

Package ‘bigrquerystorage’

May 7, 2026

Type Package

Title An Interface to Google's 'BigQuery Storage' API

Version 1.2.2

Maintainer Bruno Tremblay <openr@neoxone.com>

Description Easily talk to Google's 'BigQuery Storage' API from R
(<<https://cloud.google.com/bigquery/docs/reference/storage/rpc>>).

License Apache License (>= 2)

Imports nanoarrow (>= 0.6.0), rlang, assertthat, Rcpp, lifecycle,
bit64, tibble

Suggests blob, bigrquery, testthat, hms, wk (>= 0.3.2), tzdb,
base64enc

LinkingTo Rcpp

Encoding UTF-8

URL <https://github.com/meztez/bigrquerystorage>

BugReports <https://github.com/meztez/bigrquerystorage/issues>

SystemRequirements grpc/protobuf headers and compilers. For example
libprotobuf-dev libgrpc++-dev protobuf-compiler-grpc (Debian)
or protobuf-devel grpc-devel grpc-plugins (Fedora/RHEL)

RoxygenNote 7.3.2

Biarch TRUE

NeedsCompilation yes

Author Bruno Tremblay [aut, cre],
Google LLC [cph, fnd]

Repository CRAN

Date/Publication 2025-01-07 21:50:12 UTC

Contents

bigrquerystorage-package	2
bqs_auth	2
bqs_table_download	3

bigrquerystorage-package

bigrquerystorage: An Interface to Google's 'BigQuery Storage' API

Description

Easily talk to Google's 'BigQuery Storage' API from R (<https://cloud.google.com/bigquery/docs/reference/storage/rpc>).

Author(s)

Maintainer: Bruno Tremblay <openr@neoxone.com>

Other contributors:

- Google LLC [copyright holder, funder]

See Also

Useful links:

- <https://github.com/meztez/bigrquerystorage>
- Report bugs at <https://github.com/meztez/bigrquerystorage/issues>

bqs_auth

Initialize bigrquerystorage client

Description

Initialize bigrquerystorage client

Close bigrquerystorage client

Usage

bqs_auth()

bqs_deauth()

Details

Will attempt to reuse bigquery credentials.

About Credentials

If your application runs inside a Google Cloud environment that has a default service account, your application can retrieve the service account credentials to call Google Cloud APIs. Such environments include Compute Engine, Google Kubernetes Engine, App Engine, Cloud Run, and Cloud Functions. We recommend using this strategy because it is more convenient and secure than manually passing credentials.

Additionally, we recommend you use Google Cloud Client Libraries for your application. Google Cloud Client Libraries use a library called Application Default Credentials (ADC) to automatically find your service account credentials. ADC looks for service account credentials in the following order:

1. If the environment variable `GOOGLE_APPLICATION_CREDENTIALS` is set, ADC uses the service account file that the variable points to.
2. If the environment variable `GOOGLE_APPLICATION_CREDENTIALS` isn't set, ADC uses the default service account that Compute Engine, Google Kubernetes Engine, App Engine, Cloud Run, and Cloud Functions provide.
3. If ADC can't use either of the above credentials, an error occurs.

Value

No return value, called for side effects.

bqs_table_download	<i>Download table data</i>
--------------------	----------------------------

Description

This retrieves rows block in a stream using a grpc protocol. It is most suitable for results of larger queries (>100 MB, say).

Usage

```
bqs_table_download(
  x,
  parent = getOption("bigquerystorage.project", ""),
  snapshot_time = NA,
  selected_fields = character(),
  row_restriction = "",
  sample_percentage,
  n_max = Inf,
  quiet = NA,
  as_tibble = lifecycle::deprecated(),
  bigint = c("integer", "integer64", "numeric", "character"),
  max_results = lifecycle::deprecated()
)
```

Arguments

x	Table reference {project}.{dataset}.{table_name}
parent	Used as parent for CreateReadSession. grpc method. Default is to use option bigquerystorage.project value.
snapshot_time	Table modifier snapshot time as POSIXct.
selected_fields	Table read option selected_fields. A character vector of field to select from table.
row_restriction	Table read option row_restriction. A character. SQL text filtering statement.
sample_percentage	Table read option sample_percentage. A numeric $0 \leq \text{sample_percentage} \leq 100$. Not compatible with row_restriction.
n_max	Maximum number of results to retrieve. Use Inf or -1L retrieve all rows.
quiet	Should information be printed to console.
as_tibble	Should data be returned as tibble. Default (FALSE) is to return as arrow Table from raw IPC stream.
bigint	The R type that BigQuery's 64-bit integer types should be mapped to. The default is "integer" which returns R's integer type but results in NA for values above/below +/- 2147483647. "integer64" returns a <code>bit64::integer64</code> , which allows the full range of 64 bit integers.
max_results	Deprecated

Details

More details about table modifiers and table options are available from the API Reference documentation. (See [TableModifiers](#) and [TableReadOptions](#))

Value

This method returns a `data.frame` or optionally a tibble. If you need a `data.frame`, leave parameter `as_tibble` to FALSE and coerce the results with `as.data.frame()`.

Index

`as.data.frame()`, [4](#)

`bigquerystorage`
 (`bigquerystorage-package`), [2](#)

`bigquerystorage-package`, [2](#)

`bit64::integer64`, [4](#)

`bqs_auth`, [2](#)

`bqs_deauth` (`bqs_auth`), [2](#)

`bqs_table_download`, [3](#)