

[MySQL](#) (/sql/docs/mysql/import-export/exporting) | **PostgreSQL** | [SQL Server](#) (/sql/docs/sqlserver/import-export/exporting)

This page describes how to export data from Cloud SQL instances, or from a database server not managed by Cloud SQL.

You can export data from Cloud SQL to Cloud Storage. You can download your data from Cloud Storage to your local environment if you want to access it locally.

To export data to Cloud Storage, the instance's service account needs to have the **Bucket Writer** ACL permission set in the project. For more information see [Cloud Identity and Access Management for Cloud Storage](#) (/storage/docs/access-control/iam/).

For best practices for exporting data, see [Best Practices for Importing and Exporting Data](#) (/sql/docs/postgres/import-export/).

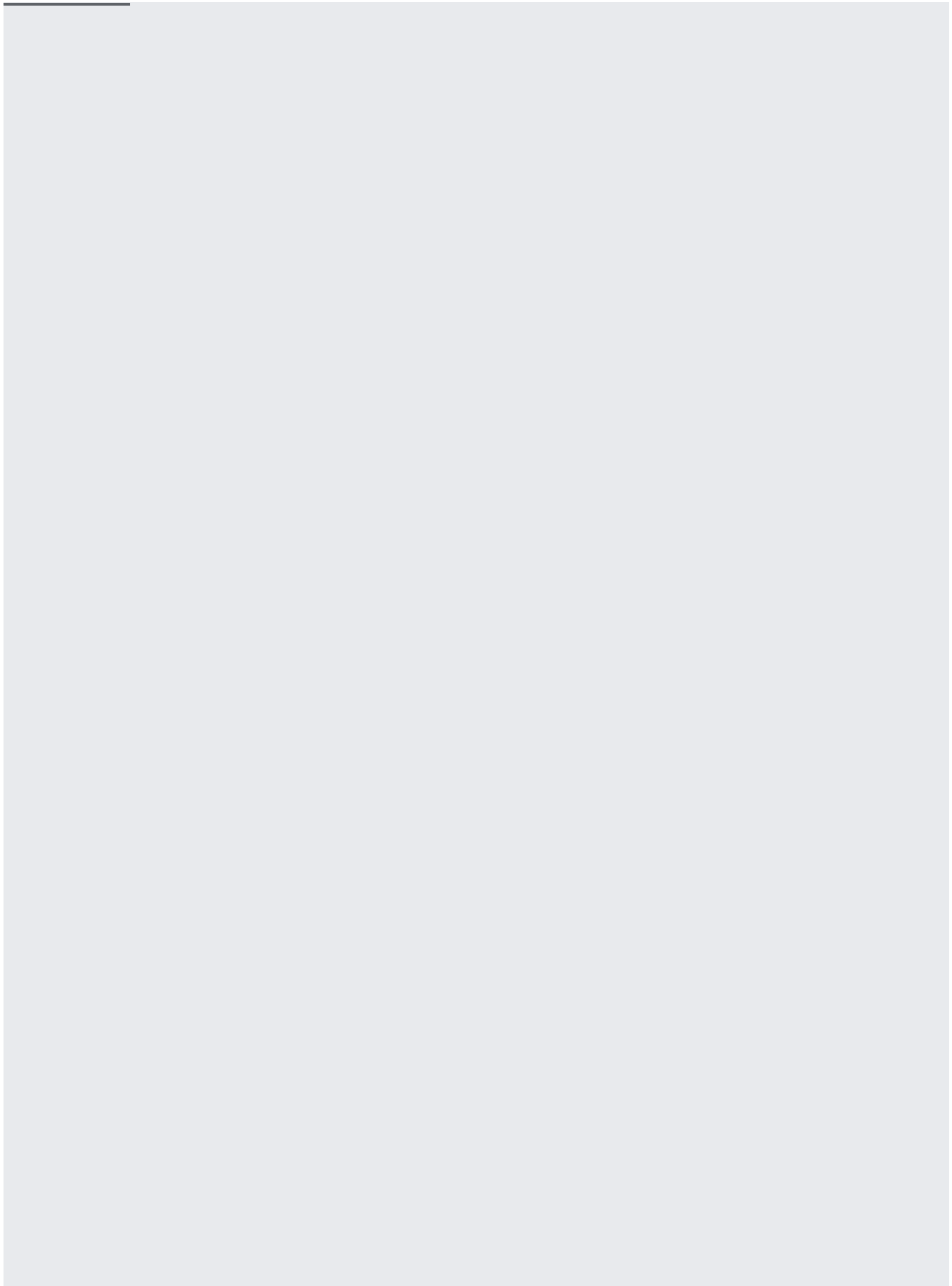
Decide the file type to export.

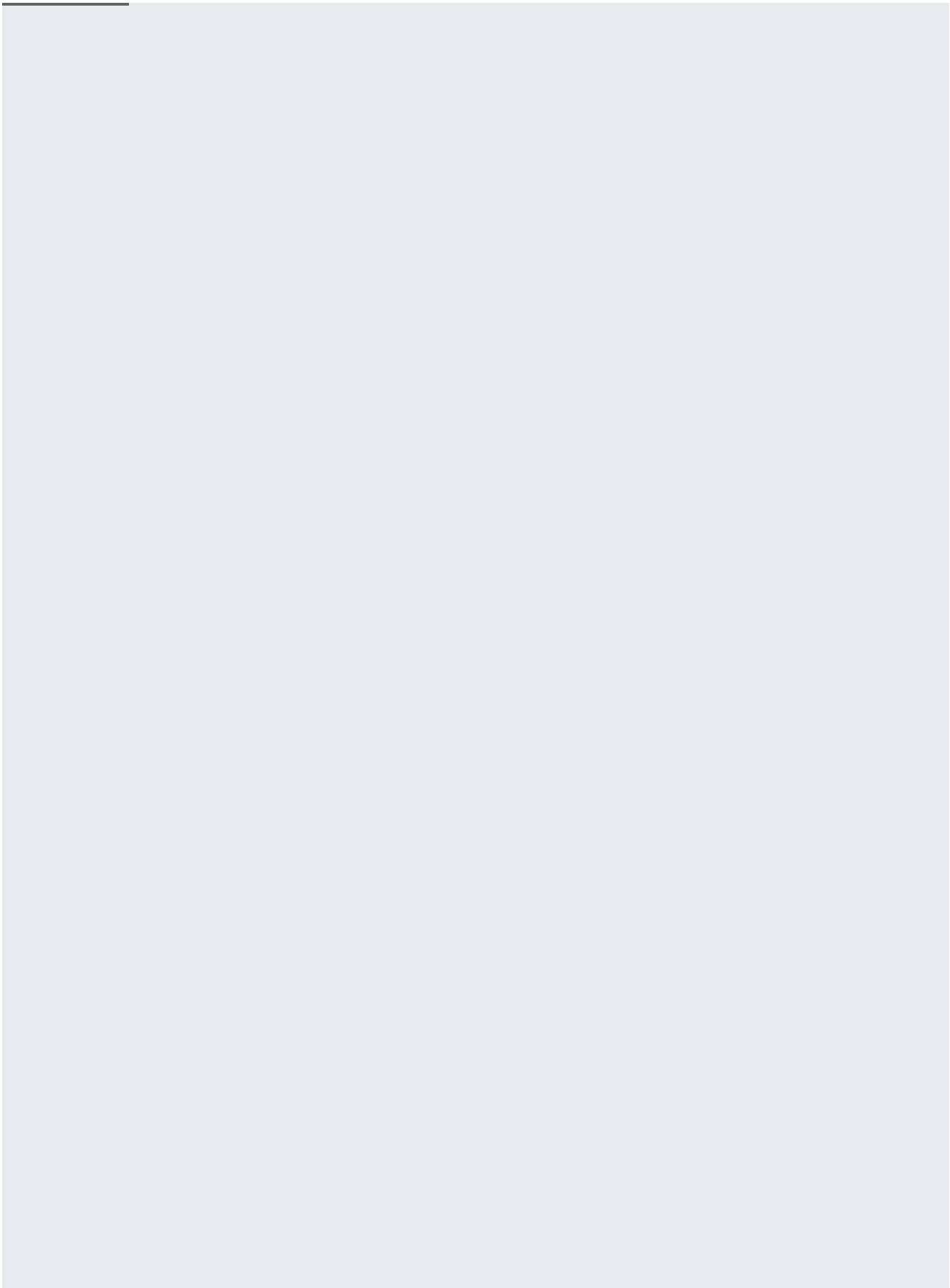
You can export a CSV file for use with other databases or tools. You also can export a SQL dump file, e.g., to export to another SQL database.

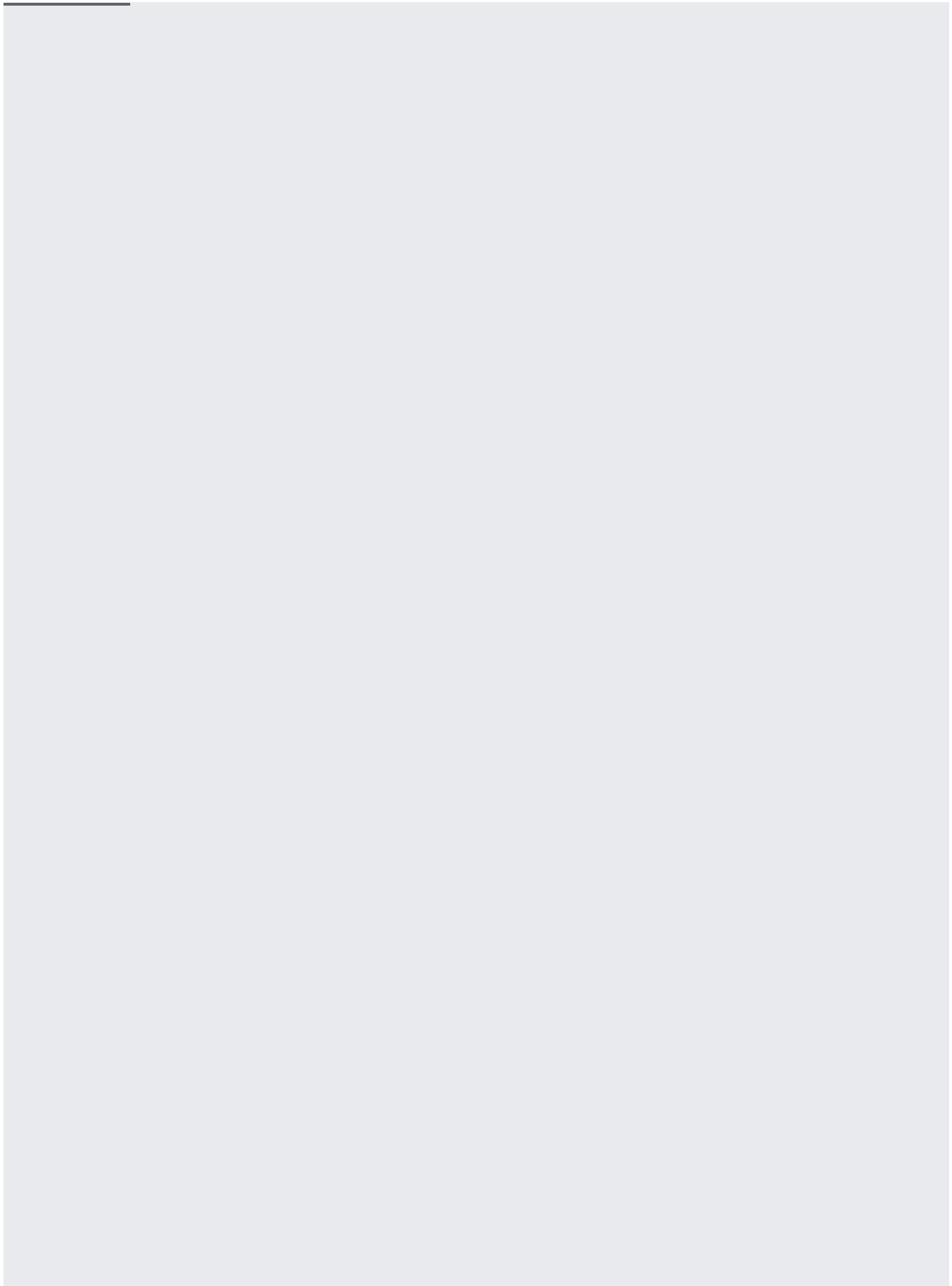
When you use Cloud SQL to perform an export, whether from the Cloud Console, the **gcloud** command-line tool, or the API, you are using the **pg_dump** (<https://www.postgresql.org/docs/9.6/static/app-pgdump.html>) utility, with the options required to ensure that the resulting export file is valid for import back into Cloud SQL.

You can also run **pg_dump** manually, if you are exporting a database not managed by Cloud SQL. However, if you plan to import your data into Cloud SQL, you must follow the instructions provided in [Exporting data from an external database server](#) (#external-server).

If your data contains large objects (blobs), the export can consume a large amount of memory, impacting instance performance. For more information, see [Known Issues \(/sql/docs/postgres/known-issues/#import-export\)](/sql/docs/postgres/known-issues/#import-export).







To export a database that is not managed by Cloud SQL, you use the `pg_dump` utility with the following flags:

- `--no-owner`

Ownership change commands must not be included in the SQL dump file.

- `--format=plain`

Only plain SQL format is supported by Cloud SQL.

- `--no-acl`

This flag is required if your dump would otherwise contain statements to grant or revoke membership in a `SUPERUSER` role.

In addition, you must remove all

- extension-related statements, if Cloud SQL does not support that extension. See [PostgreSQL Extensions \(/sql/docs/postgres/extensions\)](/sql/docs/postgres/extensions) for the list of supported extensions.
- `CREATE EXTENSION` or `DROP EXTENSION` statements referencing `plpgsql`. This extension comes pre-installed on Cloud SQL Postgres instances.
- `COMMENT ON EXTENSION` statements.

From a command line, run `pg_dump`:

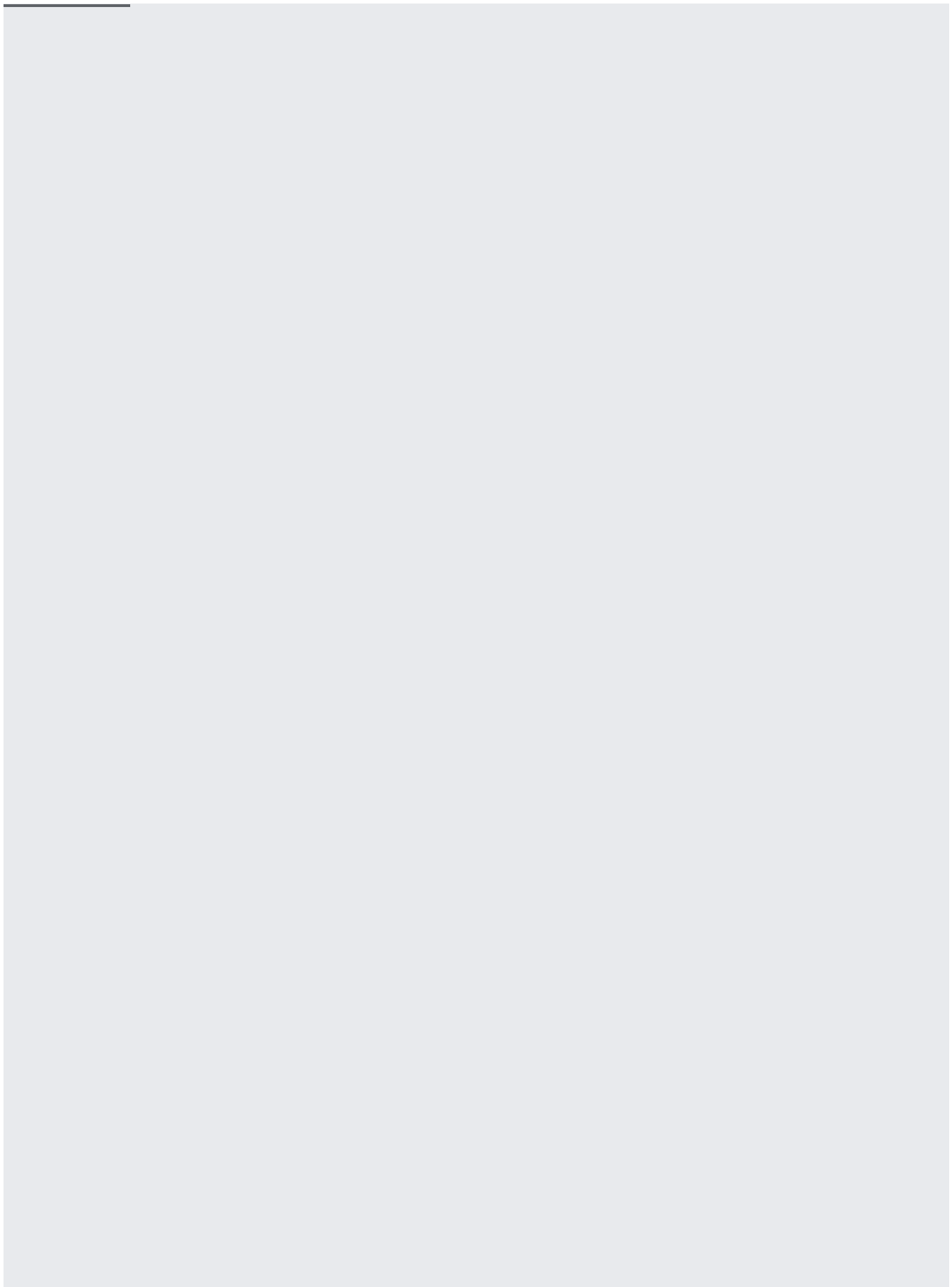
The `sed` post-processing comments out all extension statements in the SQL dump file.

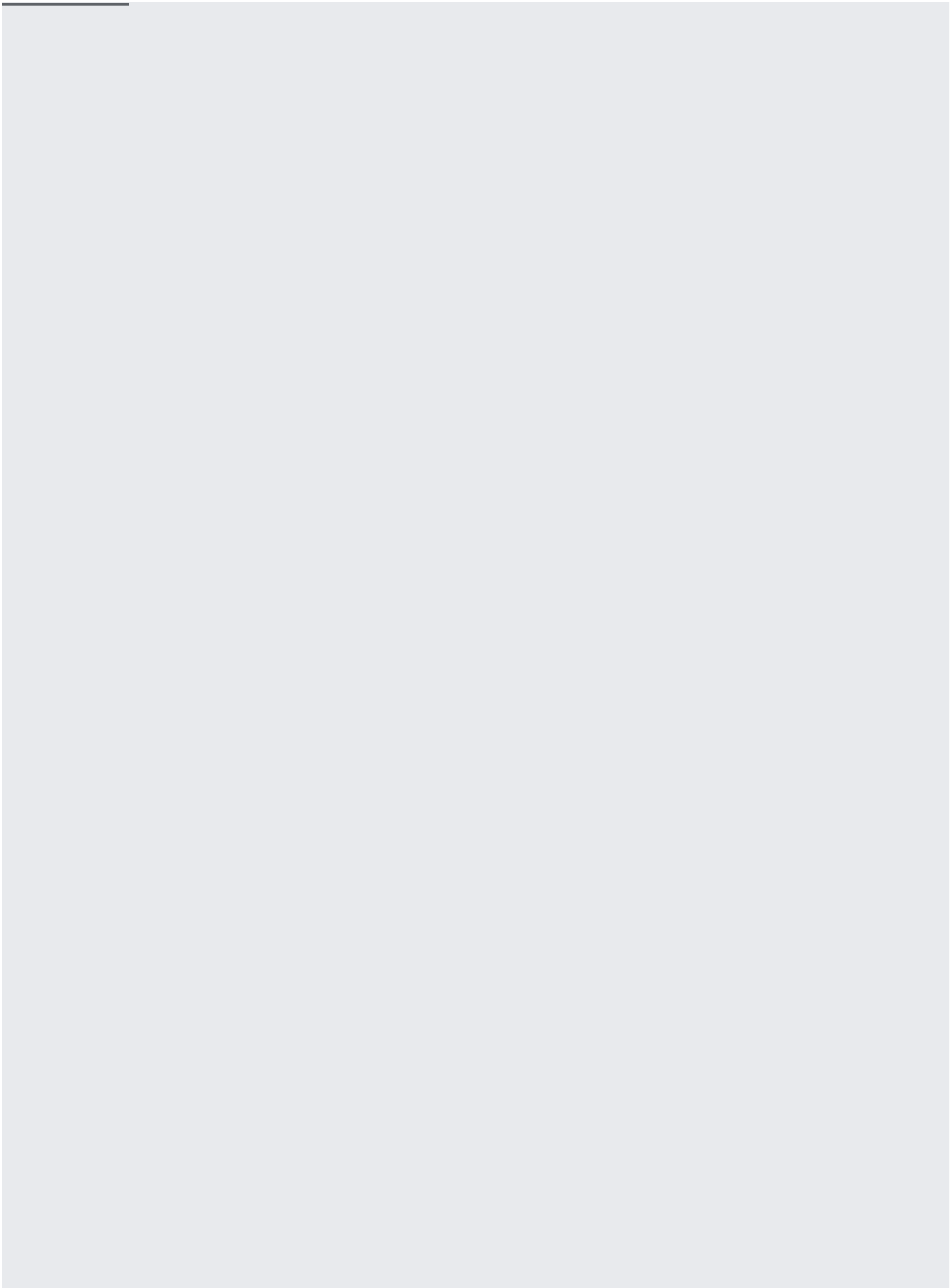
Confirm that the default encoding, as determined by the database settings, is correct for your data. If needed, you can override the default with the `--encoding` flag.

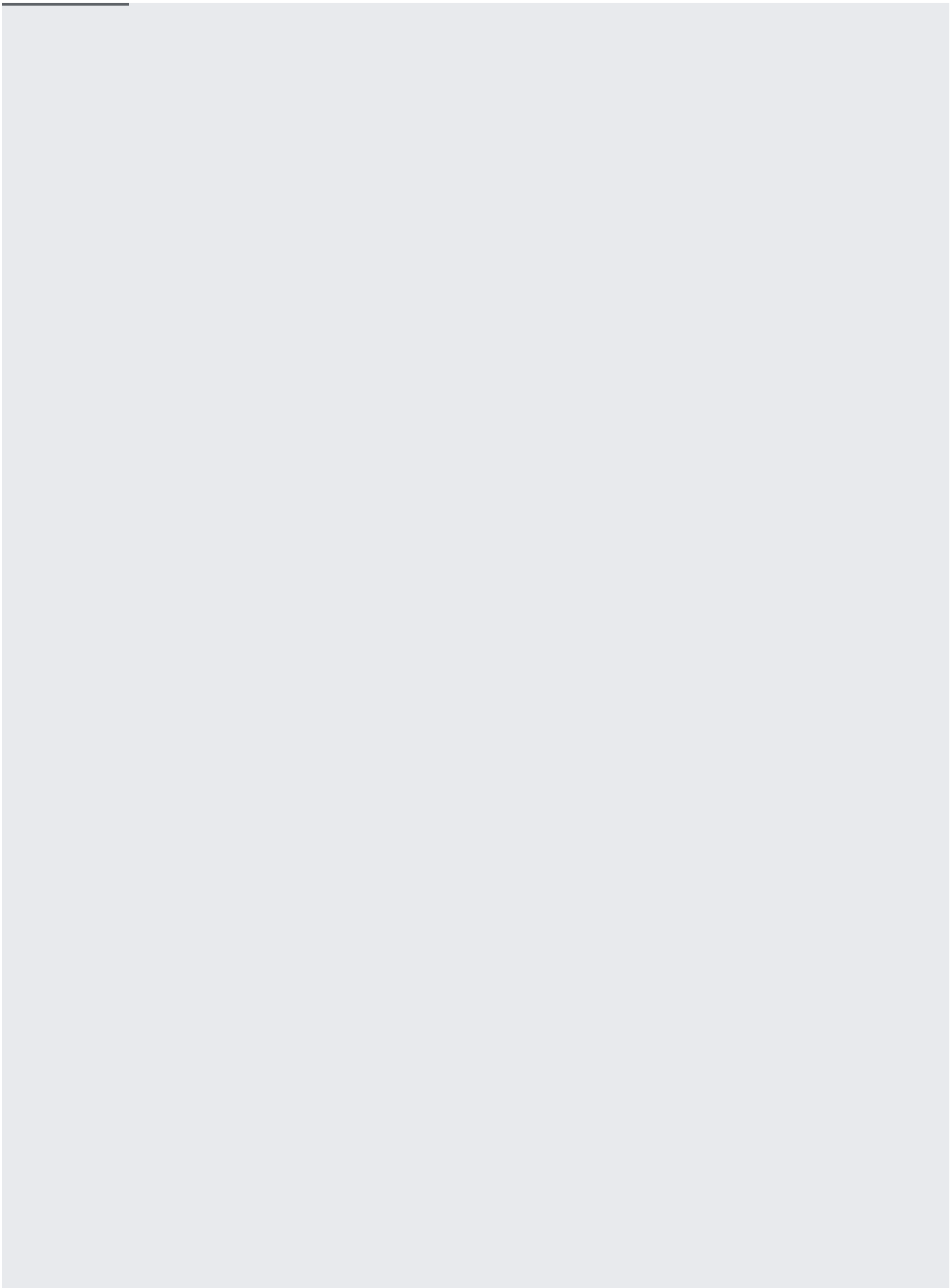
You can export your data in CSV format, which is usable by other tools and environments.

You cannot import a CSV file that was created from a MySQL instance into a PostgreSQL or SQL Server instance, or

You cannot export to a CSV file from a read replica instance. The export operation creates an export user and grants select permissions on the database the user wants to export. Since read replica instances run in read only mode, these operations fail.







CSV export creates standard CSV output. If you need a non-standard CSV format, you can use the following statement in a `psql` client:

To see how the [underlying REST API request](/sql/docs/postgres/admin-api/rest/v1beta4/instances/export) is constructed for this task, see the [APIs Explorer on the instances:export page](#)

(/sql/docs/postgres/admin-api/rest/v1beta4/instances/export).

- Learn how to check the status of import and export operations (/sql/docs/postgres/import-export/checking-status-import-export).
- Learn more about importing and exporting data (/sql/docs/postgres/import-export/).
- Learn more about Cloud Storage (/storage/docs/).
- Learn more about the PostgreSQL pg_dump utility (<https://www.postgresql.org/docs/9.6/static/app-pgdump.html>).