**BigLake**

Built on years of investment in BigQuery, BigLake is a storage engine that allows organizations to unify data warehouses and lakes, and enable them to perform uniform fine-grained access control, and accelerate query performance across multi-cloud storage and open formats.

* Store a single copy of data with uniform features across data warehouses & lakes.
* Fine-grained access control and multi-cloud governance over distributed data.
* Seamless integration with open source analytics tools and open data formats.

BENEFITS

### **Freedom of choice**

Unlock analytics on distributed data regardless where and how it’s stored, while choosing the best analytics tools, open source or cloud native over a single copy of data.

### **Secure and performant data lakes**

Fine-grained access control across open source engines like Apache Spark, Presto and Trino, and open formats such as Parquet. Performant queries over data lakes powered by BigQuery.

### **Unified governance & management at scale**

Integrates with [Dataplex](https://cloud.google.com/dataplex) to provide management at scale, including logical data organization, centralized policy & metadata management, quality and lifecycle management for consistency across distributed data.

KEY FEATURES

## **Key features**

### **Fine grained security controls**

BigLake eliminates the need to grant file level access to end users. Apply table, row, column level security policies on object store tables similar to existing BigQuery tables.

### **Multi-compute analytics**

Maintain a single copy of data and make it uniformly accessible across Google Cloud and open-source engines, including [BigQuery](https://cloud.google.com/bigquery), [Vertex AI](https://cloud.google.com/vertex-ai), [Dataflow](https://cloud.google.com/dataflow), Spark, Presto, Trino, and Hive using BigLake connectors. Centrally manage security policies in one place, and have it consistently enforced across the query engines by the API interface built into the connectors.

### **Multi-cloud governance**

Discover all BigLake tables, including those defined over Amazon S3, Azure data lake Gen 2 in [Data Catalog](https://cloud.google.com/data-catalog). Configure fine grained access control and have it enforced across clouds when querying with [BigQuery Omni](https://cloud.google.com/bigquery-omni/docs/introduction).

### **Performance acceleration**

Achieve industry leading performance over data lake tables on Google Cloud, AWS and Azure, powered by proven BigQuery infrastructure.

### **Built on open formats**

Gain access to the most popular open data formats including Parquet, Avro, ORC, CSV, JSON. The API serves multiple compute engines through Apache Arrow.