Cloud Bigtable

Cloud Bigtable is a fully managed, high performance NoSQL database service for large analytical and operational workloads.

It supports HBase API for access and native compatibility with Hadoop systems.

Features

- Scale to billions of rows and thousands of columns (petabytes of data).
- Each row has a key that is indexed.
- Ideal for storing very large amounts of single-keyed data.
- High read and write throughput at very low latency (great for MapReduce operations).
- Simple administration handling upgrades and restarts transparently.
- Cluster resizing without downtime.
- Sparse storage where empty cells do not take up any space.
- Data is encrypted in-flight and at rest.
- Supports Role based ACLs.
- Data access can be through Application API, Streaming, or Batch Processing.
- Integrates with Cloud Dataflow and Cloud Dataproc.
- On-premise to cloud base operations supported.

When to use?

Use Bigtable when you need very high throughput and scalability for non-structured key/value data where each value is typically less than 10 MB.

Bigtable is also excels for:

- MapReduce operations.
- Stream processing / analytics.
- Machine learning applications.