[optimize for ad hoc workloads (server configuration option) - SQL Server | Microsoft Learn](https://learn.microsoft.com/en-us/sql/database-engine/configure-windows/optimize-for-ad-hoc-workloads-server-configuration-option?view=sql-server-ver16)

The **optimize for ad hoc workloads** option is used to improve the efficiency of the plan cache for workloads that contain many single use ad hoc batches. When this option is set to 1, the Database Engine stores a small compiled plan stub in the plan cache when a batch is compiled for the first time, instead of the full compiled plan. This option might help to relieve memory pressure by not allowing the plan cache to become filled with compiled plans that aren't reused. However, enabling this option might affect your ability to troubleshoot single-use plans.

The compiled plan stub allows the Database Engine to recognize that this ad hoc batch was compiled previously, and only stores a compiled plan stub. When this batch is invoked (compiled or executed) again, the Database Engine compiles the batch, removes the compiled plan stub from the plan cache, and adds the full compiled plan to the plan cache.

You can find compiled plan stubs by querying the sys.dm\_exec\_cached\_plans catalog view and looking for "Compiled Plan" in the cacheobjtype column. The stub has a unique plan\_handle. The compiled plan stub doesn't have an execution plan associated with it, and querying for the plan handle doesn't return a graphical or XML showplan.

[Trace Flag 8032](https://learn.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver16) reverts the cache limit parameters to the SQL Server 2005 (9.x) RTM setting, which in general allows caches to be larger. Use this setting when frequently reused cache entries don't fit into the cache and when the **optimize for ad hoc workloads** option failed to resolve the problem with plan cache.

**Warning**

Trace Flag 8032 can cause poor performance if large caches make less memory available for other memory consumers, such as the buffer pool.