# Data location and transfers

This page explains the concepts of transfer configuration location and source data location, and also describes how locations and transfers interact.

For more information about BigQuery locations more generally, see Dataset locations (/bigquery/docs/locations).

## Key concepts

### Transfer location

Transfer configurations also have locations. When you set up a transfer, if the destination dataset does not exist, you will need to create it in BigQuery before configuring the transfer. Create the transfer configuration in the same project as the destination dataset. The location of the transfer configuration is automatically set to the same location that you specified for the destination dataset. The BigQuery Data Transfer Service processes and stages data in the same location as the destination BigQuery dataset.

### Source data location

The source data you wish to transfer to BigQuery may also have a region. In some cases, the region where your source data is stored and the location of the destination dataset in BigQuery are irrelevant. In other kinds of transfers, the dataset and the source data *must* be colocated in the same region.

For transfers that require colocation, setting up a transfer to a destination dataset in a region that is different from, or not compatible with, your source data's region could result in configuration errors.

## Location considerations for transfers

### Colocation not necessary

The following types of transfers made by the BigQuery Data Transfer Service are not location-specific, so the location of the BigQuery dataset is irrelevant:

- Reports from Google products and services
    - Campaign Manager transfers (/bigquery/docs/doubleclick-campaign-transfer)
    - Google Ad Manager transfers (/bigquery/docs/doubleclick-publisher-transfer)
    - Google Ads transfers (/bigquery/docs/google-ads-transfer)
    - Google Merchant Center transfers (/bigquery/docs/merchant-center-transfer)
    - Google Play transfers (/bigquery/docs/play-transfer)
    - Search Ads 360 transfers (/bigquery/docs/search-ads-transfer)
    - YouTube Channel transfers (/bigquery/docs/youtube-channel-transfer)
    - YouTube Content Owner transfers (/bigquery/docs/youtube-content-owner-transfer)
- Transfers from external sources
    - Amazon S3 transfers (/bigquery/docs/s3-transfer-intro)
    - Third-party transfers (/bigquery/docs/third-party-transfer)

## Colocation required

**Cloud Storage**

Transfers from Cloud Storage (/bigquery/docs/cloud-storage-transfer-overview) to BigQuery require that the Cloud Storage bucket be colocated with the BigQuery destination dataset.

Colocate your Cloud Storage buckets for transferring data.

- If your BigQuery dataset is in a multi-region, the Cloud Storage bucket containing the data you're transferring must be in the same multi-region or in a location that is contained within the multi-region. For example, if your BigQuery dataset is in the `EU` multi-region, the Cloud Storage bucket can be located in the `europe-west1` Belgium region, which is within the EU.
- If your dataset is in a region, your Cloud Storage bucket must be in the same region. For example, if your dataset is in the `asia-northeast1` Tokyo region, your Cloud Storage bucket cannot be in the `ASIA` multi-region.

### Data warehouse migrations

Data warehouse migrations from Teradata (/bigquery/docs/migration/teradata-overview) require a Cloud Storage bucket as part of the transfer process. The Cloud Storage bucket must be colocated with the BigQuery destination dataset.

Redshift data warehouse migrations do not require a colocated Cloud Storage bucket.

**Key Point:** You can copy a dataset or manually move it to another region. See Managing datasets (/bigquery/docs/managing-datasets) for details. For more information about using Cloud Storage to store and move large datasets, see Using Cloud Storage with big data (/storage/docs/working-with-big-data).

## What's next

- View all the Google Cloud services available in locations worldwide (/about/locations#region).
- Explore additional location-based concepts (/docs/geography-and-regions), such as zones, that apply to other Google Cloud services.



Last updated 2024-08-21 UTC.