

# Cloud Bigtable

A fully managed, scalable NoSQL database service for large analytical and operational workloads with up to 99.999% availability.

New customers get \$300 in free credits to spend on Cloud Bigtable.

- Consistent sub-10ms latency—handle millions of requests per second
- Ideal for use cases such as personalization, ad tech, fintech, digital media, and IoT
- Seamlessly scale to match your storage needs; no downtime during reconfiguration
- Designed with a storage engine for machine learning applications leading to better predictions
- Easily connect to Google Cloud services such as [BigQuery](#) or the Apache ecosystem

## BENEFITS

### Fast and performant

Use Cloud Bigtable as the storage engine that grows with you from your first gigabyte to petabyte-scale for low-latency applications as well as high-throughput data processing and analytics.

### Seamless scaling and replication

Start with a single node per cluster, and seamlessly scale to hundreds of nodes dynamically supporting peak demand. Replication also adds high availability and workload isolation for live serving apps.

### Simple and integrated

Fully managed service that integrates easily with big data tools like [Hadoop](#), [Dataflow](#), and [Dataproc](#). Plus, support for the open source [HBase API](#) standard makes it easy for development teams to get started.

# Key features

## **High throughput at low latency**

Bigtable is ideal for storing very large amounts of data in a key-value store and supports high read and write throughput at low latency for fast access to large amounts of data. Throughput scales linearly—you can increase QPS (queries per second) by adding Bigtable nodes. Bigtable is built with proven infrastructure that powers Google products used by billions such as Search and Maps.

## **Cluster resizing without downtime**

Scale seamlessly from thousands to millions of reads/writes per second. Bigtable throughput can be dynamically adjusted by adding or removing cluster nodes without restarting, meaning you can increase the size of a Bigtable cluster for a few hours to handle a large load, then reduce the cluster's size again—all without any downtime.

## **Flexible, automated replication to optimize any workload**

Write data once and automatically replicate where needed with eventual consistency—giving you control for high availability and isolation of read and write workloads. No manual steps needed to ensure consistency, repair data, or synchronize writes and deletes. Benefit from a high availability SLA of 99.999% for instances with multi-cluster routing across 3 or more regions (99.9% for single-cluster instances).