Cloud SQL (https://cloud.google.com/sql/)
Documentation (https://cloud.google.com/sql/docs/)
SQL Server (https://cloud.google.com/sql/docs/sqlserver/) Guides

Configuring database flags

MySQL (https://cloud.google.com/sql/docs/mysql/flags) | PostgreSQL
(https://cloud.google.com/sql/docs/postgres/flags) | **SQL Server**

Beta

This feature is in a pre-release state and might change or have limited support. For more information, see the
product launch stages (https://cloud.google.com/products/#product-launch-stages).

This page describes how to configure database flags for Cloud SQL, and lists which flags you
can set for your instance. You use database flags to adjust SQL Server parameters and options,
to configure and tune your instance.

When you set, remove, or modify a flag for an instance, the instance might be restarted. The
flag value is then persisted for the instance until you remove it. If the instance is the source of a
replica, the replica will also restart to align with the current configuration of the instance.

Configuring database flags

Setting a database flag

CONSOLE	GCLOUD	CURL

1. In the Google Cloud Console (https://console.cloud.google.com/project/_/sql/instances), create a
   new Cloud Console project, or open an existing project by selecting the project name.

   ★ **Important:** You should be aware that some resource identifiers (such as project IDs) might be
      retained beyond the life of your project. For this reason, avoid storing sensitive information in
      resource identifiers.

   ...see naming guidelines

2. Open the instance and click **Edit**.

3. Scroll down to the **Flags** section.

4. To set a flag that has not been set on the instance before, click **Add item**, choose the flag from the drop-down menu, and set its value.

5. Click **Save** to save your changes.

6. Confirm your changes under **Flags** on the Overview page.

Clearing all flags to their default value

CONSOLE   GCLOUD   CURL

1. In the Google Cloud Console (https://console.cloud.google.com/project/_/sql/instances), create a new Cloud Console project, or open an existing project by selecting the project name.

★   **Important:** You should be aware that some resource identifiers (such as project IDs) might be retained beyond the life of your project. For this reason, avoid storing sensitive information in resource identifiers.

   ...see naming guidelines

2. Open the instance and click **Edit**.

3. Open the **Database flags** section.

4. Click the **X** next to all of the flags shown.

5. Click **Save** to save your changes.

Viewing current values of database flags

Determining what database flags have been set for an instance

To see what flags have been set for a Cloud SQL instance:

CONSOLE   GCLOUD   CURL

1. In the Google Cloud Console (https://console.cloud.google.com/project/_/sql/instances), create a new Cloud Console project, or open an existing project by selecting the project name.

> ★ **Important:** You should be aware that some resource identifiers (such as project IDs) might be retained beyond the life of your project. For this reason, avoid storing sensitive information in resource identifiers.
>
> ...see naming guidelines
>
> 2. Select the instance to open its **Instance Overview** page.
>
>   The database flags that have been set are listed under the **Database flags** section.

Supported flags

Cloud SQL Flag	Type Acceptable Values and Notes	Restart Required?	In Beta?
1204 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on`|`off`	No	Yes
1222 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on`|`off`	No	Yes
1224 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on`|`off`	No	Yes
2528 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on`|`off`	No	Yes
3205 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on`|`off`	No	Yes

3226 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on|off`	No	Yes
3625 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on|off`	Yes	Yes
4199 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on|off`	No	Yes
4616 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on|off`	No	Yes
7806 (trace flag) (https://docs.microsoft.com/en-us/sql/t-sql/database-console-commands/dbcc-traceon-trace-flags-transact-sql?view=sql-server-ver15#trace-flags)	`boolean` `on|off`	Yes	Yes
access check cache bucket count (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/access-check-cache-server-configuration-options?view=sql-server-ver15)	`integer` `0 ... 65536`	No	Yes
access check cache quota (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/access-check-cache-server-configuration-options?view=sql-server-ver15)	`integer` `0 ...` `2147483647`	No	Yes
affinity mask (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/affinity-mask-server-configuration-option?view=sql-server-ver15)	`integer` `2147483648` `...` `2147483647`	No	Yes
agent xps (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/agent-xps-server-configuration-option?view=sql-server-ver15)	`boolean` `on|off`	No	Yes
automatic soft-numa disabled (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/soft-numa-sql-server?view=sql-server-ver15)	`boolean` `on|off`	Yes	Yes

cost threshold for parallelism (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-cost-threshold-for-parallelism-server-configuration-option?view=sql-server-ver15)	`integer` `0 … 32767`	No	Yes
contained database authentication (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/contained-database-authentication-server-configuration-option?view=sql-server-ver15)	`boolean` `on|off`	No	Yes
cross db ownership chaining (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/cross-db-ownership-chaining-server-configuration-option?view=sql-server-ver15)	`boolean` `on|off`	No	Yes
cursor threshold (https://docs.microsoft.com/sql/database-engine/configure-windows/configure-the-cursor-threshold-server-configuration-option?view=sql-server-ver15)	`integer` `-1 …` `2147483647`	No	Yes
default full-text language (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-default-full-text-language-server-configuration-option?view=sql-server-ver15)	`integer` `0 …` `2147483647`	No	Yes
default language (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-default-language-server-configuration-option?view=sql-server-ver15)	`integer` `0 …` `2147483647`	No	Yes
default trace enabled (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/default-trace-enabled-server-configuration-option?view=sql-server-ver15)	`boolean` `on|off`	No	Yes
disallow results from triggers (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/disallow-results-from-triggers-server-configuration-option?view=sql-server-ver15)	`boolean` `on|off`	No	Yes
external scripts enabled (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/external-scripts-enabled-server-configuration-option?view=sql-server-ver15)	`boolean` `on|off`	Yes	Yes
ft crawl bandwidth (max)	`integer`	No	Yes

(https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/ft-crawl-bandwidth-server-configuration-option?view=sql-server-ver15)	`0 … 32767`		
ft crawl bandwidth (min) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/ft-crawl-bandwidth-server-configuration-option?view=sql-server-ver15)	`integer` `0 … 32767`	No	Yes
ft notify bandwidth (max) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/ft-notify-bandwidth-server-configuration-option?view=sql-server-ver15)	`integer` `0 … 32767`	No	Yes
ft notify bandwidth (min) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/ft-notify-bandwidth-server-configuration-option?view=sql-server-ver15)	`integer` `0 … 32767`	No	Yes
fill factor (%) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-fill-factor-server-configuration-option?view=sql-server-ver15)	`integer` `0 … 100`	No	Yes
index create memory (kb) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-index-create-memory-server-configuration-option?view=sql-server-ver15)	`integer` `704 … 2147483647`	No	Yes
locks (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-locks-server-configuration-option?view=sql-server-ver15)	`integer` `5000 … 2147483647`	Yes	Yes
max server memory (mb) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/server-memory-server-configuration-options?view=sql-server-ver15)	`integer` `128 … 2147483647`	No	Yes
max text repl size (b) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-max-text-repl-size-server-configuration-option?view=sql-server-ver15)	`integer` `-1 … 2147483647`	No	Yes
max worker threads	`integer` `128 … 65535`	No	Yes

(https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-max-worker-threads-server-configuration-option?view=sql-server-ver15)

nested triggers (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-nested-triggers-server-configuration-option?view=sql-server-ver15)	`boolean on|off`	No	Yes
optimize for ad hoc workloads (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/optimize-for-ad-hoc-workloads-server-configuration-option?view=sql-server-ver15)	`boolean on|off`	No	Yes
ph timeout (s) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/ph-timeout-server-configuration-option?view=sql-server-ver15)	`integer 1 … 3600`	No	Yes
query governor cost limit (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-query-governor-cost-limit-server-configuration-option?view=sql-server-ver15)	`integer 0 … 2147483647`	No	Yes
query wait (s) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-query-wait-server-configuration-option?view=sql-server-ver15)	`integer -1 … 2147483647`	No	Yes
recovery interval (min) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-recovery-interval-server-configuration-option?view=sql-server-ver15)	`integer 0 … 32767`	No	Yes
remote access (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-remote-access-server-configuration-option?view=sql-server-ver15)	`boolean on|off`	No	Yes
remote login timeout (s) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-remote-login-timeout-server-configuration-option?view=sql-server-ver15)	`integer 0 … 2147483647`	No	Yes
remote query timeout (s) (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-remote-query-timeout-server-configuration-option?view=sql-server-ver15)	`integer 0 … 2147483647`	No	Yes

transform noise words (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/transform-noise-words-server-configuration-option?view=sql-server-ver15)	`boolean` `on|off`	No	Yes
two digit year cutoff (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-two-digit-year-cutoff-server-configuration-option?view=sql-server-ver15)	`integer` `1753 ... 9999`	No	Yes
user connections (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-user-connections-server-configuration-option?view=sql-server-ver15)	`integer` `0 ... 32767`	Yes	Yes
user options (https://docs.microsoft.com/en-us/sql/database-engine/configure-windows/configure-the-user-options-server-configuration-option?view=sql-server-ver15)	`integer` `0 ... 32767`	No	Yes

What's next

- Learn more about SQL Server configuration options (https://docs.microsoft.com/sql/database-engine/configure-windows/server-configuration-options-sql-server?view=sql-server-ver15)

  .