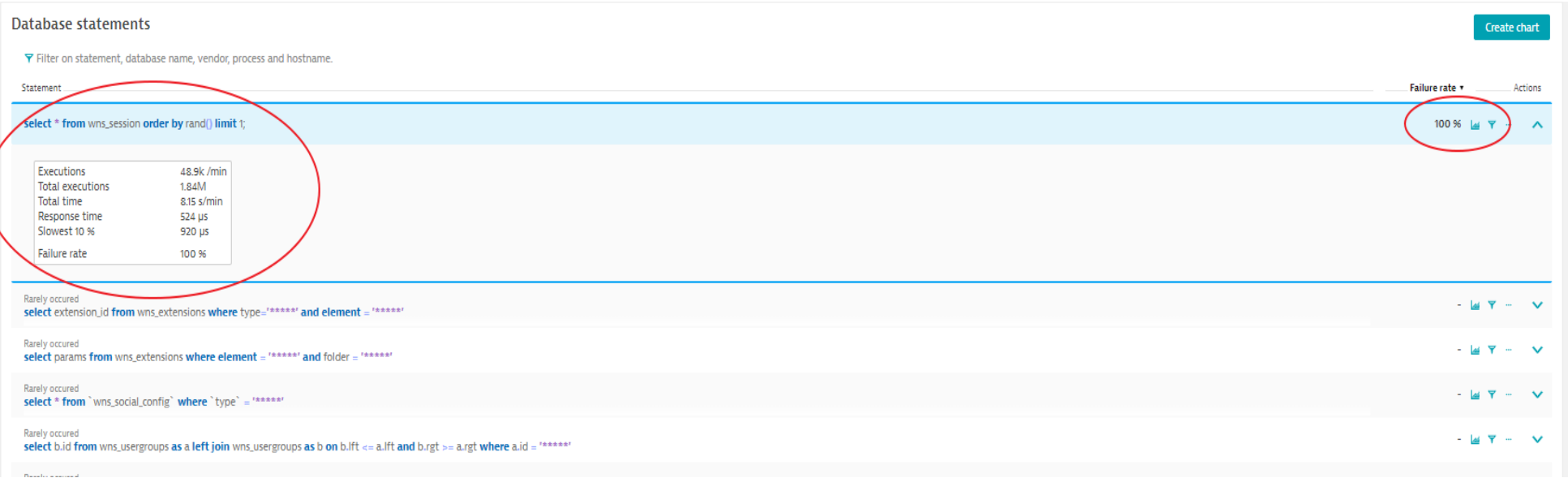
Requests contributing to this problem

High failure rate 100 % sql Queries or Procedures

High failure rate 100 % sql Modifications

High failure rate 100 % insert into wns\_session

# Dynatrace APM Screenshots



## Hotspots in selected timeframe



High failure rate 100 %  
failed-**connect**



High consumption of service resources 54 %  
failed-**connect**



Slow response time 187 ms  
**update** wns\_session

## Showing the 1000 most recent PurePaths of requests of '\*\*\*\*\*'

Today, 13:29 - 13:31 Apply

Request type: SQL Transactions Request: failed-connect

Filter for...

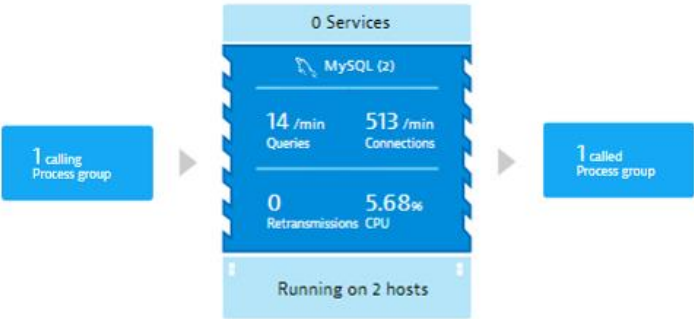
Name	Time	Response time	Fetches	Rows returned	Details
failed- <b>connect</b>	2019 Apr 26 13:31:09.882	9.33 ms			
failed- <b>connect</b>	2019 Apr 26 13:31:09.881	9.92 ms			
failed- <b>connect</b>	2019 Apr 26 13:31:09.858	717 ms			
failed- <b>connect</b>	2019 Apr 26 13:31:09.850	36.8 ms			
failed- <b>connect</b>	2019 Apr 26 13:31:09.840	6.77 ms			
failed- <b>connect</b>	2019 Apr 26 13:31:09.828	9.34 ms			
failed- <b>connect</b>	2019 Apr 26 13:31:09.826	10 ms			

# Dynatrace APM Screenshots

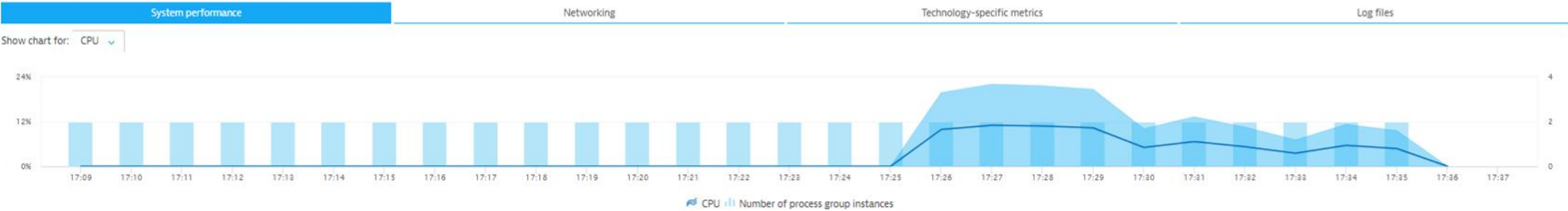
## MySQL

Edit ...

> Properties



### 2 Process group instances



Showing current values

Process	CPU	Memory usage	Responsiveness	Worker processes
MySQL on [REDACTED]	9.61 %	4.08 GB	0.08 µs	1
MySQL on [REDACTED]	0.07 %	375 MB	-	1

# Dynatrace APM Screenshots

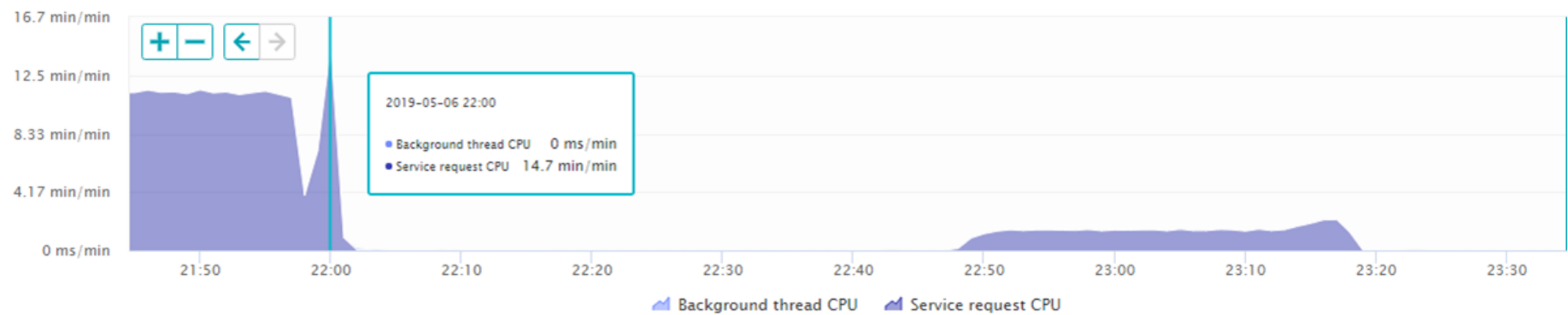
## CPU profiler (code level)

See how much of your monitored processes' CPU is consumed by service requests, background threads, and garbage collection. Use this information to optimize your code in these respective areas. [More...](#)

Filtered by:



Showing last values



Analyze CPU consumption for 10 minutes Today, 23:34 - 23:44

Process group	Type	Overall CPU consumption	CPU usage at mark
Apache Web Server apache*	Background thread CPU	<div></div>	5.29 ms/min
PHP-FPM	Background thread CPU	<div></div>	59 ms/min
PHP-FPM	Service request CPU	<div></div>	59 ms/min
Apache Web Server apache*	Service request CPU	<div></div>	5.29 ms/min

Show code level