What's big query?

Cloud-based big data analytics web service

Processes very large read-only data sets

SQL-like syntax

Runs on Google Cloud Storage Infrastructure

Analyze terabytes of data with just a click of a button

Can be accessed with REST oriented API

Link BigQuery to GA 360

1. Sign in to Google Analytics

2. Click "Admin" and Navigate to Analytics 360 property

3. Under property settings, click All Products, then click link BigQuery

4. Select the view you want to link

5. Confirm that you have enabled billing and applied any relevant credits or coupons to your project and click Save.

6. If you need to stop the export, return to this page, and click Adjust Link in the BigQuery section.

Logical Operators:

AND, OR, NOT IF(condition, true_return, false_return)

Mathematical functions:

COUNT, SUM, AVG, MAX, MIN

+ (addition), - (subtraction), / (division), * (multiplication), % (modulo)

How to start?

Create a project from google cloud console page(https://console.cloud.google.com/projectcreate).

Select BigQuery in the menu to open Google BigQuery UI

Create a dataset

Now you are ready to query!

Best Practices

1. Only you need SELECT fields

2. Whenever possible use LIMIT

3. Store often queried intermediate tables (save table)

4. Test on smaller dataset

5. Compare results with GA's web ui

Save options

Save Query (requires no space)

Save View (alias for a query)

Save Table (requires space, but offers fast execution and low cost)

Common queries:

SELECT - Select attributes (dim & met to be returned)

FROM - From which data table(s)

ORDER BY - DESC|ASC - order by dimension or metric, descending or ascending

JOIN - Join attributes

AS - Give an alias to an attribute

WITHIN - selecting inside nested values

Pricing

Operation	Pricing	Details
Active storage	$0.020 per GB	The first 10 GB is free each month.
Long-term storage	$0.010 per GB	The first 10 GB is free each month.
Streaming Inserts	$0.010 per 200 MB	You are charged for rows that are successfully inserted. Individual rows are calculated using a 1 KB minimum size.
Queries (analysis)	$5.00 per TB	First 1 TB per month is free.

Order of commands

SELECT, WITHIN, FROM, FLATTEN, JOIN, WHERE, GROUP
BY, HAVING, ORDER BY, LIMIT

Reference

Chrome Extension	Streak for bigQuery
Query reference	https://cloud.google.com/bigquery/query-reference
GA + BigQuery cookbook	https://support.google.com/analytics/answer/4419694
Set up BigQuery Export	https://support.google.com/analytics/answer/3416092
GA Sample data set	https://support.google.com/analytics/answer/7586738?hl=en&ref_topic=3416089