



HYCU for Google BigQuery

R-Cloud Module Guide

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About the module

The R-Cloud (formerly HYCU Protégé) module for Google BigQuery allows you to protect your Google BigQuery datasets, its constituent tables, views, models, and routines.

Prerequisites

Before you add the module to R-Cloud as a source, make sure your HYCU Managed Service Account (HMSA) is permitted to access to the Google BigQuery datasets. The following roles contain the required permissions:

- BigQuery Job User (`bigquery.jobUser`). The role grants the permission to create BigQuery jobs. The role must be set in the project where the module is deployed.
- BigQuery Admin (`bigquery.admin`). The role grants permissions to:
 - Read and update data and metadata for tables, views, models, and routines.
 - Delete the dataset, table, view, model or routine.

The role must be set in the projects where the datasets are defined or are going to be created.

- Storage Object Admin. The role includes read and write permissions at the bucket level. The role must be set at the project or bucket level.

Read more about the access control for Google BigQuery [here](#).

The target bucket must be created in the same region as the datasets that you will be backing up. If the dataset is a multi-region dataset, the bucket must be a multi-region bucket as well. More details are available [here](#).


Limitations

- The OVHcloud buckets cannot be used as a staging target.
- Federated queries are not supported.
- The saved queries are not backed up.
- Restore to another region is not supported.

Protecting data

R-Cloud starts protecting the data stored in your Google BigQuery datasets once you add the module as a source.

For details on how to add the module as a source, see *HYCU R-Cloud Help*.

 **Note** The R-Cloud module for Google BigQuery backs up data using a staging target. Select the preferred staging target when adding the module as a source in R-Cloud.

Backup

R-Cloud allows you to define which Google BigQuery datasets will be protected.

For details on how to configure backups for your Google BigQuery datasets, *HYCU R-Cloud Help*.

Setting up automatic policy assignment

To set up automatic policy assignment, add labels or the `hycu-policy` tag to your Google BigQuery datasets in Google Compute Engine.

Procedure

1. In the Google Cloud console, select the dataset for which you want to set up automatic policy assignment, and then click **Edit details**.
2. In the Labels section, click **Add labels**.
3. Enter the key and value, and then click **Save**.

For details about setting up automatic policy assignment, see *HYCU R-Cloud Help*. For more information about adding labels to Google BigQuery datasets, see Google Cloud documentation.

Restore

R-Cloud allows you to restore your protected Google BigQuery datasets at the following levels:

- Dataset
- Table

For details on how to configure the restore for your Google BigQuery datasets, see *HYCU R-Cloud Help*.

Dataset restore

R-Cloud allows the following options for a dataset restore:

- In-place dataset restore. The dataset will be restored with the original name. The original dataset will be deleted.
- Restore to another dataset. The restore to another dataset will only restore the dataset's tables. To restore to another dataset, provide the Google project and dataset ID to be used for restoring into.

Table restore

R-Cloud allows you to restore one or more database tables to a selected Google BigQuery dataset.

When selecting a dataset to restore the tables, define the suffix to be appended to the original table name in R-Cloud.

Example

```
<original_database_name>_<suffix>
```

If you select the override option, the suffix input field is hidden, and the tables will be restored using the original name. The existing tables will be overridden with the restored tables.

Provide feedback

For any suggestions and comments regarding this product or its documentation, send us an e-mail to:

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We will be glad to hear from you!

