Google

Google BigQuery – Real-time big data analytics in the cloud

Google BigQuery

For more information, visit
http://cloud.google.com/bigquery

"Google BigQuery Service makes it possible to examine millions of records in seconds. Speed is an essential part of our application, and BigQuery Service gives us that."
—Richard Verhoeff, founder, Crystalloids Innovations

"Google takes care of requirements like scalability, security, backup and recovery, and management features, so we can focus on the functional requirements – what business users need to perform their jobs in optimal ways."
—Quintus-Filius Grens, founder, Crystalloids and Crystalloids Innovations

Google BigQuery lets businesses and developers gain real-time business insights from massive amounts of data without any up-front hardware or software investments. Accessible via a simple UI or REST interface, Google BigQuery lets you take advantage of Google's massive computing power, store as much data as needed, and pay only for what you use. Your data is protected with multiple layers of security, replicated across multiple data centers, and can be easily exported.

With Google BigQuery, you can run ad hoc, SQL-like queries against datasets with billions of rows. This can be your own data, or data that someone has shared with you. BigQuery works best for interactive analysis of multi-terabyte datasets, to which you can append fresh data. Analysts can share insights with their organizations using Google spreadsheets integration and Google App Engine-based dashboards, or control access using fine-grained access control lists (ACLs). For developers, Google BigQuery has client libraries in multiple languages, such as Java, Python, etc.

BigQuery usage includes, but is not limited to, the following examples:

- Ad hoc reporting on hundreds of millions of sales transactions to understand changes in demand
- Segmentation analysis on millions of customers to identify discreet cohorts for targeted marketing
- Monitoring dashboards for operations management, with instant drill-down into problem areas
- Mashing up diverse business data (e.g. bookings with regional marketing spend) to discover previously-unknown correlations

Google BigQuery offers these features:

Scalability

- Data storage that scales seamlessly to hundreds of terabytes, with no management required

Speed and flexibility

- Ad hoc queries on multi-terabyte datasets
- Familiar SQL-like query syntax and intuitive web UI
- Ability to JOIN enormous fact tables to most lookup tables

Integration and accessibility

- Integration with Google spreadsheets, letting data analysts drive massive datasets in BigQuery directly from a spreadsheets interface
- Interactive dashboards easily built with Google AppEngine, and smooth data export to Google Cloud Storage
- HTTP REST API, a web UI for interactive querying, and command-line interface

"Google BigQuery Service is saving us time and resources. Since we don't have to worry about setting up machines as we bring more clients on board, we expect it will save us a lot of money, as well."
—Raj Pai, CEO, Claritics

"Using the big data analytics infrastructure from Google BigQuery Service has significant time-to-market and performance advantages."
—Raj Pai, CEO, Claritics

Security and reliability

- Customer-defined ACLs for controlling fine-grained data access
- Highly available and durable data, even in extreme failure modes, with data replicated across multiple locations

What You Get/How Companies Benefit

Faster business insights with real-time data analytics

Leverage Google's massive computing power to get business insights from big data in seconds rather than hours. Google BigQuery lets you analyze all this data without any up-front investments in server hardware or complex software. Most important, you don't need to know the questions in advance – you can ask them on the fly, without burdening IT.

Analyze, share, and scale big data with ease

You don't need to learn a complicated interface, because you can access BigQuery via a simple UI or REST interface, using familiar SQL-like queries. Sharing is easy as you collaborate quickly and securely using ACLs. And there's no worry about increasing amounts of data, because you can store as much as you want, paying only for what you use.

Secure, exportable data

Data is highly available, because it's replicated across multiple data centers. It's also protected with multiple layers of security, so you have complete peace of mind. In addition, your data is easily exportable, so you are never locked in.

Flexible pricing

Running big data analysis doesn't require operating a data center. You have no up-front risks, no capital costs, and you can terminate service and remove your data at any time. Pricing is simple, with just two components – query processing and storage. You pay only for what you use. We provide full visibility and control with Google tools to optimize usage and costs.

Technical Support

Google BigQuery features several levels of expert-led technical support, including free online user forums moderated by Google and operational support for Premier accounts.

Service Level Agreement (SLA)

During the term of the applicable license agreement for Google BigQuery, the service will be operational and available to the customer, as set forth in the current SLA. Read more about the SLA at **https://developers.google.com/bigquery/docs/sla.**

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