SQL Server Performance Counters – Ready Reference

Objective: In which version of SQL Server does a particular counter exist?

For any errors, suggestions & feedback, write to **amit.bansal@sqlmaestros.com**

	Object Name	SL No.	Counter Name	Description	2014	2012	2008 R2	2008	2005
1		1	AU cleanup batches/sec	The number of batches that completed successfully per second by the background task that cleans up deferred dropped allocation units.	☑	☑	☑	☑	☑
		2	AU cleanups/sec	The number of allocation units per second that were successfully dropped by the background task that cleans up deferred dropped allocation units. Each allocation unit drop requires multiple batches.	☑	☑	☑	☑	☑
		3	By-reference Lob Create Count	Count of large object (LOB) values that were passed by reference. By-reference lobs are used in certain bulk operations to avoid the cost of passing them by value.	☑	☑	☑	☑	☑
		4	By-reference Lob Use Count	Count of by-reference lob values that were used. By-reference lobs are used in certain bulk operations to avoid the cost of passing them by value.	☑	☑	☑	☑	☑
		5	Count Lob Readahead	Count of lob pages on which readahead was issued.	☑	☑	☑	☑	☑
		6	Count Pull In Row	Count of values that were pulled in-row from off-row.	☑	☑	☑	☑	☑
		7	Count Push Off Row	Count of values that were pushed from in-row to off-row.	☑	☑	☑	☑	☑
		8	Deferred dropped AUs	The number of allocation units waiting to be dropped by the background task that cleans up deferred dropped allocation units.	☑	☑	☑	☑	☑
		9	Deferred Dropped rowsets	The number of rowsets created as a result of aborted online index build operations that are waiting to be dropped by the background task that cleans up deferred dropped rowsets.	☑	☑	☑	☑	☑
		10	Dropped rowset cleanups/sec	The number of rowsets per second created as a result of aborted online index build operations that were successfully dropped by the background task that cleans up deferred dropped rowsets.	☑	☑	☑	☑	☑

	SQLServer:Access Methods	11	Dropped rowset skipped/sec	The number of rowsets per second created as a result of aborted online index build operations that were skipped by the background task that cleans up deferred dropped rowsets created.	☑	☑	☑	☑	☑
		12	Extent Deallocations/sec	Number of extents deallocated per second in all databases in this SQL Server instance.	☑	☑	☑	☑	☑
		13	Extent Allocated/sec	Number of extents allocated per second in all databases in this SQL Server instance.	☑	☑	☑	☑	☑
		14	Failed AU cleanup batches/sec	The number of batches per second that failed and required retry, by the background task that cleans up deferred dropped allocation units. Failure could be due to lack of memory or disk space, hardware failure and other reasons.	☑	☑	☑	☑	☑
		15	Failed leaf page cookie	The number of times that a leaf page cookie could not be used during an index search since changes happened on the leaf page. The cookie is used to speed up index search.	☑	☑	☑	☑	☑
		16	Failed tree page cookie	The number of times that a tree page cookie could not be used during an index search since changes happened on the parent pages of those tree pages. The cookie is used to speed up index search.	☑	☑	☑	☑	☑
		17	Forwarded Records/sec	Number of records fetched through forwarded record pointers.	☑	☑	☑	☑	☑
		18	FreeSpace Page Fetches/sec	Number of pages fetched per second by free space scans. These scans search for free space within pages already allocated to an allocation unit, to satisfy requests to insert or modify record fragments.	☑	☑	☑	☑	☑
		19	FreeSpace Scans/sec	Number of scans per second that were initiated to search for free space within pages already allocated to an allocation unit to insert or modify record fragments. Each scan may find multiple pages.	☑	☑	☑	☑	☑
		20	Full Scans/sec	Number of unrestricted full scans. These can either be base table or full index scans.	☑	☑	☑	☑	☑
		21	Index Searches/sec	Number of index searches. Index searches are used to start range scans, single index record fetches, and to reposition within an index.	☑	☑	☑	☑	☑
		22	InSysXact waits/sec	Number of times a reader needs to wait for a page because the InSysXact bit is set.	☑	☑	☒	☒	☒
		23	LobHandle Create Count	Count of temporary LOBs created.	☑	☑	☑	☑	☑
		24	LobHandle Destroy Count	Count of temporary LOBs destroyed.	☑	☑	☑	☑	☑

		25	LobSS Provider Create Count	Count of LOB Storage Service Providers created. One worktable created per LOB Storage Service Provider.	☑	☑	☑	☑	☑
		26	LobSS Provider Destroy Count	Count of LOB Storage Service Providers destroyed.	☑	☑	☑	☑	☑
		27	LobSS Provider Truncation Count	Count of LOB Storage Service Providers truncated.	☑	☑	☑	☑	☑
		28	Mixed page allocations/sec	Number of pages allocated per second from mixed extents. These could be used for storing the IAM pages and the first eight pages that are allocated to an allocation unit.	☑	☑	☑	☑	☑
		29	Page compression attempts/sec	Number of attempts to compress a database page per second.	☑	☑	☑	☑	☒
		30	Page Deallocations/sec	Number of pages deallocated per second in all databases in this SQL Server instance. These include pages from mixed extents and uniform extents.	☑	☑	☑	☑	☑
		31	Page Splits/sec	Number of page splits per second that occur as a result of overflowing index pages.	☑	☑	☑	☑	☑
		32	Pages Allocated /sec	Number of pages allocated per second in all databases in this SQL Server instance. These include pages allocations from both mixed extents and uniform extents.	☑	☑	☑	☑	☑
		33	Pages Compressed/sec	Number of times a database page was compressed.	☑	☑	☑	☑	☒
		34	Probe Scans/sec	Number of probe scans per second that are used to find at most one single qualified row in an index or base table directly.	☑	☑	☑	☑	☑
		35	Range Scans/sec	Number of qualified range scans through indexes per second.	☑	☑	☑	☑	☑
		36	Scan Point Revalidation/sec	Number of times the scan point had to be revalidated to continue the scan.	☑	☑	☑	☑	☑
		37	Skipped Ghosted Records/sec	Number of ghosted records per second skipped during scans.	☑	☑	☑	☑	☑
		38	Table Lock Escalations/sec	The number of times locks on a table were escalated.	☑	☑	☑	☑	☑
		39	Used leaf page cookie	Number of times a leaf page cookie was used successfully during an index search since no change happened on the leaf page. The cookie is used to speed up index search.	☑	☑	☑	☑	☑

		40	Used tree page cookie	Number of times a tree page cookie was used successfully during an index search since no change happened on the parent page of the tree page. The cookie is used to speed up index search.	☑	☑	☑	☑	☑
		41	Workfiles Created/sec	Number of work files created per second. For example, work files could be used to store temporary results for hash joins and hash aggregates.	☑	☑	☑	☑	☑
		42	Worktables Created/sec	Number of work tables created per second. For example, work tables could be used to store temporary results for query spool, LOB variables, XML variables, and cursors.	☑	☑	☑	☑	☑
		43	Worktables From Cache Ratio	Percentage of work tables created where the initial two pages of the work table were not allocated but were immediately available from the work table cache.	☑	☑	☑	☑	☑
2	SQLServer:Availability Replica	44	Bytes Received from Replica/sec	Total bytes received from the availability replica.	☑	☑	☒	☒	☒
		45	Bytes Sent to Replica/sec	Total bytes sent to the availability replica.	☑	☑	☒	☒	☒
		46	Bytes Sent to Transport/sec	Total bytes sent to transport for the availability replica.	☑	☑	☒	☒	☒
		47	Flow Control Time (ms/sec)	Time in milliseconds messages waited on flow control in the last second.	☑	☑	☒	☒	☒
		48	Flow Control/sec	Number of flow control initiated in the last second.	☑	☑	☒	☒	☒
		49	Receives from Replica/sec	Total receives from the availability replica.	☑	☑	☒	☒	☒
		50	Resent Messages/sec	Number of messages being resent in the last second.	☑	☑	☒	☒	☒
		51	Sends to Replica/sec	Total sends to the availability replica.	☑	☑	☒	☒	☒
		52	Sends to Transport/sec	Total sends to transport for the availability replica.	☑	☑	☒	☒	☒
3	SQLServer:Backup Device	53	Device Throughput Bytes/sec	Read/write throughput for a backup device.	☑	☑	☑	☑	☑

4	SQLServer:Batch Resp Statistics	54	Batches >=000000ms & <000001ms	Number of SQL Batches having response time greater than or equal to 0ms but less than 1ms.	☑	☑	☒	☒	☒
		55	Batches >=000001ms & <000002ms	Number of SQL Batches having response time greater than or equal to 1ms but less than 2ms.	☑	☑	☒	☒	☒
		56	Batches >=000002ms & <000005ms	Number of SQL Batches having response time greater than or equal to 2ms but less than 5ms.	☑	☑	☒	☒	☒
		57	Batches >=000005ms & <000010ms	Number of SQL Batches having response time greater than or equal to 5ms but less than 10ms.	☑	☑	☒	☒	☒
		58	Batches >=000010ms & <000020ms	Number of SQL Batches having response time greater than or equal to 10ms but less than 20ms.	☑	☑	☒	☒	☒
		59	Batches >=000020ms & <000050ms	Number of SQL Batches having response time greater than or equal to 20ms but less than 50ms.	☑	☑	☒	☒	☒
		60	Batches >=000050ms & <000100ms	Number of SQL Batches having response time greater than or equal to 50ms but less than 100ms.	☑	☑	☒	☒	☒
		61	Batches >=000100ms & <000200ms	Number of SQL Batches having response time greater than or equal to 100ms but less than 200ms.	☑	☑	☒	☒	☒
		62	Batches >=000200ms & <000500ms	Number of SQL Batches having response time greater than or equal to 200ms but less than 500ms.	☑	☑	☒	☒	☒
		63	Batches >=000500ms & <001000ms	Number of SQL Batches having response time greater than or equal to 500ms but less than 1,000ms.	☑	☑	☒	☒	☒
		64	Batches >=001000ms & <002000ms	Number of SQL Batches having response time greater than or equal to 1,000ms but less than 2,000ms.	☑	☑	☒	☒	☒
		65	Batches >=002000ms & <005000ms	Number of SQL Batches having response time greater than or equal to 2,000ms but less than 5,000ms.	☑	☑	☒	☒	☒

		66	Batches >=005000ms & <010000ms	Number of SQL Batches having response time greater than or equal to 5,000ms but less than 10,000ms.	☑	☑	☒	☒	☒
		67	Batches >=010000ms & <020000ms	Number of SQL Batches having response time greater than or equal to 10,000ms but less than 20,000ms.	☑	☑	☒	☒	☒
		68	Batches >=020000ms & <050000ms	Number of SQL Batches having response time greater than or equal to 20,000ms but less than 50,000ms.	☑	☑	☒	☒	☒
		69	Batches >=050000ms & <100000ms	Number of SQL Batches having response time greater than or equal to 50,000ms but less than 100,000ms.	☑	☑	☒	☒	☒
		70	Batches >=100000ms	Number of SQL Batches having response time greater than or equal to 100,000ms.	☑	☑	☒	☒	☒
5	SQLServer:Broker Activation	71	Stored Procedures Invoked/sec	The number of stored procedures that are being invoked per second.	☑	☑	☑	☑	☑
		72	Task Limit Reached	The total number of times the activated task limit on a queue has been reached.	☑	☑	☑	☑	☑
		73	Task Limit Reached/sec	The number of times the activated task limit on a queue has been reached per second.	☑	☑	☑	☑	☑
		74	Tasks Aborted/sec	The number of activated tasks that are being aborted per second.	☑	☑	☑	☑	☑
		75	Tasks Running	The total number of activated tasks that are currently running.	☑	☑	☑	☑	☑
		76	Tasks Started/sec	The number of activated tasks that are being started per second.	☑	☑	☑	☑	☑
		77	Activation Errors Total	The number of times an activation stored procedure exited with an error.	☑	☑	☑	☑	☒
		78	Broken Transaction Rollbacks	The number of Service Broker related transactions that have rolled back.	☑	☑	☑	☑	☑
		79	Corrupted Messages Total	The number of corrupted messages that were received in the instance.	☑	☑	☑	☑	☒
		80	Dequeued TransmissionQ Msgs/sec	The number of messages that have been removed from the broker transmission queue per second.	☑	☑	☑	☑	☒

6	SQLServer:Broker Statistics	81	Dialog Timer Event Count	The number of dialog endpoint related timer events in the Broker.	☑	☑	☑	☑	☑
		82	Dropped Messages Total	The number of messages that were received in the instance but could not be delivered.	☑	☑	☑	☑	☒
		83	Enqueued Local Messages Total	Total number of messages from local endpoints that are successfully delivered directly into local target queues.	☑	☑	☑	☑	☑
		84	Enqueued Local Messages/sec	The number of messages from local endpoints that are successfully delivered directly into local target queues per second.	☑	☑	☑	☑	☑
		85	Enqueued Messages Total	Total number of messages from local endpoints and the transport that are successfully delivered into local target queues.	☑	☑	☑	☑	☑
		86	Enqueued Messages/sec	The number of messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☑
		87	Enqueued P1 Messages/sec	The number of priority 1 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		88	Enqueued P10 Messages/sec	The number of priority 10 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		89	Enqueued P2 Messages/sec	The number of priority 2 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		90	Enqueued P3 Messages/sec	The number of priority 3 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		91	Enqueued P4 Messages/sec	The number of priority 4 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		92	Enqueued P5 Messages/sec	The number of priority 5 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		93	Enqueued P6 Messages/sec	The number of priority 6 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒

		94	Enqueued P7 Messages/sec	The number of priority 7 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		95	Enqueued P8 Messages/sec	The number of priority 8 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		96	Enqueued P9 Messages/sec	The number of priority 9 messages from local endpoints and the transport that are successfully delivered into local target queues per second.	☑	☑	☑	☑	☒
		97	Enqueued TransmissionQ Msgs/sec	The number of messages that have been placed into the broker transmission queue per second.	☑	☑	☑	☑	☒
		98	Enqueued Transport Msg Frag Tot	Total number of message fragments from the transport that are successfully delivered into local target queues. Note that the message can be marked as disabled if it is incomplete and/or out of order.	☑	☑	☑	☑	☑
		99	Enqueued Transport Msg Frags/sec	The number of message fragments from the transport that are successfully delivered into local target queues per second. Note that the message can be marked as disabled if it is incomplete and/or out of order.	☑	☑	☑	☑	☑
		100	Enqueued Transport Msgs Total	Total number of messages from the transport that are successfully delivered into local target queues. This includes all messages from remote endpoints and messages from local endpoints which go through the transport.	☑	☑	☑	☑	☑
		101	Enqueued Transport Msgs/sec	The number of messages from the transport that are successfully delivered into local target queues per second. This includes all messages from remote endpoints and messages from local endpoints which go through the transport.	☑	☑	☑	☑	☑
		102	Forwarded Messages Total	Total number of forwarded messages successfully sent.	☑	☑	☑	☑	☑
		103	Forwarded Messages/sec	The number of forwarded messages successfully sent per second.	☑	☑	☑	☑	☑
		104	Forwarded Msg Byte Total	Total number of forwarded message bytes successfully sent.	☑	☑	☑	☑	☑
		105	Forwarded Msg Bytes/sec	The number of forwarded message bytes successfully sent per second.	☑	☑	☑	☑	☑

		106	Forwarded Msg Discarded Total	Total number of forwarded messages discarded due to forwarded message memory limits, age limits, etc.	☑	☑	☑	☑	☑
		107	Forwarded Msg Discarded/sec	The number of forwarded messages that were discarded per second due to forwarded message memory limits, age limits, etc.	☑	☑	☑	☑	☑
		108	Forwarded Pending Msg Bytes	The number of forwarded message bytes that have not been successfully sent yet.	☑	☑	☑	☑	☑
		109	Forwarded Pending Msg Count	The number of forwarded messages that have not been successfully sent yet.	☑	☑	☑	☑	☑
		110	SQL RECEIVE Total	Total number of SQL RECEIVE commands processed by the Broker.	☑	☑	☑	☑	☑
		111	SQL RECEIVEs/sec	The number of SQL RECEIVE commands processed by the Broker per second.	☑	☑	☑	☑	☑
		112	SQL SEND Total	Total number of SQL SEND commands processed by the Broker.	☑	☑	☑	☑	☑
		113	SQL SENDs/sec	The number of SQL SEND commands processed by the Broker per second.	☑	☑	☑	☑	☑
7	SQLServer:Broker TO Statistics	114	Avg. Length of Batched Writes	Average Number of Transmission Objects saved in a batch.	☑	☑	☑	☑	☒
		115	Avg. Time Between Batches(ms)	Average time between Transmission Object batch flushes.	☑	☑	☑	☑	☒
		116	Avg. Time to Write Batch(ms)	Average time to save a Transmission Object batch.	☑	☑	☑	☑	☒
		117	Transmission Obj Gets/Sec	The number of Transmission Objects requested per second.	☑	☑	☑	☑	☒
		118	Transmission Obj Set Dirty/Sec	The number of Transmission Objects marked dirty per second.	☑	☑	☑	☑	☒
		119	Transmission Obj Writes/Sec	The number of Transmission Objects saved per second.	☑	☑	☑	☑	☒
		120	Current Bytes for Recv I/O	The number of bytes associated with current transport receive I/O operations that haven't completed.	☑	☑	☑	☑	☑
		121	Current Bytes for Send I/O	The number of buffer bytes associated with current transport send I/O operations that haven't completed.	☑	☑	☑	☑	☑

8	SQLServer:Broker/DBM Transport	122	Current Msg Frags for Send I/O	The current number of message fragments associated with current transport send I/O operations that haven't completed.	☑	☑	☑	☑	☑
		123	Message Fragment P1 Sends/sec	The number of priority 1 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		124	Message Fragment P10 Sends/sec	The number of priority 10 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		125	Message Fragment P2 Sends/sec	The number of priority 2 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		126	Message Fragment P3 Sends/sec	The number of priority 3 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		127	Message Fragment P4 Sends/sec	The number of priority 4 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		128	Message Fragment P5 Sends/sec	The number of priority 5 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		129	Message Fragment P6 Sends/sec	The number of priority 6 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		130	Message Fragment P7 Sends/sec	The number of priority 7 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		131	Message Fragment P8 Sends/sec	The number of priority 8 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		132	Message Fragment P9 Sends/sec	The number of priority 9 message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☒
		133	Message Fragment Receives/sec	The number of message fragments received per second in transport receive I/O operations.	☑	☑	☑	☑	☑
		134	Message Fragment Sends/sec	The number of message fragments sent per second in transport send I/O operations.	☑	☑	☑	☑	☑
		135	Msg Fragment Recv Size Avg	The average byte size of message fragments received in transport receive I/O operations.	☑	☑	☑	☑	☑
		136	Msg Fragment Send Size Avg	The average byte size of message fragments sent in transport send I/O operations.	☑	☑	☑	☑	☑
		137	Open Connection Count	The total number of transport connections currently open.	☑	☑	☑	☑	☑

		138	Pending Bytes for Recv I/O	The number of bytes associated with in completed transport receive I/O operations whose message fragments haven't been enqueued (or rejected) yet.	☑	☑	☑	☑	☑
		139	Pending Bytes for Send I/O	The number of buffer bytes associated with message fragments being marshalled, or marshalled and ready to be sent with send I/O operations.	☑	☑	☑	☑	☑
		140	Pending Msg Frags for Recv I/O	The current number of message fragments received in transport receive I/O operations that have not been enqueued (or rejected) yet.	☑	☑	☑	☑	☑
		141	Pending Msg Frags for Send I/O	The current number of message fragments that are being marshalled, or marshalled and ready to be sent via the transport layer.	☑	☑	☑	☑	☑
		142	Receive I/O bytes/sec	The number of transport receive I/O bytes per second.	☑	☑	☑	☑	☑
		143	Receive I/O Len Avg	The average byte length of transport receive I/O operations.	☑	☑	☑	☑	☑
		144	Receive I/Os/sec	The number of transport receives I/O per second. Note that a transport receive I/O may contain more than one message fragment.	☑	☑	☑	☑	☑
		145	Recv I/O Buffer Copies bytes/sec	The rate at which transport receive I/O operations had to move buffer fragments in memory.	☑	☑	☑	☑	☑
		146	Recv I/O Buffer Copies Count	The number of times when transport receive I/O operations had to move buffer fragments in memory.	☑	☑	☑	☑	☑
		147	Send I/O bytes/sec	The number of transport send I/O bytes per second.	☑	☑	☑	☑	☑
		148	Send I/O Len Avg	The average byte length of transport send I/O operations.	☑	☑	☑	☑	☑
		149	Send I/Os/sec	The number of transport send I/Os per second. Note that a transport send I/O may contain more than one message fragment.	☑	☑	☑	☑	☑
		150	AWE Lookup maps/sec	Number of AWE map calls made for pages found in the buffer pool.	☒	☒	☑	☑	☑
		151	AWE stolen maps/sec	Number of AWE map calls made for pages stolen from the buffer pool.	☒	☒	☑	☑	☑

9	SQLServer:Buffer Manager	152	AWE unmap calls/sec	Number of AWE unmap calls.	☒	☒	☑	☑	☑
		153	AWE unmap pages/sec	Number of AWE pages unmapped.	☒	☒	☑	☑	☑
		154	AWE write maps/sec	Number of AWE map calls made for pages to be written to disk.	☒	☒	☑	☑	☑
		155	Background writer pages/sec	Number of pages flushed to enforce the recovery interval settings.	☑	☑	☒	☒	☒
		156	Buffer cache hit ratio	Percentage of pages that were found in the buffer pool without having to incur a read from disk.	☑	☑	☑	☑	☑
		157	Checkpoint pages/sec	Number of pages flushed by checkpoint or other operations that require all dirty pages to be flushed.	☑	☑	☑	☑	☑
		158	Database pages	Number of pages in the buffer pool with database content.	☑	☑	☑	☑	☑
		159	Extension allocated pages	Number of pages occupying buffer pool extension cache.	☑	☒	☒	☒	☒
		160	Extension free pages	Number of pages needed to fill the buffer pool extension cache.	☑	☒	☒	☒	☒
		161	Extension in use as percentage	Percentage of the buffer pool extension paging file occupied by buffer manager pages.	☑	☒	☒	☒	☒
		162	Extension outstanding IO Counter	Number of buffer pool extension page reads/writes outstanding.	☑	☒	☒	☒	☒
		163	Extension page evictions/sec	Number of buffer pool extension page evictions.	☑	☒	☒	☒	☒
		164	Extension page reads/sec	Number of buffer pool extension page reads issued.	☑	☒	☒	☒	☒
		165	Extension page unreferenced time	Average seconds a page will stay in the buffer pool extension without references.	☑	☒	☒	☒	☒
		166	Extension page writes/sec	Number of Extension page writes issued.	☑	☒	☒	☒	☒
		167	Free list stalls/sec	Number of requests that had to wait for a free page.	☑	☑	☑	☑	☑

		168	Free pages	Total number of pages on all free lists.	✗	✗	✓	✓	✓
		169	Integral Controller Slope	The slope that integral controller for the buffer pool last used, times -10 billion	✓	✓	✗	✗	✗
		170	Lazy writes/sec	Number of buffers written by buffer manager's lazy writer.	✓	✓	✓	✓	✓
		171	Page life expectancy	Number of seconds a page will stay in the buffer pool without references.	✓	✓	✓	✓	✓
		172	Page lookups/sec	Number of requests to find a page in the buffer pool.	✓	✓	✓	✓	✓
		173	Page reads/sec	Number of physical database page reads issued.	✓	✓	✓	✓	✓
		174	Page Writes/sec	Number of physical database page writes issued.	✓	✓	✓	✓	✓
		175	Readahead pages/sec	Number of pages read in anticipation of use.	✓	✓	✓	✓	✓
		176	Readahead time/sec	Time (microseconds) spent issuing readahead.	✓	✗	✗	✗	✗
		177	Reserved pages	Number of buffer pool reserved pages.	✗	✗	✓	✓	✓
		178	Stolen pages	Number of pages used for miscellaneous server purpose (including procedure cache).	✗	✗	✓	✓	✓
		179	Target pages	Ideal number of pages in the buffer pool.	✓	✓	✓	✓	✓
		180	Total pages	Number of pages in the buffer pool (includes databases, free, and stolen).	✗	✗	✓	✓	✓
		181	Database pages	Database pages on node.	✓	✓	✓	✓	✓
		182	Foreign pages	Number of pages which are not from NUMA-local memory.	✗	✗	✓	✓	✓
		183	Free pages	Free pages on node.	✗	✗	✓	✓	✓

10	SQLServer:Buffer Node	184	Local node page lookups/sec	Number of lookup requests from this node which were satisfied from this node.	☑	☑	☑	☑	☒
		185	Page life expectancy	Number of seconds a page will stay in the buffer pool without references.	☑	☑	☑	☑	☑
		186	Remote node page lookups/sec	Number of lookup requests from this node which were satisfied from other nodes.	☑	☑	☑	☑	☒
		187	Stolen Pages	Stolen pages on node.	☒	☒	☑	☑	☑
		188	Target Pages	Target pages on node.	☒	☒	☑	☑	☑
		189	Total Pages	Committed pages on node.	☒	☒	☑	☑	☑
11	SQLServer:Buffer Partition	190	Free list empty/sec	Number of times a free page were requested and none were available.	☒	☒	☑	☑	☑
		191	Free list requests/sec	Number of times a free page were requested.	☒	☒	☑	☑	☑
		192	Free pages	Number of pages on partition free list.	☒	☒	☑	☑	☑
12	SQLServer:Catalog Metadata	193	Cache Entries Count	Number of entries in the catalog metadata cache.	☑	☑	☑	☑	☑
		194	Cache Entries Pinned Count	Number of catalog metadata cache entries that are pinned.	☑	☑	☑	☑	☑
		195	Cache Hit Ratio	Ratio between catalog metadata cache hits and lookups.	☑	☑	☑	☑	☑
13	SQLServer:CLR	196	CLR Execution	Total Execution time in CLR (microseconds).	☑	☑	☑	☑	☑
14		197	Active Cursors	Number of active cursors.	☑	☑	☑	☑	☑
		198	Cache Hit Ratio	Ratio between cache hits and lookups.	☑	☑	☑	☑	☑
		199	Cached Cursor Counts	Number of cursors of a given type in the cache.	☑	☑	☑	☑	☑

	SQLServer:Cursor Manager by Type	200	Cursor Cache Use Counts/sec	Times each type of cached cursor has been used.	☑	☑	☑	☑	☑
		201	Cursor memory Usage	Amount of memory consumed by cursors (KB).	☑	☑	☑	☑	☑
		202	Cursor Requests/sec	Number of SQL cursor requests received by server.	☑	☑	☑	☑	☑
		203	Cursor worktable usage	Number of worktables used by cursors.	☑	☑	☑	☑	☑
		204	Number of active cursor plans	Number of cursor plans.	☑	☑	☑	☑	☑
15	SQLServer:Cursor Manager Total	205	Async population count	Number of cursors being populated asynchronously.	☑	☑	☑	☑	☑
		206	Cursor conversion rate	Number of cursor conversions/sec.	☑	☑	☑	☑	☑
		207	Cursor flushes	Total number of times a flush for a cursor xstmt occurred.	☑	☑	☑	☑	☑
16	SQLServer:Database Mirroring	208	Bytes Received/sec	Number of bytes received per second.	☑	☑	☑	☑	☑
		209	Bytes Sent/sec	Number of bytes sent per second.	☑	☑	☑	☑	☑
		210	Log Bytes Received/sec	Number of bytes of log received per second.	☑	☑	☑	☑	☑
		211	Log Bytes Redone from Cache/sec	Number of log bytes which were redone from the Database Mirroring log cache per second.	☑	☑	☑	☑	☒
		212	Log Bytes Sent from Cache/sec	Number of sent log bytes which were sent from the Database Mirroring log cache in the last second.	☑	☑	☑	☑	☒
		213	Log Bytes Sent/sec	Number of bytes of log sent per second.	☑	☑	☑	☑	☑
		214	Log Compressed Bytes Rcvd/sec	Number of compressed bytes of log received in the last second.	☑	☑	☑	☑	☒
		215	Log Compressed Bytes Sent/sec	Number of compressed bytes of log sent in the last second.	☑	☑	☑	☑	☒

		216	Log Harden Time (ms)	Milliseconds log blocks waited to be hardened to disk in the last second.	☑	☑	☑	☑	☒
		217	Log Remaining for Undo KB	Total number of kilobytes of log that remain to be scanned by the new mirror server after failover.	☑	☑	☑	☑	☒
		218	Log Scanned for Undo KB	Total number of kilobytes of log that have been scanned by the new mirror server after failover.	☑	☑	☑	☑	☒
		219	Log Send Flow Control Time (ms)	Milliseconds log stream messages waited for send flow control in the last second.	☑	☑	☑	☑	☒
		220	Log Send Queue KB	Total number of kilobytes of log that have not been sent to the mirror server.	☑	☑	☑	☑	☑
		221	Mirrored Write Transactions/sec	Number of transactions which wrote to the mirrored database in the last second, that waited for log to be sent to the mirror.	☑	☑	☑	☑	☒
		222	Pages Sent/sec	Number of pages sent per second.	☑	☑	☑	☑	☑
		223	Receives/sec	Number of mirroring message receives per second.	☑	☑	☑	☑	☑
		224	Redo Bytes/sec	Number of bytes of log redone by the mirror database per second.	☑	☑	☑	☑	☑
		225	Redo Queue KB	Total number of kilobytes that redo on the mirror database is behind the hardened log.	☑	☑	☑	☑	☑
		226	Send/Receive Ack Time	Milliseconds messages waited for acknowledgement from the partner per second.	☑	☑	☑	☑	☑
		227	Sends/sec	Number of sends initiated per second.	☑	☑	☑	☑	☑
		228	Transaction Delay	Number of milliseconds transaction termination waited for acknowledgement per second.	☑	☑	☑	☑	☑
		229	File Bytes Received/sec	Amount of filestream data received by the availability replica for the database.	☑	☑	☒	☒	☒
		230	Log Bytes Received/sec	Amount of logs received by the availability replica for the database.	☑	☑	☒	☒	☒
		231	Log remaining for undo	The amount of log in kilobytes remaining to finish the undo phase.	☑	☑	☒	☒	☒

17	SQLServer:Database Replica	232	Log Send Queue	Amount of logs in kilobytes that is waiting to be send to the database replica.	☑	☑	☒	☒	☒
		233	Mirrored Write Transactions/sec	Number of transactions which wrote to the mirrored database in the last second, that waited for log to be sent to the mirror.	☑	☑	☒	☒	☒
		234	Recovery Queue	Total number of hardened log in kilobytes that is waiting to be redone on the secondary.	☑	☑	☒	☒	☒
		235	Redo blocked/sec	Number of times redo gets blocked in the last second.	☑	☑	☒	☒	☒
		236	Redo Bytes Remaining	The amount of log in kilobytes remaining to be redone to finish the reverting phase.	☑	☑	☒	☒	☒
		237	Redone Bytes/sec	Amount of log records redone in the last second to catch up the database replica.	☑	☑	☒	☒	☒
		238	Total Log requiring undo	The amount of log in kilobytes that need to be undone.	☑	☑	☒	☒	☒
		239	Transaction Delay	Number of milliseconds transaction termination waited for acknowledgement per second.	☑	☑	☒	☒	☒
		240	Active Transactions	Number of active update transactions for the database.	☑	☑	☑	☑	☑
		241	Backup/Restore Throughput/sec	Read/write throughput for backup/restore of a database.	☑	☑	☑	☑	☑
		242	Bulk Copy Rows/sec	Number of rows bulk copied.	☑	☑	☑	☑	☑
		243	Bulk Copy Throughput/sec	KiloBytes bulk copied.	☑	☑	☑	☑	☑
		244	Commit table entries	The size of the in-memory part of the commit table for the database.	☑	☑	☑	☑	☒
		245	Data File(s) Size (KB)	The cumulative size of all the data files in the database.	☑	☑	☑	☑	☑
		246	DBCC Logical Scan Bytes/sec	Logical read scan rate for DBCC commands.	☑	☑	☑	☑	☑
		247	Group Commit Time/sec	Group stall time (microseconds) per second.	☑	☒	☒	☒	☒

18	SQLServer:Databases	248	Log Bytes Flushed/sec	Total number of log bytes flushed.	☑	☒	☑	☑	☑
		249	Log Cache Hit Ratio	Percentage of log cache reads that were satisfied from the log cache.	☑	☑	☑	☑	☑
		250	Log Cache Reads/sec	Reads performed through the log manager cache.	☑	☑	☑	☑	☑
		251	Log File(s) Size (KB)	The cumulative size of all the log files in the database.	☑	☑	☑	☑	☑
		252	Log File(s) Used Size (KB)	The cumulative used size of all the log files in the database.	☑	☑	☑	☑	☑
		253	Log Flush Wait Time	Total wait time (milliseconds).	☑	☑	☑	☑	☑
		254	Log Flush Wait/sec	Number of commits waiting on log flush.	☑	☑	☑	☑	☑
		255	Log Flush Write Time (ms)	Milliseconds it took to perform the writes of log flushes completed in the last second.	☑	☑	☒	☒	☒
		256	Log Flushes/sec	Number of log flushes.	☑	☑	☑	☑	☑
		257	Log Growths	Total number of log growths for this database.	☑	☑	☑	☑	☑
		258	Log Pool Cache Misses/sec	Log block cache misses from log pool.	☑	☑	☒	☒	☒
		259	Log Pool Disk Reads/sec	Log disk reads via log pool.	☑	☑	☒	☒	☒
		260	Log Pool Requests/sec	Log block requests performed through log pool.	☑	☑	☒	☒	☒
		261	Log Shrinks	Total number of log shrinks for this database.	☑	☑	☑	☑	☑
		262	Log Truncations	Total number of log truncations for this database.	☑	☑	☑	☑	☑
		263	Percent Log Used	The percent of space in the log that is in use.	☑	☑	☑	☑	☑

		264	Repl. Pending Xacts	Number of pending replication transactions in the database.	☑	☑	☑	☑	☑
		265	Repl. Trans. Rate	Replication transaction rate (replicated transactions/sec.).	☑	☑	☑	☑	☑
		266	Shrink Data Movement Bytes/sec	The rate data is being moved by Autoshrink, DBCC SHRINKDATABASE or SHRINKFILE.	☑	☑	☑	☑	☑
		267	Tracked transactions/sec	Number of committed transactions recorded in the commit table for the database.	☑	☑	☑	☑	☒
		268	Transactions/sec	Number of transactions started for the database.	☑	☑	☑	☑	☑
		269	Write Transactions/sec	Number of transactions which wrote to the database in the last second.	☑	☑	☑	☑	☒
		270	XTP Memory Used(KB)	The amount of memory used by XTP in the database.	☑	☒	☒	☒	☒
19	SQLServer:Deprecated Features	271	Usage	Feature usage since last SQL Server startup.	☑	☑	☑	☑	☒
20	SQLServer:Exec Statistics	272	Distributed Query	Statistics relevant to execution of distributed queries.	☑	☑	☑	☑	☑
		273	DTC calls	Statistics relevant to execution of DTC calls.	☑	☑	☑	☑	☑
		274	Extended Procedures	Statistics relevant to execution of XP calls.	☑	☑	☑	☑	☑
		275	OLEDB calls	Statistics relevant to execution of OLEDB calls.	☑	☑	☑	☑	☑
		276	Avg Time delete FileTable item	Average time (in milliseconds) taken to delete a FileTable item.	☑	☑	☒	☒	☒
		277	Avg Time FileTable enumeration	Average time (in milliseconds) taken for a FileTable enumeration request.	☑	☑	☒	☒	☒
		278	Avg Time FileTable handle kill	Average time (in milliseconds) taken to kill a FileTable handle.	☑	☑	☒	☒	☒
		279	Avg Time move FileTable item	Average time (in milliseconds) taken to move a FileTable item.	☑	☑	☒	☒	☒

21	SQLServer:File Table	280	Avg Time per file I/O request	Average time (in milliseconds) spent handling an incoming file I/O request.	☑	☑	☒	☒	☒
		281	Avg Time per file I/O response	Average time (in milliseconds) spent handling an outgoing file I/O response.	☑	☑	☒	☒	☒
		282	Avg Time rename FileTable item	Average time (in milliseconds) taken to rename a FileTable item.	☑	☑	☒	☒	☒
		283	Avg Time to get FileTable item	Average time (in milliseconds) taken to retrieve a FileTable item.	☑	☑	☒	☒	☒
		284	Avg Time update FileTable item	Average time (in milliseconds) taken to update a FileTable item.	☑	☑	☒	☒	☒
		285	FileTable db operations/sec	Total number of database operational events processed by the FileTable store component per second.	☑	☑	☒	☒	☒
		286	FileTable enumeration reqs/sec	Total number of FileTable enumeration requests per second.	☑	☑	☒	☒	☒
		287	FileTable file I/O requests/sec	Total number of incoming FileTable file I/O requests per second.	☑	☑	☒	☒	☒
		288	FileTable file I/O response/sec	Total number of outgoing file I/O responses per second.	☑	☑	☒	☒	☒
		289	FileTable item delete reqs/sec	Total number of FileTable delete item requests per second.	☑	☑	☒	☒	☒
		290	FileTable item get requests/sec	Total number of FileTable retrieve item requests per second.	☑	☑	☒	☒	☒
		291	FileTable item move reqs/sec	Total number of FileTable move item requests per second.	☑	☑	☒	☒	☒
		292	FileTable item rename reqs/sec	Total number of FileTable rename item requests per second.	☑	☑	☒	☒	☒
		293	FileTable item update reqs/sec	Total number of FileTable update item requests per second.	☑	☑	☒	☒	☒
		294	FileTable kill handle ops/sec	Total number of FileTable handle kill operations per second.	☑	☑	☒	☒	☒
		295	FileTable table operations/sec	Total number of table operational events processed by the FileTable store component per second.	☑	☑	☒	☒	☒

22	SQLServer:General Statistics	296	Active Temp Tables	Number of temporary tables/table variables in use.	☑	☑	☑	☑	☑
		297	Connection Reset/sec	Total number of connection resets per second.	☑	☑	☑	☑	☒
		298	Event notification Delayed Drop	Number of event notifications waiting to be dropped by a system thread.	☑	☑	☑	☑	☑
		299	HTTP Authentication Requests	Number of authenticated HTTP requests started per second.	☑	☑	☑	☑	☑
		300	Logical Connections	Number of logical connections to the system.	☑	☑	☑	☑	☑
		301	Logins/sec	Total number of logins started per second.	☑	☑	☑	☑	☑
		302	Logouts/sec	Total number of logouts started per second.	☑	☑	☑	☑	☑
		303	Mars Deadlocks	Number of Mars Deadlocks detected.	☑	☑	☑	☑	☑
		304	Non-automatic yield rate	Number of non-atomic yields per second.	☑	☑	☑	☑	☑
		305	Processes blocked	Number of currently blocked processes.	☑	☑	☑	☑	☑
		306	SOAP Empty Requests	Number of empty SOAP requests started per second.	☑	☑	☑	☑	☑
		307	SOAP Method Invocations	Number of SOAP method invocations started per second.	☑	☑	☑	☑	☑
		308	SOAP Session Initiate Requests	Number of SOAP Session initiate requests started per second.	☑	☑	☑	☑	☑
		309	SOAP Session Terminate Requests	Number of SOAP Session terminate requests started per second.	☑	☑	☑	☑	☑
		310	SOAP SQL Requests	Number of SOAP SQL requests started per second.	☑	☑	☑	☑	☑
		311	SOAP WSDL Requests	Number of SOAP Web Service Description Language requests started per second.	☑	☑	☑	☑	☑

		312	SQL Trace IO Provider Lock Waits	Number of waits for the File IO Provider lock per second.	☑	☑	☑	☑	☑
		313	Temp Tables Creation Rate	Number of temporary tables/table variables created/sec.	☑	☑	☑	☑	☑
		314	Temp Tables for Destruction	Number of temporary tables/table variables waiting to be destroyed by the cleanup system thread.	☑	☑	☑	☑	☑
		315	Tempdb recovery unit id	Number of duplicate tempdb recovery unit id generated.	☑	☑	☑	☑	☒
		316	Tempdb rowset id	Number of duplicate tempdb rowset id generated.	☑	☑	☑	☑	☒
		317	Trace Event Notification Queue	Number of trace event notification instances waiting in the internal queue to be sent thru Service Broker.	☑	☑	☑	☑	☑
		318	Transactions	Number of transaction enlistments (local, dtc, and bound).	☑	☑	☑	☑	☑
		319	User Connections	Number of users connected to the system.	☑	☑	☑	☑	☑
23	SQLServer:HTTP Storage	320	Avg. Bytes/Read	Average number of bytes transferred from the HTTP storage per read.	☑	☒	☒	☒	☒
		321	Avg. Bytes/Transfer	Average number of bytes transferred from the HTTP storage during read or write operations.	☑	☒	☒	☒	☒
		322	Avg. Bytes/write	Average number of bytes transferred from the HTTP storage per write."	☑	☒	☒	☒	☒
		323	Avg. microsec/Read	The average number of microseconds it takes to do each read from the HTTP storage.	☑	☒	☒	☒	☒
		324	Avg. microsec/Transfer	The average number of microseconds it takes to do each transfer to the HTTP storage.	☑	☒	☒	☒	☒
		325	Avg. microsec/Write	The average number of microsecondsit takes to do each write to the HTTP storage.	☑	☒	☒	☒	☒
		326	HTTP Storage IO retry/sec	Number of retry requests sent to the HTTP storage per second.	☑	☒	☒	☒	☒
		327	Outstanding HTTP Storage IO	The total number of outstanding I/Os towards a HTTP storage.	☑	☒	☒	☒	☒

		328	Read Bytes/Sec	Amount of data being transferred from the HTTP storage per second during read operations.	☑	☒	☒	☒	☒
		329	Reads/Sec	Number of reads per second on the HTTP storage.	☑	☒	☒	☒	☒
		330	Total Bytes/Sec	Amount of data being transferred from the HTTP storage per second during read or write operations.	☑	☒	☒	☒	☒
		331	Transfers/Sec	Number of read and write operations per second on the HTTP storage.	☑	☒	☒	☒	☒
		332	Writes Bytes/Sec	Amount of data being transferred from the HTTP storage per second during write operations.	☑	☒	☒	☒	☒
24	SQLServer:Latches	333	Average Latch Wait Time (ms)	Average latch wait time (milliseconds) for latch requests that had to wait.	☑	☑	☑	☑	☑
		334	Latch Waits/sec	Number of latch requests that could not be granted immediately and had to wait before being granted.	☑	☑	☑	☑	☑
		335	Number of SuperLatches	Number of latches that are currently SuperLatches.	☑	☑	☑	☑	☑
		336	SuperLatch Demotions/sec	Number of SuperLatches that have been demoted to regular latches.	☑	☑	☑	☑	☑
		337	SuperLatch Promotions/sec	Number of latches that have been promoted to SuperLatches.	☑	☑	☑	☑	☑
		338	Total Latch Wait Time (ms)	Total latch wait time (milliseconds) for latch requests that had to wait in the last second.	☑	☑	☑	☑	☑
25	SQLServer:Locks	339	Average Wait Time (ms)	The average amount of wait time (milliseconds) for each lock request that resulted in a wait.	☑	☑	☑	☑	☑
		340	Lock Requests/sec	Number of new locks and lock conversions requested from the lock manager.	☑	☑	☑	☑	☑
		341	Lock Timeouts (timeout >0)/sec	Number of lock requests that timed out. This does not include requests for NOWAIT locks.	☑	☑	☑	☑	☑
		342	Lock Timeouts/sec	Number of lock requests that timed out. This includes requests for NOWAIT locks.	☑	☑	☑	☑	☑
		343	Lock Wait Time (ms)	Total wait time (milliseconds) for locks in the last second.	☑	☑	☑	☑	☑

		344	Lock Waits/sec	Number of lock requests that could not be satisfied immediately and required the caller to wait before being granted the lock.	☑	☑	☑	☑	☑
		345	Number of DeadLocks/sec	Number of lock requests that resulted in a deadlock.	☑	☑	☑	☑	☑
26	SQLServer:Memory Broker Clerks	346	Internal benefit	The internal value of memory for entry count pressure, in ms per page per ms, multiplied by 10 billion and truncated to an integer.	☑	☑	☒	☒	☒
		347	Memory broker clerk size	The size of the clerk, in pages	☑	☑	☒	☒	☒
		348	Periodic evictions (pages)	The number of pages evicted from the broker clerk by last periodic eviction.	☑	☑	☒	☒	☒
		349	Pressure evictions (pages/sec)	The number of pages per second evicted from the broker clerk by memory pressure.	☑	☑	☒	☒	☒
		350	Simulation benefit	The value of memory to the clerk, in ms per page per ms, multiplied by 10 billion and truncated to an integer.	☑	☑	☒	☒	☒
		351	Simulation size	The current size of the clerk simulation, in pages.	☑	☑	☒	☒	☒
27	SQLServer:Memory Manager	352	Connection Memory (KB)	Total amount of dynamic memory the server is using for maintaining connections.	☑	☑	☑	☑	☑
		353	Database Cache Memory (KB)	Amount of memory the server is currently using for the database cache.	☑	☑	☒	☒	☒
		354	External benefit of memory	The external value of memory, in ms per page per ms, multiplied by 10 billion and truncated to an integer.	☑	☑	☒	☒	☒
		355	Free Memory (KB)	Amount of memory the server is currently not using.	☑	☑	☒	☒	☒
		356	Granted Workspace Memory (KB)	Total amount of memory granted to executing processes. This memory is used for hash, sort and create index operations.	☑	☑	☑	☑	☑
		357	Lock Blocks	The current number of lock blocks that are in use on the server. Refreshed periodically.	☑	☑	☑	☑	☑
		358	Lock Blocks Allocated	The current number of allocated lock blocks.	☑	☑	☑	☑	☑

		359	Lock Memory (KB)	Total amount of dynamic memory the server is using for locks.	☑	☑	☑	☑	☑
		360	Lock Owner Blocks	The number of lock owner blocks that are currently in use on the server. Refreshed periodically.	☑	☑	☑	☑	☑
		361	Lock Owner Blocks Allocated	The current number of allocated lock owner blocks.	☑	☑	☑	☑	☑
		362	Log Pool Memory (KB)	Total amount of dynamic memory the server is using for Log Pool.	☑	☑	☒	☒	☒
		363	Maximum workspace Memory (KB)	Total amount of memory available for grants to executing processes. This memory is used primarily for hash, sort and create index operations.	☑	☑	☑	☑	☑
		364	Memory Grants Outstanding	Current number of processes that have successfully acquired a workspace memory grant.	☑	☑	☑	☑	☑
		365	Memory Grants Pending	Current number of processes waiting for a workspace memory grant.	☑	☑	☑	☑	☑
		366	Optimizer Memory (KB)	Total amount of dynamic memory the server is using for query optimization.	☑	☑	☑	☑	☑
		367	Reserved Server Memory (KB)	Amount of memory the server has reserved for future usage. This counter shows current unused amount of the initial grant shown in Granted Workspace Memory (KB).	☑	☑	☒	☒	☒
		368	SQL Cache Memory (KB)	Total amount of dynamic memory the server is using for the dynamic SQL cache.	☑	☑	☑	☑	☑
		369	Stolen Server Memory (KB)	Amount of memory the server is currently using for the purposes other than the database pages.	☑	☑	☒	☒	☒
		370	Target Server Memory (KB)	Ideal amount of memory the server is willing to consume.	☑	☑	☑	☑	☑
		371	Total Server Memory (KB)	Total amount of dynamic memory the server is currently consuming.	☑	☑	☑	☑	☑
28	SQLServer:Memory Node	372	Database Node Memory (KB)	Amount of memory the server is using on this node for database pages.	☑	☑	☒	☒	☒
		373	Foreign Node Memory (KB)	Non NUMA-local amount of memory on this node.	☑	☑	☒	☒	☒
		374	Free Node Memory (KB)	Amount of memory the server is not using on this node.	☑	☑	☒	☒	☒

		375	Stolen Node Memory (KB)	Amount of memory the server is using on this node for the purposes other than database pages.	☑	☑	☒	☒	☒
		376	Target Node Memory (KB)	Ideal amount of memory for this node.	☑	☑	☒	☒	☒
		377	Total Node Memory (KB)	Total amount of memory the server has committed on this node.	☑	☑	☒	☒	☒
29	SQLServer:Plan Cache	378	Cache Hit Ratio	Ratio between cache hits and lookups.	☑	☑	☑	☑	☑
		379	Cache Object Counts	Number of cache objects in the cache.	☑	☑	☑	☑	☑
		380	Cache Objects in use	Number of cache objects in use.	☑	☑	☑	☑	☑
		381	Cache Pages	Number of 8k pages used by cache objects.	☑	☑	☑	☑	☑
30	SQLServer:Query Execution	382	Local data access/sec	Total number of local data access per second.	☒	☑	☒	☒	☒
		383	Rem Req Cache Hit Ratio	Ratio between cache hits and lookups.	☒	☑	☒	☒	☒
		384	Remote activations/sec	Total number of remote activations per second.	☒	☑	☒	☒	☒
		385	Remote requests/sec	Total number of remote request per second.	☒	☑	☒	☒	☒
		386	Remote resend requests/sec	Total number of remote resend request per second.	☒	☑	☒	☒	☒
31	SQLServer:Replication Agents	387	Running	The number of replication agents currently running.	☑	☑	☑	☑	☑
32	SQServer:Replication Dist.	388	Dist:Delivered Cmds/sec	The number of commands per second delivered to the Subscriber.	☑	☑	☑	☑	☑
		389	Dist:Delivered Trans/sec	The number of transactions per second delivered to the Subscriber.	☑	☑	☑	☑	☑
		390	Dist:Delivered Latency	The current amount of time, in milliseconds, elapsed from when transactions are delivered to the Distributor to when they are applied at the Subscriber.	☑	☑	☑	☑	☑

33	SQLServer:Replication Logreader	391	Logreader:Delivered Cmds/sec	The number of commands per second delivered to the Distributor.	☑	☑	☑	☑	☑
		392	Logreader:Delivered Trans/sec	The number of transactions per second delivered to the Distributor.	☑	☑	☑	☑	☑
		393	Logreader:Delivered Latency	The current amount of time, in milliseconds, elapsed from when transactions are applied at the Publisher to when they are delivered to the Distributor.	☑	☑	☑	☑	☑
34	SQLServer:Replication Merge	394	Conflicts/sec	The number of conflicts per second occurring during the merge process.	☑	☑	☑	☑	☑
		395	Downloaded Changes/sec	The number of rows per second merged from the Publisher to the Subscriber.	☑	☑	☑	☑	☑
		396	Uploaded Changes/sec	The number of rows per second merged from the Subscriber to the Publisher.	☑	☑	☑	☑	☑
35	SQLServer:Replication Snapshot	397	Snapshot:Delivered Cmds/sec	The number of commands per second delivered to the Distributor.	☑	☑	☑	☑	☑
		398	Snapshot:Delivered Trans/sec	The number of transactions per second delivered to the Distributor.	☑	☑	☑	☑	☑
		399	Active memory grant amount (KB)	Total amount of granted memory in kilobytes in the resource pool.	☑	☑	☑	☑	☒
		400	Active memory grants count	Number of query memory grants in the resource pool.	☑	☑	☑	☑	☒
		401	Avg Disk Read IO (ms)	Average time, in milliseconds, of a read operation from the disk.	☑	☒	☒	☒	☒
		402	Avg Disk Write IO (ms)	Average time, in milliseconds, of a write operation to the disk.	☑	☒	☒	☒	☒
		403	Cache memory target (KB)	Current memory target for cache memory in kilobytes.	☑	☑	☑	☑	☒
		404	Compile memory target (KB)	Current memory target for query compile in kilobytes.	☑	☑	☑	☑	☒
		405	CPU control effect %	Effect of the resource governor on the resource pool calculated as (CPU usage %) / (CPU usage % without RG).	☑	☑	☑	☑	☒

36	SQLServer:Resource Pool Stats	406	CPU usage %	System CPU usage by all requests in the specified instance of the performance object.	☑	☑	☑	☑	☒
		407	CPU usage target %	Target value of 'CPU usage %' for the resource pool based on the configuration settings and the system load.	☑	☑	☑	☑	☒
		408	Disk Read Bytes/sec	Number of bytes read from the disk in the last second.	☑	☒	☒	☑	☒
		409	Disk Read IO Throttled/sec	Number of read operations throttled in the last second.	☑	☒	☒	☑	☒
		410	Disk Read IO/sec	Number of read operations from the disk in the last second.	☑	☒	☒	☑	☒
		411	Disk Write Bytes/sec	Number of bytes written to the disk in the last second.	☑	☒	☒	☑	☒
		412	Disk Write IO Throttled/sec	Number of write operations throttled in the last second.	☑	☒	☒	☑	☒
		413	Disk Write IO/sec	Number of write operations to the disk in the last second.	☑	☒	☒	☑	☒
		414	Max memory (KB)	Maximum amount of memory in kilobytes the resource pool can have based on the settings and server state.	☑	☑	☑	☑	☒
		415	Memory grant timeouts/sec	Number of query memory grant timeouts per second occurring in the resource pool.	☑	☑	☑	☑	☒
		416	Memory grants/sec	Number of query memory grants per second occurring in the resource pool.	☑	☑	☑	☑	☒
		417	Pending memory grants count	Number of queries waiting for memory grants in the resource pool.	☑	☑	☑	☑	☒
		418	Query exec memory target (KB)	Current memory target for query execution memory grant in kilobytes.	☑	☑	☑	☑	☒
		419	Target memory (KB)	Target amount of memory in kilobytes the resource pool is trying to attain based on the settings and server state.	☑	☑	☑	☑	☒
		420	Used memory (KB)	Used amount of memory in kilobytes in the resource pool.	☑	☑	☑	☑	☒

37	SQLServer:SQL Errors	421	Errors/sec	Number of errors/sec.	☑	☑	☑	☒	☑
38	SQLServer:SQL Statistics	422	Auto-Param Attempts/sec	Number of auto-parameterization attempts.	☑	☑	☑	☒	☑
		423	Batch Requests/sec	Number of SQL batch requests received by server.	☑	☑	☑	☑	☑
		424	Failed Auto-Params/sec	Number of failed auto-parameterizations.	☑	☑	☑	☑	☑
		425	Forced Parameterizations/sec	Number of statements parameterized by forced parameterization per second.	☑	☑	☑	☑	☑
		426	Guided plan executions/sec	Number of plan executions per second in which the query plan has been generated by using a plan guide.	☑	☑	☑	☑	☒
		427	Misguided plan executions/sec	Number of plan executions per second in which a plan guide could not be honored during plan generation. The plan guide was disregarded and normal compilation was used to generate the executed plan.	☑	☑	☑	☑	☒
		428	Safe Auto-Params/sec	Number of safe auto-parameterizations.	☑	☑	☑	☑	☑
		429	SQL Attention rate	Number of attentions per second.	☑	☑	☑	☑	☑
		430	SQL Compilations/sec	Number of SQL compilations.	☑	☑	☑	☑	☑
		431	SQL Re-Compilations/sec	Number of SQL re-compiles.	☑	☑	☑	☑	☑
		432	Unsafe Auto-Params/sec	Number of unsafe auto-parameterizations.	☑	☑	☑	☑	☑
		433	Free Space in tempdb (KB)	The free space in tempdb in KB.	☑	☑	☑	☑	☑
		434	Longest Transaction Running Time	The longest running time of any transaction in seconds.	☑	☑	☑	☑	☑
		435	NonSnapshot Version Transactions	The total number of active non-snapshot transactions that generate version records.	☑	☑	☑	☑	☑

39	SQLServer:Transactions	436	Snapshot Transactions	The total number of active snapshot transactions.	☑	☑	☑	☑	☑
		437	Transactions	The total number of active transactions.	☑	☑	☑	☑	☑
		438	Update conflict ratio	The fraction of update snapshot transactions that have update conflicts to the total number of update snapshot transactions.	☑	☑	☑	☑	☑
		439	Update Snapshot Transactions	The total number of active snapshot transactions that do updates.	☑	☑	☑	☑	☑
		440	Version Cleanup rate (KB/s)	The version cleanup rate in KB per seconds.	☑	☑	☑	☑	☑
		441	Version Generation rate (KB/s)	The version generation rate in KB per seconds.	☑	☑	☑	☑	☑
		442	Version Store Size (KB)	The size of the version store in KB.	☑	☑	☑	☑	☑
		443	Version Store unit count	Number of unit in Version Store.	☑	☑	☑	☑	☑
		444	Version Store unit creation	Creation of new unit in Version Store.	☑	☑	☑	☑	☑
		445	Version Store unit truncation	Truncation of unit in Version Store.	☑	☑	☑	☑	☑
40	SQLServer:User Settable	446	Query	As defined by the user.	☑	☑	☑	☑	☑
41	SQLServer:Wait Statistics	447	Lock waits	Statistics for processes waiting on a lock.	☑	☑	☑	☑	☑
		448	Log buffer waits	Statistics for processes waiting for log buffer to be available.	☑	☑	☑	☑	☑
		449	Log write waits	Statistics for processes waiting for log buffer to be written.	☑	☑	☑	☑	☑
		450	Memory grant queue waits	Statistics for processes waiting for memory grant to become available.	☑	☑	☑	☑	☑
		451	Network IO waits	Statistics relevant to wait on network IO.	☑	☑	☑	☑	☑

		452	Non-Page latch waits	Statistics relevant to non-page latches.	☑	☑	☑	☑	☑
		453	Page IO latch waits	Statistics relevant to page IO latches.	☑	☑	☑	☑	☑
		454	Page latch waits	Statistics relevant to page latches, not including IO latches.	☑	☑	☑	☑	☑
		455	Tread-safe memory object waits	Statistics for processes waiting on thread-safe memory allocators.	☑	☑	☑	☑	☑
		456	Transaction ownership waits	Statistics relevant to processes synchronizing access to transaction.	☑	☑	☑	☑	☑
		457	Wait for worker	Statistics relevant to processes waiting for worker to become available.	☑	☑	☑	☑	☑
		458	Workspace synchronization waits	Statistics relevant to processes synchronizing access to workspace.	☑	☑	☑	☑	☑
42	SQLServer:Workload Group Stats	459	Active parallel threads	Number of threads used by parallel queries in the workload group. Serial queries and the main thread of parallel queries are not included in this number.	☑	☑	☑	☑	☒
		460	Active requests	Number of currently running requests in the workload group.	☑	☑	☑	☑	☒
		461	Blocked tasks	Number of blocked tasks in the workload group.	☑	☑	☑	☑	☒
		462	CPU Usage %	System CPU usage by all requests in the specified instance of the performance object.	☑	☑	☑	☑	☒
		463	Max request cpu time (ms)	Maximum CPU time in milliseconds used by a request in the workload group.	☑	☑	☑	☑	☒
		464	Max request memory grant (KB)	Maximum value of memory grant in kilobytes used by a query in the workload group.	☑	☑	☑	☑	☒
		465	Query optimizations/sec	Number of query optimizations per second occurring in the workload group.	☑	☑	☑	☑	☒
		466	Queued requests	Number of requests waiting in the queue due to resource governor limits in the workload group.	☑	☑	☑	☑	☒
		467	Reduced memory grants/sec	Number of queries per second getting less than ideal amount of memory in the workload group.	☑	☑	☑	☑	☒

		468	Requests completed/sec	Number of completed requests per second in the workload group.	☑	☑	☑	☑	☒
		469	Suboptimal plans/sec	Number of suboptimal query plans generated per second in the workload group.	☑	☑	☑	☑	☒