Google Cloud Platform For Data Science

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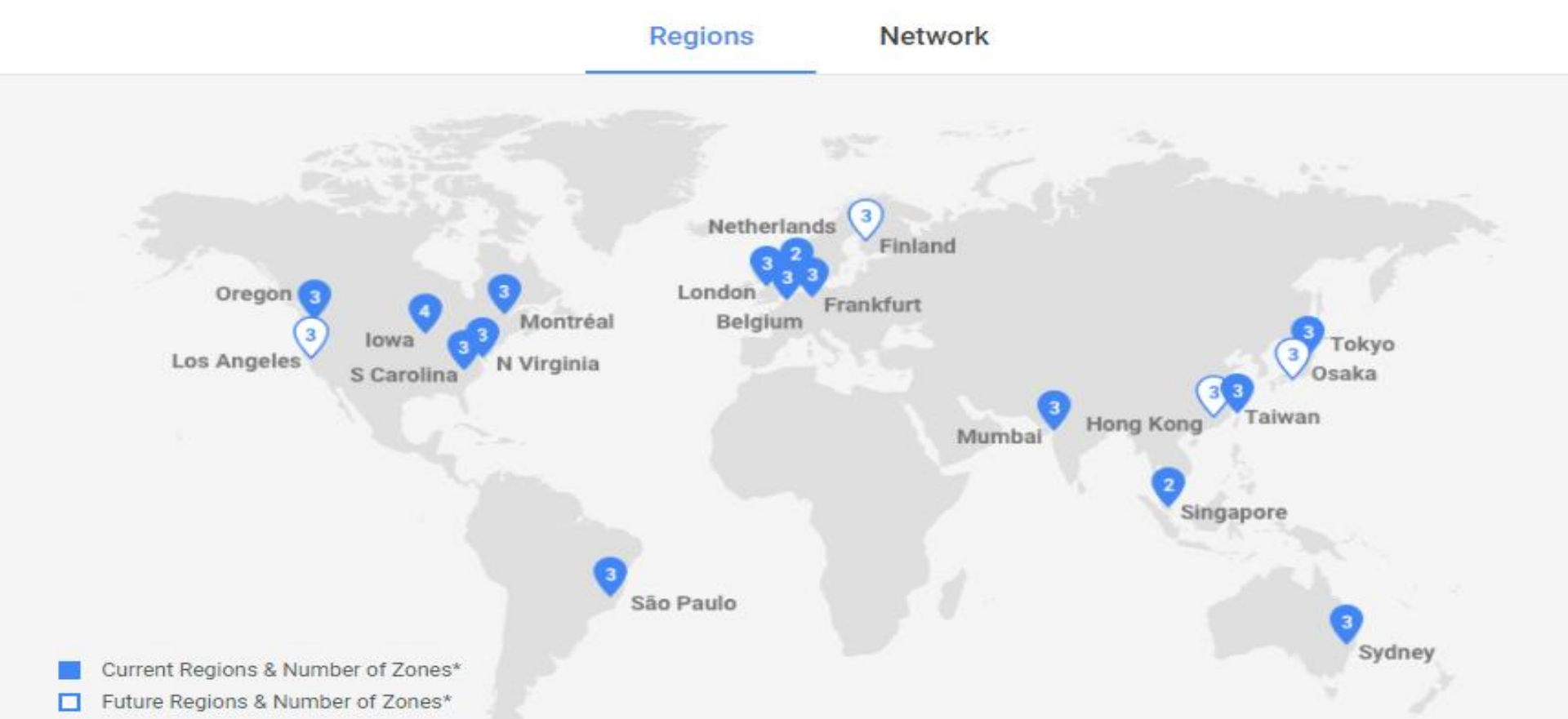
Google Cloud Platform

UPC

Google Cloud Platform Regions and Zones



Payment

Use case

Comparison

Google Cloud

Google Cloud Platform products

COMPUTE

NETWORKING

STORAGE AND DATABASES

BIG DATA

MACHINE LEARNING

IDENTITY & SECURITY

MANAGEMENT AND DEVELOPER TOOLS

Google BigQuery

BigQuery

BigQuery is

scalable

interactive

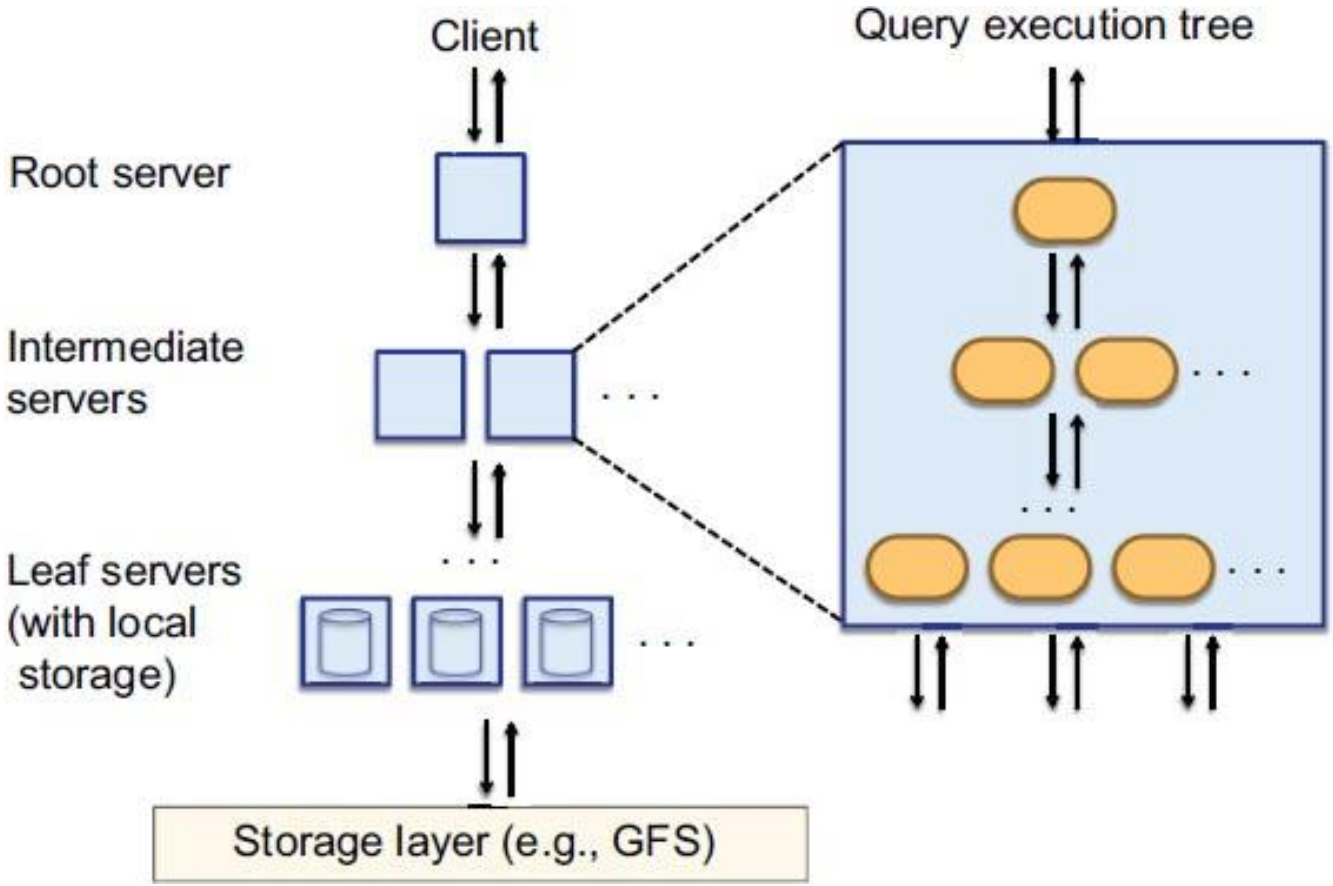
ad hoc query

Implementation details

SHARED MULTI-TENANT ARCHITECTURE

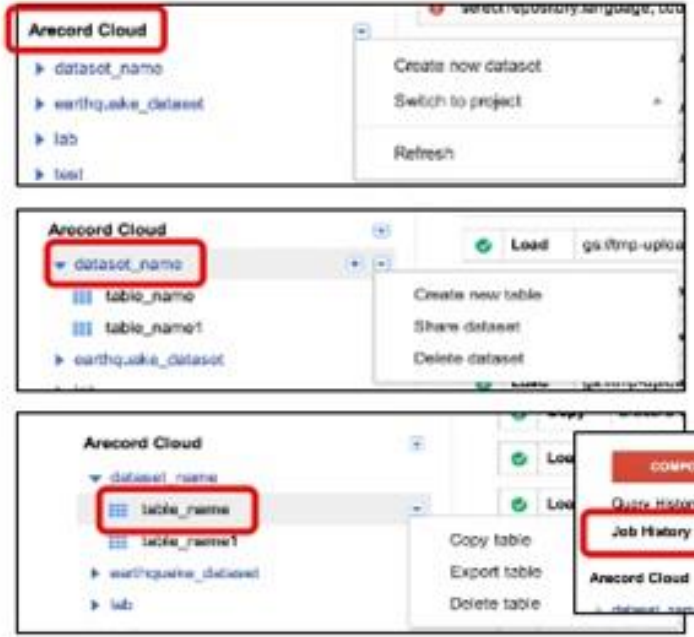
DISTRIBUTED STORAGE AND COLUMNAR DATA LAYOUT

MULTILEVEL EXECUTION TREE



Multi-level execution tree

BigQuery structure



- Project
- Dataset
- Table
- Job

Use case

Cloud Dataflow


```
Pipeline pipeline = Pipeline.create();

PCollection<Tweet> tweets = pipeline.begin()
                                    .apply(new InputFromPubSub())
                                    .apply(new TweetTransfomer());

tweets.apply(new CalculateSentiment());
tweets.apply(new CorrelateKeywords());

pipeline.run();
```

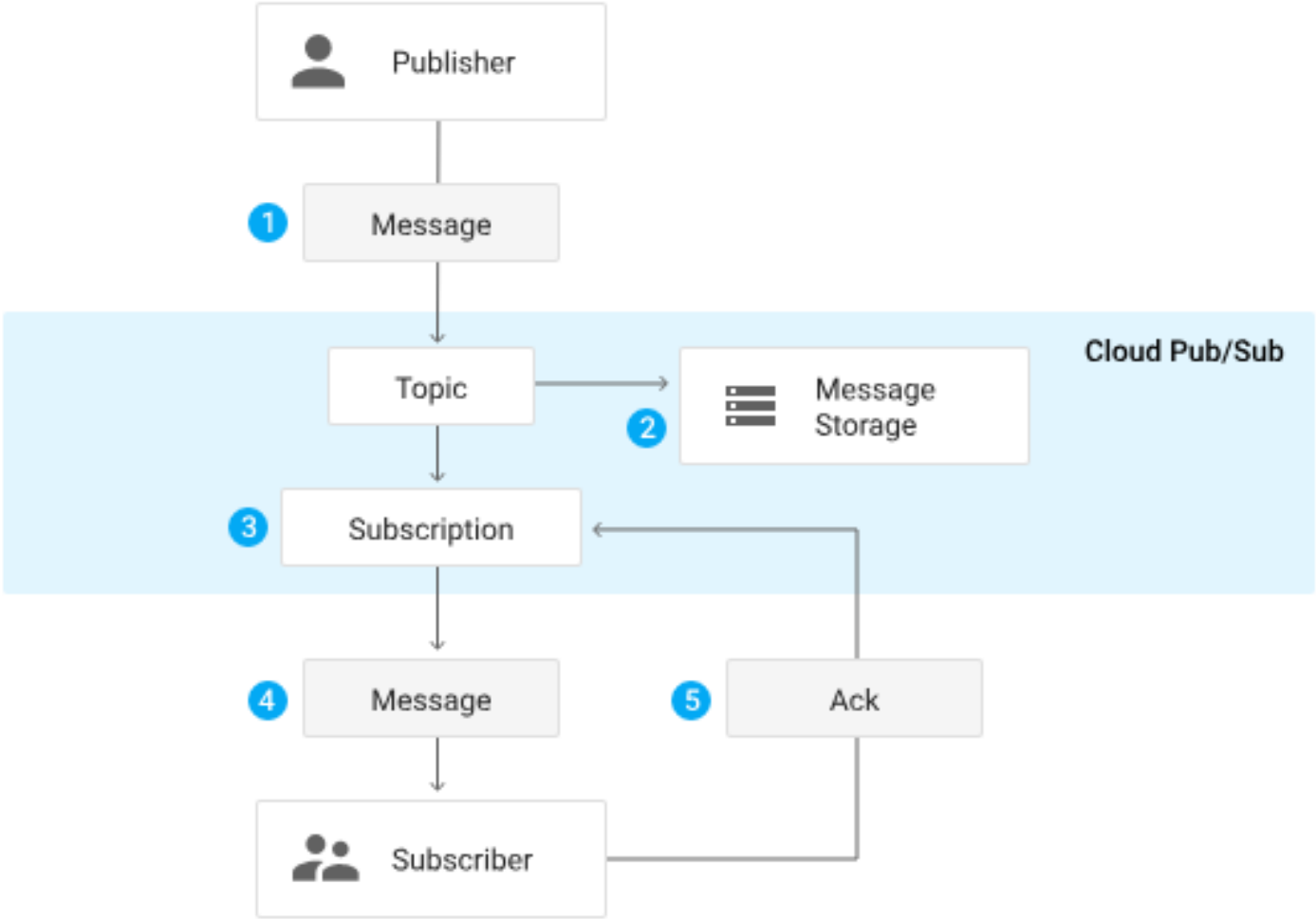
Use case

Fraud detection

IoT analytics in different areas

Logistic

Cloud Pub/Sub


Publisher
1
Message
Cloud Pub/Sub
Topic
2
Message Storage
3
Subscription
4
Message
5
Ack
Subscriber

Use case

Useful sources

- Krishnan, S. P., & L., U. G. (2015). Building your next big thing with google cloud platform: A guide for developers and enterprise architects. New York: Apress.
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