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| --- | --- |
| **Flag** | **Trace Flag Description** (underlined are sp\_configure’able) |
| **-1** | Sets trace flags for all connections. |
| 105 | SQL 6.5 – To over ride limitation of max 16 tables or sub queries allowed in a single select statement. |
| 106 | SQL 6.5/7 – Disables line number information for syntax errors. |
| 107 | SQL 6.5/7/8 – Interprets numbers with a decimal point as float instead of decimal. KB 203787 |
| 110 | SQL 6.5 – Turns off ANSI select characteristics. KB [152032](http://support.microsoft.com/kb/152032) |
| 146 | Consider using when replaying against SQL 8.0, to avoid an attempt to set an encrypted connection. |
| 168 | SQL 9/10 – On querying through a view that uses the ORDER BY clause, the result are still returned in random order. KB 926292 |
| 204 | SQL 6.5 – Backward compatibility switch that enables non-ansi standard behavior. E.g. previously SQL server ignored trailing blanks in the like statement and allowed queries that contained aggregated functions to have items in the group by clause that were not in the select list. |
| 205 | SQL 7/8 – Report when a statistics-dependent stored procedure is being recompiled as a result of AutoStat. KB [195565](http://support.microsoft.com/kb/195565) |
| 206 | SQL 6.5 – Provides backward compatibility for the set user statement. KB 160732 |
| 208 | SET QUOTED IDENTIFIER ON. |
| 210 | SQL 9 – Error when you run a query against a view: "An error occurred while executing batch". KB [945892](http://support.microsoft.com/kb/945892) |
| 212 | SQL 9 – Query may run much slower when compared to SQL 8 when you use a cursor to run the query. KB 951184 |
| 237 | Tells SQL Server to use correlated sub-queries in Non-ANSI standard backward compatibility mode. |
| 242 | Provides backward compatibility for correlated subqueries where non-ANSI-standard results are desired. |
| 243 | Provides backward compatibility for nullability behavior. When set, SQL Server has the same nullability violation behavior as that of a ver 4.2:   * Processing of the entire batch is terminated if the nullability error (inserting NULL into a NOT NULL field) can be detected at compile time. * Processing of offending row is skipped, but the command continues if the nullability violation is detected at run time.   Behavior of SQL Server is now more consistent because nullability checks are made at run time and a nullability violation results in the command terminating and the batch or transaction process continuing. |
| 244 | Disables checking for allowed interim constraint violations. By default, SQL Server checks for and allows interim constraint violations. An interim constraint violation is caused by a change that removes the violation such that the constraint is met, all within a single statement and transaction. SQL Server checks for interim constraint violations for self-referencing DELETE statements, INSERT, and multi-row UPDATE statements. This checking requires more work tables. With this trace flag you can disallow interim constraint violations, thus requiring fewer work tables. |
| 246 | Derived or NULL columns must be explicitly named in a select…INTO or create view statement when not done they raise an error. This flag avoids that. |
| 253 | Prevents ad-hoc query plans to stay in cache. |
| 257 | Will invoke a print algorithm on the XML output before returning it to make the XML result more readable. |
| **260** | Prints versioning information about extended stored procedure dynamic-link libraries (DLLs). For more information about **\_\_GetXpVersion()**, see [Creating Extended Stored Procedures](http://msdn.microsoft.com/en-us/library/ms164627.aspx). **Scope:** global or session |
| 262 | SQL 7 – Trailing spaces are no longer truncated from literal strings in CASE statements.       KB 891116 |
| 302 | Should be used with 310 to show the actual join ordering. Prints information about whether the statistics page is used, the actual selectivity (if available), and what SQL Server estimated the physical and logical I/O would be for the indexes. |
| 310 | Prints information about join order. Index selection information is also available in a more readable format using SET SHOWPLAN\_ALL, as described in the SET statement. |
| 320 | Disables join-order heuristics used in ANSI joins. To see join-order heuristics use flag 310. SQL Server uses join-order heuristics to reduce the no’ of permutations when using the best join order. |
| 323 | SQL 6.5 – Reports on the use of update statements using UPDATE in place. Shows a detailed description of the various update methods used. |
| 325 | Prints information about the cost of using a non-clustered index or a sort to process an ORDER BY clause. |
| 326 | Prints information about estimated & actual costs of sorts. Instructs server to use arithmetic averaging when calculating density instead of a geometric weighted average when updating statistics. Useful for building better stats when an index has skew on the leading column. Use only for updating the stats of a table/index with known skewed data. |
| 330 | Enables full output when using the SET SHOWPLAN\_ALL option, which gives detailed information about joins. |
| 342 | Disables the costing of pseudo-merge joins, thus significantly reducing time spent on the parse for certain types of large, multi-table joins. One can also use SET FORCEPLAN ON to disable the costing of pseudo-merge joins because the query is forced to use the order specified in the FROM clause. |
| 345 | Increase the accuracy of choice of optimum order when you join 6 or more tables. |
| 506 | Enforces SQL-92 standards regarding null values for comparisons between variables and parameters. Any comparison of variables and parameters that contain a NULL always results in a NULL. |
| 610 | SQL 10 – Enable the potential for minimal-logging when:   * Bulk loading into an empty clustered index, with no nonclustered indexes * Bulk loading into a non-empty heap, with no nonclustered indexes |
| 611 | SQL 9 – When turned on, each lock escalation is recorded in the error log along with the SQL Server handle number. |
| 652 | Disables read ahead for the server. |
| 653 | Disables read ahead for the current connection. |
| 661 | Disables the ghost record removal process. A ghost record is the result of a delete operation. When you delete a record, the deleted record is kept as a ghost record. Later, the deleted record is purged by the ghost record removal process. When you disable this process, the deleted record is not purged. Therefore, the space that the deleted record consumes is not freed. This behavior affects space consumption and the performance of scan operations. **SCOPE**: Global. If you turn off this trace flag, the ghost record removal process works correctly. KB 920093 |
| 698 | SQL 9 – Performance of INSERT operations against a table with an identity column may be slow when compared to SQL 8. KB [940545](http://support.microsoft.com/kb/940545) |
| 699 | Turn off transaction logging for the entire SQL dataserver. |
| 806 | Cause 'DBCC-style' page auditing to be performed whenever a database page is read into the buffer pool. This is useful to catch cases where pages are being corrupted in memory and then written out to disk with a new page checksum. When they're read back in the checksum will look correct, but the page is corrupt (because of the previous memory corruption). This page auditing goes someway to catching this - especially on non-Enterprise Edition systems that don't have the 'checksum sniffer'. |
| 809 | SQL 8 – Limits the amount of Lazy write activity. |
| 815 | SQL 8/9 – Enables latch enforcement. SQL Server 8 (with service pack 4) and SQL Server 9 can perform latch enforcement for data pages found in the buffer pool cache. Latch enforcement changes the virtual memory protection state while database page status changes from "clean" to "dirty" ("dirty" means modified through INSERT, UPDATE or DELETE operation). If an attempt is made to modify a data page while latch enforcement is set, it causes an exception and creates a mini-dump in SQL Server installation's LOG directory. Microsoft support can examine the contents of such mini-dump to determine the cause of the exception. In order to modify the data page the connection must first acquire a modification latch. Once the data modification latch is acquired the page protection is changed to read-write. Once the modification latch is released the page protection changes back to read-only. |
| 818 | SQL 8 - Enables in memory ring buffer used to track last 2048 successful write operations. |
| 828 | SQL 8 - When enabled checkpoint ignores the recovery interval target and keeps steady I/O otherwise it uses recovery interval setting as a target for the length of time that checkpoint will take – KB 906121. |
| 830 | SQL 9 – Disable the reporting of CPU Drift errors in the SQL Server errorlog like SQL Server has encountered 2 occurrence(s) of I/O requests taking longer than 15 seconds to complete |
| 831 | Protect unchanged pages in the buffer pool to catch memory corruptions. |
| 834 | SQL 8+ – Causes SQL Server to use Windows large-page allocations for the memory that is allocated for the buffer pool. The page size varies depending on the hardware platform, but the page size may be from 2 MB to 16 MB. Large pages are allocated at startup and are kept throughout the lifetime of the process. Trace flag 834 improves performance by increasing the efficiency of the translation look-aside buffer (TLB) in the CPU. Applies only to 64-bit versions & you should have the Lock pages in memory right granted to turn this on. It may prevent the server from starting if memory is fragmented and large pages cannot be allocated. Therefore its better suited dedicated hosts. Scope **STARTUP**.  Details - [http://msdn2.microsoft.com/en-us/library/aa366720.aspx /](http://msdn2.microsoft.com/en-us/library/aa366720.aspx%20/) http://support.microsoft.com/kb/920093 |
| 835 | SQL 9 / 10 – On 64 bit SQL Server it turns off Lock pages in memory. |
| 836 | Causes SQL Server to size the buffer pool at startup based on the value of the **max server mem** option instead of based on the total physical memory. You can use trace flag 836 to reduce the number of buffer descriptors that are allocated at startup in 32-bit AWE mode. Scope Startup. |
| 840 | SQL 9 – When trace turned on, SQL Server can perform larger I/O extent reads to populate the buffer pool when SQL Server starts this populates the buffer pool faster. Additionally, the larger I/O extent reads improve the initial query compilation and the response time when SQL Server starts. KB 912322 |
| 842 | Use sys.dm\_os\_memory\_node\_access\_stats to verify local vs. foreign memory under NUMA configurations after turning on this flag. |
| 845 | SQL 9 / 10 - On 64 bit SQL Server non ENT. This turns on Lock pages in memory.  Startup time of SQL Server takes longer because SQL Server allocates all memory up to the Max Server Memory setting. Scope Startup KB [970070](http://support.microsoft.com/kb/970070). |
| 902 | SQL server may not start after (un) install of updates. When sql server holds at the script upgrade mode. KB 2163980. Mode examples details at  <http://social.technet.microsoft.com/wiki/contents/articles/2973.microsoft-sql-server-2008-r2-sp1-release-notes.aspx?Sort=MostUseful&PageIndex=1>  &  <http://blogs.msdn.com/b/karthick_pk/archive/2010/11/18/sqlserver2008-script-level-upgrade-for-database-master-failed-because-upgrade-step-sqlagent100-msdb-upgrade-sql-encountered-error-574-state-0-severity-16.aspx> |
| 1106 | SQL 9 - Used space in tempdb increases continuously when you run a query that creates internal objects in tempdb. KB 947204. |
| 1117 | Grows all data files at once, else it goes in turns. |
| **1118** | Switches allocations in tempDB from 1pg at a time (for first 8 pages) to one extent. There is now a cache of temp tables. When a new temp table is created on a cold system it uses the same mechanism as for SQL 8. When it is dropped though, instead of all the pages being deallocated completely, one IAM page & one data page are left allocated, then the temp table is put into a special cache. Subsequent temp table creations will look in the cache to see if they can just grab a pre-created temp table. If so, this avoids accessing the allocation bitmaps completely. The temp table cache isn't huge (32 tables), but this can still lead to a big drop in latch contention in tempdb. <http://www.sqlskills.com/BLOGS/PAUL/post/Misconceptions-around-TF-1118.aspx> |
| **1119** | Turns off mixed extent allocation. |
| **1140** | Continuous tempdb growth after upgrading SQL 2005 pre-SP2 to SP3/SP4 or to SQL 2008 or newer **KB Article:**<http://support.microsoft.com/kb/2000471> **First Added:** SQL 2005 SP2 build 3166 **Versions:** SQL 2005 SP3+, SQL 2008, SQL 2008 R2, SQL 2012 |
| 1180 | SQL 7 - Forces allocation to use free pages for text or image data and maintain efficiency of storage. 1197 applies only in the case of SQL 7 – SP3. Helpful in case when DBCC SHRINKFILE and SHRINKDATABASE commands may not work because of sparsely populated text, ntext, or image columns |
| 1197 |
| 1200 | Prints detailed lock information as every request for a lock is made (the process ID and type of lock requested). |
| 1202 | Insert blocked lock requests into syslocks. |
| **1204** | Returns resources and types of locks participating in a deadlock and command affected. **Scope:** global |
| **1205** | More detailed information about the command being executed at the time of a deadlock. Documented in SQL 7 BOL. |
| 1206 | Used to complement flag 1204 by displaying other locks held by deadlock parties. |
| **1211** | Disables lock escalation based on memory pressure, or based on number of locks. The SQL Server Database Engine will not escalate row or page locks to table locks.  Using this trace flag can generate excessive numbers of locks. This can slow the performance of the Database Engine, or cause 1204 errors (unable to allocate lock resource) because of insufficient memory. For more information, see [Lock Escalation (Database Engine)](http://msdn.microsoft.com/en-us/library/ms184286.aspx).  If both trace flag 1211 and 1224 are set, 1211 takes precedence over 1224. However, because trace flag 1211 prevents escalation in every case, even under memory pressure, we recommend that you use 1224. This helps avoid "out-of-locks" errors when many locks are being used. **Scope**: global or session |
| **1216** | SQL 7 - Disables Health reporting. Lock monitor when detects a (worker thread) resource level blocking scenario. If a SPID that owns a lock is currently queued to the scheduler, because all the assigned worker threads have been created and all the assigned worker threads are in an un-resolvable wait state, the following error message is written to the SQL Server error log:  Error 1223: Process ID %d:%d cannot acquire lock "%s" on resource %s because a potential deadlock exists on Scheduler %d for the resource. Process ID %d:% d holds a lock "%h" on this resource. |
| **1222** | Returns the resources & types of locks that are participating in a deadlock and also the current command affected, in an XML format that does not comply with any XSD schema. **Scope**: global |
| **1224** | Disables lock escalation based on the number of locks. However, memory pressure can still activate lock escalation (when > 40%). The Database Engine escalates row or page locks to table (or partition) locks if the amount of memory used by lock objects exceeds one of the following conditions:   * 40% of the memory that is used by Db Engine, exclusive of memory allocation using AWE. This is applicable when the **locks** parameter of **sp\_configure** is set to 0. * Forty percent of the lock memory that is configured by using the **locks** parameter of **sp\_configure**.   If both trace flag 1211 & 1224 are set, 1211 takes precedence. However, because trace flag 1211 prevents escalation in every case, even under memory pressure, it’s recommend to use 1224 which helps avoid "out-of-locks" errors when many locks are being used.  **Note:** Lock escalation to the table- or HoBT-level granularity can also be controlled by using the LOCK\_ESCALATION option of the [ALTER TABLE](http://msdn.microsoft.com/en-us/library/ms190273.aspx) statement.  **Scope:** global / session |
| **1261** | SQL 8 - Disables Health reporting. Lock monitor when detects a (worker thread) resource level blocking scenario. If a SPID that owns a lock is currently queued to the scheduler, because all the assigned worker threads have been created and all the assigned worker threads are in an un-resolvable wait state, the following error message is written to the SQL Server error log: Error 1229: Process ID %d:%d owns resources that are blocking processes on scheduler %d. |
| **1400** | SQL 9 RTM – Enables creation of database mirroring endpoint, which is required for setting up and using database mirroring. Scope: startup |
| **1448** | SQL 9/10 - When the principal database is running exposed or is isolated the Log Reader Agent will waits for log records to harden on the mirror before replicating them to the Distributor. When publisher is started with trace flag 1448, the Log Reader Agent can continue replicating changes regardless of the mirroring state. **Scope** – GLOBAL. KB 937041 |
| **1449** | When you use SNAC to connect to an instance of a principal server in a database mirroring session: "The connection attempted to fail over to a server that does not have a failover partner". KB 936179 |
| **1462** | SQL 10 - Turns off log stream compression and effectively reverts the behavior back to ver 9. |
| 1603 | Use standard disk I/O (i.e. turn off asynchronous I/O). |
| **1604** | **Once enabled at start up makes SQL Server output information regarding memory allocation requests.** |
| 1609 | Turns on the unpacking and checking of RPC information in Open Data Services. Used only when applications depend on the old behavior. |
| 1610 | Boot the SQL dataserver with TCP\_NODELAY enabled. |
| 1611 | If possible, pin shared memory -- check errorlog for success/failure. |
| 1613 | Set affinity of the SQL data server engine's onto particular CPUs -- usually pins engine 0 to processor 0, engine 1 to processor 1... |
| 1704 | Prints information when a temporary table is created or dropped. |
| **1717** | Causes new objects being created to be system objects. |
| **1802** | SQL 9 - After detaching a database that resides on network-attached storage, you cannot reattach the SQL Server database. Scope: STARTUP – KB 922804 |
| **1806** | Disables instant file initialization. |
| **1807** | SQL 9/10 - Allows creating a database file on a mapped or UNC network location. Not required with SQL 2008 R2. |
| 1903 | SQL 8 - When you capture a SQL Profiler trace in a file and then you try to import the trace files into tables by using the **fn\_trace\_gettable** function no rows may be returned. KB [911678](http://support.microsoft.com/kb/911678) |
| 1905 |  |
| 2301 | Makes your optimizer work harder by enabling advanced optimizations that are specific to decision support queries, applies to processing of large data sets. |
| 2328 | SQL 9+ - Makes cardinality estimates upon resulting selectivity.  The reasoning for this is that one or more of the constants may be statement parameters, which would change from one execution of the statement to the next. |
| 2330 | Stops the collection of statistics for sys.db\_index\_usage\_stats. |
| 2335 | SQL 9+ Amount of memory available to SQL Server affects the execution plan generated though SQL Server generates the most optimal plan based on this value, but occasionally it may generate an inefficient plan for a specific query when you configure a large value for **max server memory**. Using 2335 as a startup parameter will cause SQL Server to generate a plan that is more conservative in terms of memory consumption when executing the query. It does not limit how much memory SQL Server can use. The memory configured for SQL Server will still be used by data cache, query execution & other consumers. KB 2413549. |
| 2340 | SQL 9/10 - Query processor may introduce a sort operation for optimization, though not required where the particular plan only touches a smaller number of rows. Setup cost for the sort operation may outweigh its benefits thus resulting in poor performance. KB [2009160](http://support.microsoft.com/kb/2009160) |
| 2371 | SQL 10.5 SP1 – Before this automatic statistics were triggered when a column would get modifications exceeding 20% of the # of rows in the table. On enabling this flag the standard 20% changes to a dynamic value if table has more than 25000 rows & reduces as the count increases. |
| 2382 | SQL 8 - Statistics collected for system tables. |
| 2388 | SQL 9 - Detect when the leading column of a statistics object is ascending and mark or brand it as ascending. Statistics object that belong to an ascending column is branded as “ascending” after three updates on the statistics. It’s necessary to update it with ascending column values so that when the third update occurs, SQL Server brands the statistics object as ascending. Flag 2388 helps to check the statistics’ brand, when turned on the result of the DBCC SHOW\_STATISTICS, has an additional column called **Leading column type** with the brand of the column. |
| 2389 | SQL 9 - Tracks nature of columns by subsequent statistics updates. When SQL Server determines that the statistics increase three times, the column is branded ascending. The statistics will be updated automatically at query compile. |
| 2390 | SQL 9 - Does the same like 2389 even if ascending nature of the column is not known and -- never enable without 2389. |
| 2440 | SQL 10 - Parallel query execution strategy on partitioned tables. SQL 9 used single thread per partition parallel query execution strategy. In SQL 10, multiple threads can be allocated to a single partition by turning on this flag. |
| 2470 | Slow performance when an AFTER trigger runs on a partitioned table in SQL Server 2008 R2 or in SQL Server 2012 **KB Article:**<http://support.microsoft.com/kb/2606883> **First Added:** SQL 2008 R2 SP1 CU3 or SQL 2012 CU1 **Versions:** SQL 2008 R2, SQL 2012 |
| 2505 | SQL 7 - Prevents DBCC TRACEON 208, SPID 10 errors from appearing in the error log. KB [243352](http://support.microsoft.com/kb/243352) |
| 2508 | Disables parallel non-clustered index checking for DBCC CHECKTABLE. |
| 2509 | Used with DBCC CHECKTABLE to see the total count of forward records in a table |
| 2514 | Used with DBCC CHECKTABLE to see the total count of ghost records in a table |
| 2520 | Forces DBCC HELP to return syntax of undocumented DBCC statements. If 2520 is not turned on, DBCC HELP will refuse to give you the syntax stating: "No help available for DBCC statement 'undocumented statement'". dbcc help ('?') |
| **2521** | SQL 7 SP2 - Facilitates capturing a Sqlservr.exe user-mode crash dump for postmortem analysis. |
| **2528** | SQL 8+ Disables parallel checking of objects by DBCC CHECKDB, CHECKFILEGROUP and CHECKTABLE. By default, the degree of parallelism is automatically determined by the query processor. The maximum degree of parallelism is configured just like that of parallel queries. For more information, see [max degree of parallelism Option](http://msdn.microsoft.com/en-us/library/ms181007.aspx).  Parallel DBCC should typically be left enabled. For DBCC CHECKDB, the query processor reevaluates and automatically adjusts parallelism with each table or batch of tables checked. Sometimes, checking may start when the server is almost idle. An administrator who knows that the load will increase before checking is complete may want to manually decrease or disable parallelism. Disabling parallel checking of DBCC can cause it to take much longer to complete and if DBCC is run with the TABLOCK feature enabled and parallelism set off, tables may be locked for longer periods of time. <http://msdn.microsoft.com/en-us/library/ms176064.aspx> **Scope**: global / session |
| 2537 | SQL 9/10 - Allows function ::fn\_dblog to look inside all logs (not just the active log). |
| 2542 | SQL 8 - Used with Sqldumper.exe to get certain dumps. In range 254x – 255x. |
| 2544 | Creates a full memory dump. |
| 2546 | All threads in SQL Server process are dumped (mini dump). |
| 2549 | SQL 10.5 – DBCC CHECKDB builds an internal list of pages to read per unique disk drive across all database files. This logic determines unique disk drives based on the drive letter of the physical file name of each file. If the underlying disks are actually unique when the drive letters or not, the DBCC CHECKDB command would treat these as one disk. When this trace flag is enabled, each database file is assumed to be on a unique disk drive. Do not use this trace flag unless you know that each file is based on a unique physical disk. KB 2634571, Scope – Any |
| 2551 | SQL 9 – Creates a full filtered dump which is additional information for the dump file. |
| 2562 | SQL 10.5 – As an effect the space requirements for tempdb may increase as much as 5% or more of the user database that is being processed. Therefore, it’s recommend to pre-size tempdb to at least 5% of scanned database.  When enabled it runs the DBCC CHECKDB command in a single "batch" regardless of the number of indexes in the database. By default, the DBCC CHECKDB command tries to minimize tempdb resources by limiting the number of indexes or "facts" that it generates by using a "batches" concept. This trace flag forces all processing into one batch.  This flag improves the internal processing for determining which pages to read from the database. This reduces the contention on the DBCC\_MULTIOBJECT\_SCANNER latch. KB 2634571, Scope – Any |
| 2566 | SQL 9 - DBCC CHECKDB takes longer to run on an x64-based computer compared to a 32-bit computer. Kb - 945770 |
| 2701 | SQL 6.5 - Sets the @@ERROR system function to 50000 for RAISERROR messages with severity levels of 10 or less. When disabled, sets the @@ERROR system function to 0 for RAISERROR messages with severity levels of 10 or less. |
| 2861 | SQL 8 - Cache query plans for queries that have a cost of zero or near to zero. When turned on, **fn\_get\_sql** function can return the SQL text for activities that have zero cost plans [kb 325607](http://support.microsoft.com/kb/325607) Tip: Avoid Using Trace Flag 2861 to Cache Zero-Cost Query Plans <http://www.microsoft.com/technet/abouttn/subscriptions/flash/tips/tips_042705.mspx> |
| 3001 | Stops sending backup entries into MSDB. |
| 3004 | Shows information about backups and file creations use with 3605 to direct to error log.  <http://blogs.msdn.com/b/psssql/archive/2008/01/23/how-it-works-what-is-restore-backup-doing.aspx>  <http://blogs.msdn.com/b/sql_pfe_blog/archive/2009/12/23/how-and-why-to-enable-instant-file-initialization.aspx> |
| 3014 | Provides more information related backups / file streams. <http://blogs.msdn.com/b/psssql/archive/2008/02/06/how-it-works-how-does-sql-server-backup-and-restore-select-transfer-sizes.aspx> |
| 3023 | How to enable the CHECKSUM option if backup utilities do not expose the option **KB Article:**<http://support.microsoft.com/kb/2656988> **First Added:** SQL 2005 **Versions:** SQL 2005, SQL 2008, SQL 2008 R2, SQL 2012 |
| 3028 |  |
| 3031 | SQL 9 - Will turn the NO\_LOG and TRUNCATE\_ONLY options into checkpoints in all recovery modes. Read more: <http://www.sqlskills.com/BLOGS/KIMBERLY/category/Transaction-Log.aspx#ixzz1VYfrEdbS> |
| 3042 | SQL 10+ Prevents pre-allocation of space while running compressed backups. kb2001026 |
| 3104 | Causes SQL Server to bypass checking for free space. |
| 3101 | Slow performance when you restore a database in SQL Server 2008 R2, in SQL Server 2008 or in SQL Server 2012 if CDC is enabled **KB Article:**<http://support.microsoft.com/kb/2567366> **First Added:** SQL 2008 SP3 CU5, SQL 2008 R2 CU10, SQL 2012 CU2 **Versions:** SQL 2008+ |
| 3106 | Required to move sys databases. |
| 3111 | Cause LogMgr::ValidateBackedupBlock to be skipped during backup and restore operations. |
| **3117** | SQL 9 - SQL Server 2005 tries to restore the log files and the data files in a single step which some third-party snapshot backup utilities do not support. Turing on 3117 does things the SQL 8 way multiple-step restore process. KB 915385   * Restore the file or the file group from the full database backup. The database remains in a restoring state. * Restore the transaction log or logs from the log backup chain. |
| **3205** | If a tape drive supports hardware compression, either the DUMP or BACKUP statement uses it. With this trace flag, you can disable hardware compression for tape drivers. This is useful when you want to exchange tapes with other sites or tape drives that do not support compression. **Scope**: global / session |
| **3213** | Trace SQL Server activity during backup process so that we will come to know which part of backup process is taking more time.  <http://blogs.msdn.com/b/psssql/archive/2008/02/06/how-it-works-how-does-sql-server-backup-and-restore-select-transfer-sizes.aspx> |
| 3222 | Disables the read ahead that is used by the [recovery](http://www.sql-server-performance.com/rd_traceflags.asp) operation during roll forward operations. |
| **3226** | Suppress BACKUP COMPLETED log entries going to WIN and SQL logs. **Scope**: global |
| 3228 |  |
| 3231 | SQL 8/9 - Will turn the NO\_LOG and TRUNCATE\_ONLY options into no-ops in FULL/BULK\_LOGGED recovery mode, and will clear the log in SIMPLE recovery mode. When set, BACKUP LOG with TRUNCATE\_ONLY and BACKUP LOG with NO\_LOG do not allow a log backup to run if the database's recovery model is FULL or BULK\_LOGGED. Read more: <http://www.sqlskills.com/BLOGS/KIMBERLY/category/Transaction-Log.aspx#ixzz1VYfbCw00> |
| 3282 | SQL 6.5 - Used after backup restoration fails. KB Q215458 |
| 3422 | Cause auditing of transaction log records as they're read (during transaction rollback or log recovery). This is useful because there is no equivalent to page checksums for transaction log records and so no way to detect whether log records are being corrupted e careful with these trace flags - I don't recommend using them unless you are experiencing corruptions that you can't diagnose. Turning them on will cause a big CPU hit because of the extra auditing that's happening. |
| 3502 | Tracks CHECKPOINT - Prints a message to the log at the start and end of each checkpoint. |
| 3503 | Indicates whether the checkpoint at the end of automatic recovery was skipped for a database (this applies only to read-only [databases](http://www.sql-server-performance.com/rd_traceflags.asp)). |
| 3504 | For internal testing. Will raise a bogus log-out-of-space condition from checkpoint() |
| 3505 | Disables automatic checkpoints. May increase recovery time and can prevent log space reuse until the next checkpoint is issued. Make sure to issue manual checkpoints on all read/write databases at appropriate time intervals. **Note** does not prevent the internal checkpoints that are issued by certain commands, such as **BACKUP**. |
| 3601 | Stack trace when error raised. Also see 3603 |
| 3602 | Records all error and warning messages sent to the client. |
| **3603** | SQL Server fails to install on tricore, Bypass SMT check is enabled, flags are added via registry. Also see 3601. |
| **3604** | Sends trace output to the client. Used only when setting trace flags with DBCC TRACEON and DBCC TRACEOFF. |
| **3605** | Sends trace output to the error log.  (if SQL Server is started from CMD output also appears on the screen) |
| **3607** | SQL 7+ Skips the recovery of databases on the startup of SQL Server and clears the TempDB. Setting this flag lets you get past certain crashes, but there is a chance that some data will be lost |
| **3608** | SQL 7+ Prevents Instance from automatically starting-recovering any database except **master**. Databases will be started and recovered when accessed. Some features, such as snapshot isolation and read committed snapshot, might not work.  Works when SQL Server is started as an application. |
| 3609 | Skips the creation of the **tempdb** database at startup. Use this trace flag if the device or devices on which **tempdb** resides are problematic or problems exist in the **model** database. |
| 3610 | SQL 9 - Divide by zero to result in NULL instead of error. |
| **3625** | Limits the amount of information returned in error messages. For more information, see [Metadata Visibility Configuration](http://msdn.microsoft.com/en-us/library/ms187113.aspx). **Scope**: global. |
| 3626 | Turns on tracking of the CPU data for the sysprocesses table. |
| 3635 | Print diagnostic information. Trace Flag 3635 Diagnostics are written to the console that started it. There are not written to the errorlog, even if 3605 is turned on. |
| 3640 | Eliminates sending DONE\_IN\_PROC messages to client for each statement in stored procedure. This is similar to the session setting of SET NOCOUNT ON, but when set as a trace flag, every client session is handled this way. |
| 3654 | Allocations to stack. |
| 3659 |  |
| 3688 | SQL 9+, Avoids messages with ID 19030 and message ID 19031 are logged in the Errorlog when many traces are started & stopped. KB 922578. **Scope**: global. |
| 3689 | Logs extended errors to errorlog when network disconnect occurs, turned off by default. Will dump out the socket error code this can sometimes give you a clue as to the root cause. |
| 3913 | SQL 7/8 - SQL Server does not update the **rowcnt** column of the **sysindexes** system table until the transaction is committed. When turned on the optimizer gets row count information from in-memory metadata that is saved to **sysindexes** system table when the transaction commits. |
| 4001 | Very verbose logging of each login attempt to the error log. Includes tons of information. |
| 4010 | Allows only shared memory connections to the SQL Server. Meaning, you will only be able to connect from the server machine itself. Client connections over TCP/IP or named pipes will not happen. |
| **4013** | Writes an entry to error log when a new connection is established. For each connection that occurs, the trace flag writes two entries that look like:  Login: sa saSQL Query Analyzer(local)ODBCmaster, server process ID (SPID): 57, kernel process ID (KPID): 57. Login: sa XANADUsaSQL Query Analyzer(local)ODBCmaster, server process ID (SPID): 57, kernel process ID (KPID): 57. |
| 4020 | Boot without recover. |
| **4022** | Used to bypass automatically started (startup) procedures, this is a subset of startup option –f. TIP: Each SP consumes one worker thread while executing so you may prefer to make one startup procedure that calls others. |
| 4029 | Logs extended errors to errorlog when network disconnect occurs, turned off by default. Will dump out the socket error code this can sometimes give you a clue as to the root cause. |
| 4030 | Prints both a byte and ASCII representation of the receive buffer. Used when you want to see what queries a client is sending to SQL Server. You can use this trace flag if you experience a protection violation and want to determine which statement caused it. Typically, you can set this flag globally or use SQL Server Enterprise Manager. You can also use DBCC INPUTBUFFER. |
| 4031 | Prints both a byte and ASCII representation of the send buffers (what SQL Server sends back to the client). You can also use DBCC OUTPUTBUFFER. |
| 4032 | Traces the SQL commands coming in from the client. When enabled with 3605 it will direct those all to the error log. |
| 4044 | SA account can be unlocked by rebooting server with trace flag. If sa (or sso\_role) password is lost, add this to your RUN\_serverfile. This will generate new password when server started. |
| 4052 | SQL 9+ Prints TDS packets sent to the client (output) to console.– Startup only. |
| 4055 | SQL 9+ Prints TDS packets received from the client to console.– Startup only. |
| 4102 | SQL 9 - Query performance is slow if the execution plan of the query contains semi join operators Typically, semi join operators are generated when the query contains the IN keyword or the EXISTS keyword. Enable flag 4102 and 4118 to overcome this. KB – 940128 |
| 4103 |  |
| 4104 | SQL 9 - Overestimating cardinality of JOIN operator. When additional join predicates are involved, this problem may increase the estimated cost of the JOIN operator to the point where the query optimizer chooses a different join order. When the query optimizer chooses a different join order, SQL 9 system performance may be slow. KB - 920346 |
| 4105 |  |
| 4106 |  |
| 4107 | SQL 9 - When you run a query that references a partitioned table, query performance may decrease. KB 923849 |
| 4108 |  |
| 4109 |  |
| 4110 |  |
| 4111 |  |
| 4112 |  |
| 4115 |  |
| 4116 | SQL 9 - Query runs slowly when using joins between a local and a remote table. KB 950880 |
| 4117 | SQL 9 - Blocking issues occur when updating rows in a table. KB [948445](http://support.microsoft.com/kb/948445) |
| 4118 | SQL 9 - Query performance is slow if the execution plan of the query contains semi join operators Typically, semi join operators are generated when the query contains the IN keyword or the EXISTS keyword. Enable flag 4102 and 4118 to overcome this. KB 940128 |
| 4119 |  |
| 4120 |  |
| 4101 | SQL 9 - Query that involves an outer join operation runs very slowly. However, if you use the FORCE ORDER query hint in the query, the query runs much faster. Additionally, the execution plan of the query contains the following text in the **Warnings** column:  NO JOIN PREDICATE. |
| 4121 |
| **4122** |  |
| **4123** | Query that has many outer joins takes a long time to compile in SQL Server 2005 **KB Article:**<http://support.microsoft.com/kb/943060> **First Added:** SQL 2005 SP2 CU4 **Versions:** SQL 2005 |
| **4124** |  |
| **4125** | SQL 9 - Query may take more time to finish if using an inner join to join a derived table that uses DISTINCT keyword. KB 949854 |
| **4126** |  |
| **4127** | SQL 9 - Compilation time of some queries is very long in an x64-based version. Basically its more than execution time because more memory allocations are necessary in the compilation process. Kb 953569 |
| 4128 |  |
| 4129 |  |
| **4131** |  |
| **4133** | SQL 9/10 - Size of error log file grows very quickly when query notifications are created and destroyed in a high ratio. KB [958006](http://support.microsoft.com/kb/958006) |
| **4134** | Incorrect results or constraint violation when you run a SELECT or DML statement that uses the row\_number function and a parallel execution plan in SQL Server 2008 **Purpose 2:** Results may change every time that you run a parallel query in SQL Server 2005, in SQL Server 2008, or in SQL Server 2008 R2 if the query uses a ranking function and if the computer has eight or more CPUs **KB Article 1:**<http://support.microsoft.com/kb/2589980> **KB Article 2:**<http://support.microsoft.com/kb/2546901> **First Added:** SQL 2008 CU6 or SQL 2008 SP1 CU2 **Versions:** SQL 2008 |
| **4135** | SQL 10 - Disables optimization in Query optimizer KB 960770 |
| **4136** | Disables parameter sniffing (<http://blogs.msdn.com/b/queryoptteam/archive/2006/03/31/565991.aspx>(http://blogs.msdn.com/b/queryoptteam/archive/2006/03/31/565991.aspx)) which is equivalent to adding an OPTIMIZE FOR UNKNOWN hint to each query which references a parameter. KB 980653 |
| **4137** | FIX: Poor performance when you run a query that contains correlated AND predicates in SQL Server 2008 or in SQL Server 2008 R2 or in SQL Server 2012. KB 2658214 |
| **4138** | A query may take a long time to run if the query optimizer uses the Top operator in SQL Server 2008 R2 or in SQL Server 2012. KB 2667211 |
| **4199** | Over time there were multiple fixes, each controlled with a different trace flag. This can make troubleshooting query performance difficult and time-consuming. To improve the troubleshooting process, trace flag 4199 was added in CuP 6 for SQL Server 2005 SP3, CuP 7 for SQL Server 2008, CuP 7 for SQL Server 2008 SP1, and SQL Server 2008 R2. This one trace flag can be used to enable all the fixes that were previously made for the query processor under many trace flags. In addition, all future query processor fixes will be controlled by using this trace flag. **Scope**: global / session.   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | **KB article** | **Flag** | **KB article** | **Flag** | **KB article** | **Flag** | **KB article** | **Flag** | | [318530](http://support.microsoft.com/kb/318530) | 4101 | [926024](http://support.microsoft.com/kb/926024) | 4108 | [942659](http://support.microsoft.com/kb/942659) | 4119 | [953569](http://support.microsoft.com/kb/953569) | 4127 | | [940128](http://support.microsoft.com/kb/940128) | 4102 | [926773](http://support.microsoft.com/kb/926773) | 4109 | [953948](http://support.microsoft.com/kb/953948) | 4120 | [955694](http://support.microsoft.com/kb/955694) | 4128 | | [919905](http://support.microsoft.com/kb/919905) | 4103 | [933724](http://support.microsoft.com/kb/933724) | 4110 | [942444](http://support.microsoft.com/kb/942444) | 4121 | [957872](http://support.microsoft.com/kb/957872) |  | | [920346](http://support.microsoft.com/kb/920346) | 4104 | [934065](http://support.microsoft.com/kb/934065) | 4111 | [946020](http://support.microsoft.com/kb/946020) | 4122 | [958547](http://support.microsoft.com/kb/958547) | 4129 | | [920347](http://support.microsoft.com/kb/920347) | 4105 | [946793](http://support.microsoft.com/kb/946793) | 4115 | [948248](http://support.microsoft.com/kb/948248) | 4124 | [956686](http://support.microsoft.com/kb/956686) | 4131 | | [922438](http://support.microsoft.com/kb/922438) | 4106 | [950880](http://support.microsoft.com/kb/950880) | 4116 | [949854](http://support.microsoft.com/kb/949854) | 4125 | [958006](http://support.microsoft.com/kb/958006) | 4133 | | [923849](http://support.microsoft.com/kb/923849) | 4107 | [948445](http://support.microsoft.com/kb/948445) | 4117 | [959013](http://support.microsoft.com/kb/959013) | 4126 | [960770](http://support.microsoft.com/kb/960770) | 4135\* | | 2276330 |  | 2698639 |  | 2649913 |  | 2260502 |  | |
| **4606** | Over comes SA password by startup.  KB 936892 / Disables password policy check during server startup. |
| **4610** | When you use trace flag 4618 together with trace flag 4610, the number of entries in the cache store is limited to 8,192. When the limit is reached, SQL 2005 removes some entries from the TokenAndPermUserStore cache store. KB 959823. |
| **4612** | Disable the ring buffer logging - no new entries will be made into the ring buffer. |
| **4613** | Generate a minidump file whenever an entry is logged into the ring buffer. |
| **4614** | Enables SQL Server authenticated logins that use Windows domain password policy enforcement to log on to the instance even though the SQL Server service account is locked out or disabled on the Windows domain controller. KB 925744. |
| **4616** | Makes server-level metadata visible to application roles. In SQL Server, an application role cannot access metadata outside its own database because application roles are not associated with a server-level principal. This is a change of behavior from earlier versions of SQL Server. Setting this global flag disables the new restrictions, and allows for application roles to access server-level metadata. **Scope**: global |
| 4618 | Limits number of entries per user cache store to 1024. It may incur a small CPU overhead as when removing old cache entries when new entries are inserted. It performs this action to limit the size of the cache store growth. However, the CPU overhead is spread over time. Kb 933564 |
| 4621 | SQL 9 – After 4610 & 4618 you can still customize the quota for TokenAndPermUserStore cache store that is based on the current workload.  KB 959823 |
| 5101 | Forces all I/O requests to go through engine 0. This removes the contention between processors but could create a bottleneck if engine 0 becomes busy with non-I/O tasks. For more information...[5101/5102.](http://dba.fyicenter.com/Interview-Questions/SYBASE/What_is_Trace_Flag_Definitions_in_Sybase.html#1.3.4#1.3.4) |
| 5102 | Prevents engine 0 from running any non-affinitied tasks. For more information...[5101/5102.](http://dba.fyicenter.com/Interview-Questions/SYBASE/What_is_Trace_Flag_Definitions_in_Sybase.html#1.3.4#1.3.4) |
| **5302** | Alters default behavior of select…INTO (and other processes) that lock system tables for the duration of the transaction. This trace flag disables such locking during an implicit transaction. |
| **6527** | Disables generation of a memory dump on the first occurrence of an out-of-memory exception in CLR integration. By default, SQL Server generates a small memory dump on the first occurrence of an out-of-memory exception in the CLR.  The behavior of the trace flag is as follows:   * If this is used as a startup trace flag, a memory dump is never generated. However, a memory dump may be generated if other trace flags are used. * If this trace flag is enabled on a running server, a memory dump will not be automatically generated from that point on. However, if a memory dump has already been generated due to an out-of-memory exception in the CLR, this trace flag will have no effect.   **Scope**: global |
| **7103** | Disable table lock promotion for text columns.  KB 230044 |
| 7300 | Retrieves extended information about any error you encounter when you execute a distributed query. |
| 7501 | Dynamic cursors are used by default on forward-only cursors. Dynamic cursors are faster than in earlier versions and no longer require unique indexes. 75401 4disables dynamic cursor enhancements and reverts to version 6.0 behavior. |
| 7502 | Disables the caching of cursor plans for extended stored procedures. |
| 7505 | Enables version 6.x handling of return codes when calling dbcursorfetchex and the resulting cursor position follows the end of the cursor result set. |
| 7525 | SQL 8 - Reverts to ver 7 behavior of closing nonstatic cursors regardless of the SET CURSOR\_CLOSE\_ON\_COMMIT state. |
| 7601  7603  7604  7605 | Helps in gathering more information in full text search by turning on full text tracing which gathers information on indexing process using the error log. |
| 7608 | Performance fix for slow full text population with a composite clustered index **KB Article:**<http://support.microsoft.com/kb/938672> **First Added:** SQL 2005 SP2 CU3 **Versions:** SQL 2005, SQL 2008, SQL 2008 R2, SQL 2012 |
| 7613 | SQL 9 - Search results are missing when performing a full-text search operation on Win SharePoint Services 2.0 site after upgrading. KB [927643](http://support.microsoft.com/kb/927643) |
| 7614 | SQL 9 - Full-text index population for the indexed view is very slow. KB 928537 |
| 7646 | SQL 10 - Avoids blocking when using full text indexing. An issue we experienced that full text can be slow when there is a high number of updates to the index and is caused by blocking on the docidfilter internal table. |
| **7806** | SQL 9 - Enables a dedicated administrator connection on SQL Express, DAC resources are not reserved by default.  **Scope**: global. |
| 8002 | Allows changing the meaning of affinity mask so that it is treated like a process affinity. KB 818769 |
| 8004 | SQL server to create a mini-dump once you enable 2551 and a out of memory condition is hit. |
| 8010 | SQL Server services cannot be stopped on a computer that has SQL Server 2008 R2 Express Edition installed **KB Article:**<http://support.microsoft.com/kb/2633271> **First Added:** SQL 2008 R2 SP1 CU4 **Versions:** SQL 2008 R2 |
| 8011 | Disables the collection of additional diagnostic information for Resource Monitor. You can use the information in this ring buffer to diagnose out-of-memory conditions. **Scope** GLOBAL. |
| 8012 | Records an event in the schedule ring buffer every time that one of the following events occurs:   * A scheduler switches context to another worker. * A worker is suspended or resumed. * A worker enters the preemptive mode or the non-preemptive mode.   You can use the diagnostic information in this ring buffer to analyze scheduling problems. For example, you can use the information in this ring buffer to troubleshoot problems when SQL Server stops responding. Trace flag 8012 disables recording of events for schedulers. **Scope** Startup. |
| 8015 | SQL 9 - CPU utilization of a CPU in a single node increases to 100 percent when you use SQL Server 2005 on a multiprocessor computer that uses NUMA architecture. **Scope** - Startup KB [948450](http://support.microsoft.com/kb/948450) |
| 8017 | **upgrade version conflict** <http://social.msdn.microsoft.com/Forums/eu/sqlexpress/thread/dd6fdc16-9d8d-4186-9549-85ba4c322d10>  and <http://connect.microsoft.com/SQLServer/feedback/details/407692/indicateur-de-trace-8017-reported-while-upgrading-from-ssee2005-to-ssee2008> |
| 8018 | Disables the creation of the ring buffer, and no exception information is recorded. The exception ring buffer records the last 256 exceptions that are raised on a node. Each record contains some information about the error and contains a stack trace. A record is added to the ring buffer when an exception is raised. **Scope** Startup |
| 8019 | Disables stack collection during the record creation, has no effect if trace flag 8018 is turned on. Disabling the exception ring buffer makes it more difficult to diagnose problems that are related to internal server errors. **Scope** Startup |
| 8020 | SQL Server uses the size of the working set when SQL Server interprets the global memory state signals from the operating system. Trace flag 8020 removes the size of the working set from consideration when SQL Server interprets the global memory state signals. If you use this trace flag incorrectly, heavy paging occurs, and the performance is poor. Therefore, contact Microsoft Support before you use. **Scope** Startup. |
| 8030 | SQL 9 - Occurs only on 64-bit servers with 16+ GB of physical memory. On SQL 9 query performance may degrade with time and when you query the **sys.dm\_os\_wait\_stats** dynamic management view, you may notice that there are many rows in which the values of the **wait\_type** column are SOS\_RESERVEDMEMBLOCKLIST or DBCC MEMORYSTATUS. This situation indicates that many multipage allocations exist. KB [917035](http://support.microsoft.com/kb/917035) |
| **8033** | SQL 9 - Disable the reporting of CPU Drift errors in the SQL Server error log like time stamp counter of CPU on scheduler id 1 is not synchronized with other CPUs. |
| **8038** | SQL 9+ Database engine & SSRS use SQLOS which exposes an internal timer which if set to a 1ms granularity, more power consumption may occur on Windows client. 8038 avoids it affecting the output of some DMV’s. **Scope** Startup KB [972767](http://support.microsoft.com/kb/972767) |
| **8048** | Newer hardware with multi-core CPUs can present more than 8 CPUs within a single NUMA node. Microsoft has observed that when you approach and exceed 8 CPUs per node the NODE based partitioning may not scale as well for specific query patterns. However, using trace flag 8048 (startup parameter only requiring restart of the SQL Server process) all NODE based partitioning is upgraded to CPU based partitioning. Remember this requires more memory overhead but can provide performance increases on these systems.  **HOW DO I KNOW IF I NEED THE TRACE FLAG?**  The issue is commonly identified by looking as the DMVs *dm\_os\_wait\_stats* and *dm\_os\_spin\_stats* for types (CMEMTHREAD and SOS\_SUSPEND\_QUEUE). Microsoft CSS usually sees the spins jump into the trillions and the waits become a hot spot.  <http://blogs.msdn.com/b/psssql/archive/2011/09/01/sql-server-2008-2008-r2-on-newer-machines-with-more-than-8-cpus-presented-per-numa-node-may-need-trace-flag-8048.aspx> |
| **8049** | SQL 9+ Startup only – Allows use of 1ms times even when patched. Check 8038 for details. KB [972767](http://support.microsoft.com/kb/972767) |
| **8202** | Used to replicate UPDATE as DELETE/INSERT pair at the publisher. i.e. UPDATE commands at the publisher can be run as an "on-page DELETE/INSERT" or a "full DELETE/INSERT". If the UPDATE command is run as an "on-page DELETE/INSERT," the Logreader send UDPATE command to the subscriber, If the UPDATE command is run as a "full DELETE/INSERT," the Logreader send UPDATE as DELETE/INSERT Pair. If you turn on trace flag 8202, then UPDATE commands at the publisher will be always send to the subscriber as DELETE/INSERT pair. |
| 8206 | SQL 8 - Supports stored procedure execution with a user specified owner name for SQL Server subscribers or without owner qualification for heterogeneous subscribers. |
| 8203 | Display statement and transaction locks on a deadlock error. |
| 8207 | Enables singleton updates for Transactional Replication, released with SQL Server 8 SP 1. KB 302341. |
| 8446 | Databases in SQL 8 do not have a Service Broker ID. If you restore these databases on SQL 9 by using the WITH NORECOVERY option, these databases will not be upgraded causing mirroring & log-shipping configurations to fail. KB 959008. |
| 8501 | Writes detailed information about Ms-DTC context & state changes to the log. |
| 8599 | Allows you to use a save-point within a distributed transaction. |
| **8602** | Ignore index hints that are specified in query/procedure. |
| **8649** | Forces //ism by setting the cost threshold for parallelism from 1 to 0. |
| 8679 | Prevents the SQL Server optimizer from using a Hash Match Team operator. |
| 8687 | Used to disable query parallelism. |
| 8721 | Dumps information into the error log when AutoStat has been run. |
| **8722** | Disable all other types of hints. This includes the OPTION clause. |
| **8744** | Disables pre-fetching for the **Nested Loops** operator. Incorrect use of this trace flag may cause additional physical reads when SQL Server executes plans that contain the **Nested Loops** operator. For more information about the **Nested Loops** operator, see the "Logical and physical operators reference" topic in SQL Server 9 BOL. You can turn on trace flag 8744 at startup or in a user session. When you turn on trace flag 8744 at startup, the trace flag has global scope. When you turn on trace flag 8744 in a user session, the trace flag has session scope. |
| **8755** | Disable any locking hints like READONLY. Allows SQL Server to dynamically select the best locking hint for the query. |
| **8765** | Allows use of variable length data, from ODBC driver; fixes the issue of a field returning the wrong data length. |
| 8783 | Allows DELETE, INSERT, and UPDATE statements to honor the SET ROWCOUNT ON setting when enabled. |
| 8816 | Logs every two-digit year conversion to a four-digit year. |
| 9059 | SQL 8 - Turns back behavior to SP3 after a SP4 installation, this allows to choose an index seek when comparing numeric columns or numeric constants that are of different precision or scale; else would have to change schema/code. |
| 9082 | SQL 9 - Stored procedure using views, perform slow compared to ver 8 if views use JOIN operator and contain sub queries. KB 942906 |
| 9134 | SQL 8 - Does additional reads to test if the page is allocated & linked correctly this checks IAM & PFS. Fixes error 601 for queries under Isolation level read uncommitted. In case performance is affected (because of a bug) apply SP4. |
| 9204 | When enabled and a plan is compiled or recompiled there is a listing of statistics which is being fully loaded & used to produce cardinality and distribution estimates for some plan alternative or other. |
| 9259 | SQL 9/10 - An access violation occurs on running a query marked by the following message and a dump in the log folder: KB 970279 / 971490  Msg 0, Level 11, State 0, Line 0 - A severe error occurred on the current command. The results, if any, should be discarded. Msg 0, Level 20, State 0, Line 0 - A severe error occurred on the current command. The results, if any, should be discarded. |
| 9292 | When enabled the query analyzer provides a report of statistics objects while compiling / recompiling the query. Only header is loaded for the potentially useful statistics. |
| 9268 | SQL 8 - When SQL Server runs a parameterized query that contains several IN clauses, each with a large number of values, SQL Server may return the following error message after a minute or more of high CPU utilization: KB 325658  Server: Msg 8623, Level 16, State 1 Internal Query Processor Error: The query processor could not produce a query plan. Contact your primary support provider for more information. |
| 9485 | SQL 11 cu 2 - Reverts original permissions for DBCC SHOW\_STATISTICS i.e. allows for users who have SELECT permissions to run the DBCC SHOW\_STATISTICS command in case the following conditions are true (KB [2683304](http://support.microsoft.com/kb/2683304)):  Users have SELECT permissions on all columns in the statistics object.  Users have SELECT permissions on all columns in a filter condition if the filter exists. |
| 9532 | SQL 11 CTP3 - to get more than 1 availability group replica in CTP3 **Scope** Startup. |