

Creating Date-Partitioned Tables in BigQuery

GSP414



- BigQuery delivers a fully managed, serverless analytics database for querying petabyte-scale data using SQL with pay-as-you-go pricing.
- No infrastructure management or database admins are required, letting you focus purely on data analysis and insights.
- This lab teaches querying techniques and creating partitioned tables to boost performance and cut resource costs.
- The dataset features millions of Google Analytics records from the Google Merchandise Store ecommerce site.
- You'll apply partitioning strategies on this real-world ecommerce data loaded directly into BigQuery.

G Build a Data Warehouse with Big X +

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Dashboard Catalog Paths Collections

Lab setup instructions and requirements

Protect your account and

End Lab 01:29:35 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853

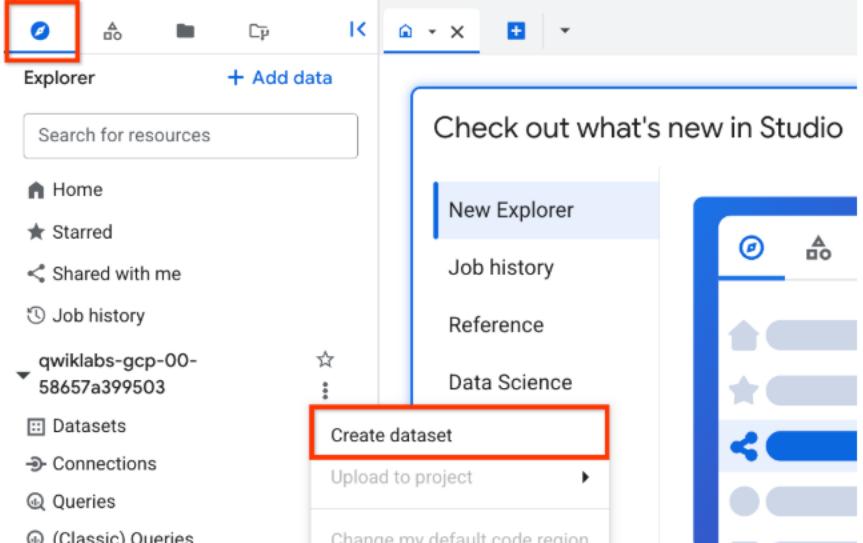
Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Task 1. Create a new dataset

1. First, you will create a dataset to store your tables.

2. Switch to the **Explorer pane**, near your project id, click **View actions**, then click **Create dataset**.



Setup and requirements 0/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Previous Next

6 15°C Mostly cloudy

Search

ENG IN 02:24 PM 31-12-2025

G Build a Data Warehouse with BigQuery +

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Dashboard Catalog Paths Collections

Lab setup instructions and requirements Protect your account and End Lab 01:28:41 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more. Open Google Cloud console

Username student-02-2ca1724ff853c Password 6edzwtrDFkws Project ID qwiklabs-gcp-00-f290007:

Shared with me Job history Reference Data Science Create dataset Upload to project Change my default code region

3. Set Dataset ID to ecommerce.

Leave the other options at their default values (Data Location, Default table Expiration).

4. Click Create dataset.

Click Check my progress to verify the objective.

Create a dataset named ecommerce

Check my progress

Setup and requirements 0/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

6 15°C Mostly cloudy

Search

02:25 PM 31-12-2025

Create dataset - BigQuery - qwiklabs

https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m0

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more

BigQuery Overview Preview Studio

Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling

Governance Sharing (Analytics Hub) Policy tags Metadata curation

Administration Partner Center Settings Preview Release Notes

Check out what's new in Studio

- Files explorer
- Gemini in queries
- Apache Spark
- Visualization Cell
- Notebook gallery

Organize and share

The new Files explorer provides a central location for managing files, notebooks, and more) into a single pane.

To get started with better organization, click the gear icon in the left pane. [Learn more](#)

Job history

Create dataset

Project ID * **qwiklabs-gcp-00-f2900077ea8b** Change

Dataset ID * **ecommerce** Letters, numbers, and underscores allowed

Some locations have been restricted due to a policy set by your organization. [Learn more about restricting locations.](#)

Data location

Tags

Advanced options

Create dataset Cancel

6 15°C Mostly cloudy

Search

02:24 PM 31-12-2025 ENG IN

Build a Data Warehouse with Big

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:28:27 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Task 2. Create tables with date partitions

A partitioned table is a table that is divided into segments, called partitions, that make it easier to manage and query your data. By dividing a large table into smaller partitions, you can improve query performance, and control costs by reducing the number of bytes read by a query.

Now create a new table and bind a date or timestamp column as a partition. Before we do that, let's explore the data in the non-partitioned table first.

Query web page analytics for a sample of visitors in 2017

1. Click on + SQL query and add the below query:

```
#standardSQL
SELECT DISTINCT
    fullVisitorId,
    date,
    city,
    pageTitle
FROM `data-to-insights.ecommerce.all_sessions_raw`
```

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Previous Next

6 15°C Mostly cloudy

Search

02:25 PM 31-12-2025

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Dashboard Catalog Paths Collections

Lab setup instructions and requirements

Protect your account and

End Lab 01:28:19 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Query web page analytics for a sample of visitors in 2017

1. Click on + SQL query and add the below query:

```
#standardSQL
SELECT DISTINCT
    fullVisitorId,
    date,
    city,
    pageTitle
FROM `data-to-insights.ecommerce.all_sessions_raw`
WHERE date = '20170708'
LIMIT 5
```

Before running, note the total amount of data it will process as indicated next to the query validator icon: "This query will process 1.74 GB when run".

2. Click Run.

The query returns 5 results.

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Previous Next

6 15°C Mostly cloudy

Search

02:25 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... X +

https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m5!1m4!1m3!1sqwiklabs-gcp-00-f2...

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

BigQuery Overview Preview Studio Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling Governance Sharing (Analytics Hub) Policy tags Metadata curation Administration Partner Center Settings Preview Release Notes Job history

Untitled query Run Save Download Share Schedule Open in

```
1 #standardSQL
2 SELECT DISTINCT
3   fullVisitorId,
4   date,
5   city,
6   pageTitle
7 FROM `data-to-insights.ecommerce.all_sessions_raw`
8 WHERE date = '20170708'
9 LIMIT 5
```

Query completed Using on-demand processing quota

Query results Job information Results Visualization JSON Execution details Execution graph

Row	fullVisitorId	date	city	pageTitle
1	0439542843807410007	20170708	Mountain View	Nest-USA
2	3464962792528009722	20170708	not available in demo dataset	Nest-USA
3	6217341148538645429	20170708	not available in demo dataset	Nest-USA
4	9731947397678883357	20170708	not available in demo dataset	Nest-USA
5	7498426319470024193	20170708	not available in demo dataset	Nest-USA

Results per page: 50 1 – 5 of 5 Show

6 15°C Mostly cloudy

Search

02:26 PM 31-12-2025 ENG IN

Build a Data Warehouse with Big

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Contents Creating Date-Partitioned Tables in BigQuery

Query web page analytics for a sample of visitors in 2018

Let's modify the query to look at visitors for 2018 now.

1. Click + SQL query to clear the **Query Editor**, then add this new query. Note the WHERE date parameter is changed to 20180708:

```
#standardSQL
SELECT DISTINCT
  fullVisitorId,
  date,
  city,
  pageTitle
FROM `data-to-insights.ecommerce.all_sessions_raw`
WHERE date = '20180708'
LIMIT 5
```

The **Query Validator** tells you how much data this query will process.

2. Click **Run**.

Notice that the query still processes 1.74 GB even though it returns 0 results. Why? The

Dashboard Catalog Paths Collections

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

6 15°C Mostly cloudy

Search

02:26 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... X +

https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m5!1m4!1m3!1sqwiklabs-gcp-00-f2... | 1

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

BigQuery Overview Preview Studio Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling Governance Sharing (Analytics Hub) Policy tags Metadata curation Administration Partner Center Settings Preview Release Notes Job history

Search BigQuery resources Show starred only

Untitled query Run Save Download Share Schedule Open in

```
1 #standardSQL
2 SELECT DISTINCT
3   fullVisitorId,
4   date,
5   city,
6   pageTitle
7 FROM `data-to-insights.ecommerce.all_sessions_raw`
8 WHERE date = '20180708'
9 LIMIT 5
```

This query will process 1.74 GB when run.

Using on-demand processing quota

Query results Save results Open in

Job information Results Visualization JSON Execution details Execution graph

There is no data to display.

Results per page: 50 1 - 0 of 0 Show

15°C Mostly cloudy

Search

02:26 PM 31-12-2025 ENG IN

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Dashboard Catalog Paths Collections

Lab setup instructions and requirements Protect your account and End Lab 01:26:40 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more. Open Google Cloud console

Username: student-02-2ca1724ff853c Password: 6edzwtrDFkws Project ID: qwiklabs-gcp-00-f290007

matching condition in the WHERE clause. It must look at each record to compare the date against the condition of '20180708'. Additionally, the LIMIT 5 does not reduce the total amount of data processed, which is a common misconception.

Why did the previous query return 0 records but still scan through 1.74GB of data?

The query engine has the metadata for each partition stored but still needs to scan all records even if the table is partitioned.

Before the query runs, the query engine does not know whether 2018 data exists to satisfy the WHERE clause condition and it needs to scan through all records in a non-partitioned table.

The query was written incorrectly

Submit

Common use-cases for date-partitioned tables

Next < Previous

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

6 15°C Mostly cloudy

Search

02:27 PM 31-12-2025

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:26:33 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Common use-cases for date-partitioned tables

Scanning through the entire dataset every time to compare rows against a WHERE condition is wasteful. This is especially true if you only really care about records for a specific period of time like:

- All transactions for the last year
- All visitor interactions within the last 7 days
- All products sold in the last month

Instead of scanning the entire dataset and filtering on a date field like we did in the earlier queries, Now set up a date-partitioned table. This allows you to completely ignore scanning records in certain partitions if they are irrelevant to our query.

Create a new partitioned table based on date

1. Click + SQL query , add the below query, then click Run:

```
#standardSQL
CREATE OR REPLACE TABLE ecommerce.partition_by_day
PARTITION BY date_formatted
```

Submit

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Previous Next

6 15°C Mostly cloudy

Search

ENG IN

02:27 PM 31-12-2025

Build a Data Warehouse with BigQuery +

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents

Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:26:07 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007:

```
#standardSQL
CREATE OR REPLACE TABLE ecommerce.partition_by_day
PARTITION BY date_formatted
OPTIONS(
    description="a table partitioned by date"
) AS

SELECT DISTINCT
PARSE_DATE("%Y%m%d", date) AS date_formatted,
fullvisitorId
FROM `data-to-insights.ecommerce.all_sessions_raw`
```

In this query, note the new option - PARTITION BY a field. The two options available to partition are DATE and TIMESTAMP. The PARSE_DATE function is used on the date field (stored as a string) to get it into the proper DATE type for partitioning.

2. Click **Datasets**, select the **ecommerce** dataset, and then select the new **partition_by_day** table.
3. Click on the **Details** tab.

Confirm that you see:

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Next >

6 15°C Mostly cloudy

Search

ENG IN

02:27 PM 31-12-2025

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:25:57 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

2. Click **Datasets**, select the **ecommerce** dataset, and then select the new **partition_by_day** table.

3. Click on the **Details** tab.

Confirm that you see:

- Partitioned by: Day
- Partitioning on: date_formatted

Screenshot of the Google Cloud BigQuery UI showing the 'partition_by_day' table details. The 'Details' tab is selected, showing the following configuration:

Table Type	Partitioned
Partitioned by	Date
Partitioned on field	date_formatted
Partition expiration	Partitions do not expire
Partition filter	Not required

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Previous Next

6 15°C Mostly cloudy

Search

02:27 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... X +

https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m5!1m4!4m3!1sqwiklabs-gcp-00-f2... | 1

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

BigQuery Overview Preview Studio Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling Governance Sharing (Analytics Hub) Policy tags Metadata curation Administration Partner Center Settings Preview Release Notes Job history Show

partition_by_day

partition_by_d... Query Open in Share Copy Snapshot Delete

Schema Details Preview Table Explorer Preview Insights Lineage Data Profile Data Quality

Filter Enter property name or value

<input type="checkbox"/> Field name	Type	Mode	Description	Key	Collation	Default Value	Policy Tags
<input type="checkbox"/> date_formatted	DATE	NULLABLE	-	-	-	-	-
<input type="checkbox"/> fullvisitorId	STRING	NULLABLE	-	-	-	-	-

Edit schema View row access policies

15°C 6 Mostly cloudy

Search

ENG IN 02:28 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... X +

https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m5!1m4!4m3!1sqwiklabs-gcp-00-f2... | 1

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

BigQuery BigQuery Overview Preview Studio Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling Governance Sharing (Analytics Hub) Policy tags Metadata curation Administration Partner Center Settings Preview Release Notes

Search BigQuery resources Show starred only

partition_by_d... Query Open in Share Copy Snapshot Delete Up C

Schema Details Preview Table Explorer Insights Lineage Data Profile Data Quality

Table info

Edit Details

Table ID	qwiklabs-gcp-00-f2900077ea8b.ecommerce.partition_by_day
Created	Dec 31, 2025, 2:28:12PM UTC+5:30
Last modified	Dec 31, 2025, 2:28:12PM UTC+5:30
Table expiration	NEVER
Data location	US
Default collation	
Default rounding mode	ROUNDING_MODE_UNSPECIFIED
Case insensitive	false
Description	a table partitioned by date
Labels	
Primary key(s)	
Tags	
Table Type	Partitioned
Partitioned by	DAY
Job history	Show

6 15°C Mostly cloudy

Search

ENG IN 02:28 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... X +

https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m5!1m4!4m3!1sqwiklabs-gcp-00-f2... | 1

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

BigQuery Overview Preview Studio

Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling

Governance Sharing (Analytics Hub) Policy tags Metadata curation

Administration Partner Center Settings Preview Release Notes

Search BigQuery resources Show starred only

qwiklabs-gcp-00-f2900077ea8b / Datasets / ecommerce / Tables / partition_by_day

partition_by_d... Query Open in Share Copy Snapshot Delete

Schema Details Preview Table Explorer Preview Insights Lineage Data Profile Data Quality

Default rounding mode ROUNDING_MODE_UNSPECIFIED

Case insensitive false

Description a table partitioned by date

Labels

Primary key(s)

Tags

Table Type Partitioned

Partitioned by DAY

Partitioned on field date_formatted

Partition expiration Partitions do not expire

Partition filter Not required

Storage info Number of rows 478,323 Number of partitions 0 Total logical bytes 13.17 MB Job history Show

6 15°C Mostly cloudy

Search

ENG IN 02:29 PM 31-12-2025

G Build a Data Warehouse with Big X +

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Dashboard Catalog Paths Collections

Lab setup instructions and requirements

Protect your account and

End Lab 01:24:38 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Task 3. Review results from queries on a partitioned table

1. Run the below query, and note the total bytes to be processed:

```
#standardSQL
SELECT *
FROM `data-to-insights.ecommerce.partition_by_day`
WHERE date_formatted = '2016-08-01'
```

This time 25 KB or 0.025MB is processed, which is a fraction of what you queried.

2. Now run the below query, and note the total bytes to be processed:

```
#standardSQL
SELECT *
FROM `data-to-insights.ecommerce.partition_by_day`
WHERE date_formatted = '2018-07-08'
```

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Next >

6 15°C Mostly cloudy

Search

ENG IN

02:29 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... X +

https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m10!1m4!4m3!1sqwiklabs-gcp-00-f... | 1

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

BigQuery Overview Preview Studio Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling Governance Sharing (Analytics Hub) Policy tags Metadata curation Administration Partner Center Settings Preview Release Notes

BigQuery *Untitled...ery *Untitled...ery *Untitled...ery partition... day *Untitled.

Untitled query Run Save Download Share Schedule Open in

```
#standardSQL
SELECT *
FROM `data-to-insights.ecommerce.partition_by_day`
WHERE date_formatted = '2016-08-01'
```

Query completed Using on-demand processing quota

Query results Job information Results Visualization JSON Execution details Execution graph

Row	date_formatted	fullvisitorId
1	2016-08-01	8346614539128137085
2	2016-08-01	1856237131266550302
3	2016-08-01	8422029627538180622
4	2016-08-01	7298538238612725446
5	2016-08-01	8271170844108113200
6	2016-08-01	6030957980134486247
7	2016-08-01	7624290805116034111

Results per page: 50 1 – 50 of 888

Job history Show

6 15°C Mostly cloudy

Search

ENG IN 02:29 PM 31-12-2025

Build a Data Warehouse with Big

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:24:14 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007:

`SELECT *
FROM `data-to-insights.ecommerce.partition_by_day`
WHERE date_formatted = '2016-08-01'`

This time 25 KB or 0.025MB is processed, which is a fraction of what you queried.

2. Now run the below query, and note the total bytes to be processed:

`#standardSQL
SELECT *
FROM `data-to-insights.ecommerce.partition_by_day`
WHERE date_formatted = '2018-07-08'`

You should see This query will process 0 B when run.

Why was there 0 bytes processed?

- The query engine knows which date partitions exist before the query is ran (and there is no 2018 partitions)
- The query is running from query cache
- The query is running from a saved View

Setup and requirements 30/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Previous Next

BigQuery – qwiklabs-gcp-00-f29... X +

https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m10!1m4!4m3!1sqwiklabs-gcp-00-f...

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

BigQuery Overview Preview Studio

Search BigQuery resources Show starred only

qwiklabs-gcp-00-f2900077ea8b ecommerce partition_by_day

#standardSQL
SELECT *
FROM `data-to-insights.ecommerce.partition_by_day`
WHERE date_formatted = '2018-07-08'

Untitled query Run Save Download Share Schedule Open in

Query completed

Query results Job information Results Visualization JSON Execution details Execution graph

There is no data to display.

Results per page: 50 1 - 0 of 0 Show

Job history

6 15°C Mostly cloudy

Search

ENG IN 02:29 PM 31-12-2025

Build a Data Warehouse with Big

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Dashboard Catalog Paths Collections

Lab setup instructions and requirements

Protect your account and

End Lab 01:23:52 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

SELECT *
FROM `data-to-insights.ecommerce.partition_by_day`
WHERE date_formatted = '2018-07-08'

You should see This query will process 0 B when run.

Why was there 0 bytes processed?

The query engine knows which date partitions exist before the query is ran (and there is no 2018 partitions)

The query is running from query cache

The query is running from a saved View

Submit

Setup and requirements 65/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Task 4. Create an auto-expiring partitioned table

Previous Next

6 15°C Mostly cloudy

Search

02:29 PM 31-12-2025

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:23:46 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853

Password: 6edzwtrDFkws

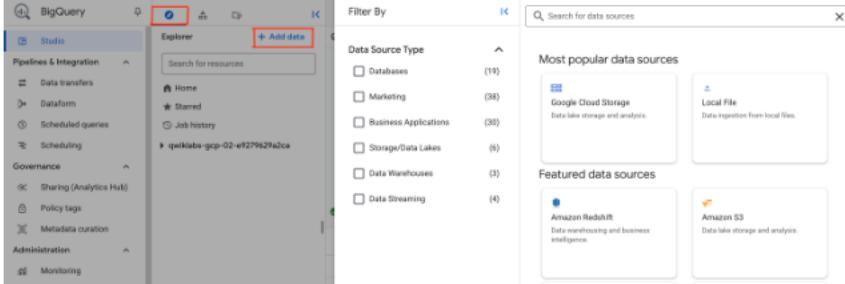
Project ID: qwiklabs-gcp-00-f290007

Task 4. Create an auto-expiring partitioned table

Auto-expiring partitioned tables are used to comply with data privacy statutes, and can be used to avoid unnecessary storage (which you'll be charged for in a production environment). If you want to create a rolling window of data, add an expiration date so the partition disappears after you're finished using it.

Explore the available NOAA weather data tables

1. In the left menu, in Explorer, click on + Add data and select Public datasets.



Previous Next

Setup and requirements 65/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

15°C Mostly cloudy

Search

ENG IN

02:30 PM 31-12-2025

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:23:29 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

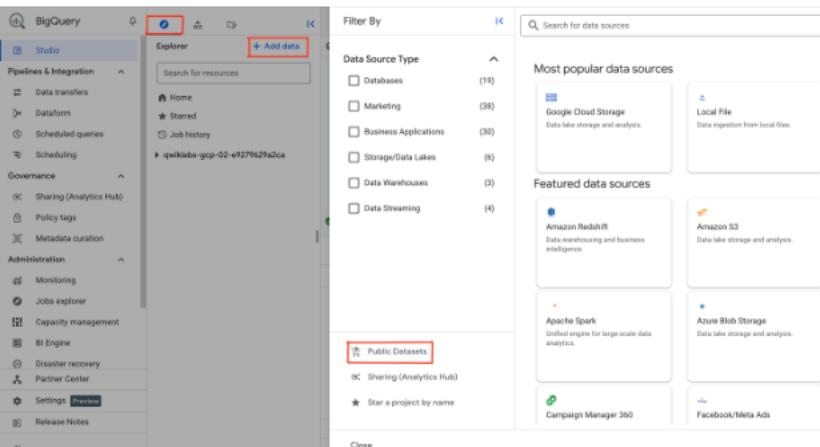
Username: student-02-2ca1724ff853

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Explore the available NOAA weather data tables

1. In the left menu, in Explorer, click on + Add data and select Public datasets.



2. Search for GSOD NOAA then select the dataset.

3. Click on View Dataset.

Setup and requirements 65/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Previous Next

6 15°C Mostly cloudy

Search

ENG IN 02:30 PM 31-12-2025

G Build a Data Warehouse with Big X +

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:23:16 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Contents

BI Engine

Disaster recovery

Partner Center

Settings

Release Notes

Public Datasets

Sharing (Analytics Hub)

Star a project by name

Campaign Manager 360

Facebook/Meta Ads

Unified engine for large-scale data analysis.

Data lake storage and analysis.

Close

2. Search for **GSOD NOAA** then select the dataset.
3. Click on **View Dataset**.
4. **Scroll through the tables in the noaa_gsod dataset** (which are manually sharded and not partitioned):

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

6 15°C Mostly cloudy

Search

ENG IN

02:30 PM 31-12-2025

65/100

Add data – BigQuery – qwiklabs X + https://console.cloud.google.com/bigquery?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&ws=!1m10!1m4!4m3!1sqwiklabs-gcp-00-f... 2

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for

BigQuery Overview Preview Studio

Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling

Governance Sharing (Analytics Hub) Policy tags Metadata curation

Administration Partner Center Settings Preview Release Notes

Explorer + Add data Search for resources Home Starred Shared with me Job history qwiklabs-gcp-00-f2900077ea8b Datasets Connections Queries (Classic) Queries Notebooks Data canvases Data preparations Pipelines Repositories Job history

Add data Filter By Untitled

Data Source Type

- Databases (19)
- Marketing (38)
- Business Applications (30)
- Storage/Data Lakes (6)
- Data Warehouses (3)
- Data Streaming (4)

Query command Query results Job information

Public Datasets Sharing (Analytics Hub) Star a project by name

Most popular data sources

- Google Cloud Storage Data lake storage and analysis.
- Local File Data ingestion from local files.

Featured data sources

- Amazon Redshift Data warehousing and business intelligence.
- Amazon S3 Data lake storage and analysis.
- Apache Spark Unified engine for large-scale data analytics.
- Azure Blob Storage Data lake storage and analysis.

Close

6 15°C Mostly cloudy

Search

1 ENG IN 2 02:30 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... x +

https://console.cloud.google.com/bigquery(cameo:browser)?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b&filter=solution-type:dataset... | 1

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b

BigQuery Overview Preview Studio

Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling

Governance Sharing (Analytics Hub) Policy tags Metadata curation

Administration Partner Center Settings Preview Release Notes

Explorer + Add data Search for resources

Home Starred Shared with me Job history

qwiklabs-gcp-00-f2900077ea8b Datasets Connections Queries (Classic) Queries Notebooks Data canvases Data preparations Pipelines Repositories

Marketplace GSOD NOAA

Marketplace > "GSOD NOAA" > Data

Filter Type to filter 1 result

Category Science & research (1) Sustainability (1) Financial services (1)

Type Data

Price Free

GSOD NOAA

This public dataset was created by the National Oceanic and Atmospheric Administration (NOAA) from the USAF Climatology Center. This dataset covers GSOD data between 1929 and present. It includes approximately 9000 stations. Global summary of the day is comprised of a dozen daily averages computed.

Google Cloud Marketplace Terms of Service

https://console.cloud.google.com/bigquery(cameo:product/noaa-public/gsod)?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b

6 15°C Mostly cloudy

Search

02:31 PM 31-12-2025 ENG IN

BigQuery – qwiklabs-gcp-00-f29... X +

https://console.cloud.google.com/bigquery(cameo:product/noaa-public/gsod)?authuser=1&project=qwiklabs-gcp-00-f2900077ea8b | 1

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b

BigQuery Overview Preview Studio

Pipelines & Integration Data transfers Dataform Scheduled queries Scheduling

Governance Sharing (Analytics Hub) Policy tags Metadata curation

Administration Partner Center Settings Preview Release Notes

6 15°C Mostly cloudy

Search

ENG IN 02:31 PM 31-12-2025

Product details

 **GSOD**
[NOAA](#)

Global Surface Summary of the Day Weather Data

[View dataset](#) Click to view dataset

[Overview](#) [Samples](#) [Related Products](#)

Overview

This public dataset was created by the National Oceanic and Atmospheric Administration (NOAA) and includes global data obtained from the USAF Climatology Center. This dataset covers GSOD data between 1929 and present (updated daily), collected from over 9000 stations.

Global summary of the day is comprised of a dozen daily averages computed from global hourly station data. Daily weather elements include mean values of: temperature, dew point temperature, sea level

Build a Data Warehouse with Big

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:20:29 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007:

Setup and requirements 65/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

• Filters to only include days that have had some precipitation (rain, snow, etc.)
• Only stores each partition of data for 90 days from that partition's date (rolling window)

1. First, **copy and paste** this below query:

```
#standardSQL
SELECT
  DATE(CAST(year AS INT64), CAST(mo AS INT64), CAST(da AS
INT64)) AS date,
  (SELECT ANY_VALUE(name) FROM `bigquery-public-
data.noaa_gsod.stations` AS stations
  WHERE stations.usaf = stn) AS station_name, -- Stations may
have multiple names
  prcp
FROM `bigquery-public-data.noaa_gsod.gsod*` AS weather
WHERE prcp < 99.9 -- Filter unknown values
  AND prcp > 0 -- Filter stations/days with no
precipitation
  AND _TABLE_SUFFIX >= '2018'
ORDER BY date DESC -- Where has it rained/snowed recently
LIMIT 10
```

Previous Next

6 15°C Mostly cloudy

Search

02:33 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... (1) noaa_gsod – BigQuery – qwiklab +

https://console.cloud.google.com/bigquery?p=bigquery-public-data&d=noaa_gsod&page=dataset&pli=1&authuser=1&project=qwiklabs-gc... |

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud Search (/) for resources, docs, products, and more :

Untitled query

Untitled query

```
1 #standardSQL
2 SELECT
3   DATE(CAST(year AS INT64), CAST(mo AS INT64), CAST(da AS INT64)) AS date,
4   (SELECT ANY_VALUE(name) FROM `bigquery-public-data.noaa_gsod.stations` AS stations
5    WHERE stations.usaf = stn) AS station_name, -- Stations may have multiple names
6   prcp
7   FROM `bigquery-public-data.noaa_gsod.gsod*` AS weather
8   WHERE prcp < 99.9 -- Filter unknown values
9   AND prcp > 0 -- Filter stations/days with no precipitation
10  AND _TABLE_SUFFIX >= '2018'
11  ORDER BY date DESC -- Where has it rained/snowed recently
12  LIMIT 10
```

Query completed Using on-demand processing quota

Query results

Row	date	station_name	prcp
1	2025-08-27	DEXTER B FLORENCE MEM FLD...	0.3
2	2025-08-27	PORT ISABEL CAMERON	0.14
3	2025-08-27	EVANSTON UNTA CO BU	0.11
4	2025-08-27	NOGALES INTL	0.77

Job information Results JSON Execution graph

Results per page: 50 ▾ 1 – 10 of 10 ▶ Show

Job history

6 15°C Mostly cloudy

Search

ENG IN 02:33 PM 31-12-2025

Build a Data Warehouse with Big

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:19:58 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Contents

Creating Date-Partitioned Tables in BigQuery

Task 5. Your turn: create a partitioned table

- Modify the previous query to create a table with the below specifications:
 - Table name: ecommerce.days_with_rain
 - Use the date field as your PARTITION BY
 - For OPTIONS, specify partition_expiration_days = 60
 - Add the table description = "weather stations with precipitation, partitioned by day"

Your query should look like this:

```
#standardSQL
CREATE OR REPLACE TABLE ecommerce.days_with_rain
PARTITION BY date
OPTIONS (
    partition_expiration_days=60,
    description="weather stations with precipitation, partitioned
by day"
) AS
```

Setup and requirements 65/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Previous Next

6 15°C Mostly cloudy

Search

ENG IN 02:33 PM 31-12-2025

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Dashboard Catalog Paths Collections

Lab setup instructions and requirements

Protect your account and

End Lab 01:19:42 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

#standardSQL

```
CREATE OR REPLACE TABLE ecommerce.days_with_rain
PARTITION BY date
OPTIONS (
    partition_expiration_days=60,
    description="weather stations with precipitation, partitioned
by day"
) AS

SELECT
    DATE(CAST(year AS INT64), CAST(mo AS INT64), CAST(da AS
INT64)) AS date,
    (SELECT ANY_VALUE(name) FROM `bigquery-public-
data.noaa_gsod.stations` AS stations
        WHERE stations.usaf = stn) AS station_name, -- Stations may
have multiple names
    prcp
    FROM `bigquery-public-data.noaa_gsod.gsod*` AS weather
    WHERE prcp < 99.9 -- Filter unknown values
        AND prcp > 0 -- Filter
        AND _TABLE_SUFFIX >= '2018'
```

Setup and requirements 65/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Click Check my progress to verify the objective

Previous Next

6 15°C Mostly cloudy

Search

ENG IN

02:34 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... (BigQuery – qwiklab +

https://console.cloud.google.com/bigquery?p=bigquery-public-data&d=noaa_gsod&page=dataset&pli=1&authuser=1&project=qwiklabs-gc... | 2

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud **qwiklabs-gcp-00-f2900077ea8b** Search (/) for resources, docs, products, and more Search

Untitled...ery noaa_gsod *Untitled...ery *Untitled...ery +

Untitled query Run Save Download Share Schedule Open in More

```
1 #standardSQL
2 CREATE OR REPLACE TABLE ecommerce.days_with_rain
3 PARTITION BY date
4 OPTIONS (
5   partition_expiration_days=60,
6   description="weather stations with precipitation, partitioned by day"
7 ) AS
```

Query completed Using on-demand processing quota

Query results Save results Open in

Job information Results Execution details Execution graph

This statement created a new table named days_with_rain. Go to table

Job history Show

6 16°C Mostly cloudy Search

ENG IN 02:35 PM 31-12-2025

The screenshot shows the Google Cloud BigQuery interface. On the left is a sidebar with various icons and a search bar for "Search BigQuery resources". Below it is a list of datasets and tables under the "noaa_gsod" dataset. The main area displays an "Untitled query" with the following SQL code:

```
1 #standardSQL
2 CREATE OR REPLACE TABLE ecommerce.days_with_rain
3 PARTITION BY date
4 OPTIONS (
5   partition_expiration_days=60,
6   description="weather stations with precipitation, partitioned by day"
7 ) AS
```

The status bar at the bottom indicates "Query completed" and "Using on-demand processing quota". Below the query results, there are tabs for "Job information", "Results" (which is selected), "Execution details", and "Execution graph". A note states: "This statement created a new table named days_with_rain." At the bottom, there is a "Go to table" button and a "Job history" section.

BigQuery – qwiklabs-gcp-00-f29... – noaa_gsod – BigQuery – qwiklab +

https://console.cloud.google.com/bigquery?p=bigquery-public-data&d=noaa_gsod&page=dataset&pli=1&authuser=1&project=qwiklabs-gc... | 2

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

Untitled...ery noaa_gsod *Untitled...ery *Untitled...ery days_wi...ain

Search BigQuery resources ?

Show starred only

- Repositories
- Queries
- Notebooks
- Data canvases
- Data preparations
- Pipelines
- Connections
- ecommerce** ★
- days_with_rain
- partition_by_day
- bigquery-public-data** ★
- Connections
- america_health_rankings
- austin_311
- austin_bikeshare
- austin_crime
- austin_incidents

This is a partitioned table. [Learn more](#) Dismiss

Schema Details Preview Table Explorer **Preview** Insights Lineage Data Profile Data Quality

Filter Enter property name or value

<input type="checkbox"/> Field name	Type	Mode	Description	Key	Collation	Default Value	Policy Tags ?	Data Policies
<input type="checkbox"/> date	DATE	NULLABLE	-	-	-	-	-	-
<input type="checkbox"/> station_name	STRING	NULLABLE	-	-	-	-	-	-
<input type="checkbox"/> prcp	FLOAT	NULLABLE	-	-	-	-	-	-

Edit schema View row access policies

Job history **'ecommerce' was starred.** X Show

6 16°C Mostly cloudy

Search

02:36 PM 31-12-2025 ENG IN

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Lab setup instructions and requirements

Protect your account and

End Lab 01:17:18 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Confirm data partition expiration is working

To confirm you are only storing data from 60 days in the past up until today, run the DATE_DIFF query to get the age of your partitions, which are set to expire after 60 days.

Below is a query which tracks the average rainfall for the NOAA weather station in Wakayama, Japan which has significant precipitation.

- Add this query and run it:

```
#standardSQL
# avg monthly precipitation
SELECT
    AVG(prcp) AS average,
    station_name,
    date,
    CURRENT_DATE() AS today,
    DATE_DIFF(CURRENT_DATE(), date, DAY) AS partition_age,
    EXTRACT(MONTH FROM date) AS month
FROM ecommerce.days_with_rain
WHERE station_name = 'WAKAYAMA' #Japan
GROUP BY station_name, date, today, month, partition_age
ORDER BY date DESC; # most recent days first
```

Setup and requirements 65/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Next >

6 16°C Mostly cloudy

Search

02:36 PM 31-12-2025

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

DATE_DIFF query to get the age of your partitions, which are set to expire after 60 days.

Below is a query which tracks the average rainfall for the NOAA weather station in Wakayama, Japan which has significant precipitation.

- Add this query and run it:

```
#standardSQL
# avg monthly precipitation
SELECT
    AVG(prcp) AS average,
    station_name,
    date,
    CURRENT_DATE() AS today,
    DATE_DIFF(CURRENT_DATE(), date, DAY) AS partition_age,
    EXTRACT(MONTH FROM date) AS month
FROM ecommerce.days_with_rain
WHERE station_name = 'WAKAYAMA' #Japan
GROUP BY station_name, date, today, month, partition_age
ORDER BY date DESC; # most recent days first
```

Setup and requirements 65/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

Dashboard Catalog Paths Collections

Lab setup instructions and requirements

Protect your account and

End Lab 01:17:03 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Previous Next

BigQuery – qwiklabs-gcp-00-f29... – BigQuery – qwiklab +

https://console.cloud.google.com/bigquery?p=bigrquery-public-data&d=noaa_gsod&page=dataset&pli=1&authuser=1&project=qwiklabs-gc... | 2

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-00-f2900077ea8b Search (/) for resources, docs, products, and more Search

Untitled query Run Save Download Share Schedule Open in More

```
1 #standardSQL
2 # avg monthly precipitation
3 SELECT
4   AVG(prcp) AS average,
5   station_name,
6   date,
7   CURRENT_DATE() AS today,
8   DATE_DIFF(CURRENT_DATE(), date, DAY) AS partition_age,
9   EXTRACT(MONTH FROM date) AS month
10 FROM ecommerce.days_with_rain
11 WHERE station_name = 'WAKAYAMA' #Japan
12 GROUP BY station_name, date, today, month, partition_age
13 ORDER BY date DESC; # most recent days first
```

Query completed

Query results Save results Open in

Job information Results Visualization JSON Execution details Execution graph

There is no data to display.

Results per page: 50 1 - 0 of 0 Show

Job history

Top Stories Amid rising tens... Search

ENG IN 02:37 PM 31-12-2025

Build a Data Warehouse with BigQuery

https://partner.skills.google/course_templates/624/labs/597935

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Task 6. Confirm the oldest partition_age is at or below 60 days

Update the ORDER BY clause to show the oldest partitions first.

- Add this query and run it:

```
#standardSQL
# avg monthly precipitation

SELECT
    AVG(prcp) AS average,
    station_name,
    date,
    CURRENT_DATE() AS today,
    DATE_DIFF(CURRENT_DATE(), date, DAY) AS partition_age,
    EXTRACT(MONTH FROM date) AS month
FROM ecommerce.days_with_rain
WHERE station_name = 'WAKAYAMA' #Japan
GROUP BY station_name, date, today, month, partition_age
ORDER BY partition_age DESC
```

Setup and requirements 100/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

◀ Previous

Next ▶

G Build a Data Warehouse with BigQuery +

Free AI Paraphrasin... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Skills Partner

Build a Data Warehouse with BigQuery > Creating Date-Partitioned Tables in BigQuery

Contents Creating Date-Partitioned Tables in BigQuery

Dashboard Catalog Paths Collections

Lab setup instructions and requirements

Protect your account and

End Lab 01:16:19 Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. Learn more.

Open Google Cloud console

Username: student-02-2ca1724ff853c

Password: 6edzwtrDFkws

Project ID: qwiklabs-gcp-00-f290007

Update the ORDER BY clause to show the oldest partitions first.

- Add this query and run it:

```
#standardSQL
# avg monthly precipitation

SELECT
    AVG(prcp) AS average,
    station_name,
    date,
    CURRENT_DATE() AS today,
    DATE_DIFF(CURRENT_DATE(), date, DAY) AS partition_age,
    EXTRACT(MONTH FROM date) AS month
FROM ecommerce.days_with_rain
WHERE station_name = 'WAKAYAMA' #Japan
GROUP BY station_name, date, today, month, partition_age
ORDER BY partition_age DESC
```

Note: Your results will vary if you re-run the query in the future, as the weather data, and your partitions, are continuously updated.

Setup and required 100/100

Task 1. Create a new dataset

Task 2. Create tables with date partitions

Task 3. Review results from queries on a partitioned table

Task 4. Create an auto-expiring partitioned table

Task 5. Your turn: create a partitioned table

Task 6. Confirm the oldest partition_age is at or below 60 days

Congratulations!

< Previous Next >

Top Stories Amid rising tens... 6

Search

ENG IN 02:37 PM 31-12-2025

BigQuery – qwiklabs-gcp-00-f29... – noaa_gsod – BigQuery – qwiklab +

https://console.cloud.google.com/bigquery?p=bigquery-public-data&d=noaa_gsod&page=dataset&pli=1&authuser=1&project=qwiklabs-gc... |

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud Search (/) for resources, docs, products, and more

Untitled query Open in days_with_rain

Untitled query Open in

#standardSQL
avg monthly precipitation

SELECT
AVG(prcp) AS average,
station_name,
date,
CURRENT_DATE() AS today,
DATE_DIFF(CURRENT_DATE(), date, DAY) AS partition_age,
EXTRACT(MONTH FROM date) AS month
FROM ecommerce.days_with_rain
WHERE station_name = 'WAKAYAMA' #Japan
GROUP BY station_name, date, today, month, partition_age
ORDER BY partition_age DESC

Query completed

Query results

Job information Results JSON Execution graph

There is no data to display.

Results per page: 50 ▾ 1 – 0 of 0

Job history

16°C Mostly cloudy ENG IN 02:38 PM 31-12-2025