Cloud SQL (https://cloud.google.com/sql/)
Documentation (https://cloud.google.com/sql/docs/)
MySQL (https://cloud.google.com/sql/docs/mysql/) Guides

Exporting data for import into Cloud SQL

MySQL | PostgreSQL | SQL Server

This page describes how to create a SQL dump file or CSV file that is usable by Cloud SQL. You can use these files to import your data into Cloud SQL or to create an external master for Cloud SQL replicas.

For general best practices for importing data into Cloud SQL, see <u>Best Practices for Importing and Exporting Data</u> (https://cloud.google.com/sql/docs/mysql/import-export/).

Creating a SQL dump file

Important: These instructions exclude all triggers, stored procedures, views, and functions from the export. This is needed to enable Cloud SQL to import the dump file. If your database relies on any of these elements, you must manually recreate them after importing.

You can create a SQL dump file for import into Cloud SQL using <u>Cloud SQL</u> (#cloudsql) or <u>mysqldump</u> (#mysqldump).

Exporting without views using Cloud SQL

You can exclude views using the <code>gcloud</code> command-line tool or the Cloud SQL Admin API by specifying each table you want to export. Follow the <code>gcloud</code> or <code>cURL</code> instructions provided in <code>Exporting Data</code> (https://cloud.google.com/sql/docs/import-export/exporting#mysqldump), using the following syntax:

You must specify exactly one database when you specify tables. Do not include views or system tables.

For information about using the export command, see the <a href="sqlexport sqlexport s

Exporting without views using mysqldump

You use mysqldump to create your SQL dump file with the following flags:

- --databases You must use the --databases option to specify an explicit list of databases to import, and this list must not contain the mysql system database.
- --hex-blob If your database contains any binary fields, you must use this flag to ensure that your binary fields are imported correctly.
- --skip-triggers Triggers should not be included in the SQL dump file.
- --set-gtid-purged=0FF GTID information must not be included in the SQL dump file, nor should binary logging be disabled by the SQL dump file. (Not required for MySQL 5.5 or external replication.)
- --ignore-table If your databases include VIEWs, you must exclude them from the export
 by including a --ignore-table [VIEW_NAME] flag for each view in the databases being
 exported.

If you are creating a dump file for use in an external master or external replica configuration, you must also use the --master-data=1 and --flush-privileges flags.

In addition, do *not* use the **--routines** option. Routines should not be included in the SQL dump file.

From a command line, run mysqldump:

```
mysqldump --databases [DATABASE_NAME] -h [INSTANCE_IP] -u [USERNAME] -p \
--hex-blob --skip-triggers --single-transaction --set-gtid-purged=OFF \
--ignore-table [VIEW_NAME1] [...] --default-character-set=utf8mb4 > [SQL_FILE].sql
```

For more information about mysqldump, see the mysqldump reference (https://dev.mysql.com/doc/refman/5.7/en/mysqldump.html).

Creating a CSV file

To create a CSV file from your local MySQL server:

```
mysql --host=[INSTANCE_IP] --user=[USER_NAME] --password [DATABASE] \
-e " SELECT * FROM [TABLE] INTO OUTFILE '[FILE_NAME]' CHARACTER SET 'utf8mb4'
FIELDS TERMINATED BY ',' OPTIONALLY ENCLOSED BY '\"' ESCAPED BY '\"' "
```

What's next

- Learn more about <u>importing and exporting data</u> (https://cloud.google.com/sql/docs/mysql/import-export/).
- Read the <u>MySQL documentation about the mysqldump utility</u> (https://dev.mysql.com/doc/refman/5.7/en/mysqldump.html).
- <u>Create a Cloud Storage bucket</u> (https://cloud.google.com/storage/docs/creating-buckets) where you can put your file for import into Cloud SQL.
- Import the file into Cloud SQL (https://cloud.google.com/sql/docs/mysql/import-export/importing).

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