

Query Plans

Last Modified on 06 May 2021

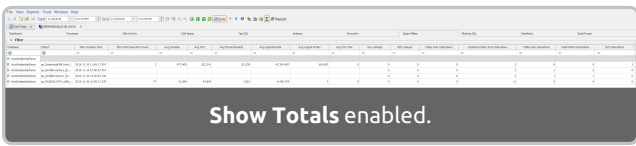
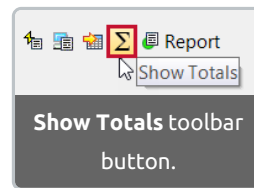
Applies to: SQL Server and Azure SQL Database targets

The **Query Plans** tab lists all plans collected for **Top SQL** completed queries for the specified date range, and provides a detailed chronology of all completed query plan changes. Use **Query Plans** to look back at any point in time to see when a plan change led to a query performance problem.

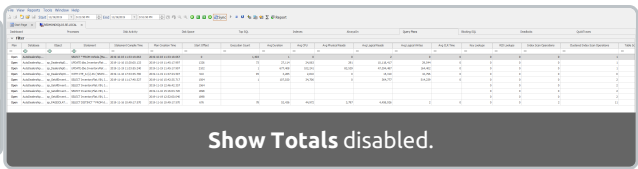
Object	Plan Creation Time	Max Cost	Execution Count	Avg Duration	Avg CPU	Avg Physical Reads	Avg Logical Reads	Avg Logical Writes	Avg CLR Time	Key Lookups	RID Lookups	Index Scan Operations	Clustered Index Scan Operations	Table Scan Operations	Hash Match Operations	Sort Operations
AutoIndexingDemo	sp_DestinyDMLWork...	2019-11-19 11:45:17.997	1	677,468	202,241	82,539	47,594,967	164,402	0	0	0	0	1	0	0	3
AutoIndexingDemo	sp_GetInventory_Pr...	2019-11-19 12:46:42.207											2	1	2	0
AutoIndexingDemo	sp_GetInventory_Pr...	2019-11-19 16:56:50.729											2	1	1	0
AutoIndexingDemo	sp_PAZ2020.ATD_AIS...	2019-11-19 16:46:17.970	77	51,984	44,854	5,861	4,456,734	2	0	0	0	2	11	0	4	6

Note: The **Query Plans** tab does not currently display collected **Top SQL** Query Stats or Procedure Stats query plans.

The **Show Totals** toolbar button controls whether the grid lists plans are grouped by stored procedure.

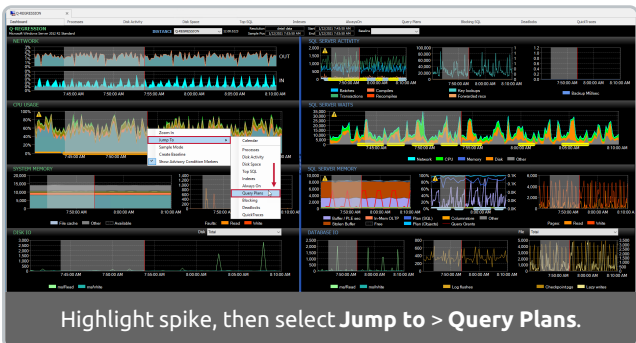


Show Totals enabled.

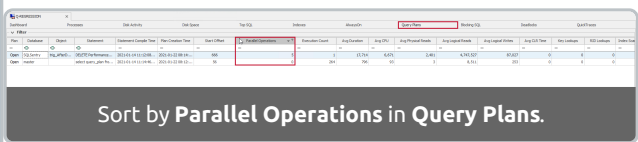


Show Totals disabled.

Jump To > Query Plans tab by highlighting a range on the dashboard as usual. For example, if you see a spike in parallelism waits on the **SQL Server Waits** chart, highlight the spike, and then select **Jump To > Query Plans**. Sort by the **Parallel Operations** column to determine which queries caused the spike.



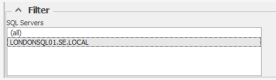
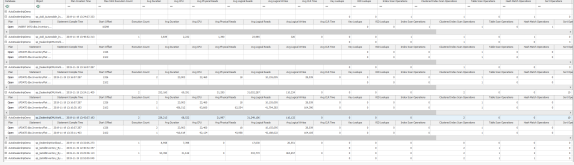
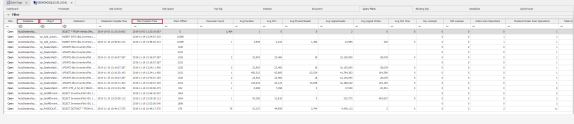
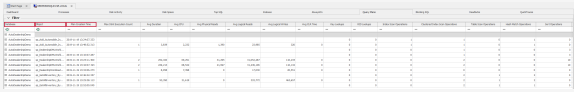
Highlight spike, then select **Jump to > Query Plans**.



Sort by **Parallel Operations** in **Query Plans**.

Note: The same approach can be used to find queries with key or RID lookups because **Lookups** are now displayed on the **Dashboard**, as well as other metrics that correlate, such as I/O and table/index scans.

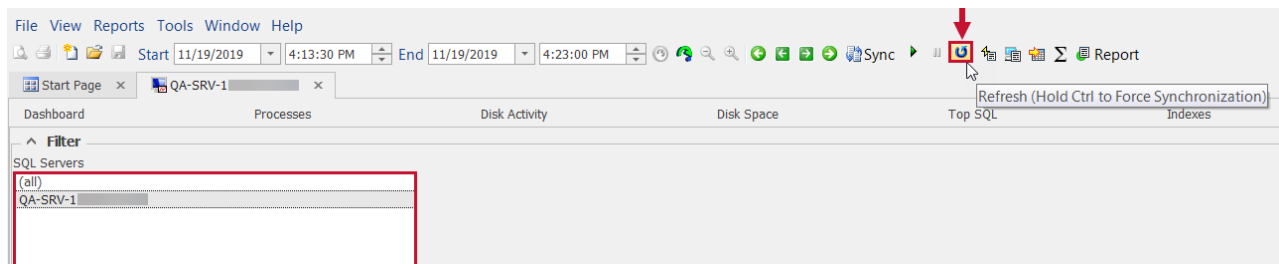
Display Panes

Display Pane	Image
The Filter pane allows you to filter the Query Plans by SQL Server.	
The Bottom pane lists the records matching the current filters. There are two modes for this pane: Default and Totals .	
Default lists all events for the active date range in a standard list format, sorted in order by Database name, Object name, and Plan Creation Time (descending).	
Totals lists all events for the active date range in a standard list format, sorted in order by Database name, Object name, and Plan Creation Time (descending).	

Controls

Top Pane

After changing the filter, select **Refresh** , or press **F5** to apply the filter.



Bottom Pane

To open the plan in the **Query Plan Analysis** window, select the **Open** button under the **Plan** column. (If the **Show Totals** button is selected, you need to expand the **Database Name** to see the **Plan** column).

Plan	Database	Object	Statement	Statement Compile Time	Plan Creation Time	Start Offset	Execution Count	Avg Duration	Avg CPU	Avg Physical Reads	Avg Logical Reads	Avg Logical Writes	Avg CLR Time	Key Lookups	RED Lookups	Index Scan Operations	Clustered Index Scan Operations	Table Scans
Open	AdventureWorks	dbo	SELECT FROM INVOICE_Pnl...	2019-11-19 13:03:05.643	2019-11-19 13:03:05.647	0	1	0	0	0	0	0	0	0	0	0	0	0
Open	AdventureWorks	dbo	INSERT INTO dbo.Inventory...	2019-11-19 13:46:52.313	2019-11-19 13:46:57.133	10298	2	5,766	2,253	1,143	23,962	328	0	0	0	1	1	1
Open	AdventureWorks	dbo	UPDATE dbo.InventoryPnl...	2019-11-19 13:46:52.313	2019-11-19 13:46:57.133	1326	2	25,903	22,460	18	30,155,095	28,039	0	0	0	0	0	1
Open	AdventureWorks	dbo	UPDATE dbo.InventoryPnl...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	2302	2	25,903	22,460	18	30,155,095	28,039	0	0	0	0	0	1
Open	AdventureWorks	dbo	UPDATE dbo.InventoryPnl...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	1326	2	25,903	22,460	18	30,155,095	28,039	0	0	0	0	0	1
Open	AdventureWorks	dbo	UPDATE dbo.InventoryPnl...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	2302	1	406,512	93,660	62,554	41,794,383	384,390	0	0	0	0	0	1
Open	AdventureWorks	dbo	UPDATE dbo.InventoryPnl...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	1326	2	25,903	22,460	18	30,155,095	28,039	0	0	0	0	0	1
Open	AdventureWorks	dbo	UPDATE dbo.InventoryPnl...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	2302	1	406,619	93,124	45,938	41,589,022	384,165	0	0	0	0	0	1
Open	AdventureWorks	dbo	UPDATE dbo.InventoryPnl...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	622	2	5,941	7,869	0	17,240	20,661	0	0	0	0	0	0
Open	AdventureWorks	dbo	SELECT InventoryPnl.VN, I...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	1564	1	93,350	31,619	0	333,772	403,657	0	0	0	0	0	2
Open	AdventureWorks	dbo	SELECT InventoryPnl.VN, I...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	3989	1	93,350	31,619	0	333,772	403,657	0	0	0	0	0	2
Open	AdventureWorks	dbo	SELECT InventoryPnl.VN, I...	2019-11-19 13:46:57.287	2019-11-19 13:46:57.287	3989	1	93,350	31,619	0	333,772	403,657	0	0	0	0	0	2
Open	AdventureWorks	dbo	SELECT DISTINCT FROM 6...	2019-11-19 10:46:17.570	2019-11-19 10:46:17.570	676	79	52,337	44,959	3,794	4,499,113	2	0	0	0	0	2	11

Note: The context menu provides an option to **Highlight recompiles in the current date range** for a statement by enabling the checkbox.

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Open	AdventureWorks	dbo	SELECT DISTINCT FROM 6...	2019-11-19 10:46:17.570	2019-11-19 10:46:17.570	676	79	52,337	44,959	3,794	4,499,113	2	0	0	0	0	2	11