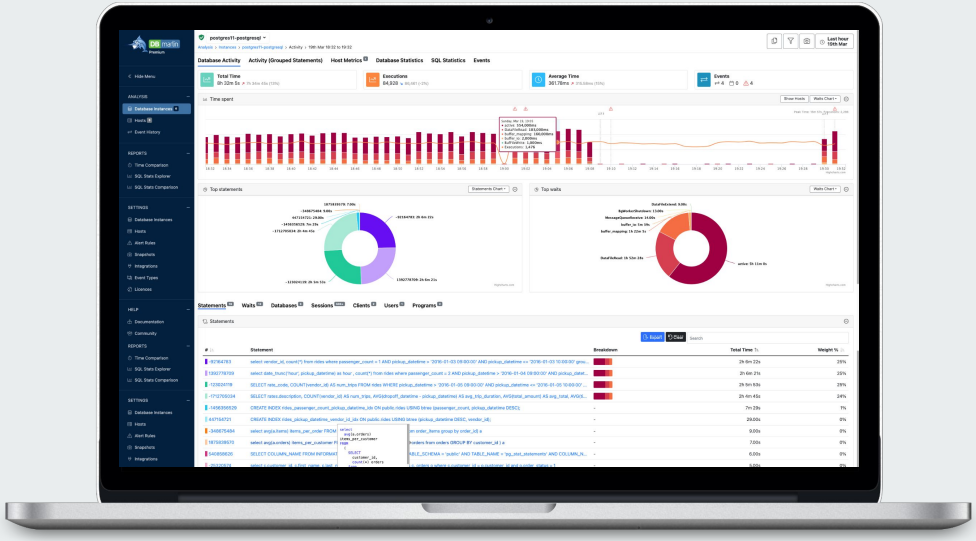
DBmarlin Cookbook



Worked examples to help you understand more about DBmarlin

Cookbook

1. Find Performance Degradation
2. Analyse SQL Statement performance
3. Analyse wait states
4. Troubleshoot database locking
5. Configure DBmarlin co-pilot
6. Use DBmarlin co-pilot to tune SQL Query
7. Use DBmarlin co-pilot to understand wait states
8. Use KB to understand wait states
9. Select a time period for analysis
10. Take a snapshot of database performance
11. Compare database activity between snapshots or time periods
12. Explore SQL Statistics
13. Configure SQL Statistics
14. Compare SQL Statistics over time or between instances
15. Review Recommendations
16. Explore Database versions
17. Configure https access to DBmarlin
18. Update DBmarlin
19. Collect logs
20. Use tags to classify database instances
21. Configure Authentication
22. Configure Role-based Access Control
23. Configure Single sign-on (SSO)

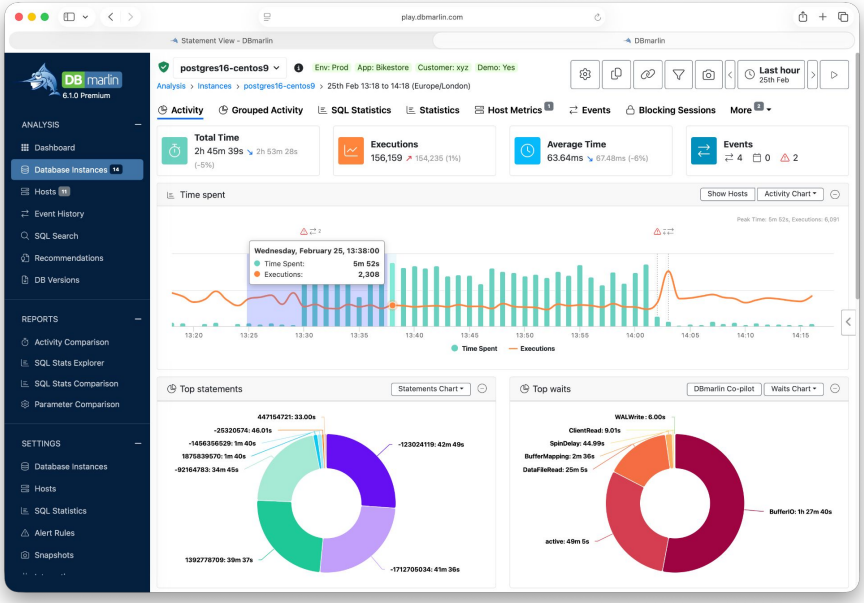
Using the cookbook

All screenshots and steps in the cookbook have been completed on the DBmarlin play site: https://www.dbmarlin.com/play

Using this, you should see identical results.

For some of the screenshots, I selected a time period where performance for the postgres16-centos9 instance gets worse.

1. Click on the postgres16-centos9 database in the main dashboard
2. On the main timeline, drag to select time where green bars can hardly be seen to where green bars are seen



1. Find Performance Degradation

Problem

You want to quickly find the performance degradation amongst many different databases and many different database platforms so that the problem can be fixed rapidly and accurately, minimising time to recovery.

Solution

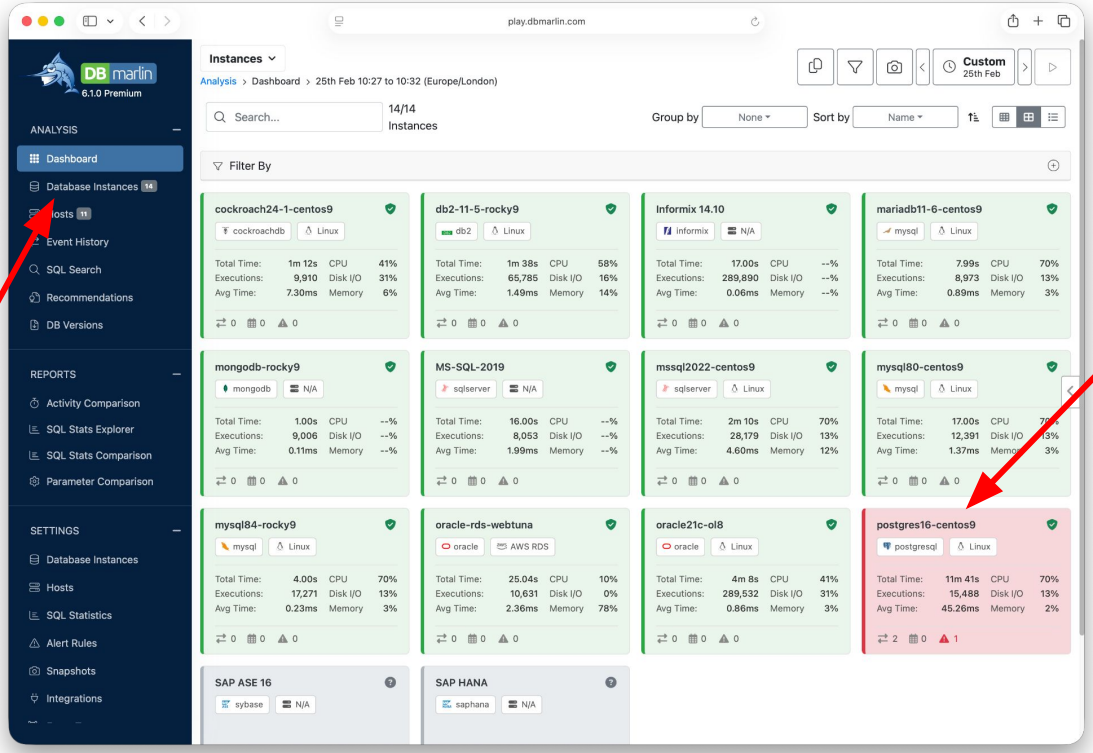
Open up Database Instances for all databases. Look for “Average Time” - It represents the time the database takes to run queries. You can see rising trends. Also look for “Executions” - A sudden drop or sudden rise could indicate a problem in the application or website layer.

Also look for Alerts, Changes or Events, these can indicate likely correlations.

Find Performance Degradation

Dashboard

Click on Database Instances to see the databases in a list



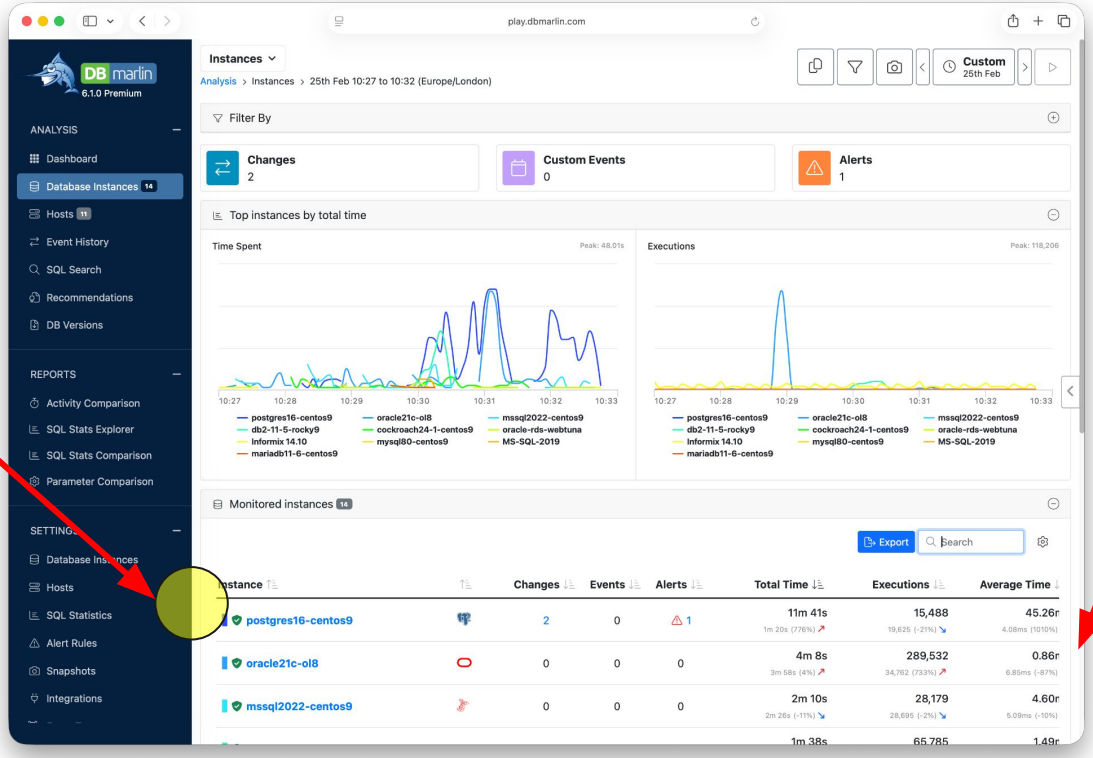
Database of interest is coloured Red.

DB marlin

Find Performance Degradation

Database Instances

Hide left menu - hover around the highlighted area, an arrow should appear to collapse the menu.

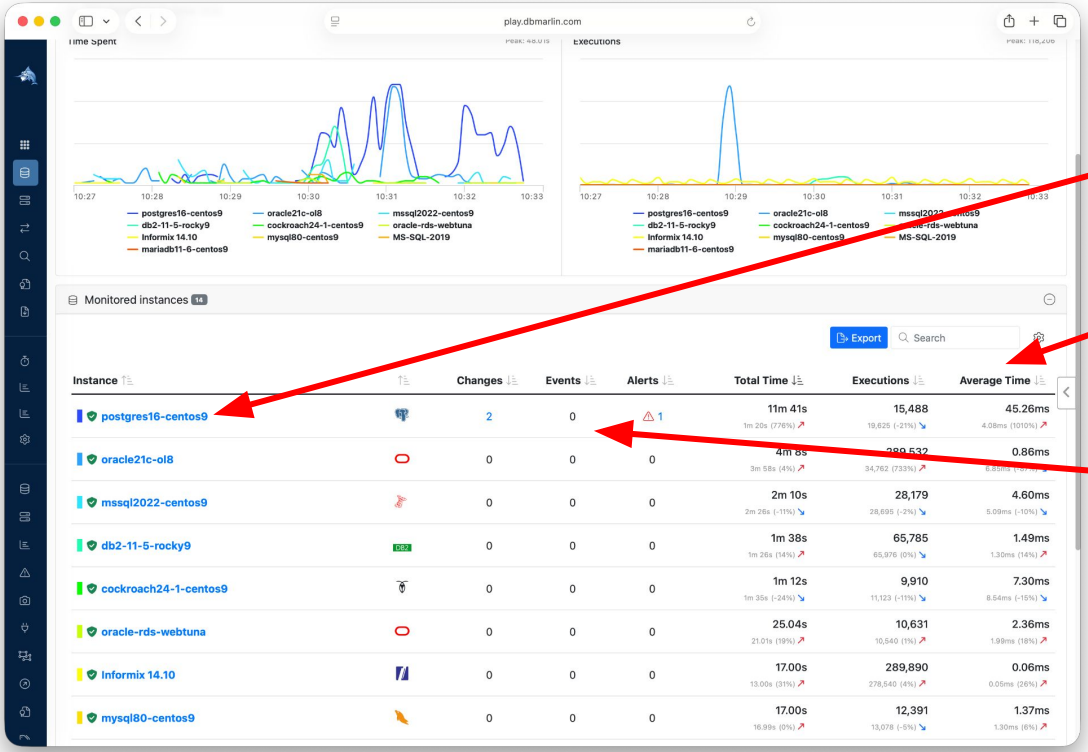


Scroll down for a deeper look at the instances

DB marlin

Find Performance Degradation

Take a Look at top item



postgres16-centos9 instance

Average time 45.26ms up 1010%

2 changes detected
1 alert

DB marlin

2. Analyse SQL Statement Performance

Problem

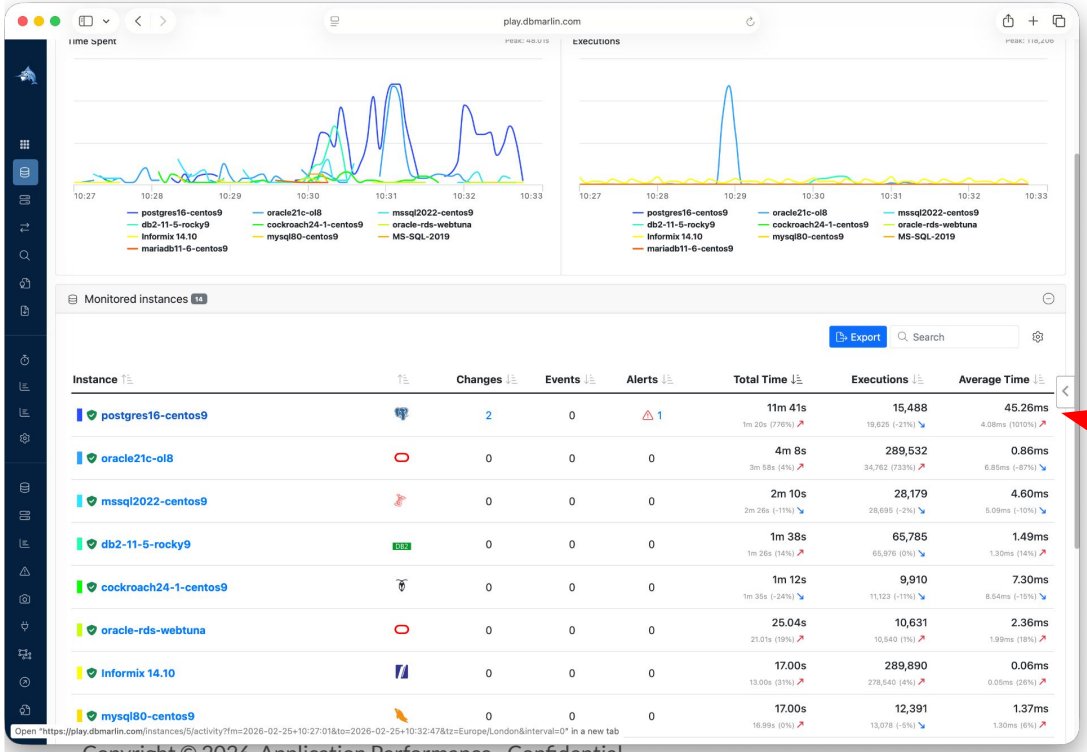
You want to understand why a SQL Statement is running slowly. If it has recently got worse, you want to understand if a recent change has caused a problem.

Solution

- Select the statement of interest (DBmarlin presents the statements with the highest wait time first)
  DBmarlin will present the statement and the query execution plan. There may be more than one plan used during the selected time period. If the plan is less efficient, then this can help to diagnose the problem
- Optionally, use DBmarlin Co-Pilot to use AI to offer suggestions as to the cause and possible solutions.

Analyse SQL Statement Performance

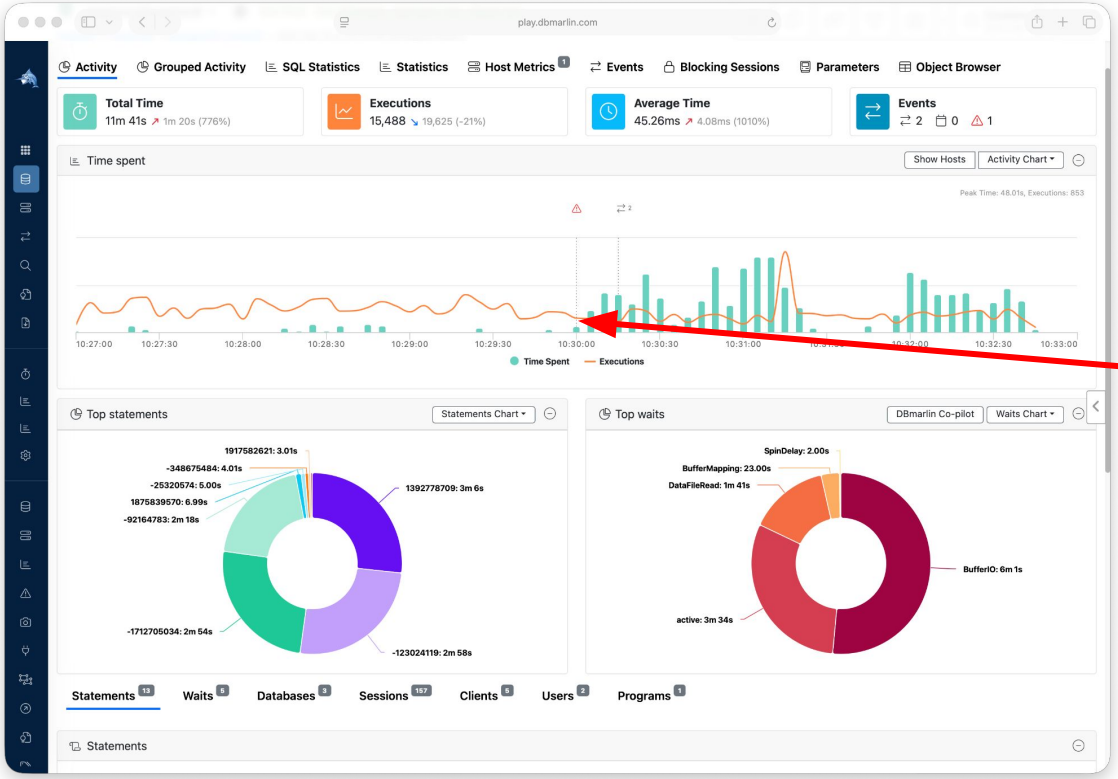
Select the Database of Interest



In this case the top database (postgres16-centos9) is interesting
Average time highest and rising

Analyse SQL Statement Performance

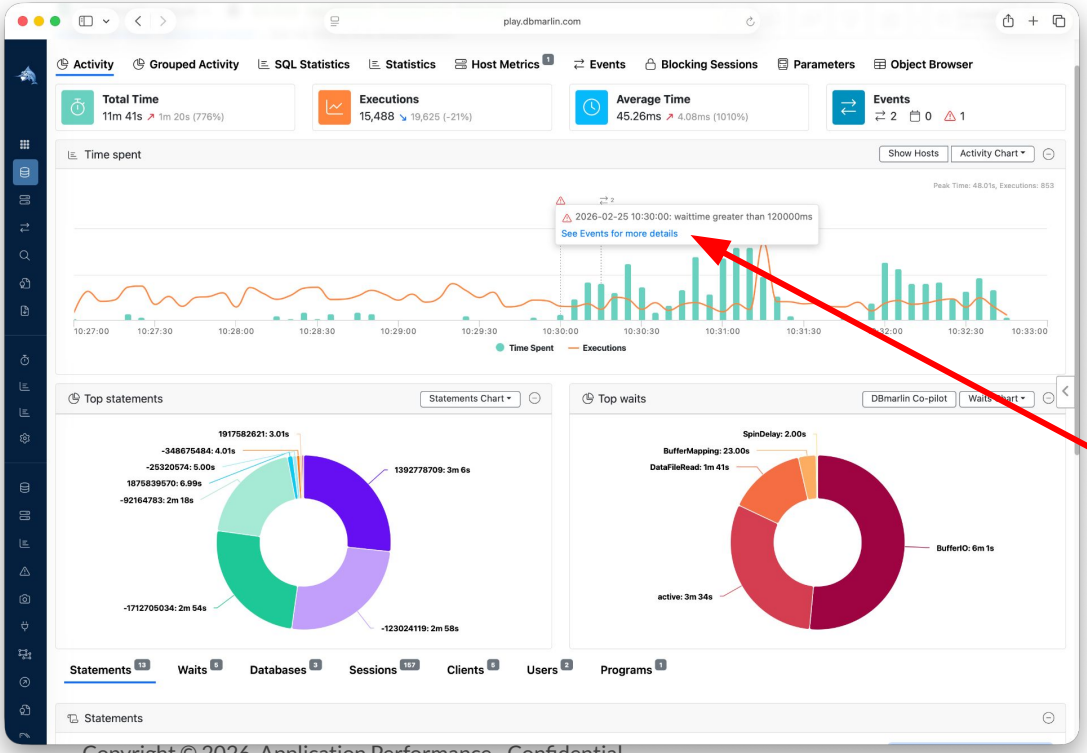
Select the Statement of Interest



Timeline shows increase in time from 10:30 onwards

Analyse SQL Statement Performance

Examine alerts on timeline

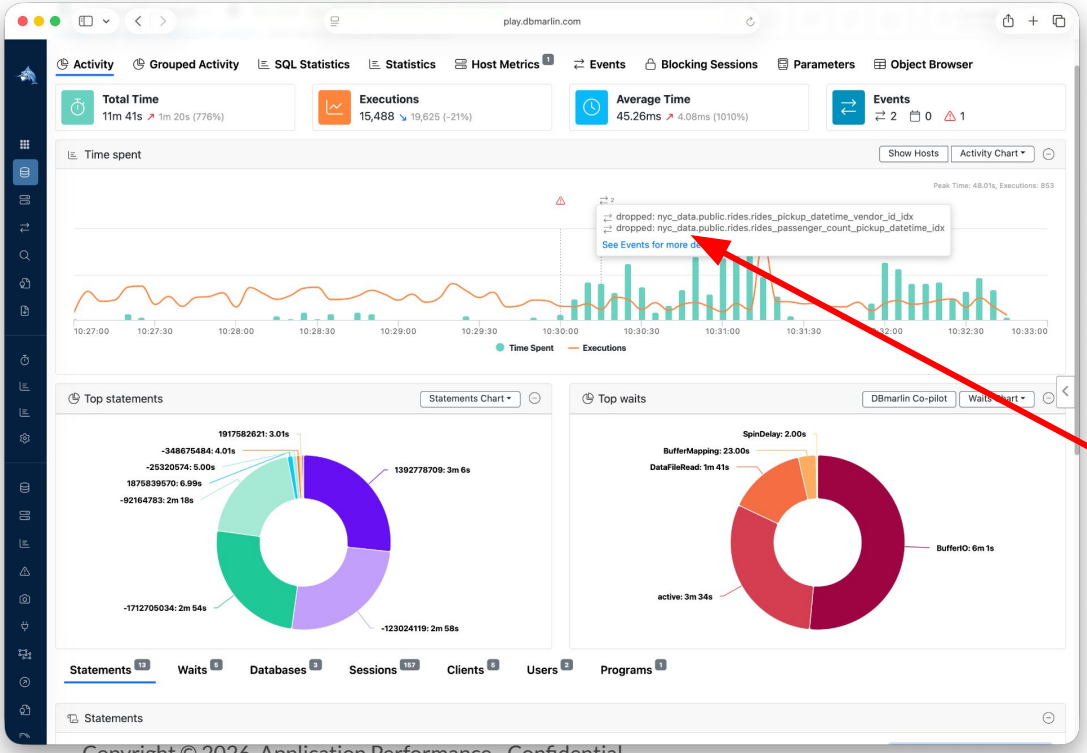


Hover over warning triangle in timeline to see alert detail. *Alert for waittime greater than 120000ms. Link is available to see events as a list.*

DB marlin

Analyse SQL Statement Performance

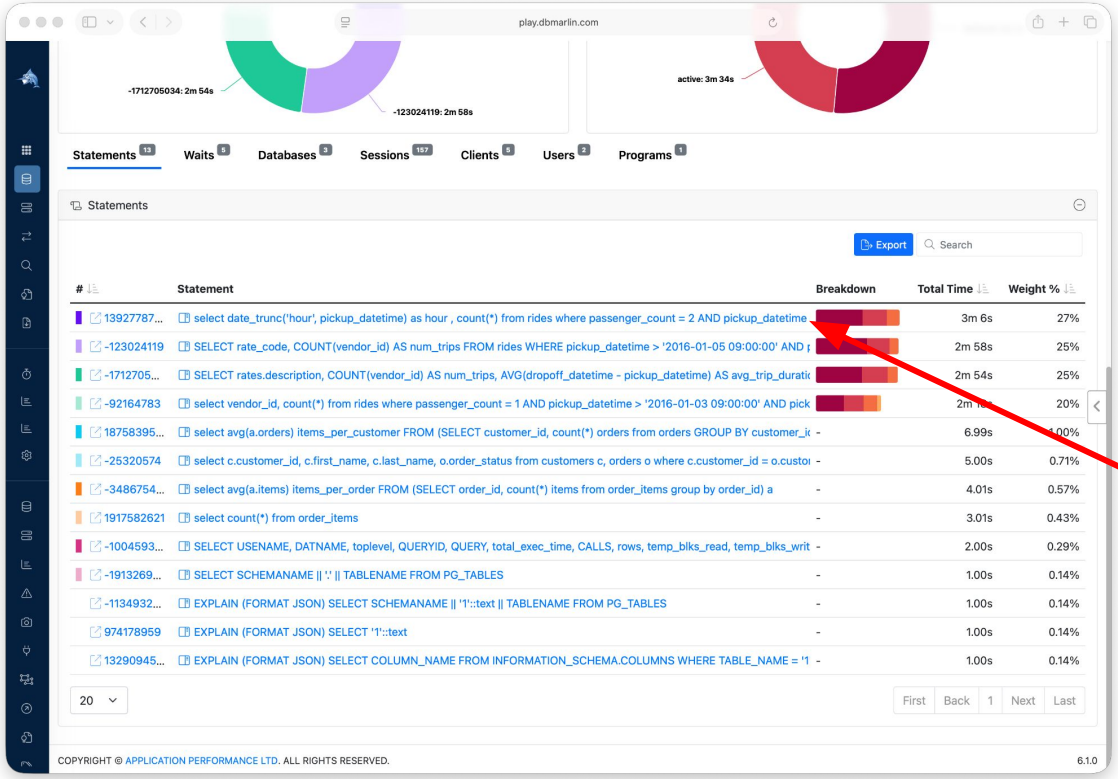
Examine changes in timeline



Hover over bidirectional arrows on timeline.
2 Indexes have been dropped
Changes are frequently cause of performance issues

DB marlin

Analyse SQL Statement Performance
Select the statement of interest

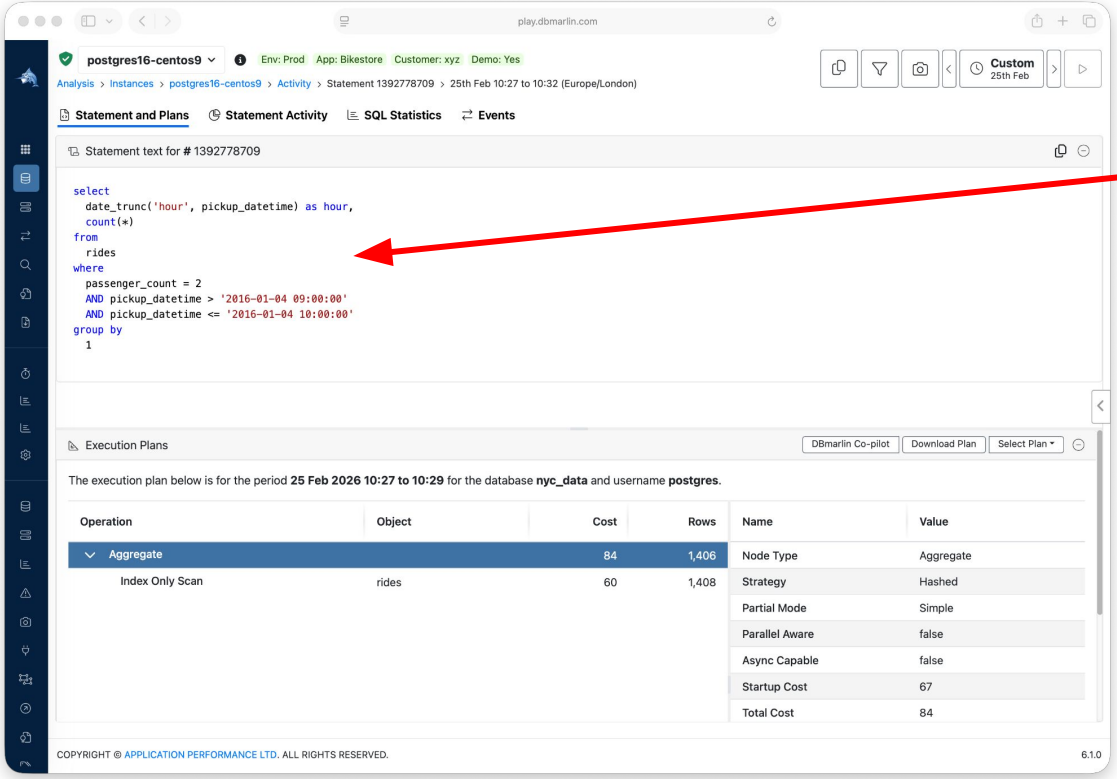


Select statement of interest. This list is sorted by Total Time, so most interesting statements are at the top.

DB marlin

Analyse SQL Statement Performance

Review the statement and plan(s)



The statement is presented
Along with the execution plan

Note: DBmarlin automatically collects statement execution plans for you.

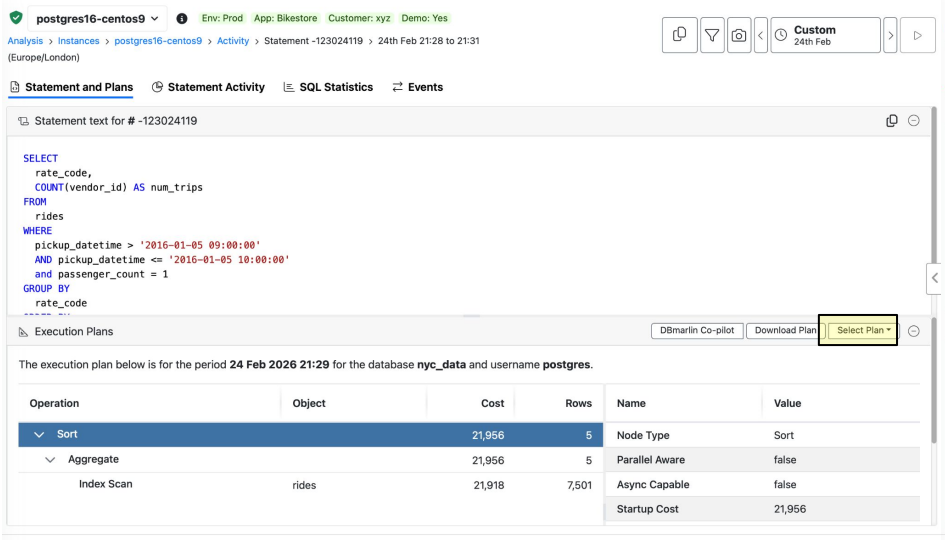
Analyse SQL Statement Performance

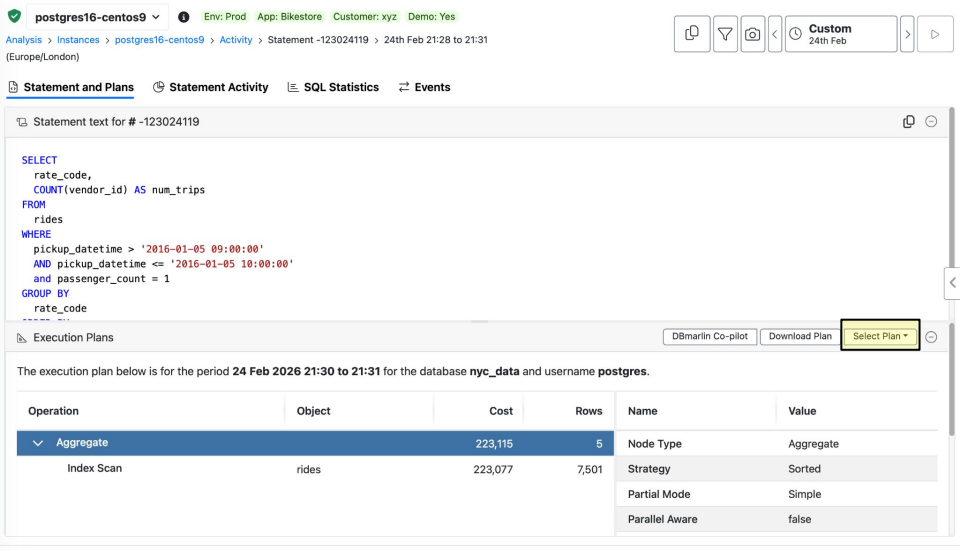
Examining a Query Execution Plan

In this case, there are two execution plans. Click the “Select Plan” button (highlighted in illustration) to select the other query plan. The cost shows which plan is slower than the other.

The one on the right has a cost of 223,115 compared to the one on the left with a cost of 21,956

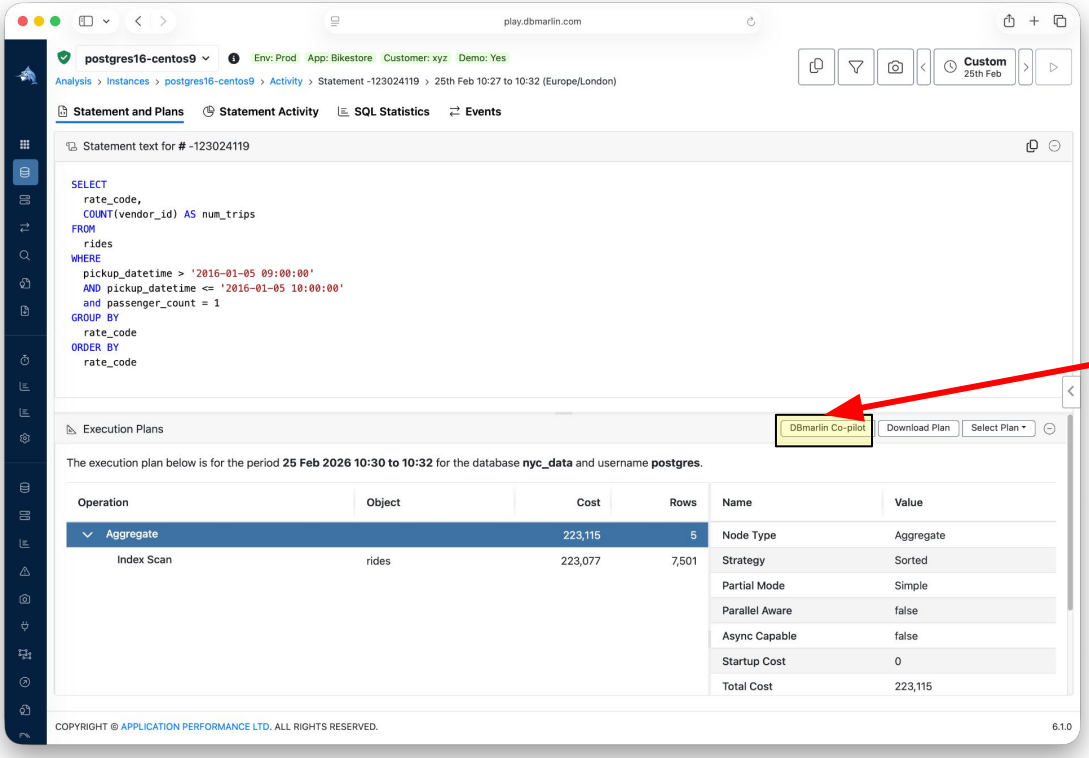
It seems that the change (dropped indexes) means that the database executes the query much more slowly than before.





Analyse SQL Statement Performance

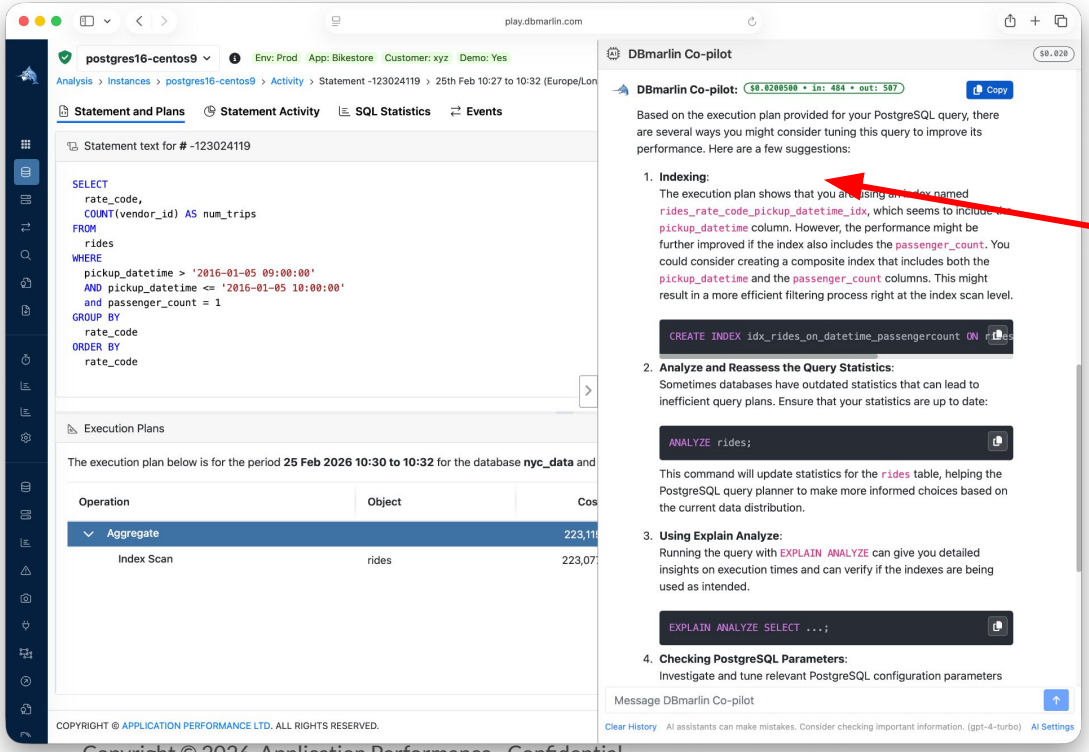
Use DBmarlin co-pilot to suggest cause and remediation



Click on DBmarlin co-pilot. DBmarlin co-pilot is given information about the query and the plan, and comes up with an AI view of the efficiency, and what could be improved.
Even for expert DBAs, this capability is useful, especially with new database platforms. It helps a DBA to transfer their skills to a new platform.

Analyse SQL Statement Performance

View the DBmarlin Co-pilot output



DBmarlin Co-pilot has correctly identified the index that would need to be added to improve performance.
The psql command to make the recommended changes can be copied / pasted.
You can ask DBmarlin Co-pilot any follow on questions that you would like.

3. Analyse wait states

Problem

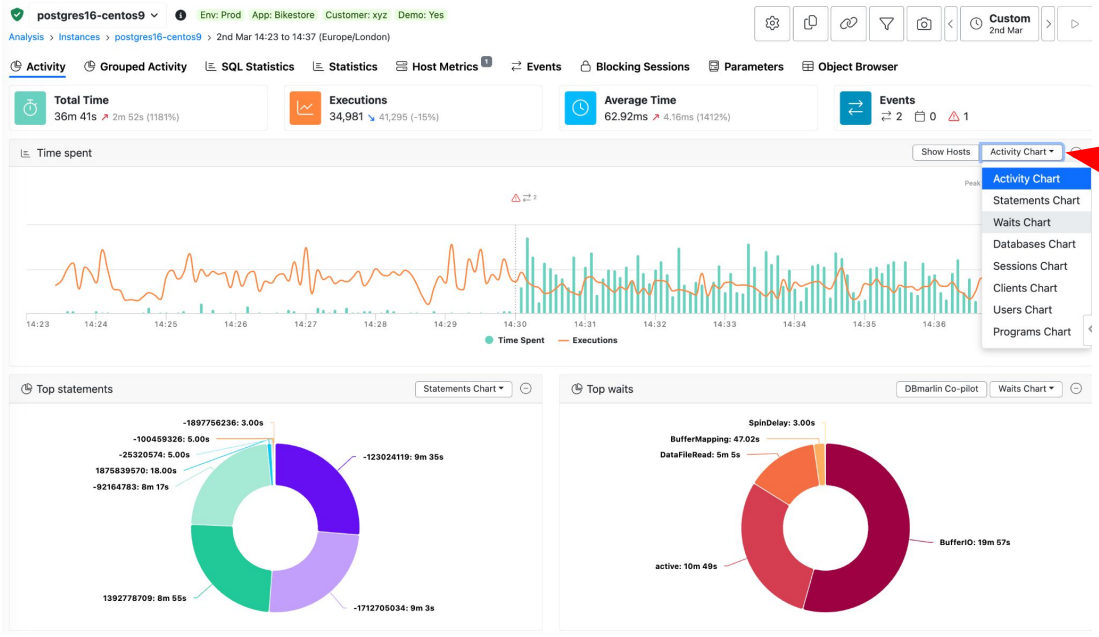
Databases spend most of their time either executing work or waiting for resources (I/O, locks, CPU or memory). You want to understand wait states for the whole database or for an individual statement, so the database can run these statements more quickly.

Solution

Either at the database level or the statement level, examine the wait states. If you are looking for inspiration as to what to look for, with the wait state selected, ask for assistance from either the knowledge base or the AI option with co-pilot

Analyse wait states

Put wait states into the timeline

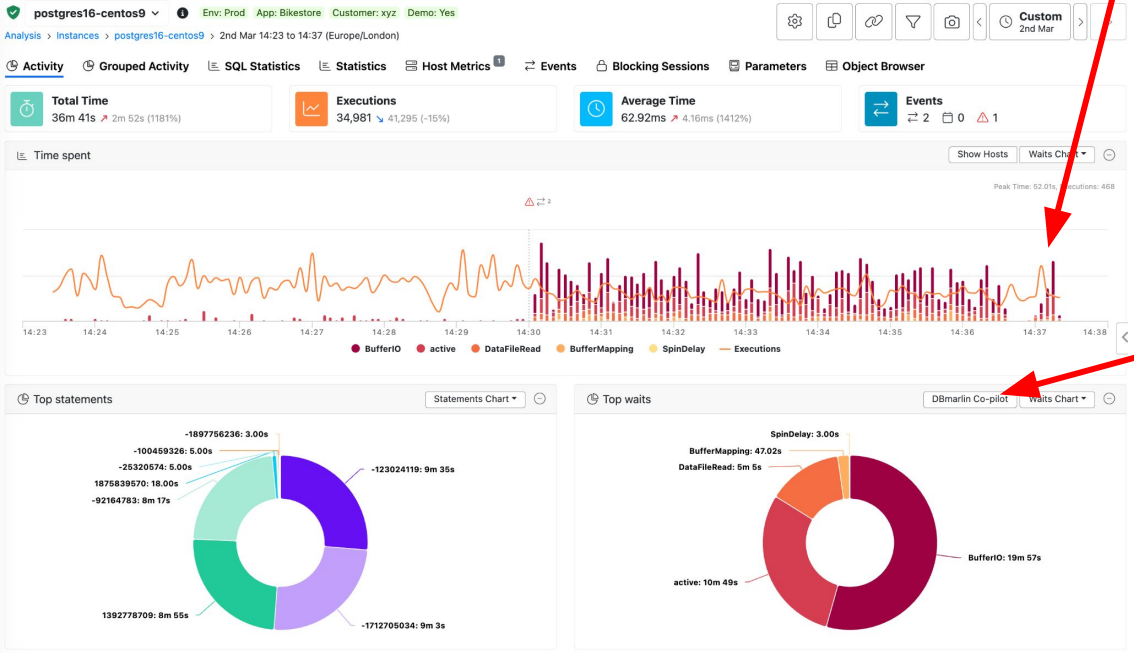


In the timeline, click the dropdown marked Activity Chart and choose Waits Chart

DB marlin

Analyse wait states

View wait states at database level.



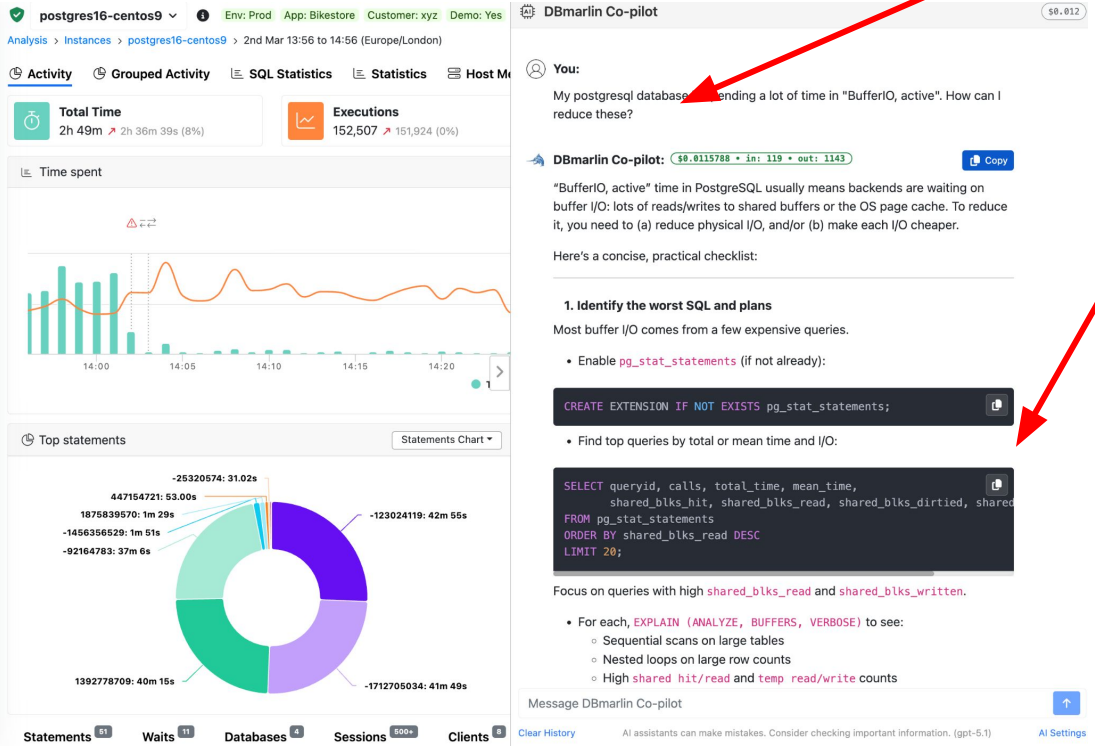
Hover over bars to see distribution of waits.

BufferIO is the most common wait state

In the Top Waits pie chart, click on “DBmarlin Co-pilot” to ask for help from AI

Analyse wait states

View DBmarlin Co-pilot results



This is the question sent DBmarlin Co-pilot

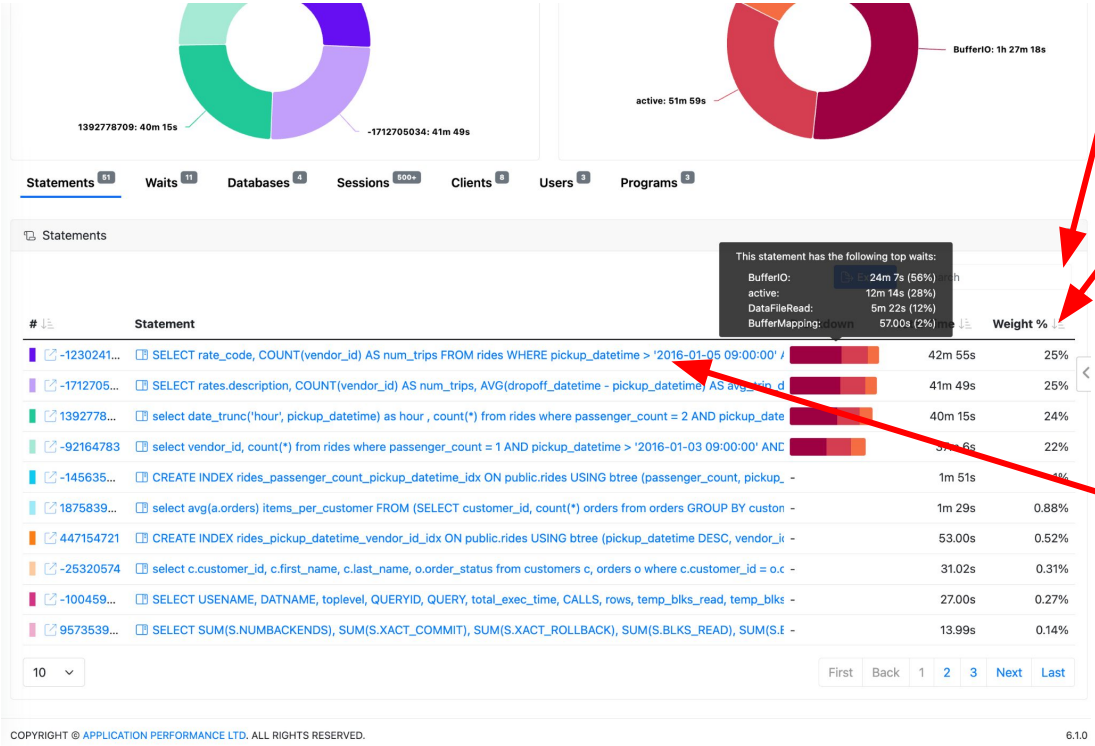
DBmarlin Co-pilot explains the problem very clearly, and offers advice for remediation

More details of DBmarlin Co-pilot in other sections

DB marlin

Analyse wait states

View wait states at statement level



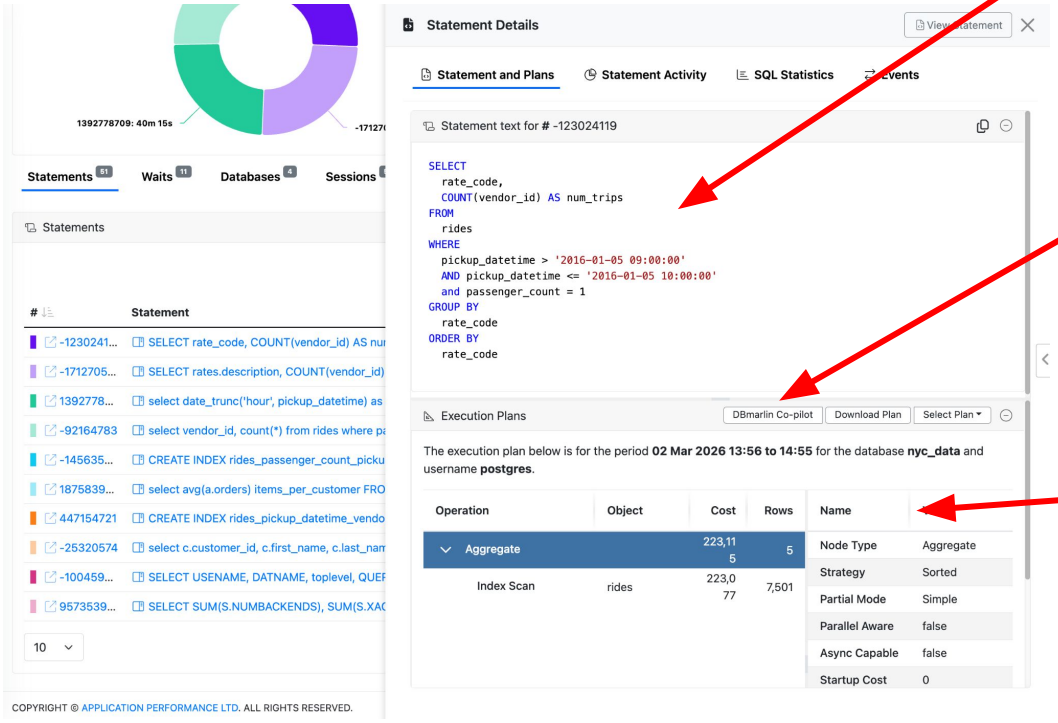
Scroll down to see list of statements

Top 4 statements have a breakdown of wait states for each statement. Hover over item in Breakdown column for details wait states.

Click on the top statement's SQL Query

Analyse wait states

View wait states at statement level



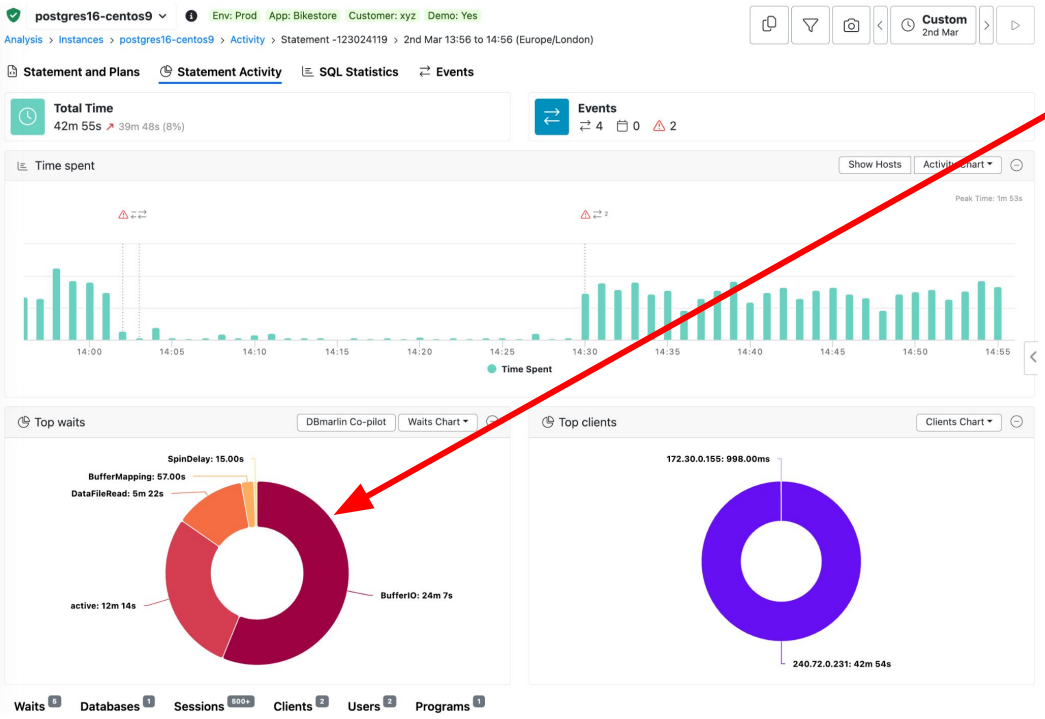
See statement text in clear indented form

Click on View Statement (top right), and then “Statement Activity” (top middle)

See the Query execution plan for this statement

Analyse wait states

View wait states at statement level



See waitstates at statement level. Click on DBmarlin Co-pilot for more information.

4. Troubleshoot database locking

Problem

Blocked Queries are a significant problem for database performance. Inefficient query or database design and resource saturation can trigger blocking, which in turn can result in increased latency, and user dissatisfaction.

Identifying root blockers that can cause cascading locks on database resources is crucial to troubleshooting and addressing database performance issues.

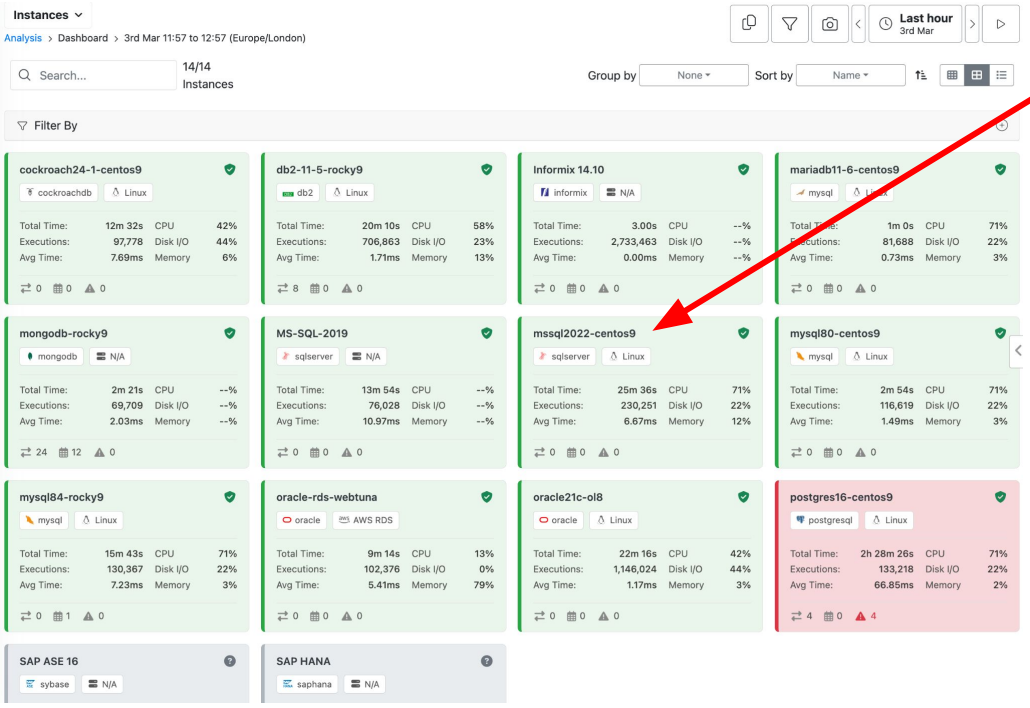
Solution

DBmarlin provides detailed visibility into root blocking queries, allowing you to efficiently survey and troubleshoot blocked connections and suboptimal performance across your entire database estate.

https://www.dbmarlin.com/blog/2023-05-31-troubleshoot-blocking-queries-with-dbmarlin/

Troubleshoot database locking

Identify database to examine

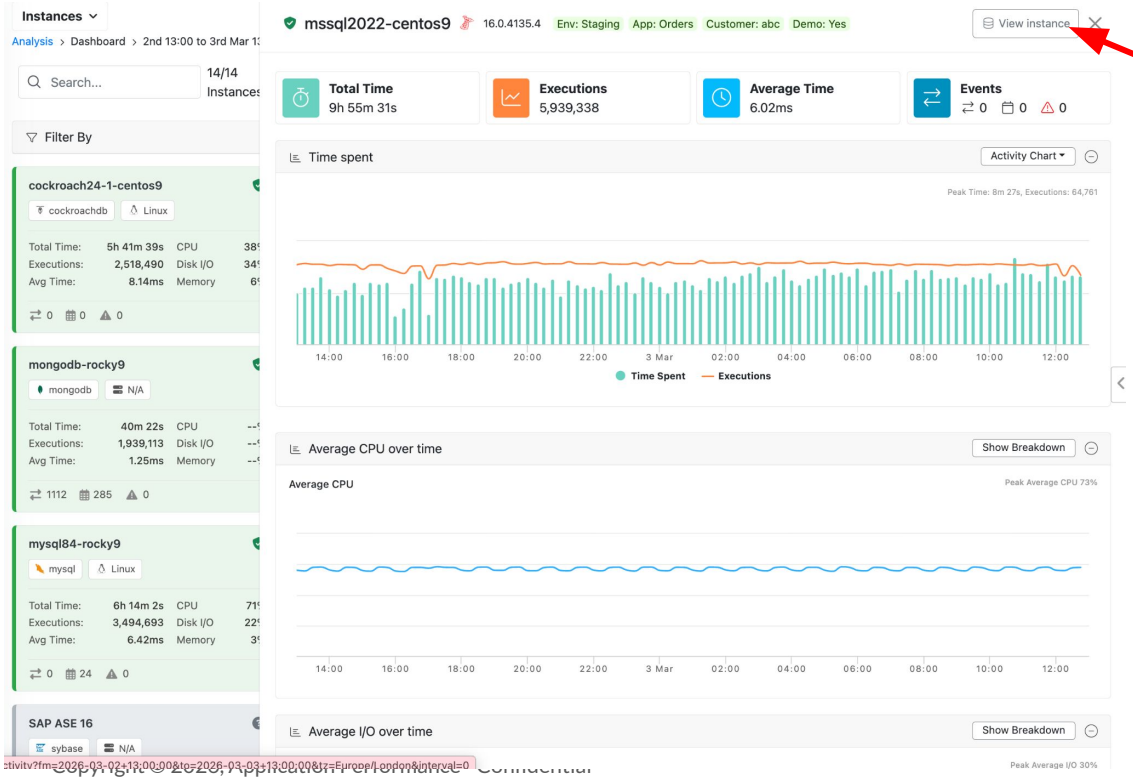


Select Database - in this case, MSSQL2022-centos contains some examples of locking. Click on the database name
And then click “View Instance”

DB marlin

Troubleshoot database locking

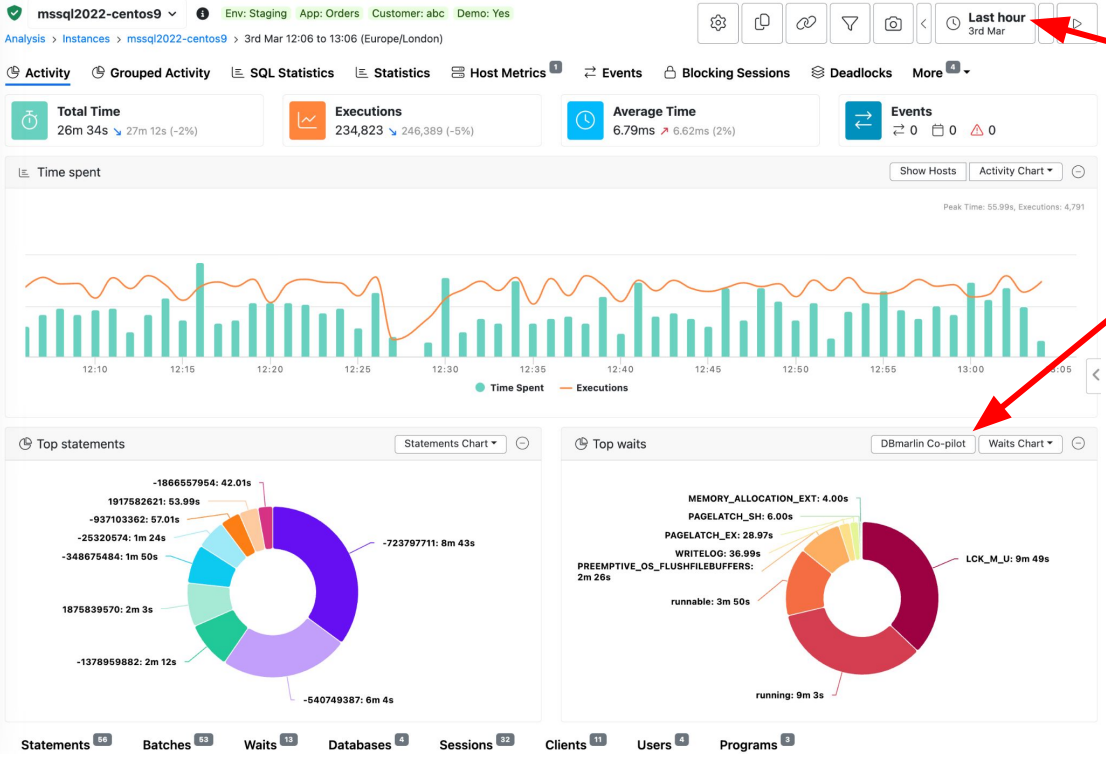
Using MS-SQL-2019



Select Database - in this case, MS-SQL-2019 contains some examples of locking. Click on the database name
And then click “View Instance”

Troubleshoot database locking

Using MS-SQL-2019



Set time selection to “Last Hour”

Launch DBmarlin Co-pilot

DB marlin

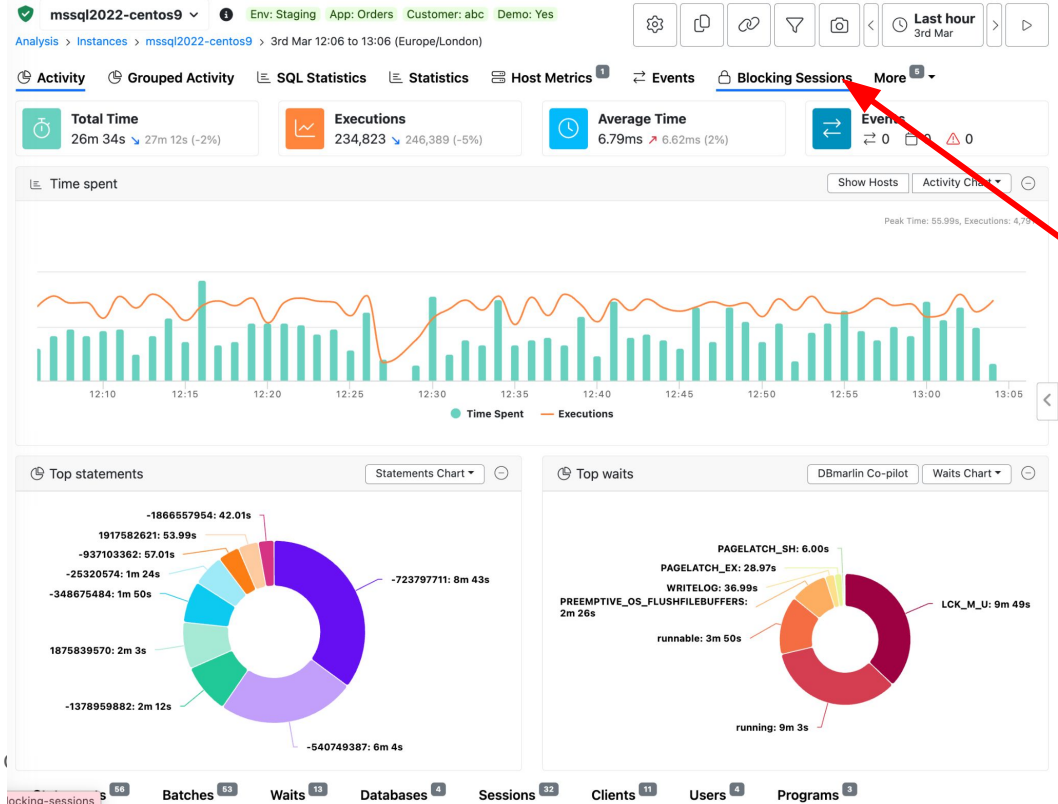
Summary of DBmarlin Co-pilot recommendations

PDF is here: DBmarlin Co-Pilot for locking

1. Identify who is blocking whom
    a. Co-pilot recommends running a query to identify blockers
    This has to executed when the problem is apparent, which can be difficult, and by the time the query has been executed, it might miss the problem.
    DBmarlin can traverse locked sessions (and other statements that cause the lock anytime in the last 7 days)
2. Understand what is driving the sessions that are locking resources.
    a. Use DBmarlin to view statement and perhaps tune it.
    b. Check App Server / Web Server layers to see if lock logic is held there

Troubleshoot database locking

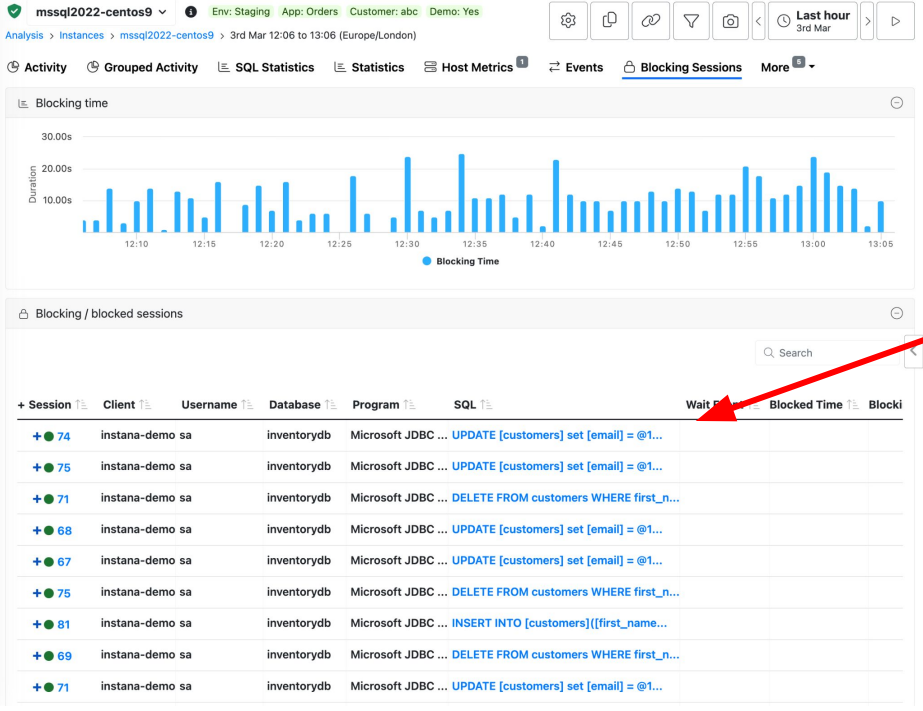
Examine Blocking sessions



Select Blocking Sessions tab

Troubleshoot database locking

Examine Blocking sessions

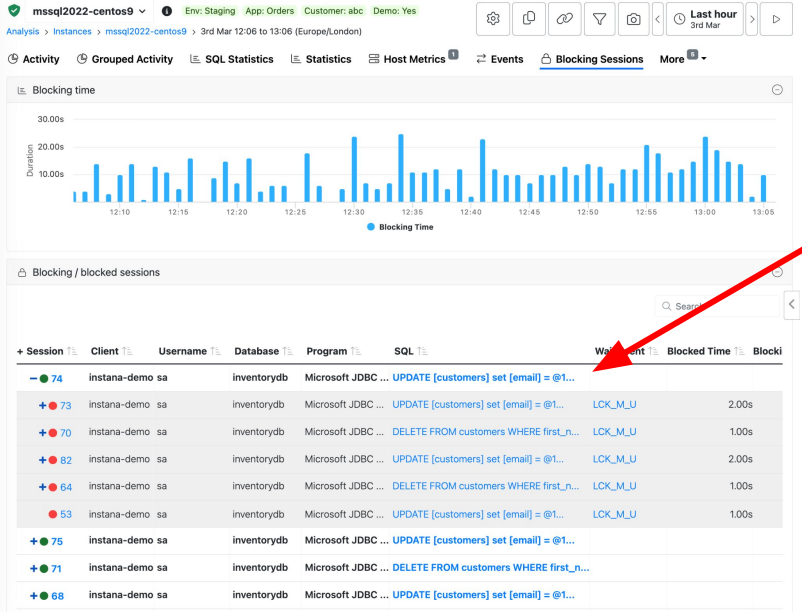


See list of recent blocked sessions

DB marlin

Troubleshoot database locking

Expand to see statements that are blocking



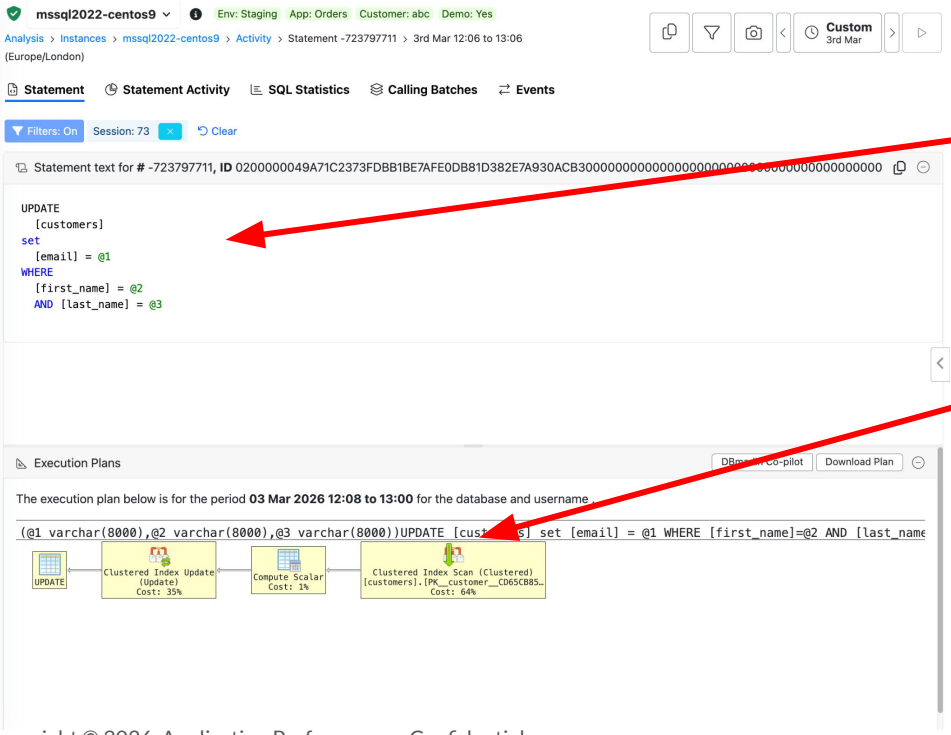
See list of recent blocked sessions

5 statements listed together with Blocked Time

Click on Session 73 for more tuning advice

Troubleshoot database locking

Tuning one of the blocking sessions

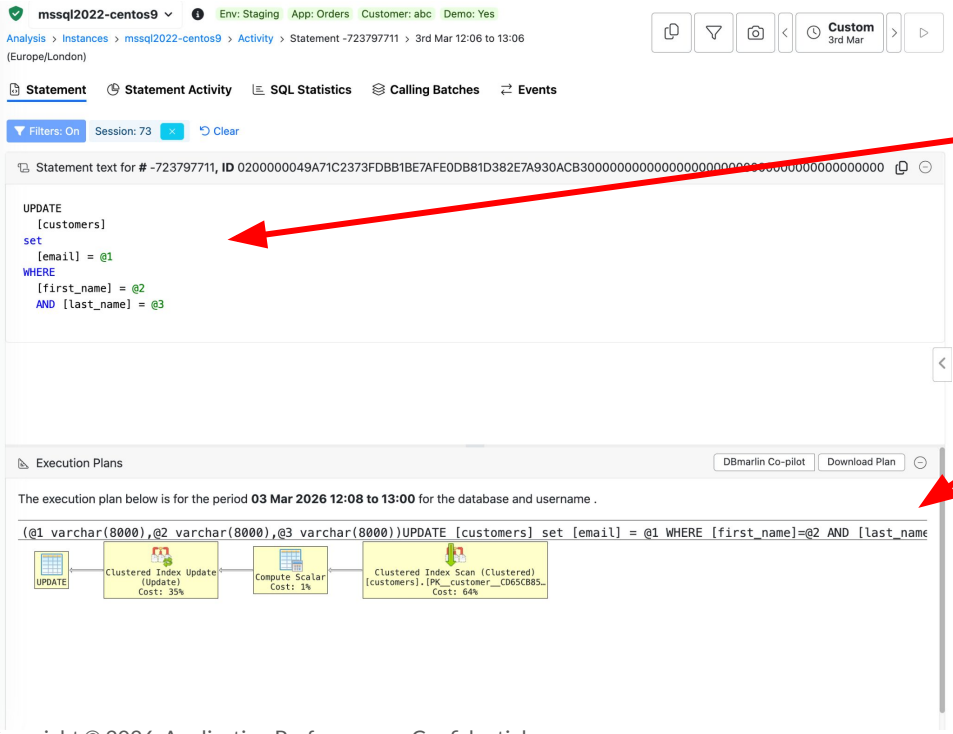


SQL Statement for one of the blockers

Execution Plan for the statement. Click on DBmarlin Co-pilot

Troubleshoot database locking

Tuning one of the blocking sessions

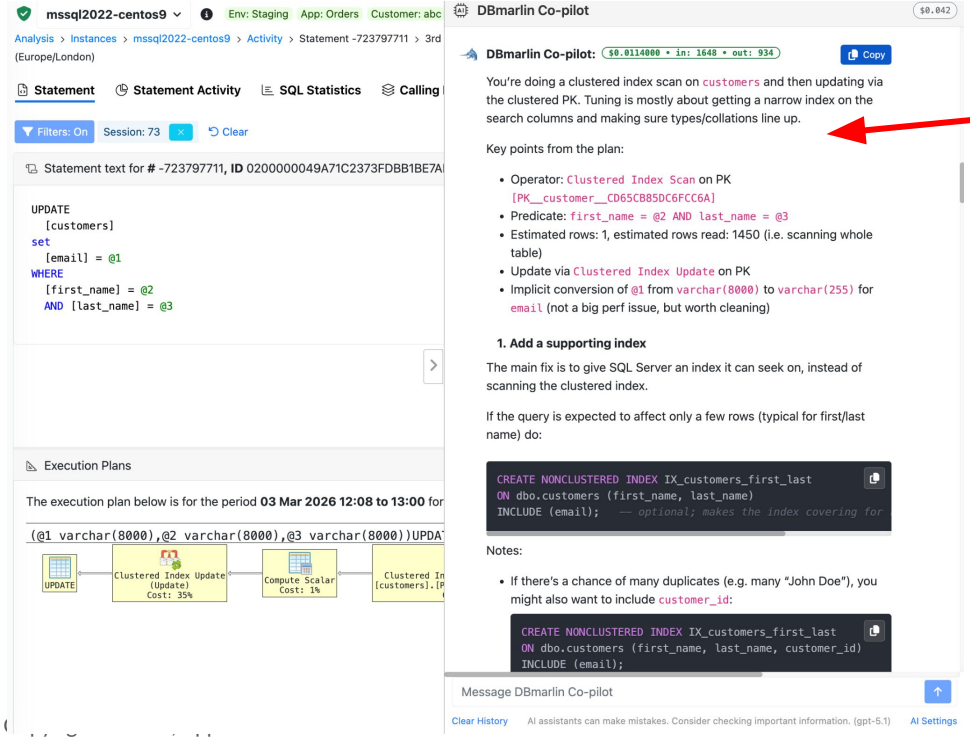


SQL Statement for one of the blockers

Execution Plan for the statement. Click on DBmarlin Co-pilot [Copilot findings for blocking sessions analysis]

Troubleshoot database locking

Tuning one of the blocking sessions



DBmarlin Co-pilot review. Attached here: [Copilot findings for blocking sessions analysis]

5. Configure DBmarlin co-pilot

- Problem

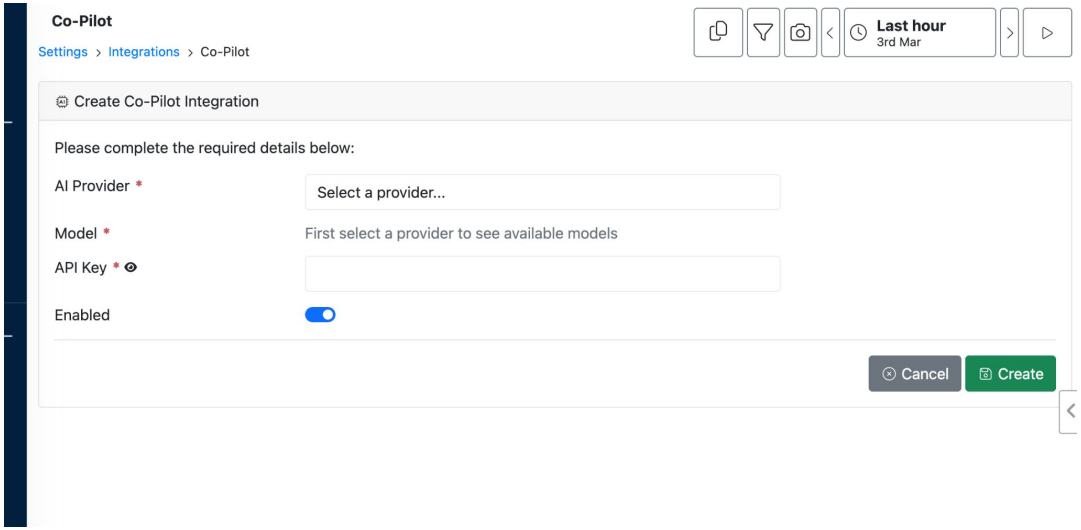
  A user of DBmarlin is trying to understand a performance issue. Maybe this is a new database platform. The user needs a deeper insight of what the data means,

- Solution

  DBmarlin co-pilot can be configured to use a variety of available LLM’s at the user level or a system level. This example is set at the system level. The LLM will help to explain a database performance issue and remediation steps in a clear and concise way.

Configure DBmarlin co-pilot

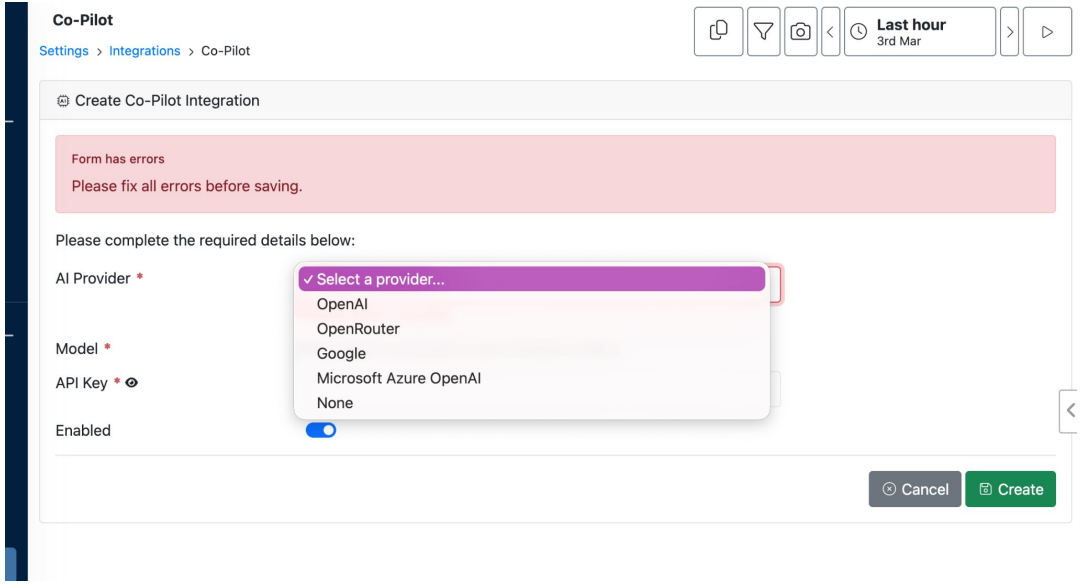
Go to the “Integrations” screen



Under Settings, click on Integrations, Edit the “AI Co-pilot” section, and click Create.

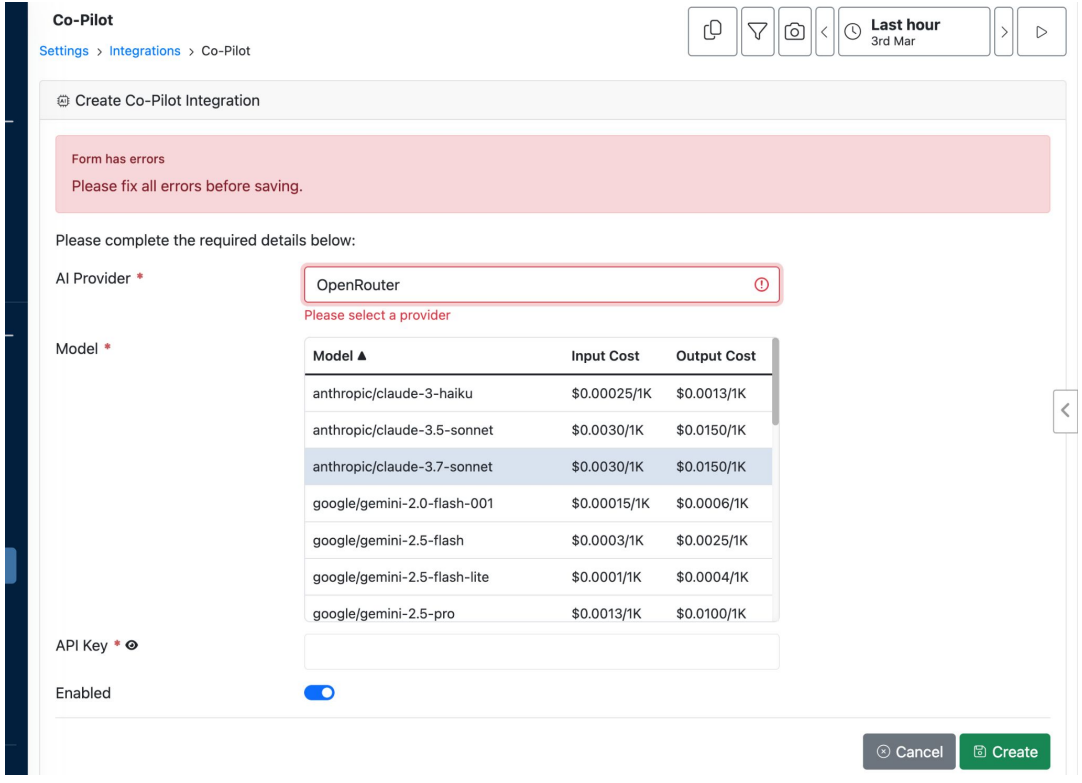
Configure DBmarlin co-pilot
Select AI LLM provider

Select your provider



Configure DBmarlin co-pilot

Select AI Model



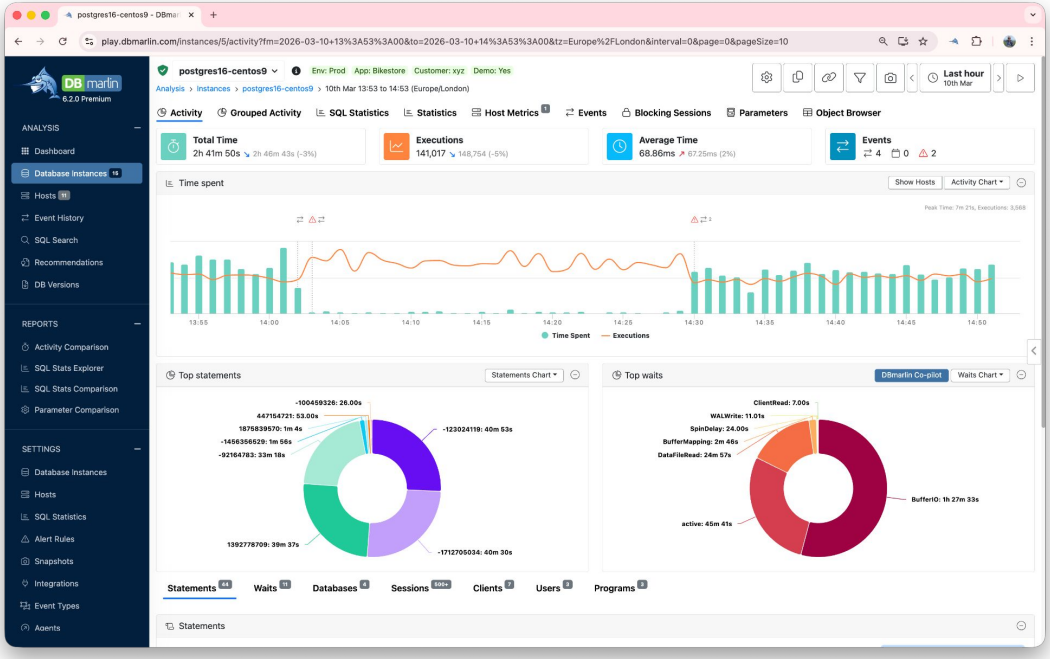
Select the model

Enter the API Key for the provider

Click the Create button, and it is done.

Configure DBmarlin co-pilot

Test the configuration



For a database, open the instance, and click the “DBmarlin Co-Pilot” on the Top Waits pie chart

DBmarlin sends a question to your LLM, which provides the answer

6. Use DBmarlin co-pilot to tune SQL Query

Problem

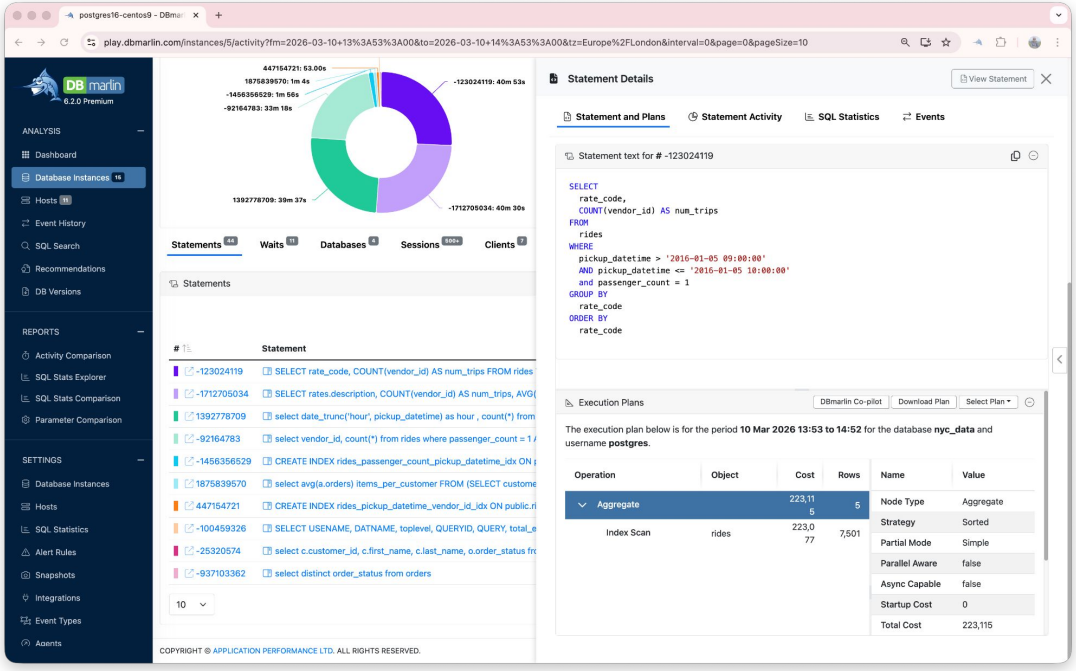
DBmarlin has provided detail on the execution plan for a statement, but the plan is hard to interpret, and it is difficult to build a remediation plan from what is provided

Solution

DBmarlin co-pilot will use the LLM of your choice to query how a SQL Statement is executed, and will make recommendations to improve performance.

Use DBmarlin co-pilot

Open up query.

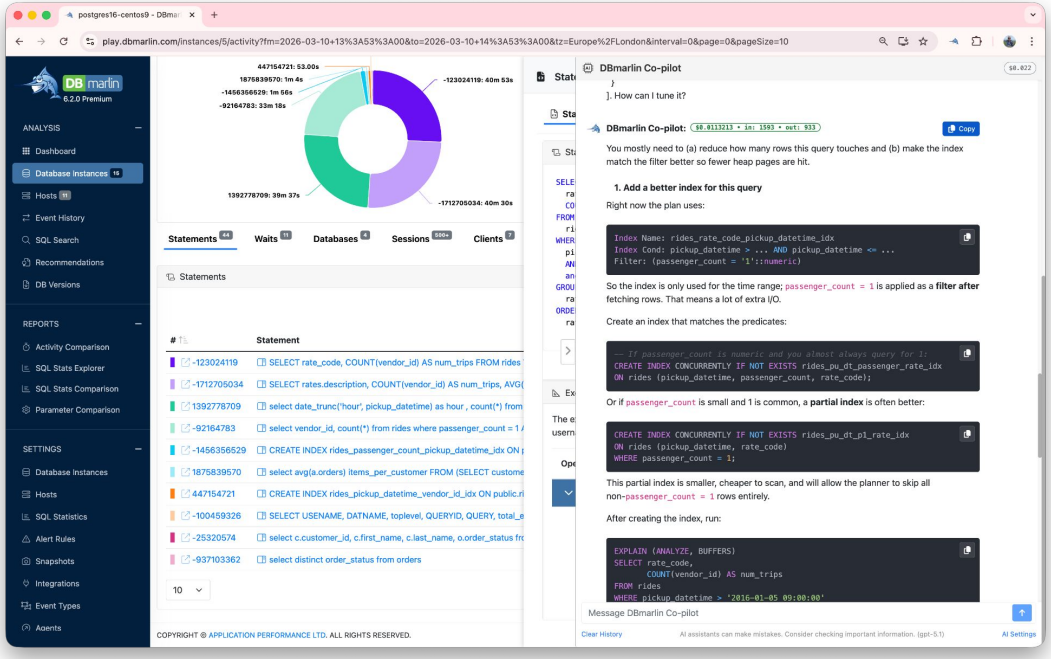


For a database, open the instance, scroll down to the statements. Click on one of the top statements

The Execution plan is provided. Click on DBmarlin Co-pilot to get a better understanding.

Use DBmarlin co-pilot

Review the findings



Co-pilot has produced a good set of recommendations. The main option is to use a better index.

It is possible to ask any follow up questions of DBmarlin Co-pilot

7. Use DBmarlin Co-pilot to understand wait states

Problem

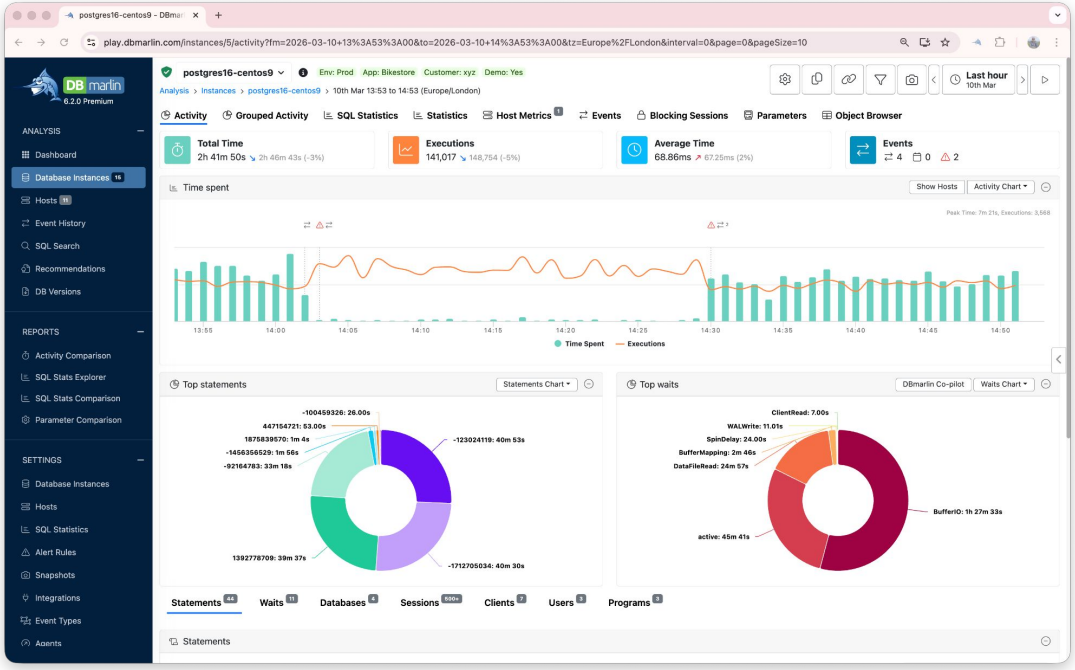
DBmarlin has provided a chart highlighting the proportions of different wait states a database is experiencing. Optimising these to improve the performance is vitally important. Each database platform uses different terminology. The end user would like a detailed and concise definition of the wait states, and recommendations for remediation actions.

Solution

DBmarlin Co-pilot can provide a description of the wait state, and can provide recommendations for performance improvement.

Use DBmarlin co-pilot

Ask for Information

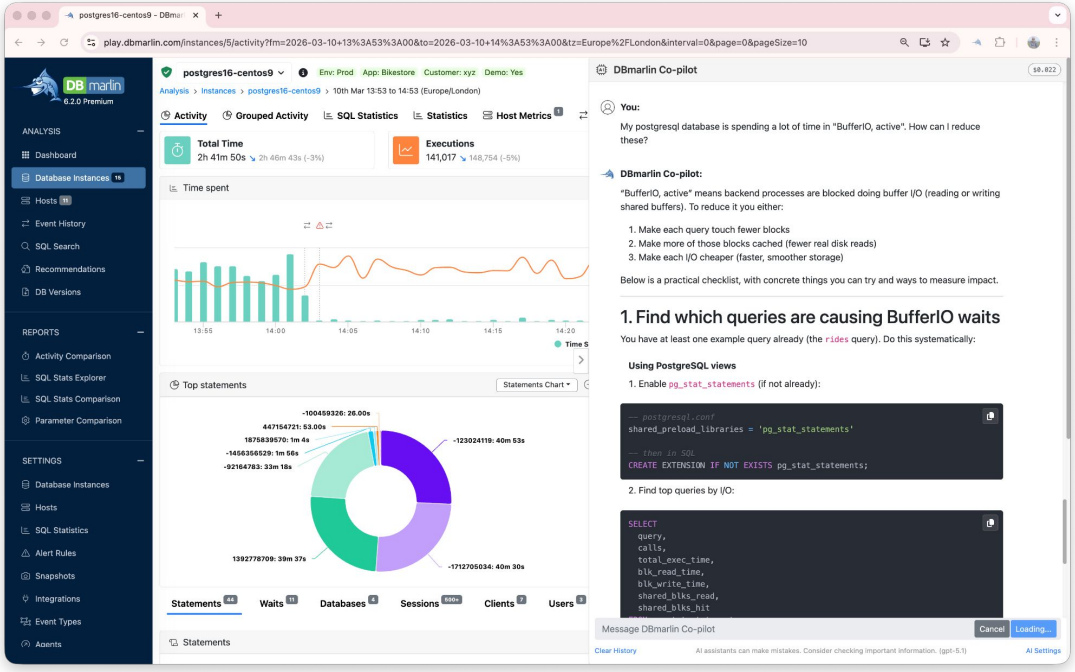


When viewing a database instance, there is a “Top Waits” chart.

Click on DBmarlin Co-pilot to get more information about top waits.

Use DBmarlin co-pilot

Interpret results



DBmarlin Co-pilot shows

- A definition of the top wait “BufferIO, active”
- A 5 point plan
  - Find which queries affected
  - Tune queries
  - Improve Cache Behaviour
  - Smooth and speed up I/O
  - Use DBmarlin to track impact

8. Use KB to understand wait states

Problem

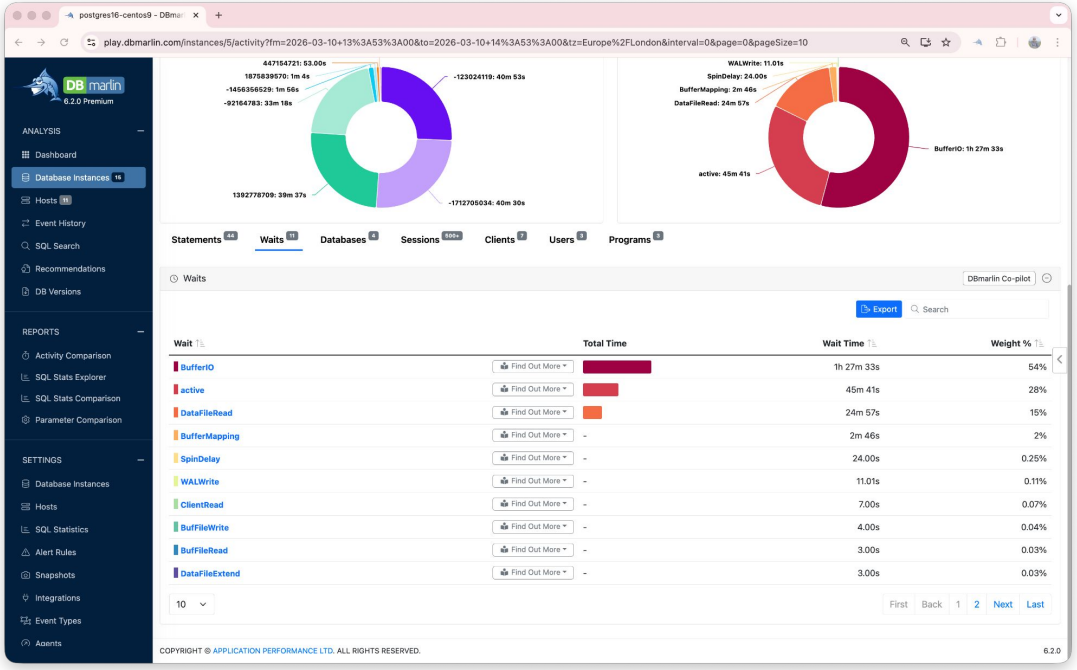
DBmarlin has provided a chart highlighting the proportions of different wait states a database is experiencing. Optimising these to improve the performance is vitally important. Each database platform uses different terminology. The end user would like a detailed and concise definition of the wait states, and recommendations for remediation actions.

Solution

DBmarlin provides and maintains a knowledge base to help interpret the presented statistics for all of the databases that DBmarlin supports.

Use DBmarlin Knowledge Base

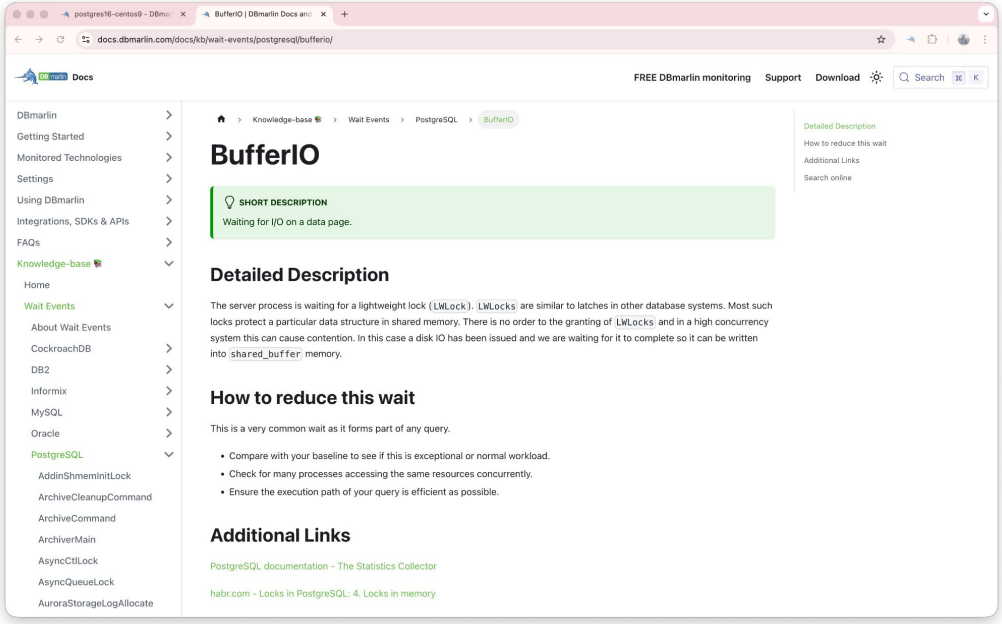
Ask for Information



When viewing a database instance, scroll down to the list of Statements, click on Waits to view the top waits i a table.

Click on the “Find Out More” button and choose Knowledge Base”

Use DBmarlin Knowledge Base
Ask for Information



The DBmarlin knowledge base describes the wait state, presents options for reducing the wait, and additional links for more information.

9. Select a time period for analysis

Problem

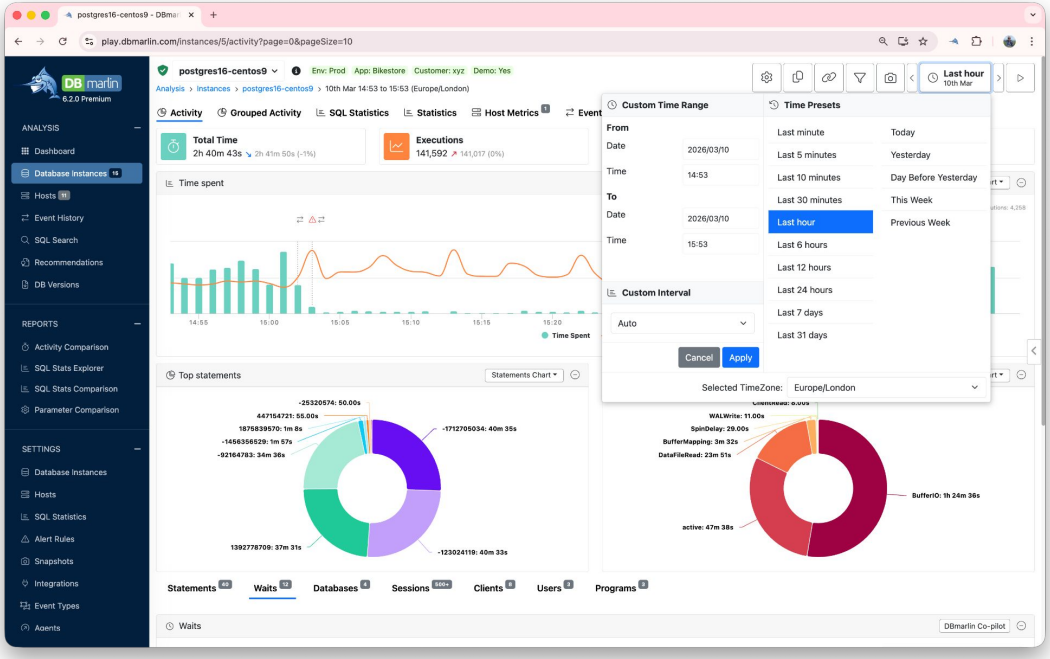
A problem occurred in the past, and investigation can be difficult to explore and to reproduce.

Solution

DBmarlin stores 1-second interval data for the past 7 days, and more summarised dta after that. DBmarlin offers a number of ways to select a previous period of time.

Select a time period for analysis

Choose a time period

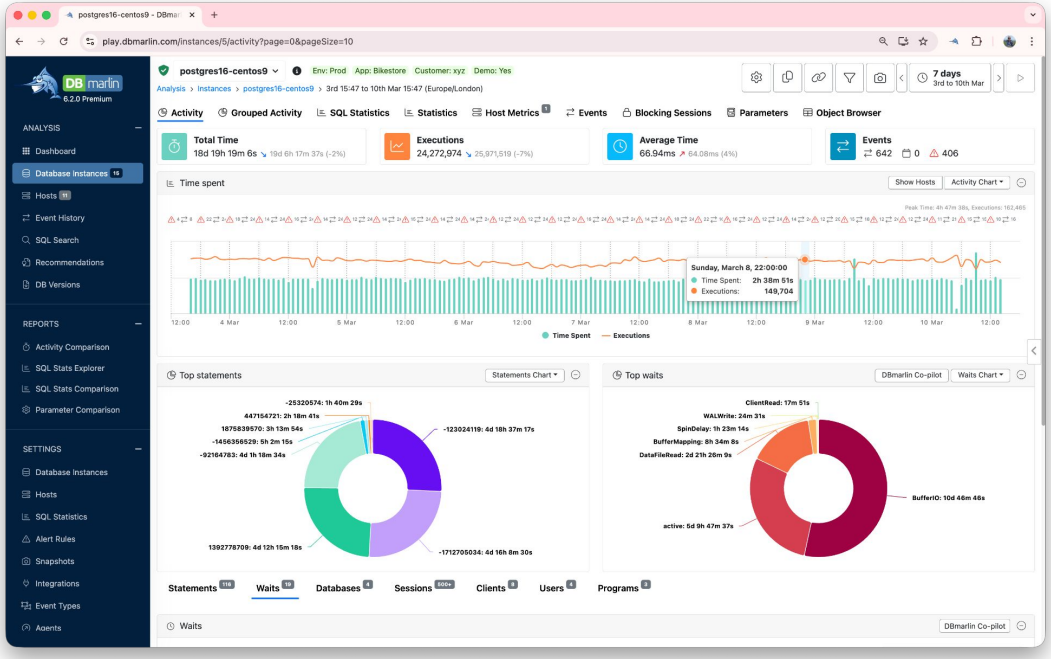


Click on time selector, and choose time period

- Presets such as last 5 minutes
- Custom Time Range or interval

Select a time period for analysis

Strategies for finding time.

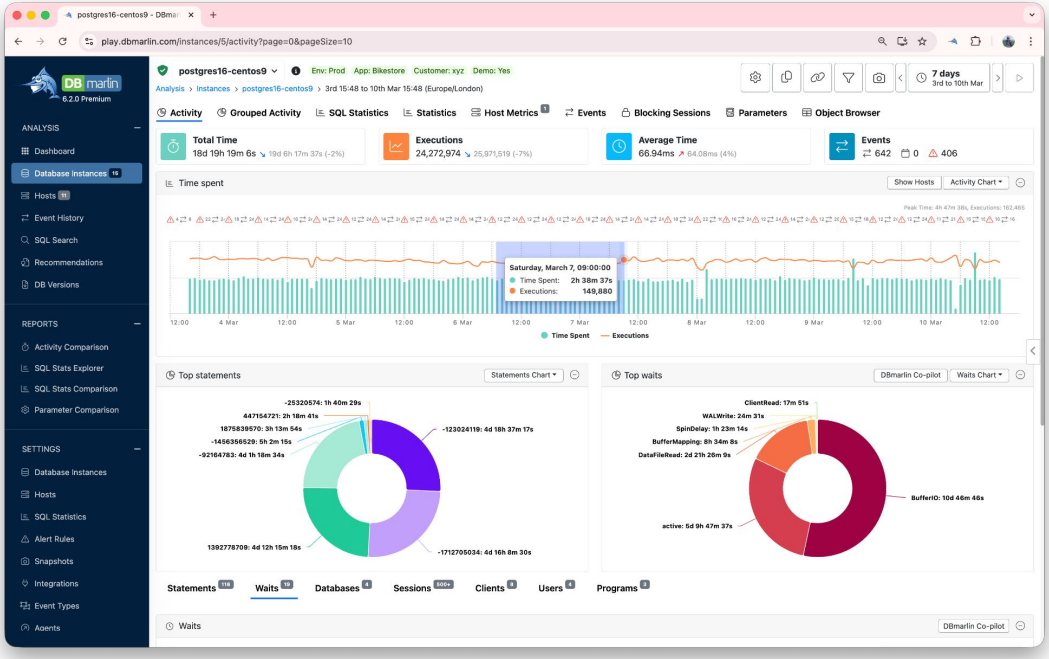


Expand time selection to past 7 days, Click and Drag inside timeline to find the exact time.

Select a time period for analysis

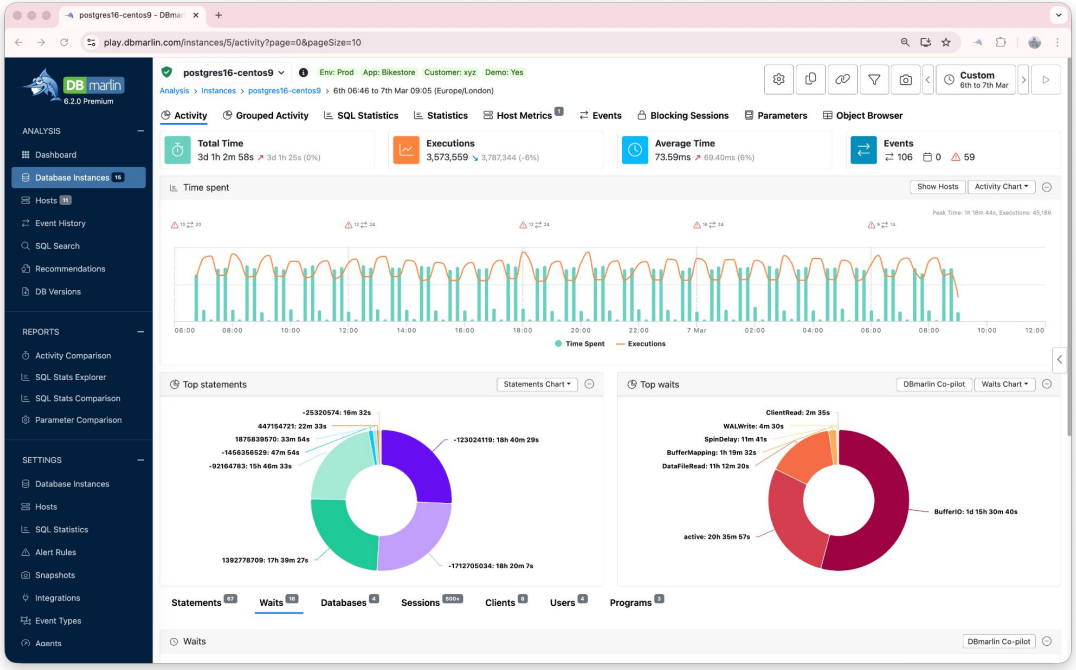
Strategies for finding time.

Time Period selected



Select a time period for analysis

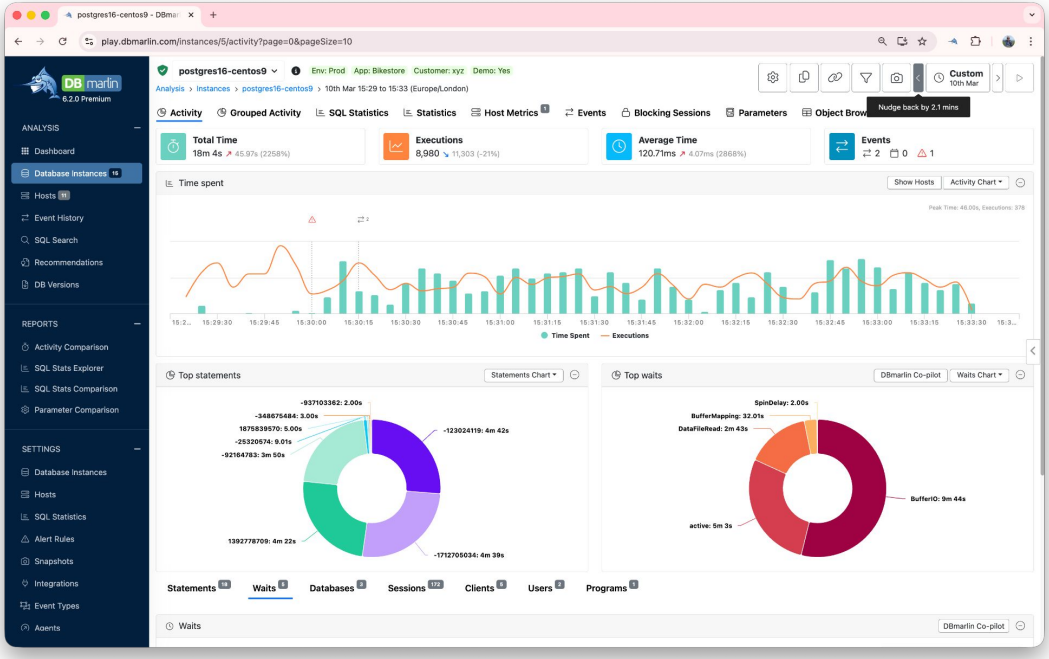
Strategies for finding time.



Zoomed in time period. This step can be performed until the time period is shown.

Select a time period for analysis

Nudge time back



If time period has interesting data a little bit earlier, click on the arrow to nudge it back.

10. Take a snapshot of database performance

Problem

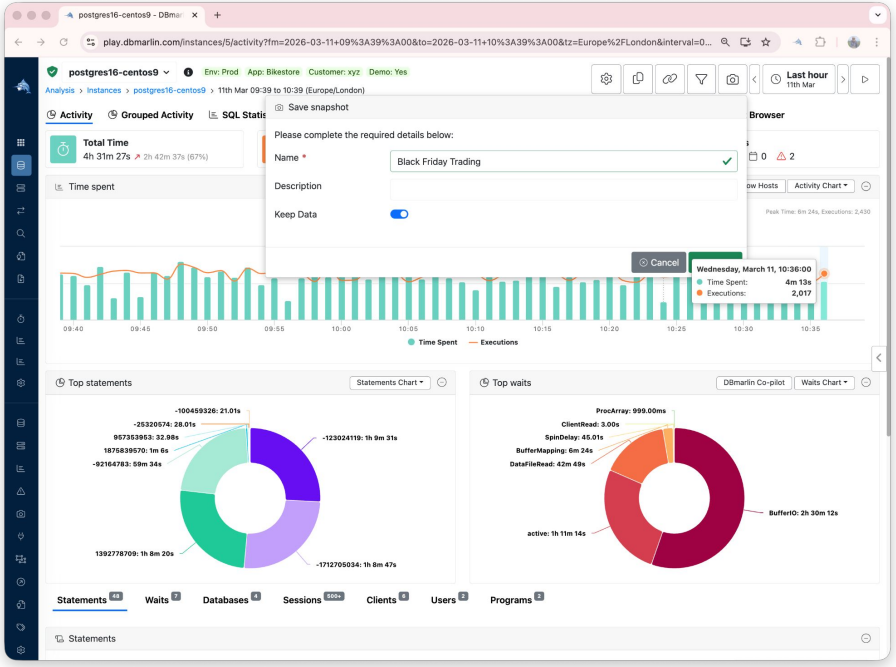
Users need a way to capture a snapshot of database performance, so they can compare future behaviour against a known baseline. Without an easy mechanism to preserve key metrics, it is difficult to evaluate the impact of events such as major trading periods (e.g. Black Friday) or application releases.

Solution

DBmarlin offers a mechanism to take a snapshot for any period of time, with the option to also capture the granular 1-second interval data for accurate evaluation at a later date.

Take a snapshot of database performance

Select time period, and click camera icon



Give the snapshot a descriptive name.

Optionally choose to keep data, so accurate (1 second) detail is available for later analysis

11. Compare database activity between snapshots or time periods

Problem

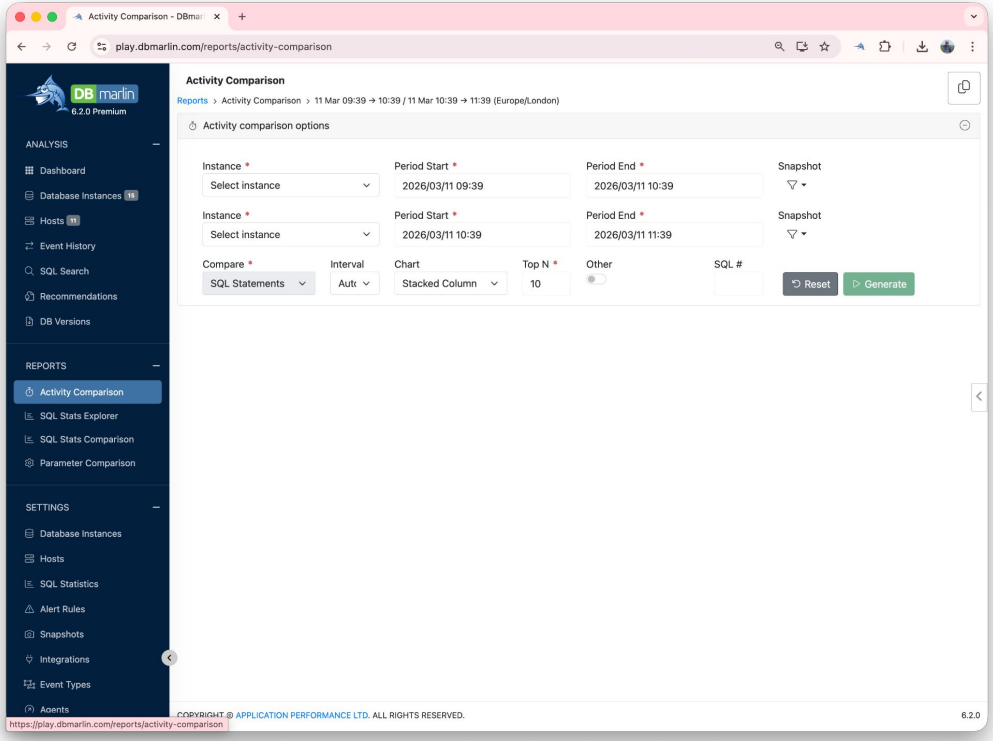
Users need a way to make an objective comparison of database performance now against a previous time window. This could help build readiness for major events (e.g. Black Friday), or could help to quantify performance improvements

Solution

DBmarlin offers an Activity Comparison report that can compare performance between two different periods (either or both of these can be snapshots)

Compare database activity

Select the Activity Comparison report



Select the Instance, and then select time period, or select snapshot(s)

And click generate

Compare database activity

View activity comparison results

Activity Comparison Results

Metric	6th Sep 16:00 to 18:00 (Oracle RDS CPU bottleneck)	7th Sep 16:00 to 18:00 (Oracle RDS CPU bottleneck FIXED)	Difference
Instance Name	oracle-rds-webtuna	oracle-rds-webtuna	
Total DB Time	21h 5m 47s	22m	20h 43m 47s (-98%) ↘
Total Executions	330,427	243,911	86,516 (-26%) ↘
Average Execution Time	229.85ms	5.41ms	224.44ms (-98%) ↘
Host Average CPU	18%	14%	-4% ↘
Host Average Memory	82%	81%	-1% ↘
Detected Changes	1	0	1 ↘
Custom Events	0	0	0 =
Alerts	0	0	0 =
CPU Count	2	2	0 (0%) =

This comparison is for before / after a fix for a CPU bottleneck.

Average Execution time was down 98%

Compare database activity

View activity comparison results

Activity Comparison Results

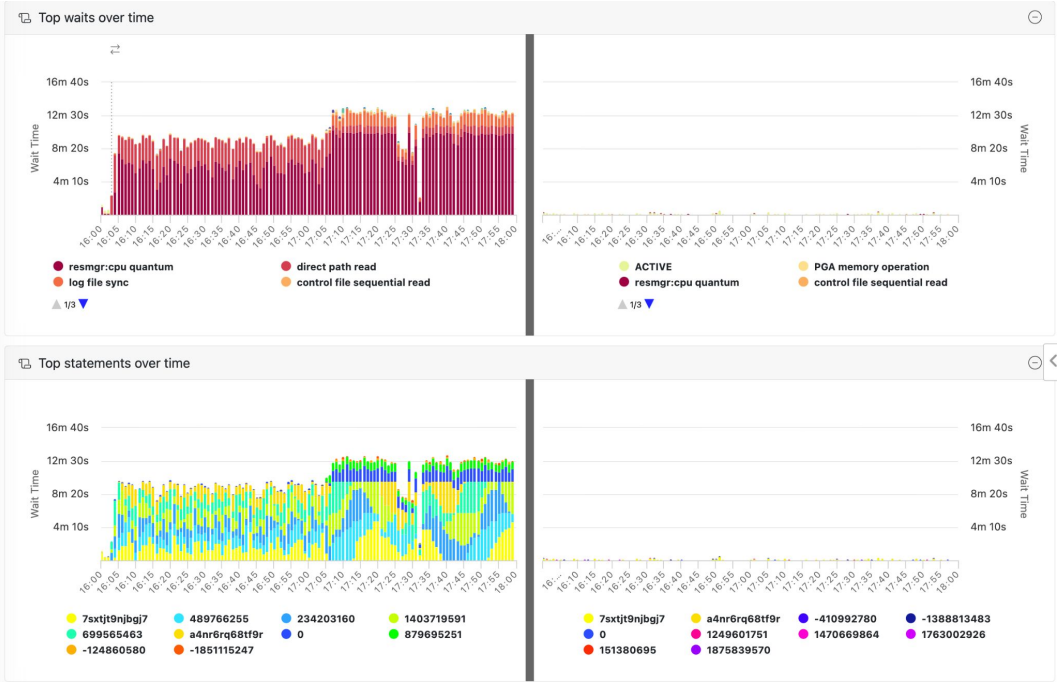
Metric	6th Sep 16:00 to 18:00 (Oracle RDS CPU bottleneck)	7th Sep 16:00 to 18:00 (Oracle RDS CPU bottleneck FIXED)	Difference
Instance Name	oracle-rds-webtuna	oracle-rds-webtuna	
Total DB Time	21h 5m 47s	22m	20h 43m 47s (-98%) ↘
Total Executions	330,427	243,911	86,516 (-26%) ↘
Average Execution Time	229.85ms	5.41ms	224.44ms (-98%) ↘
Host Average CPU	18%	14%	-4% ↘
Host Average Memory	82%	81%	-1% ↘
Detected Changes	1	0	1 ↘
Custom Events	0	0	0 =
Alerts	0	0	0 =
CPU Count	2	2	0 (0%) =

This comparison is for before / after a fix for a CPU bottleneck.

Average Execution time was down 98%

Compare database activity

View activity comparison results



This comparison is for before / after a fix for a CPU bottleneck.

Top waits over time and Top statements over time reduced to negligible amounts

12. Explore SQL Statistics

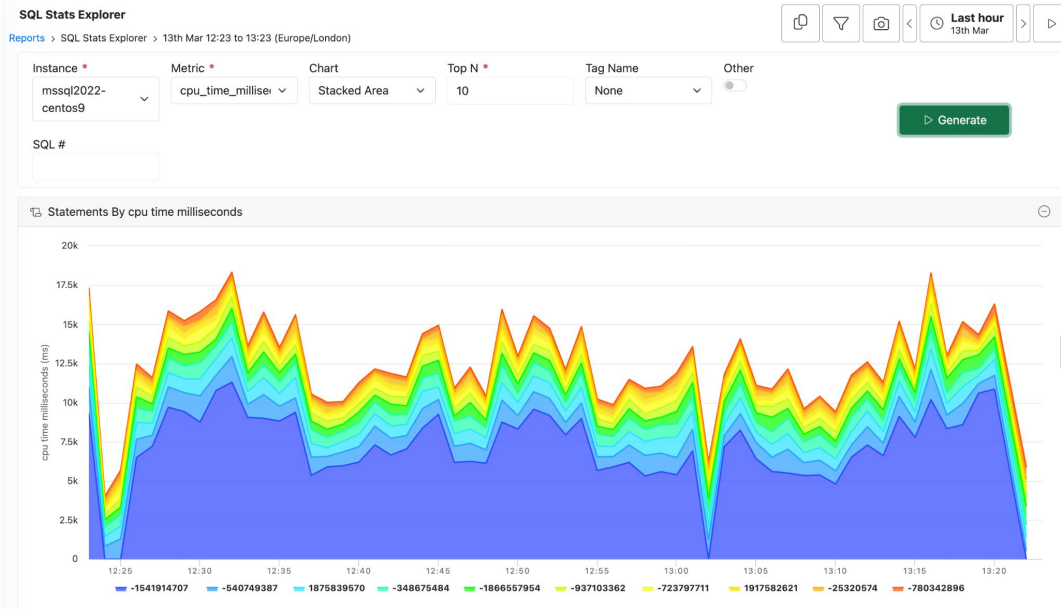
Problem

SQL Statistics are essential performance metrics that help in analysing and optimising the performance of SQL queries and database systems. These statistics provide insights into how the database engine processes SQL statements, enabling database administrators and developers to identify performance bottlenecks and optimize query execution.

Solution

DBmarlin presents relevant SQL Statistics in the dashboards, and it is also possible to create custom reports using SQL Stats Explorer, and to make comparisons between instances or between different times.

Explore SQL Statistics
Using SQL Stats Explorer



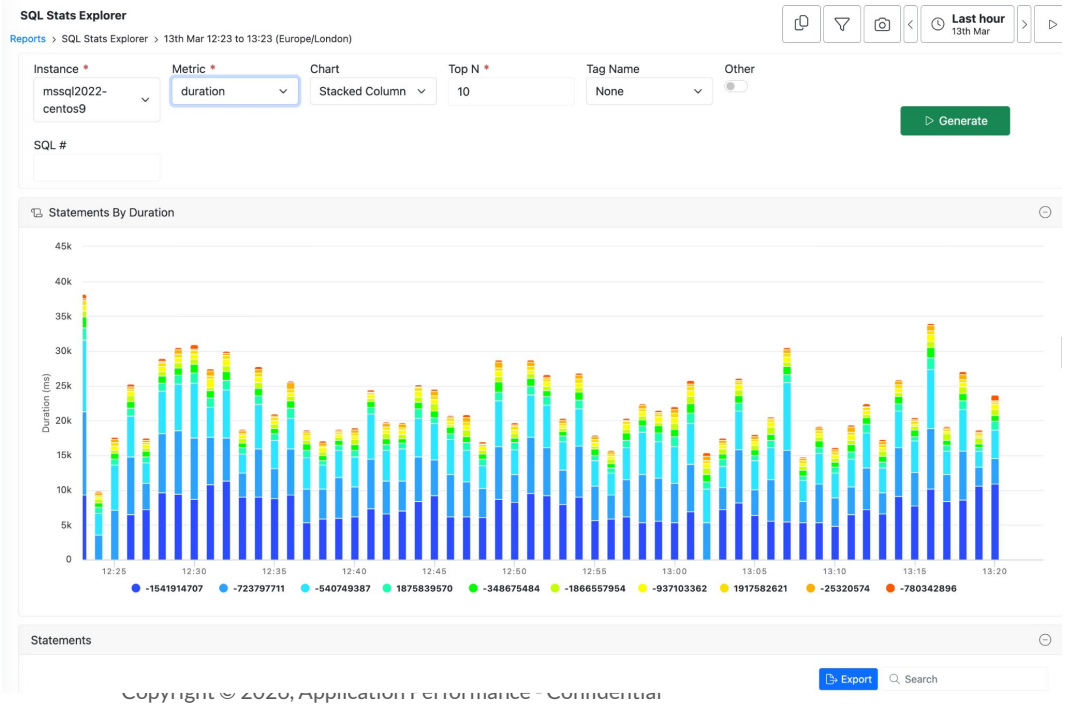
In Reports->SQL Stats Explorer, the user has selected cpu time (ms) for an MS SQL Server db, using a stacked area chart.

The largest area in the chart corresponds to the SQL Statement with the most execution time.

DB marlin

Compare database activity

View activity comparison results



From the menu, select Reports->SQL Stats Explorer

The user can choose their instance, Metric (in this case SQL Statement duration) as a stacked column, grouped by statement

DB marlin

13. Configure SQL Statistics

Problem

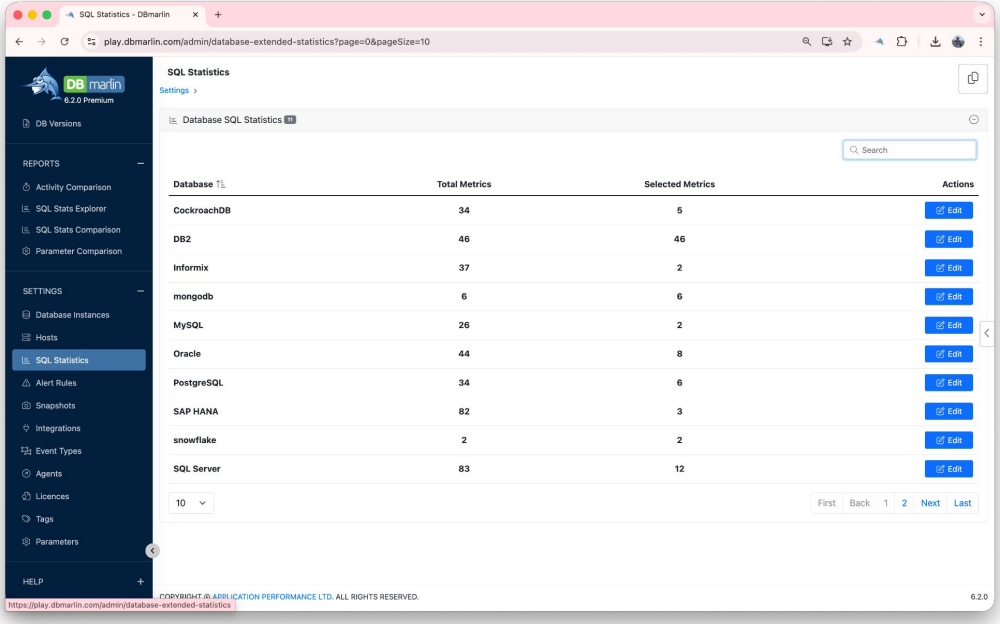
Each database platform can report on a wide variety of statistics. What can be done if a user can't see a statistic that they want?

Solution

In DBmarlin's Settings->SQL Statistics page, users can configure which database statistics that they collect. New statistics can be added for future collection.

Configure SQL Statistics

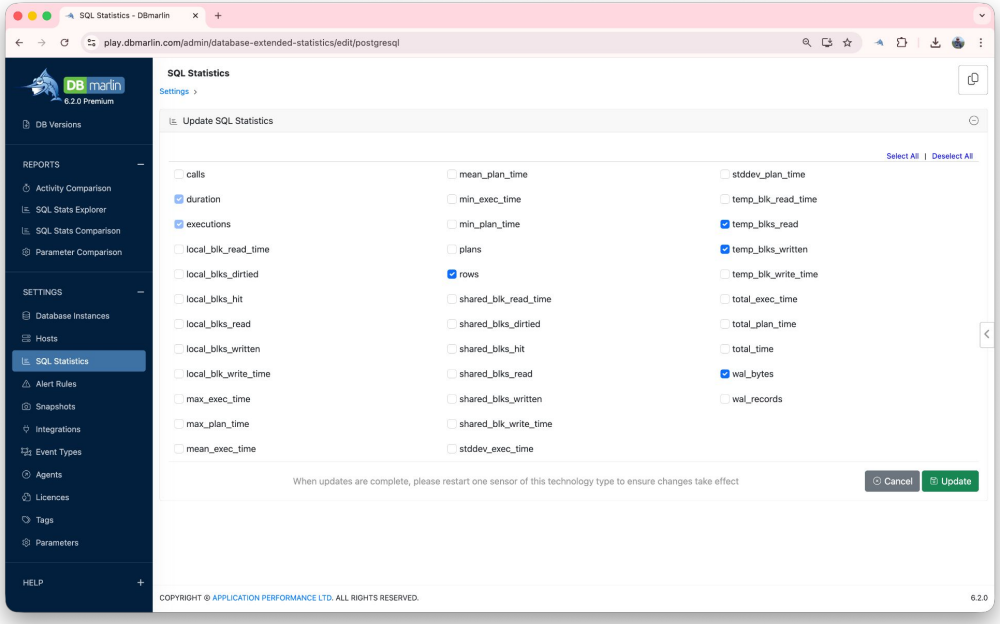
Select database platform settings



Select Settings->SQL Statistics to bring up the list of configured statistics. For the platform of interest, click on Edit.

Configure SQL Statistics

Make alterations to list of statistics gathered



Click to select or deselect statistics gathered. Each statistic has a CPU cost for gathering the information, so be careful making selections.

14. Compare SQL Statistics over time or between instances

Problem

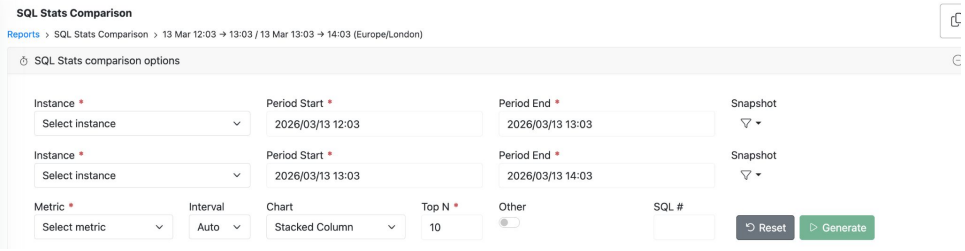
Users need a way to make an objective comparison of database performance now against a previous time window. This could help build readiness for major events (e.g. Black Friday), or could help to quantify performance improvements

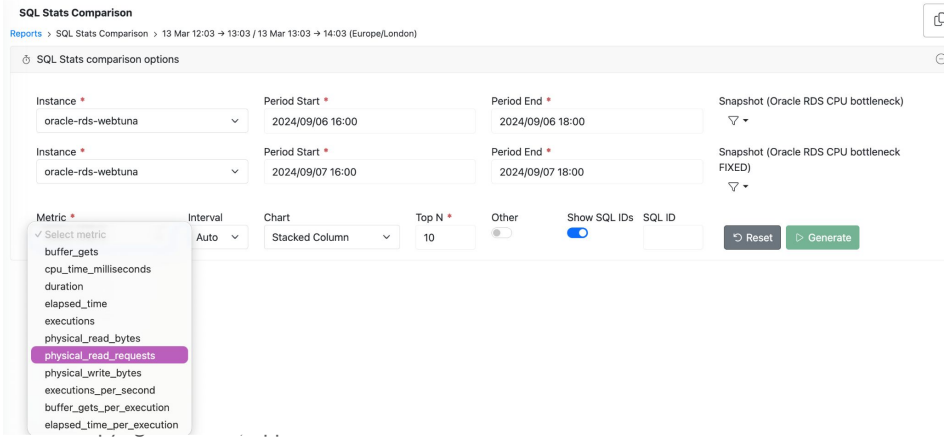
Solution

DBmarlin provides a SQL Stats Comparison report in order to explore and understand a comparison of recent performance and a well established benchmark time. This could also be used to contribute to a report showing before and after statistics.

Compare SQL Statistics

Select the time periods / snapshots and the metric to view





Click on Reports->SQL Stats Comparison

User has chosen a before / after tuning snapshot for an Oracle database, and they have chosen physical read requests as the metrics to display

DB marlin

Configure SQL Statistics
View Results

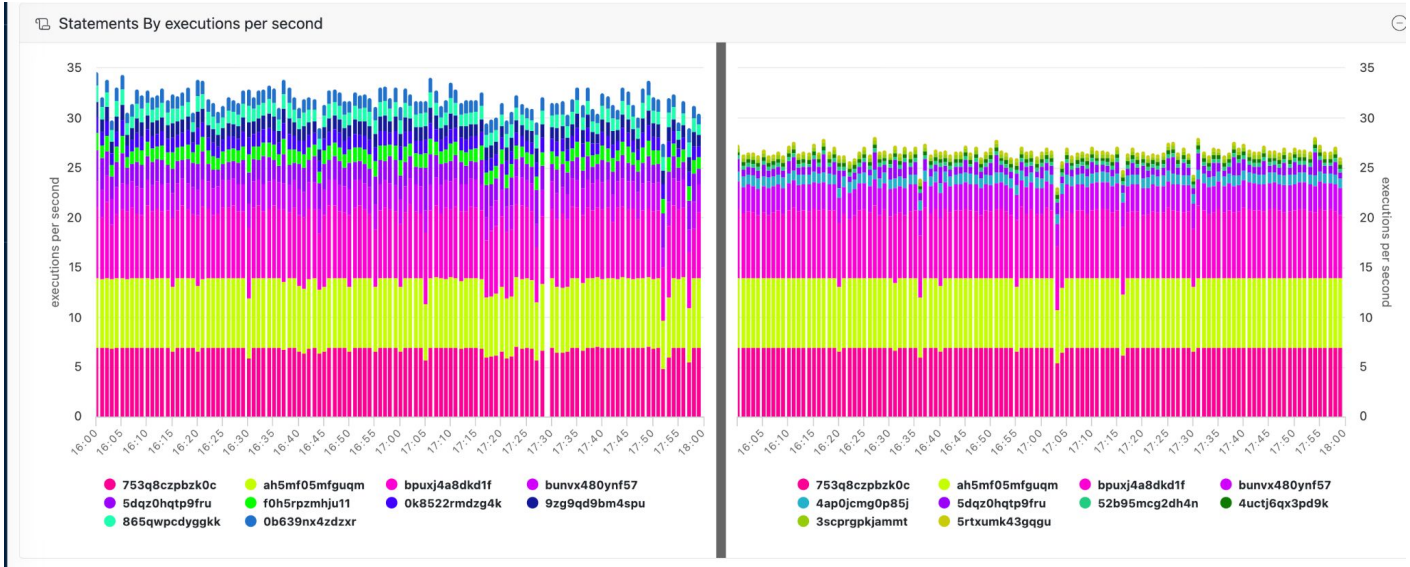
This is the first pane of the comparison. The selected statistic (executions per second) is showing as reduced from 5,448 to 4,063

Metric	6th Sep 16:00 to 18:00	7th Sep 16:00 to 18:00	Period Difference
Instance Name	oracle-rds-webtuna	oracle-rds-webtuna	
Total Duration	20h 6m 54s	31m 14s	19h 35m 39s ↘
Total Executions	326,782	243,765	83,017 ↘
Average Execution Time	221.60ms	7.69ms	213.91ms ↘
CPU Count	2	2	0 =
executions_per_second	5,446	4,063	1,384 ↘

Configure SQL Statistics

View Results grouped by statements

This is the second pane of the comparison. The selected statistic (executions per second) is showing graphically before (on the left) and after (on the right)



15. Database recommendations

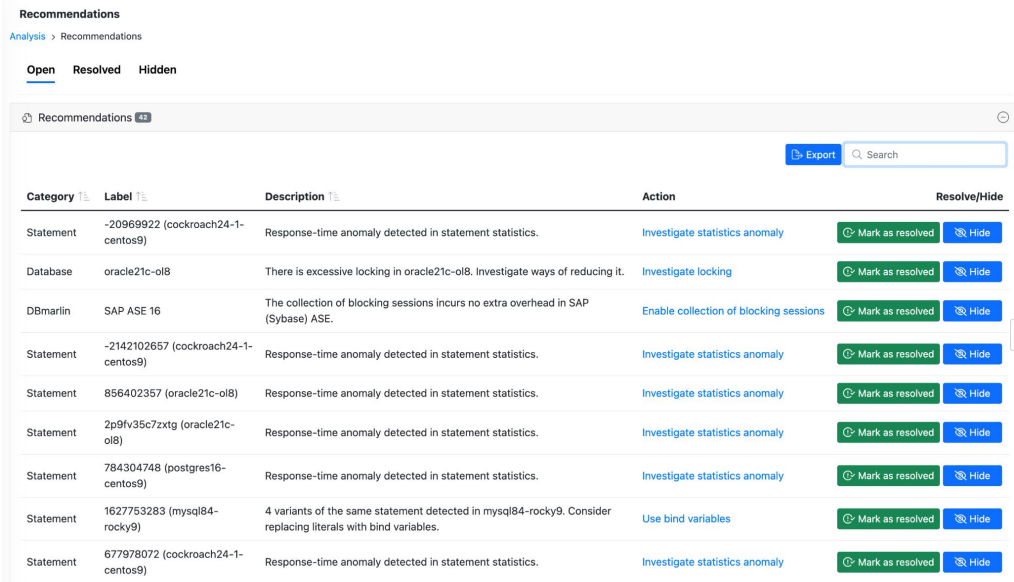
Problem

Users need a way to achieve a good configuration of their database platform, but with multiple platforms in use, and with less specialist knowledge for all them it can be very difficult to achieve this.

Solution

DBmarlin checks the database configurations, and will highlight recommendations for changes to improve configuration for security, operational health and performance

Recommendations
View all recommendations



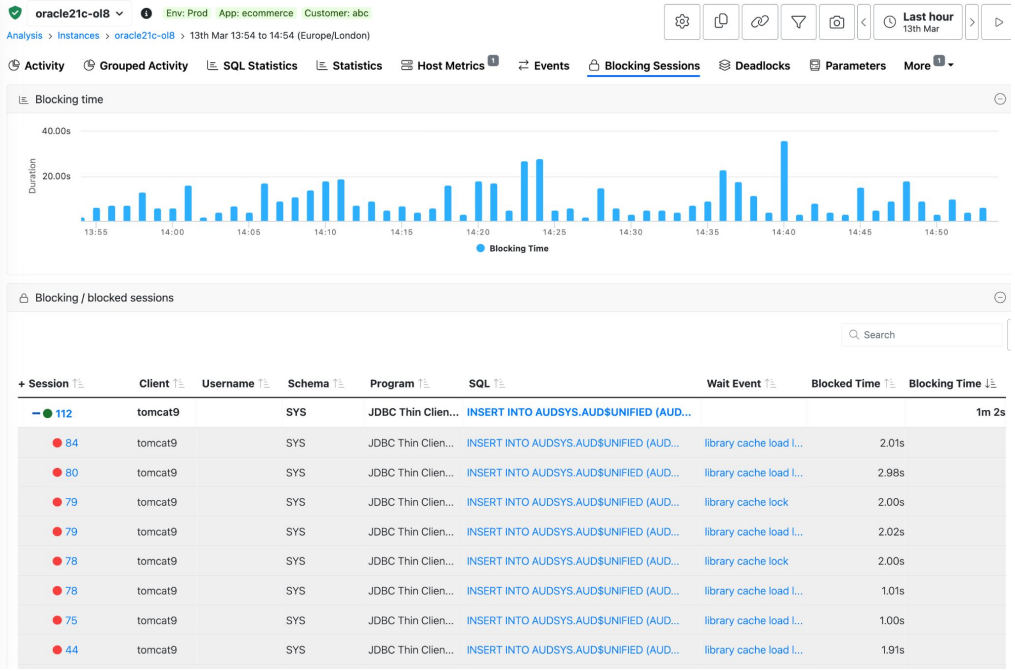
This option is available from Analysis -> Recommendations. DBmarlin groups by Open, Resolved and Hidden.

This analysis is an important step towards database configuration health for many different platforms.

The recommendation items can be managed, supporting any operational processes in place.

Recommendations

Dive into one recommendation



The deep dive shows recent locking activity for this database. The locked statements are displayed along with statements that are locking.

Previously, it has been very difficult to keep track of locking. DBmarlin provides this information, so that application developers can reduce the risk of locking.

DB marlin

16. Explore Database versions

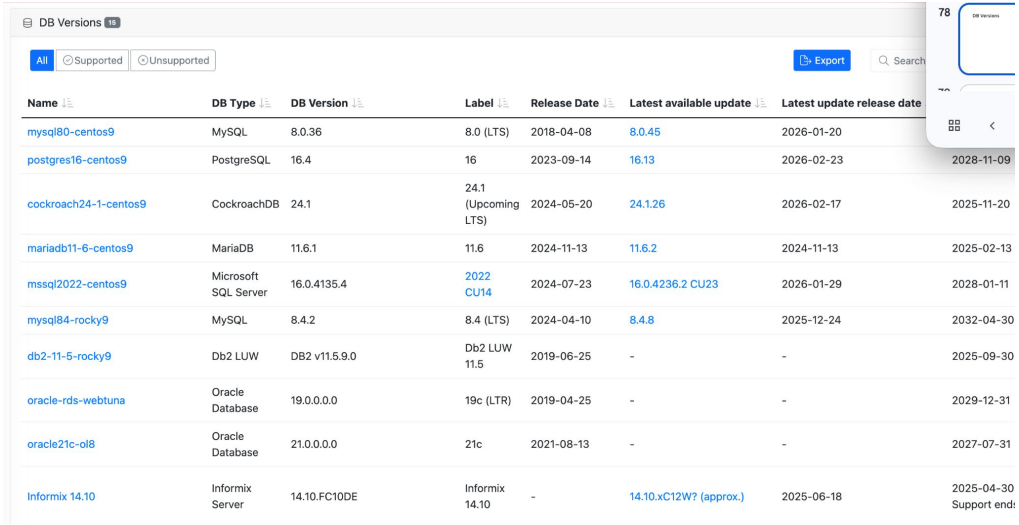
Problem

Old versions of software for database platform is a risk for any company. Not updating database software creates severe, high-level risks that go beyond simple technical inconveniences.

Solution

DBmarlin provides an overview of all configured databases with the release date, latest available update, end of mainstream support and end of extended support.

DB Versions



Name	DB Type	DB Version	Label	Release Date	Latest available update	Latest update release date	
mysql80-centos9	MySQL	8.0.36	8.0 (LTS)	2018-04-08	8.0.45	2026-01-20	
postgres16-centos9	PostgreSQL	16.4	16	2023-09-14	16.13	2026-02-23	2028-11-09
cockroach24-1-centos9	CockroachDB	24.1	24.1 (Upcoming LTS)	2024-05-20	24.1.26	2026-02-17	2025-11-20
mariadb11-6-centos9	MariaDB	11.6.1	11.6	2024-11-13	11.6.2	2024-11-13	2025-02-13
mssql2022-centos9	Microsoft SQL Server	16.0.4135.4	2022 CU14	2024-07-23	16.0.4236.2 CU23	2026-01-29	2028-01-11
mysql84-rocky9	MySQL	8.4.2	8.4 (LTS)	2024-04-10	8.4.8	2025-12-24	2032-04-30
db2-11-5-rocky9	Db2 LUW	DB2 v11.5.9.0	Db2 LUW 11.5	2019-06-25	-	-	2025-09-30
oracle-rds-webtuna	Oracle Database	19.0.0.0.0	19c (LTR)	2019-04-25	-	-	2029-12-31
oracle21c-ol8	Oracle Database	21.0.0.0.0	21c	2021-08-13	-	-	2027-07-31
Informix 14.10	Informix Server	14.10.FC10DE	Informix 14.10	-	14.10.xC12W? (approx.)	2025-06-18	2025-04-30 Support ends

This view shows all the databases under management, together with information about available updates, and support information for the databases.

This view can be used to ensure that all databases are supported and patched correctly, reducing risk of outage, data leakage or corruption.

17. Configure https access to DBmarlin

Problem

Sending data over the network without certificates and encryption leaves an organisation vulnerable to “man in the middle” and/or sensitive data collection over the wire.

Solution

DBmarlin allows easy configuration of SSL using the DBmarlin NGINX front end.

Steps to configure https

1. Obtain SSL Certificate
    a. Generate certificate and use the certificate files and private key file
2. Place the certificate files
    a. Copy the certificate into /opt/dbmarlin/nginx/conf
3. Configure NGINX for HTTPS
    a. Edit /opt/dbmarlin/nginx/conf/nginx.conf
4. Restart DBmarlin
5. Update agents

Reference documentation

https://docs.dbmarlin.com/docs/Getting-Started/ssl

18. Update DBmarlin

Problem

New releases of DBmarlin add new features, and new supported platforms as well as fixing vulnerabilities. How can I maintain an ideal cadence with minimal downtime and disruption

Solution

DBmarlin provides a clear process for upgrades, recent changes have reduced the time required for the update to the database. This reduces downtime opening up the possibility that an upgrade can be performed during office hours.

Documentation Linux or Windows

19. Collect logs

Problem

A user has encountered a problem, and the support organisation has asked for logs. How can I collect them?

Solution

This process can be executed from the command line on Linux or Windows

Linux process to capture logs

Log in, and set user to dbmarlin

```
user@dbmarlin:~$ sudo -i -u dbmarlin
[sudo] password for user:
dbmarlin@dbmarlin:~$
```

Run the command to capture the support files (this will take a few minutes)

```
dbmarlin@dbmarlin:~$ cd /opt/dbmarlin
dbmarlin@dbmarlin:~$ ./support_files.sh
```

The support files capture the necessary log files, and package them into a compressed archive. DBmarlin makes this available as a URL, so it can be easily downloaded

Windows process to capture logs

Using a command prompt, cd to the right directory.

```
Microsoft Windows [Version 10.0.17763.8276]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\Administrator>cd "\Program Files\DBmarlin"
```

Run the command to capture the support files (This will take a few minutes)

```
C:\Program Files\DBmarlin>support_files.bat
```

The support files capture the necessary log files, and package them into a compressed archive. DBmarlin makes this available as a URL, so it can be easily downloaded

20. Use tags to classify database instances

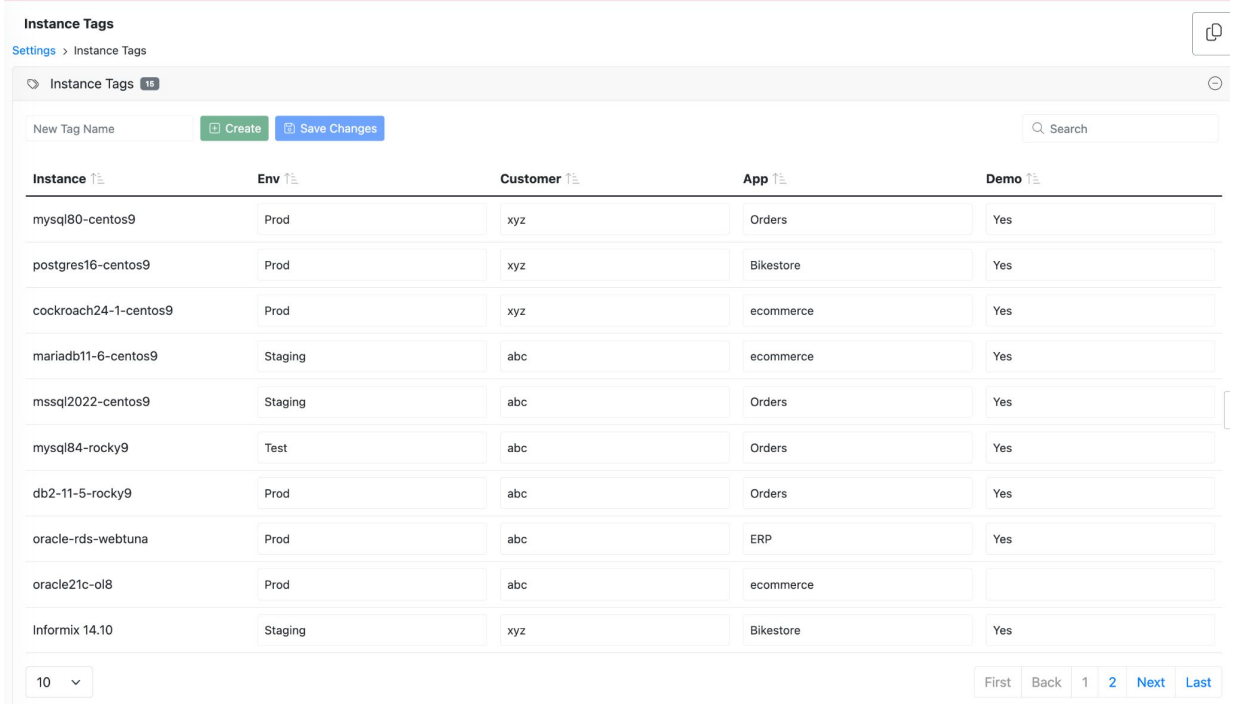
Problem

I have many different instances under management, it can be difficult to identify the right database depending on the environment (QA, DEV or Prod) or the application name (ABC, XYZ)

Solution

DBmarlin provides the ability to associate a name/value pair to a database instance, together with options to report on it, or group by it.

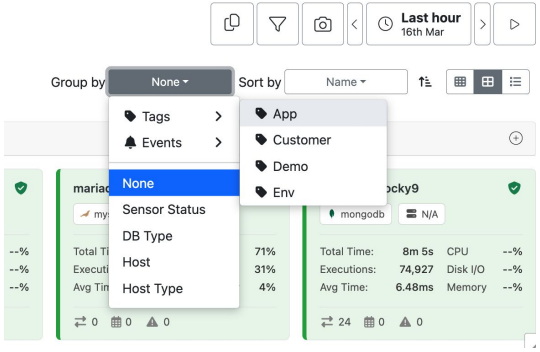
Configuring Tags

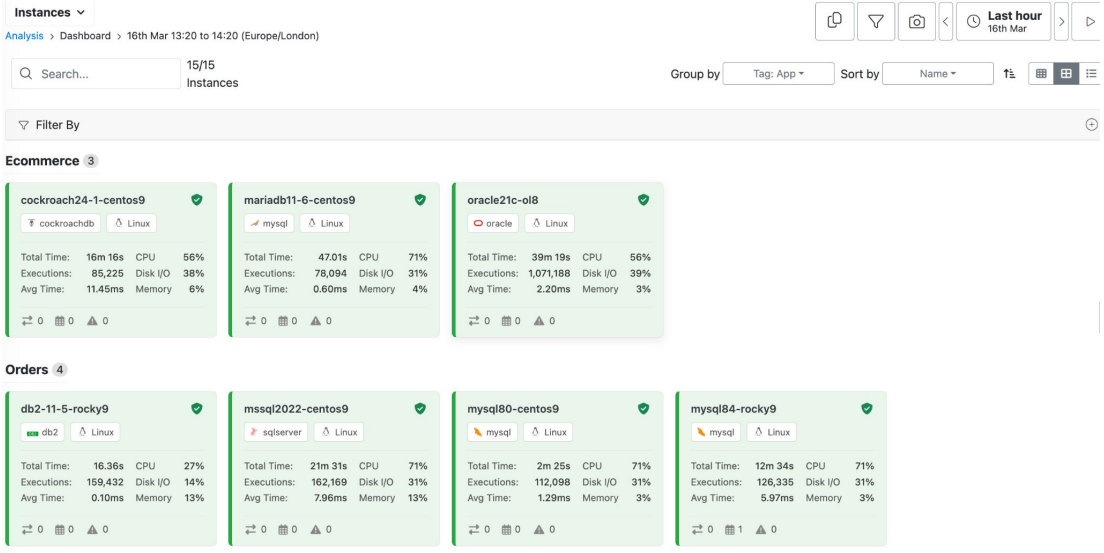


- Go to Settings -> Tags
  - Create a new tag if necessary
  - Fill in values for existing tabs to help classify each instance

Using Tags

At the main dashboard (Analysis->Dashboard), change group by to Tags->App





DB marlin

21. Configure Authentication

Problem

You want to control access to DBmarlin by enforcing password access.

Solution

DBmarlin provides basic authentication using an htpasswd file mechanism. Documentation is provided for this purpose here

22. Configure Role-based Access Control

Problem

You want to define what access each user has to databases within DBmarlin

Solution

DBmarlin provides Role-based Access Control (RBAC), Access control is tag based (See this section for how to use tags) and is documented here

23. Configure Single sign-on (SSO)

Problem

You want to allow users to log in to DBmarlin using your organisation's existing identity provider (idP), such as Microsoft Entra, Google or Okta, instead of managing local usernames and passwords

Solution

Dbmarlin supports Single sign-on using OAuth 2.0 for authorisation and OIDC for identity.

Step 1 - Configure Authentication

Configure authentication first
See this recipe to configure authentication.

You must add one local user before setting up SSO

Step 2 -

Configure authentication first
See this recipe to configure authentication.

You must add one local user before setting up SSO

Questions?