

Understanding Query Performance Metrics



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Module Overview



Examine query resource use and execution duration in detail

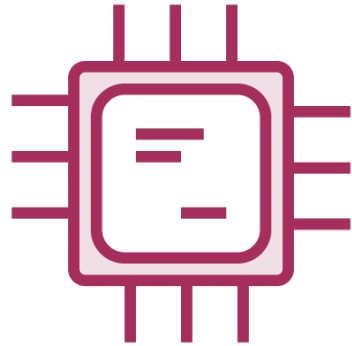
- Sources for data
- How to use it for troubleshooting and comparing performance



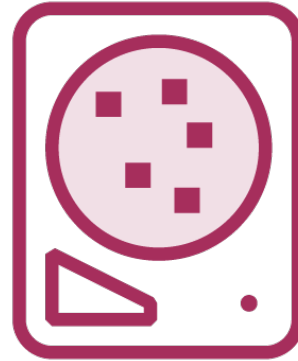
Query Metrics of Interest



Duration



CPU



I/O



Memory



SSMS

Information for the execution of one query
Client statistics have limitations
Returning results to the UI incurs overhead
Output must be saved



Extended Events

Data for an individual query or batch

Only selected data is collected, based on the capture duration and predicates

Data can be saved

Aggregation must be done post-collection



Dynamic Management Objects

Data is an aggregation from the time the plan entered the plan cache

Data is lost when the plan leaves the cache, or when the instance is restarted



Query Store

SQL Server aggregates query execution data for a plan across user-defined time intervals



Demo



Viewing and Interpreting Query Execution Data



What We Covered



Examine query resource use and execution duration in detail

- Sources for data
- How to use it for troubleshooting and comparing performance

