

Google Cloud Announces BigQuery Features That Accelerate Performance and Increase Efficiency for all Business Intelligence Workloads

BI Engine and materialized views give organizations performance gains across any business intelligence tool, from Google's Looker and Connected Sheets to Tableau, to Microsoft Power BI, and more

Sunnyvale, Calif., February 25, 2021 – Google Cloud today announced two powerful enhancements that will continue to meet the customer demand of reducing time to insight and increasing performance of BigQuery. BI Engine and materialized views for BigQuery build upon the open, intelligent and flexible Google Cloud platform to provide sub-second query response time and high concurrency. The performance gains provided through these enhancements allows organizations to provide employees with increased access to data at scale and empower them with the ability to make fast data-driven decisions that directly impact the business.

Supporting Google's open data cloud strategy, BI Engine is now previewing out-of-the-box integration with Looker and Google's Connected Sheets as well as continued support for Data Studio. BI Engine is also available for third party partners such as Salesforce's Tableau, Microsoft's Power BI, or any custom-built or partner business intelligence (BI) tool.

"Our business users are hungry for data and expect a lot from our team, so as soon as we had the opportunity to turn on BI Engine for BigQuery and Looker, we did and the performance matched to the speed of business expectations and greatly improved the load times for dashboards," said Harish Ramachandraiah, Director of Engineering and Analytics at [Sunrun](#). "This fast in-memory analysis service allowed the marketing, sales, and operations business users to analyze large and complex datasets interactively in Looker and Data Studio."

Kiran Manne who is the Google Cloud Architect on the BI team at [Sunrun](#) added, "It helped the development team too, with its simplified architecture for getting started quickly without managing complex, post-ETL transformations and data pipelines. We saw 40% performance increases and we have 1000+ users interacting with the data daily via Looker and Data Studio, so this was a very effective way to improve their data experiences, save them time, and positively impact the data culture at Sunrun."

Using smart tuning capabilities, BI Engine intelligently creates configuration settings to ensure optimal performance and overall load times for dashboards. This function is executed in the background every time data changes or is added, guaranteeing fresh and fast data for any and all queries. This functionality occurs automatically, causing zero maintenance for analytics teams.

Also, now generally available, BigQuery materialized views (MV's) significantly boosts performance of workloads that have the characteristic of common and repeated queries. MV's in BigQuery are unique as they offer a modern approach with zero required maintenance and ensure data is always fresh. By providing precomputed views that periodically cache results of a query, MV's provide a faster query performance and acceleration of real-time data.

"Query latency is critical in our case where reporting data is directly consumed by the UI which processes ~8,000 SQL queries per day with each query needing to complete in under a second: this innovation not only came with great cost reduction, but it also hugely improves performance," says Adrian Witas, Senior Vice President, Chief Architect at Viant.

"In order to achieve their business goals customers need real-time insight. BI Engine enables them to get sub-second response time, regardless of the BI tools they use. With no changes on their end, users automatically get lightning-fast analytics in the applications they already use and love. We're excited to work with partners like Microsoft, Tableau and the rest of the community to further advance our goal to democratize access to data by providing the world's best analytics experience," said Debanjan Saha, GM, data analytics at Google Cloud.

This announcement of BI Engine and MV's further extends Google's open cloud strategy for multi-cloud analytics. The announcement deepens the company's commitment made during the launch of [BigQuery Omni](#), the company's multi-cloud analytics solution which customers can use to cost-effectively access and securely analyze data across Google Cloud, Amazon Web Services (AWS), and Azure (coming soon).

BI Engine is now natively integrated into BigQuery's API and architecture, so customers are always working with the most up-to-date data. Materialized views are also automatically available for use in BigQuery starting today.

Supporting quotes:

- Looker: "Customers are always looking for ways to improve query performance, and we've been working closely with the BigQuery team to ensure we meet this demand. The launch of BI Engine for Looker makes querying extremely fast. Common use cases in Looker include the analysis of large data sets or streaming data where speed and freshness is important. Simply put, BI Engine will greatly accelerate our customers' experience with Looker," says Ronaldo Ama, GM at Looker, Google Cloud.
- Tableau: "When a company runs on data, speed, agility and empowerment are critical to achieving competitive advantage. Combining Tableau's ease of use and flexibility with the power and scale of Google's BigQuery BI Engine will rapidly unlock the power of data for even more people," says Francois Ajenstat, Chief Product Officer at Tableau Software.

For more info about the value these innovations are bringing to organizations, join our upcoming webinar in March: "[Delivering fast and fresh data experiences with BigQuery BI Engine & Looker](#)". You can always visit our blogs for [BI Engine \(Preview\)](#) and [Materialized Views \(GA\)](#) to learn more.

About Google Cloud

Google Cloud provides organizations with leading infrastructure, platform capabilities and industry solutions. We deliver enterprise-grade cloud solutions that leverage Google's cutting-edge technology to help companies operate more efficiently and adapt to changing needs, giving customers a foundation for the future. Customers in more than 150 countries turn to Google Cloud as their trusted partner to solve their most critical business problems.

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