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Using WorkloadTools to analyze your workload

Gianluca Sartori

Founder at Quantumdatis



Data Platform MVP



Works with SQL Server since version 7

DBA @ Scuderia Ferrari



Blog: spaghettidba.com

Twitter: [@spaghettidba](https://twitter.com/spaghettidba)



Agenda

- Workload Analysis
- WorkloadTools to the rescue!

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Workload Analysis

Workload Analysis

- Capturing all queries to identify
 - Long running queries
 - Resource consumption
- Two types of analysis
 1. Characterizing a server workload
 2. Troubleshooting an application



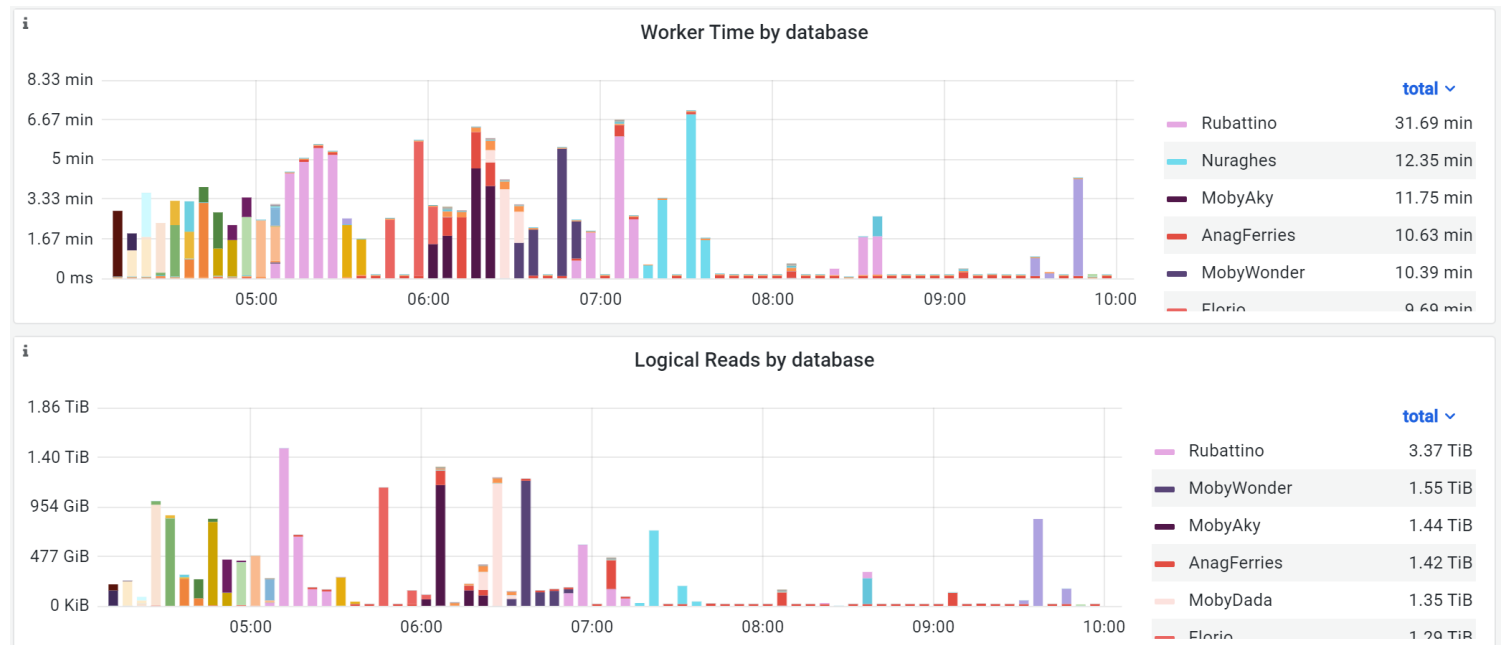
Characterizing a Server Workload

- Purpose:

- Identify top intensive queries
- Aggregate / filter workload by database, application, login...

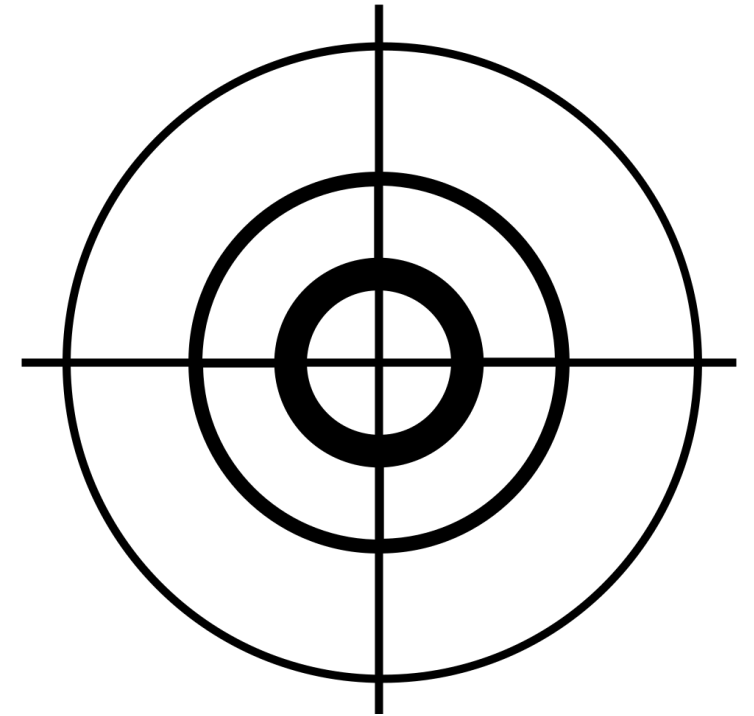
- Tools:

- Query Stats
- Query Store
- SqlTrace
- Extended Events



Troubleshooting

- Purpose:
 - Focus the analysis on a specific feature or workflow
 - Identify interesting queries
 - Tune that specific process
- Tools:
 - SqlTrace
 - Extended Events
 - ClearTrace



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WorkloadTools to the Rescue!

Introducing WorkloadTools

- Collection of Open Source tools

<https://workloadtools.com>

- Takes care of all aspects of benchmarking

Workload capture

Workload analysis

Workload replay

- Works against Azure SQL Database
- Can do real-time capture and replay

**UNIQUE
FEATURES!!!!**



Characterizing a Server Workload

- Steps:
 1. Set up the capture
 - Parameters
 - Filters
 2. Start!
 3. Keep it running for a meaningful amount of time
 4. Analyze the data



Troubleshooting

- Steps:
 1. Set up the capture
 - Parameters
 - Filters
 2. Start the application
 3. Stop the capture
 4. Analyze the data





DEMO

Wrap up

- Analyzing a Workload is important, but complicated
- Some tools in SQL Server can help
- WorkloadTools makes it easy
 - Capturing tools
 - Analysis tools
 - Reporting tools