BigQuery release notes

This page documents production updates to BigQuery. We recommend that BigQuery developers periodically check this list for any new announcements. BigQuery automatically updates to the latest release and cannot be downgraded to a previous version.

For older release notes, see the Release notes archive (/bigquery/docs/release-notes-archive).

You can see the latest product updates for all of Google Cloud on the Google Cloud (/release-notes) page, browse and filter all release notes in the Google Cloud console (https://console.cloud.google.com/release-notes), or programmatically access release notes in BigQuery (https://console.cloud.google.com/bigquery?p=bigquery-public-data&d=google_cloud_release_notes&t=release_notes&page=table) .

To get the latest product updates delivered to you, add the URL of this page to your feed reader (https://wikipedia.org/wiki/Comparison_of_feed_aggregators), or add the feed URL (https://docs.cloud.google.com/feeds/bigquery-release-notes.xml) directly.

April 29, 2026

Breaking

Strict act-as mode (/dataform/docs/strict-act-as-mode) is enforced globally for all Dataform repositories, requiring the use of a custom service account or user credentials for running Dataform workflows, BigQuery pipelines, notebooks, and data preparations.

Feature

You can now use the `VECTOR_INDEX.STATISTICS` function (/bigquery/docs/reference/standard-sql/vectorindex_functions#vector_indexstatistics) to calculate how much an indexed table's data has drifted between when a vector index was created and the present. If table data has changed enough to require a vector index rebuild (/bigquery/docs/vector-index#rebuild_a_vector_index), you can use the `ALTER VECTOR INDEX REBUILD` statement (/bigquery/docs/reference/standard-sql/data-definition-language#alter_vector_index_rebuild_statement) to rebuild the vector index without downtime. These features are generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature You can now use the `PARTITION BY` clause of the `CREATE VECTOR INDEX` statement (/bigquery/docs/reference/standard-sql/data-definition-language#create_vector_index_statement) to partition TreeAH vector indexes (/bigquery/docs/vector-index#partitions). Partitioning enables partition pruning and can decrease I/O costs. This feature is Generally Available (https://cloud.google.com/products/#product-launch-stages).

April 28, 2026

Feature You can now create materialized views over active change data capture (CDC) enabled tables (/bigquery/docs/materialized-views-intro#cdc). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

April 23, 2026

Change An updated version of the Simba JDBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#current_jdbc_driver) is now available.

April 22, 2026

Feature You can now use the visual graph modeler (/bigquery/docs/graph-modeler) in BigQuery Studio to define BigQuery graph nodes and edges from your BigQuery tables and edit graph schema. This feature is available in Preview (/products#product-launch-stages).

Announcement Dataproc is now called Managed Service for Apache Spark (/dataproc/docs/concepts/overview). The names for associated API, client library, CLI, and Identity and Access Management (IAM) resources remain unchanged.

Announcement BigLake is now called Google Cloud Lakehouse (/biglake/docs/introduction). BigLake metastore is now called the Lakehouse runtime catalog (/biglake/docs/about-blms). The names for associated APIs, client libraries, CLI

commands, and Identity and Access Management (IAM) remain unchanged and still reference BigLake.

Announcement

Dataplex Universal Catalog is now called Knowledge Catalog (/dataplex/docs/introduction). The API, client library, CLI, and Identity and Access Management (IAM) names remain unchanged. For more information, see Knowledge Catalog overview (/dataplex/docs/introduction).

Announcement

Looker Studio is now called Data Studio (https://docs.cloud.google.com/data-studio). The website and endpoint change from `lookerstudio.google.com` to `datastudio.google.com`. You do not need to update your reports for this change, as Data Studio automatically redirects to the new domain. However, if your company uses proxies to restrict access to external sites, your IT administrator needs to add the new domain to your access control list (ACL). The names for associated API, client library, CLI, and Identity and Access Management (IAM) resources remain unchanged. For more information, see Data Studio returns as new home for Data Cloud assets (https://cloud.google.com/blog/products/data-analytics/looker-studio-is-data-studio).

Feature

BigQuery graphs (/bigquery/docs/graph-overview) now support the following features:

- You can query graphs (/bigquery/docs/conversational-analytics#graphs) using natural language in Conversational Analytics.
- You can add descriptions and synonyms (/bigquery/docs/reference/standard-sql/graph-schema-statements#element_table_property_definition) to the labels and properties in your graphs.
- For some types of graphs you can define measures (/bigquery/docs/graph-measures), which lock an aggregation to a key to help you perform complex aggregations without overcounting. To query measures, you transform your graph into a flattened table by using the `GRAPH_EXPAND` TVF (/bigquery/docs/reference/standard-sql/graph-sql-queries#graph_expand), and then query measures in that table with the `AGG` function (/bigquery/docs/reference/standard-sql/aggregate_functions#agg).

These features are in Preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now use the Data Engineering Agent (/bigquery/docs/data-engineering-agent-pipelines) to build, modify, and troubleshoot data pipelines in BigQuery. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use the `gemini-embedding-2-preview` model in the `AI.EMBED` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-embed), `AI.SIMILARITY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-similarity), and `AI.GENERATE_EMBEDDING` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-embedding) functions to generate a single embedding from a combination of input types, including text, image, audio, video, and PDF files. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

April 21, 2026

Feature

You can now visualize BigQuery graph query results and graph schemas (/bigquery/docs/graph-visualization#visualization-results) directly in BigQuery Studio, without the need of a notebook environment. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

April 20, 2026

Change

Starting July 25, 2026, the BigQuery Data Transfer Service for Facebook Ads connector (/bigquery/docs/facebook-ads-transfer) will update the data type mapping for the `ActionValue` field in the `AdInsightsActions` report from `INT` to `FLOAT`.

Feature

The following features have been added to Python UDFs (/bigquery/docs/user-defined-functions-python) during Preview (https://cloud.google.com/products/#product-launch-stages):

- Vectorized UDFs with Apache Arrow. You can now create vectorized Python UDFs (/bigquery/docs/user-defined-functions-python#create-vector-udf-apache) using the Apache Arrow `RecordBatch` interface for improved performance.
- Cloud Monitoring integration. Python UDFs now export metrics (/bigquery/docs/user-defined-functions-python#view_python_udf_metrics) to Cloud Monitoring, including CPU utilization, memory utilization, and maximum concurrent requests per instance.
- Container request concurrency. A new option, `container_request_concurrency`, is available for the `CREATE FUNCTION` statement. This option controls the maximum number of concurrent requests per Python UDF container instance.
- New quotas. Python UDFs are now subject to new quotas (/bigquery/quotas#udf_limits) on image storage bytes (10 GiB per project per region) and mutation rate (30 per minute per project per region).
- Cost visibility. Python UDF costs can be seen in the `external_service_costs` column in the `INFORMATION_SCHEMA.JOBS` view and in the `ExternalServiceCosts` field in the Job API (/bigquery/docs/reference/rest/v2/Job#externalservicecost).

Feature

You can now migrate metadata from external data catalogs to BigLake tables for Apache Iceberg (/bigquery/docs/migration/external-metastore-lakehouse-migration). This feature supports external data catalogs such as such as Apache Hive Metastore and Apache Iceberg REST Catalog. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can use the BigQuery MCP server (/bigquery/docs/use-bigquery-mcp) to perform a range of data-related tasks with your AI applications including:

- Examining BigQuery resources.
- Generating accurate and efficient SQL queries.
- Securely executing queries.
- Interpreting query results.

This feature is Generally Available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now publish a BigQuery Conversational Analytics agent in Gemini Enterprise (/bigquery/docs/create-data-agents#publish-agent-gemini-enterprise). This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use the notebook gallery (/bigquery/docs/notebooks-introduction#notebook_gallery) in the BigQuery web UI as your central hub for discovering and using prebuilt notebook templates. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

April 17, 2026

Feature

Using folders (/bigquery/docs/code-asset-folders) to organize and control access to single file code assets is generally available (https://cloud.google.com/products#product-launch-stages) (GA). In addition, you can perform bulk move and delete operations, refresh folder contents, and view full breadcrumb paths based on resource permissions. For more information, see Create and manage folders (/bigquery/docs/create-manage-folders).

April 16, 2026

Feature

Conversational analytics (/bigquery/docs/conversational-analytics) now supports querying Lakehouse tables that connect to the Apache Iceberg REST catalog or are federated to an external catalog. For more information, see Query BigLake data with natural language (/biglake/docs/conversational-analytics).

This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now use Colab Data Apps (/bigquery/docs/colab-data-apps) to transform your data analyses from Colab notebooks into polished, interactive applications.

This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now use the `AI.KEY_DRIVERS` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-key-drivers) to identify segments of data that cause statistically significant changes to a summable metric.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

April 15, 2026

Feature

BigQuery Apache Iceberg external tables now support Iceberg version 3 (https://iceberg.apache.org/spec/#version-3-extended-types-and-capabilities), including binary deletion vectors. For more information, see Apache Iceberg external tables (/bigquery/docs/iceberg-external-tables). This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

BigQuery agent analytics is now generally available (https://cloud.google.com/products#product-launch-stages) (GA) in the Google Agent Developer Kit. BigQuery agent analytics (/bigquery/docs/bigquery-agent-analytics) is an open source solution that lets you capture, analyze, and visualize multimodal agent interaction data at scale.

Announcement

A known issue has been resolved where a materialized view refresh could expose could expose masked or filtered data from fine grained access control policies in error messages. No further action is needed.

Feature

You can now use `EXPORT DATA` statements (/bigquery/docs/reference/standard-sql/export-statements#export_to_alloydb) to reverse ETL BigQuery data to AlloyDB (/bigquery/docs/export-to-alloydb). This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

April 13, 2026

Feature

Support for the `AI.AGG` function preview (https://cloud.google.com/products/#product-launch-stages) has been temporarily disabled. We are working to restore this feature as soon as possible.

Feature

To reduce LLM token consumption and query latency when processing large datasets, enable optimized mode (/bigquery/docs/optimize-ai-functions) using the following managed AI functions (/bigquery/docs/generative-ai-overview#managed_ai_functions):

- `AI.IF` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-if)
- `AI.CLASSIFY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-classify)

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

The following managed AI functions (/bigquery/docs/generative-ai-overview#managed_ai_functions) use Gemini to help you filter, join, rank, and classify your data:

- `AI.IF` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-if): Filter and join text and unstructured data (such as images, PDFs, audio, or video) based on a condition described in natural language.
- `AI.SCORE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-score): Rate text and unstructured data (such as images, PDFs, audio, or video) to rank your data by quality, similarity, or other criteria.
- `AI.CLASSIFY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-classify): Classify text and unstructured data (such as images, PDFs, audio, or video) into user-defined categories.

These functions are generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can use visualization cells (/bigquery/docs/create-notebooks#cells) to automatically generate a visualization (/bigquery/docs/visualize-data-colab) of any DataFrame in your notebook. You can customize the columns, chart type, aggregations, colors, labels, and title.

This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

April 10, 2026

Feature

SQL cells (/colab/docs/sql-cells) in BigQuery notebooks are now generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

April 09, 2026

Feature

The BigQuery Data Transfer Service can now transfer data from Snowflake to BigQuery (/bigquery/docs/migration/snowflake-transfer). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use stateful operations in continuous queries (/bigquery/docs/continuous-queries-introduction#supported_stateful_operations), which let you perform complex analysis by retaining information across multiple rows or time intervals using `JOIN`s and windowing aggregations. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use BigQuery Graph (/bigquery/docs/graph-overview) to model your data as a graph and perform analysis on a large scale.

- Create a graph (/bigquery/docs/graph-create) directly from tables that store entities and relationships between entities. You don't need to modify your existing workflows or replicate your data to use it in graph queries.
- Use Graph Query Language (GQL) (/bigquery/docs/reference/standard-sql/graph-intro) to find complex, hidden relationships between data points that would be challenging to find using SQL.
- Visualize (/bigquery/docs/graph-visualization) your graph schema and graph query results in a notebook.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

April 08, 2026

Feature

The BigQuery Data Transfer Service now supports incremental data transfers (/bigquery/docs/sqlserver-transfer#full_or_incremental_transfers) when transferring data from Microsoft SQL Server to BigQuery. This feature is supported in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use the `@@session_id` system variable (/bigquery/docs/reference/system-variables) with SQL user-defined functions, table functions, and logical views. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

April 07, 2026

Feature

The BigQuery Data Transfer Service now supports incremental data transfers for the following data source connectors:

- MySQL (/bigquery/docs/mysql-transfer)
- Oracle (/bigquery/docs/oracle-transfer)
- PostgreSQL (/bigquery/docs/postgresql-transfer)
- ServiceNow (/bigquery/docs/servicenow-transfer)

These features are supported in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use the built-in text embedding model `embeddinggemma-300m` in the `AI.EMBED` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-embed) and `AI.SIMILARITY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-similarity) functions. This model uses your BigQuery slots to generate embeddings at scale. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

April 06, 2026

Feature

You can now use the `AI.AGG` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-agg) to semantically

aggregate unstructured input data based on natural language instructions. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now use a custom organization policy (/bigquery/docs/custom-constraints) to allow or deny specific operations on these BigQuery resources: tables, data policies, and row access policies. This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

April 02, 2026

Feature

You can now use the `CREATE CONNECTION` (/bigquery/docs/reference/standard-sql/data-definition-language#create_connection_statement), `ALTER CONNECTION SET OPTIONS` (/bigquery/docs/reference/standard-sql/data-definition-language#alter_connection_set_options_statement), and `DROP CONNECTION` (/bigquery/docs/reference/standard-sql/data-definition-language#drop_connection_statement) data definition language (DDL) statements to manage Cloud resource connections with GoogleSQL. Additionally, you can now use the `connection` user type (/bigquery/docs/reference/standard-sql/data-control-language#user_list) and `PROJECT` resource type (/bigquery/docs/reference/standard-sql/data-control-language#arguments) with `GRANT` and `REVOKE` data control language (DCL) statements to manage connection and project access. These features are generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

The BigQuery Migration Service supports SQL translations from Snowflake SQL to GoogleSQL (/bigquery/docs/migration/snowflake-migration-intro). This feature is now generally available (https://cloud.google.com/products#product-launch-stages) (GA).

With this change, the translation service supports a wider variety of Snowflake SQL and has improved support for several data types. Among other changes, the translation service maps Snowflake `INTEGER` and zero-scale `NUMERIC` types up to precision 38 to `INT64` type in GoogleSQL for improved performance by default.

Feature

You can set the column granularity (/bigquery/docs/search-index#column-granularity) when you create a search index (/bigquery/docs/reference/standard-sql/data-definition-language#create_search_index_statement), which stores additional column information in your search index to further optimize your search query performance. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

March 31, 2026

Feature

BigQuery `ObjectRef` values (/bigquery/docs/work-with-objectref) now support the following:

- You can run `ObjectRef` functions (/bigquery/docs/reference/standard-sql/objectref_functions) with either direct access or delegated access (/bigquery/docs/work-with-objectref#authorizer_and_permissions).
- The `OBJ.MAKE_REF` function (/bigquery/docs/reference/standard-sql/objectref_functions#objmake_ref) automatically fetches the latest Cloud Storage metadata and populates this in the `ref.details` field.
- The `OBJ.GET_READ_URL` function (/bigquery/docs/reference/standard-sql/objectref_functions#objget_read_url) returns a `STRUCT` value with a read URL and status columns and renders image results in the Cloud console. Use this function when you don't require a write URL.

These features are generally available (https://cloud.google.com/products#product-launch-stages) (GA).

March 30, 2026

Feature

The following forecasting and anomaly detection functions and updates are generally available (https://cloud.google.com/products#product-launch-stages) (GA):

- The `AI.DETECT_ANOMALIES` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-detect-anomalies) supports providing a custom context window that determines how many of the most recent data points should be used by the model.
- The `AI.FORECAST` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-forecast) supports specifying the latest timestamp value for forecasting.
- The `AI.EVALUATE` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-evaluate) supports the following:
  - You can provide a custom context window that determines how many of the most recent data points should be used by the model.
  - The function outputs the mean absolute scaled error (https://en.wikipedia.org/wiki/Mean_absolute_scaled_error) for the time series.

Feature You can now create BigQuery non-incremental materialized views over Spanner data (https://docs.cloud.google.com/bigquery/docs/materialized-views-create#spanner) to improve query performance by periodically caching results. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

March 26, 2026

Feature You can now use Cloud resource connections with `EXPORT DATA` statements (/bigquery/docs/export-to-spanner#export_using_a_cloud_resource_connection) to reverse ETL BigQuery data to Spanner. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

March 25, 2026

Announcement The Gemini for Google Cloud API (https://docs.cloud.google.com/gemini/docs/overview)

(cloudaicompanion.googleapis.com) is now enabled for existing BigQuery projects in the European jurisdiction.

Feature

You can now use the BigQuery Migration Service MCP server (/bigquery/docs/use-bigquery-migration-mcp) to perform SQL translation tasks, including translating SQL queries into GoogleSQL syntax, generating DDL statements from SQL input queries, and getting explanations of SQL translations.

This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

Feature

In BigQuery Data Transfer Service, you can monitor resource-level status reporting for Hive managed tables (/bigquery/docs/hdfs-data-lake-transfer#monitor-transfer-status) to track progress and view granular error details for individual tables. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can use the BigQuery migration assessment for Snowflake (/bigquery/docs/migration-assessment) to assess the complexity of migrating from Snowflake to BigQuery. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

March 24, 2026

Feature

You can now use the BigQuery Data Transfer Service remote MCP server (/bigquery/docs/reference/datatransfer/mcp) to enable AI agents to create, manage, and run data transfers. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

March 23, 2026

Feature

The following functions are now generally available (https://cloud.google.com/products#product-launch-stages) (GA):

- `AI.EMBED` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-embed): create embeddings from text or image data.

- `AI.SIMILARITY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-similarity): compute the semantic similarity between pairs of text, pairs of images, or across text and images.

Feature

You can clean, transform, and enrich data from files in Cloud Storage and Google Drive in your BigQuery data preparations. For more information, see Prepare data with Gemini (/bigquery/docs/data-prep-get-suggestions#open-data-prep-editor). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

March 19, 2026

Feature

You can now use a custom organization policy (/bigquery/docs/custom-constraints) to allow or deny specific operations on routines. This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

March 17, 2026

Feature

In BigQuery ML, you can now automatically deploy (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open#automatically_deployed_models) open models to Vertex AI endpoints. Automatically deployed models offer the following benefits:

- Automatic Vertex AI resource management (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open#managed-resources)
- Reserve open model resources by using Compute Engine reservations (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open#reservation-affinity)
- Automatic or immediate open model undeployment (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open#managed-model-undeployment) to save costs

This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

March 16, 2026

Feature

BigQuery now lets you configure a global default location (/bigquery/docs/default-configuration#global-settings). This setting is used if the location isn't set or can't be inferred from the request. You can set the default location at the organization or project level.

This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

March 12, 2026

Change

BigQuery advanced runtime (/bigquery/docs/advanced-runtime) is now enabled as the default runtime for all projects.

March 11, 2026

Feature

You can now understand and debug BigQuery query performance with a visual mapping of your SQL query in the query execution graph (/bigquery/docs/query-plan-explanation#query_text_heatmap). A heatmap highlights the steps that consume more slot-time. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

March 09, 2026

Feature

Updates to conversational analytics (/bigquery/docs/conversational-analytics) include the following improvements:

- ObjectRef support: BigQuery conversational analytics now integrates with Google Cloud Storage through ObjectRef functions (/bigquery/docs/reference/standard-sql/objectref_functions). This lets you reference and interact with unstructured data such as images and PDFs in Cloud Storage buckets in your conversational analysis.
- BQML support: BigQuery conversational analytics now supports a set of BigQuery ML functions (/bigquery/docs/conversational-analytics#bigquery-ml-support), including AI.FORECAST, AI.DETECT_ANOMALIES, and AI.GENERATE. These functions let you perform advanced analytics tasks with simple conversational prompts.
- Chat with BigQuery results: You can now start conversations and chat with query results in BigQuery Studio (SQL editor).
- Enhanced support for partitioned tables: BigQuery conversational analytics can now use BigQuery table partitioning. The agent can optimize SQL queries by using partitioned columns such as date ranges on a date-partitioned table. This can improve query performance and reduce costs.
- Labels for agent-generated queries: BigQuery jobs initiated by the conversational analytics agent are now labeled in BigQuery Job History (/bigquery/docs/managing-jobs) in the Google Cloud Console. You can identify, filter, and analyze the jobs run by the conversational analytics agent by referencing labels similar to `{'ca-bq-job': 'true'}`. These labels can help with the following tasks:
  - Monitor and attribute cost.
  - Audit agent activity.
  - Analyze agent-generated query performance.
- Suggest next questions (clickable): When working with BigQuery conversational analytics, the agent now suggests questions that are directly clickable in the Google Cloud console.

This feature is available in Preview (https://cloud.google.com/products/#product-launch-stages).

March 06, 2026

Feature

You can create a remote model (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-embedding-maas) based on the Vertex AI `gemini-embedding-001` model, or a remote model (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open) based on an open embedding model from Vertex Model Garden or Hugging Face that is deployed to Vertex AI.

You can then use the `AI.GENERATE_EMBEDDING` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-embedding) with these remote models to generate embeddings. You can also use the `AI.EMBED` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-embed) directly with the `gemini-embedding-001` model endpoint.

These features are generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use the Pipelines & Connections page (/bigquery/docs/pipeline-connection-page) to streamline your data integration tasks by using guided, BigQuery-specific configuration workflows for services like BigQuery Data Transfer Service, Datastream, and Pub/Sub.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

March 05, 2026

Change

An updated version of the Simba ODBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#current_odbc_driver) is now available.

Feature

You can now use an alternate syntax when you call the `VECTOR_SEARCH` function (/bigquery/docs/reference/standard-sql/search_functions#vector_search) to improve query performance when you search for a single vector. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

March 04, 2026

Feature

Monitor dataset replication latency and network egress bytes in Cloud Monitoring for BigQuery cross-region replication (/bigquery/docs/data-replication#monitor-replication) and managed disaster recovery (/bigquery/docs/managed-disaster-recovery#monitor-replication). These metrics are generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use continuous queries to stream BigQuery data to Spanner in real time (/bigquery/docs/continuous-queries#spanner-example). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

February 25, 2026

Change

Effective *June 1, 2026*, BigQuery will limit legacy SQL use. This depends on whether your organization or project uses it from November 1, 2025, to June 1, 2026. If you don't use legacy SQL during this time, you won't be able to use it after June 1, 2026. If you do use it, your existing workloads will keep running, but new ones might not. For more information, see Legacy SQL feature availability (https://docs.cloud.google.com/bigquery/docs/legacy-sql-feature-availability) .

February 24, 2026

Feature

You can now create and review (/bigquery/docs/create-data-agents#create-review-glossary-terms) custom glossary terms in BigQuery for a conversational analytics agent and you can review business glossary terms imported from Dataplex Universal Catalog for an agent. These terms help an agent interpret your prompts.

This feature is now in Preview (https://cloud.google.com/products/#product-launch-stages).

February 23, 2026

Feature You can now undelete a dataset (/bigquery/docs/restore-deleted-datasets) that is within your time travel window to recover it to the state that it was in when it was deleted. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

February 17, 2026

Feature You can now run global queries (/bigquery/docs/global-queries), which let you reference data stored in more than one region in a single query. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Change After March 17, 2026, when you enable BigQuery, the BigQuery MCP server is automatically enabled.

Deprecated Control of MCP use with organization policies is deprecated. After March 17, 2026, organization policies that use the `gcp.managed.allowedMCPServices constraint` won't work, and you can control MCP use with IAM deny policies. For more information about controlling MCP use, see Control MCP use with IAM deny policies (/mcp/control-mcp-use-iam).

February 12, 2026

Feature The `AI.CLASSIFY` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-classify) now supports classifying your input into multiple categories. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature You can now provide descriptions for the fields in your custom output schema when you use the `AI.GENERATE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate) and `AI.GENERATE_TABLE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-table) functions. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use dataset insights (/bigquery/docs/generate-dataset-insights) to understand relationships between tables in a dataset by generating relationship graphs and cross-table queries. You can automatically generate dataset summaries, infer relationships across tables, and receive suggestions for analytical questions. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

February 11, 2026

Feature

You can now run pipelines with three distinct execution methods: running all tasks, running selected tasks, and running tasks with selected tags. For more information, see Run a pipeline (/bigquery/docs/create-pipelines#run-pipeline). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

February 09, 2026

Feature

You can now customize the scope of data documentation scans for BigQuery tables to generate specific insights. You can choose to generate only SQL queries, only table and column descriptions, or all insights.

You can also create one-time data scans that execute immediately upon creation, removing the need for a separate `run` command. These scans support a Time to Live (TTL) setting to automatically delete the scan resource after completion.

For more information, see Generate insights for a BigQuery table (/bigquery/docs/generate-table-insights#insights-bigquery-table).

February 04, 2026

Change

Data transfers from the YouTube Channel (/bigquery/docs/youtube-channel-transfer) and YouTube Content Owner (/bigquery/docs/youtube-content-owner-transfer) data sources now support reach reports. For more information, see YouTube

Channel report transformation (/bigquery/docs/youtube-channel-transformation) and YouTube Content Owner report transformation (/bigquery/docs/youtube-content-owner-transformation).

Feature

You can now associate data policies directly on columns (/bigquery/docs/column-data-masking#data-policies-on-column). This feature enables direct database administration for controlling access and applying masking and transformation rules at the column level. This feature is now generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

February 03, 2026

Announcement

Gemini in BigQuery now processes data in the same jurisdiction (`US` or `EU`) as your BigQuery datasets, or based upon user-specified location settings. For more information, see Where Gemini BigQuery processes your data (/bigquery/docs/gemini-locations).

February 02, 2026

Feature

You can now pass parameterized queries (https://cloud.google.com/bigquery/docs/parameterized-queries) from the BigQuery query editor in the Google Cloud console.

This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

January 29, 2026

Feature

BigQuery now supports a `RANDOM_HASH` predefined masking rule. This rule returns a hash of the column's value using a salted hash algorithm, and it provides stronger security than the standard `Hash (SHA-256)` rule.

For more information, see Data masking rules (/bigquery/docs/column-data-masking-intro#masking_options).

Feature

BigQuery now offers conversational analytics (/bigquery/docs/conversational-analytics), which accelerates data analysis by enabling insights through natural language. Users can view a predefined sample agent, chat with their BigQuery data or custom agents, and access those agents even outside of BigQuery. They can also use supported BigQuery ML functions (/bigquery/docs/conversational-analytics#bigquery-ml-support) in verified queries and in chat. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now create BigQuery ML models by using the Google Cloud console (https://cloud.google.com/bigquery/docs/create-machine-learning-model-console).

This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

January 28, 2026

Change

The BigQuery change data capture feature has been renamed to BigQuery change data capture ingestion (/bigquery/docs/change-data-capture).

Feature

The BigQuery Data Transfer Service can now transfer data from Shopify to BigQuery (/bigquery/docs/shopify-transfer). This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

January 27, 2026

Change

An updated version of the Simba JDBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#current_jdbc_driver) is now available.

Feature

The BigQuery Data Transfer Service can now transfer data from Mailchimp to BigQuery (/bigquery/docs/mailchimp-transfer). This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

January 26, 2026

Feature You can now use Gemini Cloud Assist to discover resources (/bigquery/docs/use-cloud-assist#discover_resources) across your projects. For example, you can ask about a specific table's schema, or which tables contain demographic information about new users. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

January 23, 2026

Change You can now optionally specify which model to use by passing an endpoint argument to the `AI.IF` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-if), `AI.SCORE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-score), and `AI.CLASSIFY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-classify) functions.

January 22, 2026

Fixed Support for table parameters in table-valued functions (/bigquery/docs/table-functions#table_parameters) is restored.

Change You can now run queries that use the `AI.IF` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-if), `AI.SCORE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-score), and `AI.CLASSIFY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-classify) functions by using your end-user credentials (/bigquery/docs/permissions-for-ai-functions) instead of a BigQuery connection.

January 21, 2026

Change BigQuery is now available in the Bangkok (`asia-southeast3`) region (/bigquery/docs/locations#regions).

Feature You can now use Gemini Cloud Assist to get information about your job history (/bigquery/docs/use-cloud-assist#analyze_jobs), such as why a particular query was

slow or which queries were the most resource-intensive in the past day. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

January 19, 2026

Breaking

Dataform workflows (/dataform/docs/sql-workflows), BigQuery notebooks (/bigquery/docs/orchestrate-notebooks), pipelines (/bigquery/docs/schedule-pipelines), and data preparations (/bigquery/docs/orchestrate-data-preparations) are enforcing strict act-as mode at the project level. To avoid failures and maintain automatic releases, you must use custom service accounts instead of the default Dataform service agent across all repositories. You must also grant the Service Account User role (`roles/iam.serviceAccountUser`) to the default Dataform service agent and relevant principals. For more information and to verify act-as permissions, see Use strict act-as mode (/dataform/docs/strict-act-as-mode).

January 07, 2026

Feature

You can now use the Google-developed, open source Java Database Connectivity (JDBC) driver for BigQuery (/bigquery/docs/jdbc-for-bigquery) to connect your Java applications to BigQuery. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

January 06, 2026

Feature

The `CREATE EXTERNAL TABLE` (/bigquery/docs/reference/standard-sql/data-definition-language#create_external_table_statement) and `LOAD DATA` (/bigquery/docs/reference/standard-sql/load-statements) statements now support the following options:

- `time_zone`: specify a time zone to use when loading data
- `date_format`, `datetime_format`, `time_format`, and `timestamp_format`: define how date and time values are formatted in your source files

- `null_markers`: define the strings that represent `NULL` values in CSV files.
- `source_column_match`: specify how loaded columns are matched to the schema. You can match columns by position or by name.

These features are generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

December 22, 2025

Feature

The BigQuery Data Transfer Service can now transfer data from PostgreSQL to BigQuery (/bigquery/docs/postgresql-transfer). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Libraries

December 19, 2025

Feature

The BigQuery Data Transfer Service can now transfer data from MySQL to BigQuery (/bigquery/docs/mysql-transfer). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

The BigQuery Data Transfer Service can now transfer data from Microsoft SQL Server to BigQuery (/bigquery/docs/sqlserver-transfer). This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

December 18, 2025

Feature

The BigQuery Data Transfer Service can now transfer data from the following data sources to BigQuery:

- Klaviyo (/bigquery/docs/klaviyo-transfer)
- HubSpot (/bigquery/docs/hubspot-transfer)

These features are in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use the BigQuery Data Transfer Service to transfer data from blob storage sources (/bigquery/docs/iceberg-ingestion), such as Amazon Simple Storage Service (Amazon S3), Azure Blob Storage, and Cloud Storage, into BigLake Iceberg tables in BigQuery. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

December 16, 2025

Feature

The BigQuery Data Transfer Service can now transfer data from Oracle to BigQuery (/bigquery/docs/oracle-transfer). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

December 15, 2025

Libraries

December 10, 2025

Feature

You can now use the BigQuery remote MCP server (/bigquery/docs/use-bigquery-mcp) to enable LLM agents to perform a range of data-related tasks.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

December 02, 2025

Change

An updated version of the ODBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#current_odbc_driver) is now available.

Feature

You can now enable autonomous embedding generation (/bigquery/docs/autonomous-embedding-generation) on tables that you make with the `CREATE TABLE` statement (/bigquery/docs/reference/standard-sql/data-definition-language#create_table_statement). When you do this, BigQuery maintains a column of embeddings on the table based on a source column. When you add or modify data in the source column, BigQuery automatically generates or updates the embedding column for that data.

You can also use the `AI.SEARCH` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-search) function, enabling semantic search on tables that have autonomous embedding generation enabled.

These features are in Preview (https://cloud.google.com/products/#product-launch-stages).

December 01, 2025

Feature

Search results in the Explorer pane (/bigquery/docs/bigquery-web-ui#explorer_pane) in BigQuery Studio now show results in the current organization. You can use a drop-down menu to switch between organizations. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

November 26, 2025

Feature

The BigQuery Data Transfer Service now supports incremental data transfers (/bigquery/docs/salesforce-transfer#full_or_incremental_transfers) when transferring data from Salesforce to BigQuery. This feature is supported in Preview (https://cloud.google.com/products/#product-launch-stages).

November 25, 2025

Change An updated version of the JDBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#current_jdbc_driver) is now available.

November 24, 2025

Feature You can set the default project and dataset for your pipeline (/bigquery/docs/create-pipelines#sqlx-options) in the **SQLX options** section, which simplifies task configuration by using these defaults for all tasks. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

November 20, 2025

Feature You can now use the BigQuery Agent Analytics plugin within the Agent Development Kit to export agent interaction data directly into BigQuery. This plugin captures comprehensive logs of your agent's prompts, tool usage, and responses, enabling you to analyze and visualize agent performance metrics. The plugin leverages the BigQuery Storage Write API for efficient high-throughput streaming. For more information on how to leverage this plugin in your agent, see the Announcing BigQuery Agent Analytics for the Google ADK (https://cloud.google.com/blog/products/data-analytics/introducing-bigquery-agent-analytics/?e=48754805)
.

November 19, 2025

Feature You can use the `JSON_FLATTEN` function (/bigquery/docs/reference/standard-sql/json_functions#json_flatten) to extract all non-array values that are either directly in the input `JSON` value or children of one or more consecutively nested arrays in the input `JSON` value. This function is available in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature You can now use Gemini in BigQuery to fix and explain errors (/bigquery/docs/write-sql-gemini#fix_and_explain_sql_errors) in your SQL queries. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

November 18, 2025

Feature

You can now use Gemini 3.0 (/vertex-ai/generative-ai/docs/models/gemini/3-pro) when you call generative AI functions in BigQuery, such as `AI.GENERATE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate). You must use the full global endpoint argument:

`https://aiplatform.googleapis.com/v1/projects/PROJECT_ID/locations/global/publishers/google/models/gemini-3-pro-preview`.

Feature

Dataform now lets you automate the creation of BigLake tables for Apache Iceberg in BigQuery (/dataform/docs/create-tables#create-iceberg-table). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

BigQuery ML now supports the following generative AI functions (/bigquery/docs/generative-ai-overview):

- `AI.GENERATE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate): generate free text to accomplish a wide range of tasks, such as translation, summarization, and classification, on any unstructured data, including images, audio, video, and documents. It can also perform entity extraction and generate structured output. This function is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).
- `AI.EMBED` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-embed): turn text, image, audio, video, or documents into embeddings. This function is in Preview (https://cloud.google.com/products/#product-launch-stages).
- `AI.SIMILARITY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-similarity): compute the semantic similarity between pairs of text, pairs of images, or across text and images. This function is in Preview (https://cloud.google.com/products/#product-launch-stages).
- You can use the `AI.GENERATE_BOOL` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-bool), `AI.GENERATE_DOUBLE`

(/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-double), and `AI.GENERATE_INT` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-int) functions to generate scalar values, which are convenient for filtering, scoring, and counting purposes.

- Each of these functions supports authentication with end-user credentials (EUC) (/bigquery/docs/permissions-for-ai-functions#run_generative_ai_queries_with_end-user_credentials) to set up the necessary Vertex AI permissions.

BigQuery ML now supports the following table-valued generative AI functions:

- `AI.GENERATE_TABLE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-table): generate a table of structured output from unstructured data including text, images, audio, and video.
- `AI.GENERATE_TEXT` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-text) is the new, preferred version of `ML.GENERATE_TEXT`, which has the same functionality but with simplified column output names.
- `AI.GENERATE_EMBEDDING` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-embedding) is the new, preferred version of `ML.GENERATE_EMBEDDING`, which has the same functionality but with simplified column output names.
- These functions are all generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now publish data insights (/bigquery/docs/data-insights#modes), including query recommendations and auto-generated table and column descriptions, to the Dataplex Universal Catalog. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

November 17, 2025

Feature You can use folders (/bigquery/docs/code-asset-folders) to organize and control access to single file code assets, such as notebooks, saved queries, data canvases, and data preparation files. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature In the query execution graph, you can now use the query text heatmap (/bigquery/docs/query-plan-explanation#query_text_heatmap) to identify which query text contributes to stages that consume more slot time, and to see query plan details for those stages. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature You can now share SQL stored procedures in BigQuery sharing listings (/bigquery/docs/analytics-hub-manage-listings#share-stored-procedure-in-listing) and enable role-based authorization for stored procedures (/bigquery/docs/authorized-routines#authorize_routines). These features are in preview (https://cloud.google.com/products#product-launch-stages).

Libraries

November 11, 2025

Feature The BigQuery Overview page (/bigquery/docs/bigquery-web-ui#open-overview) is now your hub for discovering tutorials, features, and resources to help you get the most out of BigQuery. It provides guided paths for users of all skill levels. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature You can now use the interactive SQL translator (/bigquery/docs/interactive-sql-translator), the translation API (/bigquery/docs/api-sql-translator), and the batch SQL translator (/bigquery/docs/batch-sql-translator) to translate the following SQL dialects into GoogleSQL:

- Apache Impala SQL
- GoogleSQL (BigQuery)

Impala SQL translation can be used to migrate Cloudera and Apache Hadoop SQL workloads that use Impala as a query engine.

GoogleSQL (BigQuery) translation can be used to verify and iteratively customize your translated SQL queries after an initial translation from an external dialect. For example, you can apply systematic query rewrites using YAML configurations (/bigquery/docs/config-yaml-translation#optimize_and_improve_the_performance_of_translated_sql) to customize and optimize your GoogleSQL queries before deploying it.

These features are in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use custom constraints (/bigquery/docs/custom-constraints) with an Organization Policy to provide more granular control over specific fields for BigQuery dataset resources. This feature is generally available (/products#product-launch-stages) (GA).

November 10, 2025

Feature

You can aggregate (/bigquery/docs/data-prep-get-suggestions#aggregate) and deduplicate (/bigquery/docs/data-prep-get-suggestions#deduplicate) table data with Gemini assistance in your BigQuery data preparations (/bigquery/docs/data-prep-introduction). These features are generally available (/products#product-launch-stages) (GA).

Feature

Partitioning is now available for BigLake tables for Apache Iceberg in BigQuery (/bigquery/docs/iceberg-tables#use_partitioning). This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

BigQuery ML now supports the `TimesFM 2.5` time series foundational model (/bigquery/docs/timesfm-model). You can use the `TimesFM 2.5` model in the `AI.FORECAST` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-forecast), `AI.EVALUATE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-evaluate), and `AI.DETECT_ANOMALIES` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-detect-anomalies) functions to achieve better forecasting accuracy and lower latency.

Feature

BigQuery ML now offers the `AI.DETECT_ANOMALIES` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-detect-anomalies). Use the

`AI.DETECT_ANOMALIES` function with a TimesFM model to detect anomalies (/bigquery/docs/anomaly-detection-overview) in time series data, using historical data as a baseline. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

November 06, 2025

Announcement

The research paper ARIMA_PLUS: Large-scale, Accurate, Automatic and Interpretable In-Database Time Series Forecasting and Anomaly Detection in Google BigQuery (https://arxiv.org/abs/2510.24452) is now publicly available. This paper describes the algorithms behind the `ARIMA_PLUS` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-time-series) and `ARIMA_PLUS_XREG` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-multivariate-time-series) models for time series forecasting and anomaly detection, and demonstrates the high performance, scalability, explainability, and customizability of the models.

November 05, 2025

Feature

You can use the `MATCH_RECOGNIZE` clause (/bigquery/docs/reference/standard-sql/query-syntax#match_recognize_clause) in your SQL queries to filter and aggregate matches across rows in a table. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Announcement

The BigQuery Data Transfer Service for Google Ads (/bigquery/docs/google-ads-transfer) now supports Google Ads API v21 (https://developers.google.com/google-ads/api/fields/v21/overview).

Feature

You can now generate table and column descriptions (/bigquery/docs/data-insights#generate-column-table-descriptions) in all supported Gemini languages when you generate data insights. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now generate data insights (/bigquery/docs/data-insights#rest) when you create a `DataScan` (/dataplex/docs/reference/rest/v1/projects.locations.dataScans) using the Dataplex API. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

November 04, 2025

Feature

You can now use custom organization policies with the BigQuery migration service (/bigquery/docs/migration-custom-org-policies) to allow or deny specific operations during a BigQuery migration to meet your organization's compliance and security requirements. This includes an option to disable AI suggestions during a migration. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

November 03, 2025

Libraries

October 31, 2025

Feature

We have increased the row capacity (https://workspaceupdates.googleblog.com/2025/10/powerful-pivot-tables-connected-sheets.html) for pivot tables backed by BigQuery in Connected Sheets (/bigquery/docs/connected-sheets) from 100,000 to 200,000 rows.

October 30, 2025

Feature

The Apache Iceberg REST catalog in BigLake metastore (/biglake/docs/blms-rest-catalog) is now generally available (https://cloud.google.com/products#product-launch-stages) (GA) with several new

features, including BigQuery catalog federation, credential vending, and catalog management in the Google Cloud console.

October 29, 2025

Feature

You can now group reservations (/bigquery/docs/reservations-tasks#prioritize_idle_slots_with_reservation_groups) together to prioritize idle slot sharing within the group. Reservations within a reservation group share idle slots with each other before making them available to other reservations in the project, giving you more control over slot allocation for high-priority workloads. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

October 28, 2025

Feature

The BigQuery Data Transfer Service can now transfer data from the following data sources:

- Facebook Ads (/bigquery/docs/facebook-ads-transfer)
- Salesforce (/bigquery/docs/salesforce-transfer)
- Salesforce Marketing Cloud (/bigquery/docs/sfmc-transfer)
- ServiceNow (/bigquery/docs/servicenow-transfer)

Transfers from these data sources are now generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

Subscriber email logging lets you log the principal identifiers of users who execute jobs and queries against linked datasets. You can enable logging at the listing level (https://cloud.google.com/bigquery/docs/analytics-hub-manage-listings#create_a_listing) and the data exchange level (https://cloud.google.com/bigquery/docs/analytics-hub-manage-exchanges#create-exchange). The logged data is available in the `job_principal_subject` field of the `INFORMATION_SCHEMA.SHARED_DATASET_USAGE` view

(/bigquery/docs/information-schema-shared-dataset-usage). This feature is generally available (https://cloud.google.com/products#product-launch-stages).

October 27, 2025

Feature

The administrative jobs explorer now includes a job details page (/bigquery/docs/admin-jobs-explorer#get-job-details) to help you diagnose and troubleshoot queries. The **Performance** tab compiles query information including the execution graph, SQL text, execution history, performance variance, and system load during execution. You can also compare two jobs (/bigquery/docs/admin-jobs-explorer#compare-jobs) to identify discrepancies and potential areas to improve query performance.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

BigQuery now offers the following managed AI functions (/bigquery/docs/generative-ai-overview#managed_ai_functions) that use Gemini to help you filter, join, rank, and classify your data:

- `AI.IF` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-if): Filter and join text or multimodal data based on a condition described in natural language.
- `AI.SCORE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-score): Rate text or multimodal input to rank your data by quality, similarity, or other criteria.
- `AI.CLASSIFY` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-classify): Classify text into user-defined categories.

These functions are in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use the Data Engineering Agent (/bigquery/docs/data-engineering-agent-pipelines) to use Gemini in BigQuery to build and modify data pipelines to ingest data into BigQuery. This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use the Apache Arrow format to stream data to BigQuery with the Storage Write API (/bigquery/docs/write-api#arrow-handling). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Libraries

October 23, 2025

Feature

BigQuery is now offering early access (https://cloud.google.com/products/#product-launch-stages) to conversational analytics. Conversational analytics accelerates data analysis by enabling quick insights through natural language. Users can chat with their BigQuery data, create custom agents, and access those agents even outside of BigQuery. To enroll in conversational analytics early access, fill out the request form (https://docs.google.com/forms/d/e/1FAIpQLSe5KhRr81uUce6mKj8YrV1iFezGIydTxOcx8wUTqcBJP3e7vg/viewform)
.

October 22, 2025

Issue

Support for table parameters in table-value functions (TVFs) (/bigquery/docs/table-functions#table_parameters) has been temporarily disabled. We are working to restore this feature as soon as possible.

Feature

You can now use custom constraints with Organization Policy to provide more granular control over specific fields for some BigQuery sharing resources. For more information, see Manage Sharing data exchanges and listings using custom constraints (/bigquery/docs/analytics-hub-custom-constraints). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature

BigQuery ML now offers a built-in TimesFM univariate time series forecasting model (/bigquery/docs/timesfm-model) that implements Google Research's open source TimesFM model. You can use BigQuery ML's built-in TimesFM model with the following functions:

- Use `AI.FORECAST` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-forecast) to perform forecasting. This function now supports a larger context window.
- Use `AI.EVALUATE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-evaluate) to evaluate forecasted data against a reference time series based on historical data.

To try using a TimesFM model with the `AI.FORECAST` function, see Forecast a time series with a TimesFM univariate model (/bigquery/docs/timesfm-time-series-forecasting-tutorial).

This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

October 21, 2025

Feature

BigQuery now supports TransUnion for entity resolution (/bigquery/docs/entity-resolution-setup). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

October 20, 2025

Feature

In BigQuery ML, you can now fully manage open models as Vertex AI endpoints. BigQuery-managed open models offer the following benefits:

- Manage Vertex AI resource by using SQL queries (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open#managed-resources)
- Automatic or immediate open model undeployment (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open#managed-model-undeployment) to save costs

- Customize model deployment machine types (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open#machine-type)
  or reserve open model resources by using Compute Engine reservations (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open#reservation-affinity)

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use visualization cells (/bigquery/docs/create-notebooks#cells) to automatically generate a visualization (/bigquery/docs/visualize-data-colab) of any DataFrame in your notebook. You can customize the columns, chart type, aggregations, colors , labels, and title.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

October 16, 2025

Feature

You can now access repositories by clicking Repositories in the Explorer pane. A new tab opens that displays a list of repositories. The Explorer pane no longer has a bottom pane for repositories. When you open a workspace in a repository, it opens in the Git repository pane in the left pane. These features are available in BigQuery Studio in preview (https://cloud.google.com/products/#product-launch-stages).

Feature

The following features are now generally available (https://cloud.google.com/products/#product-launch-stages) (GA) in BigQuery Studio:

- To streamline resource discovery and access, the left Explorer pane (/bigquery/docs/bigquery-web-ui#explorer_panel) has been reorganized into three sections: Explorer, Classic Explorer, and Git repository. You can still use the Classic Explorer, which provides the complete resources tree.
- In the Explorer pane, you can use the search feature (/bigquery/docs/bigquery-web-ui#explorer_pane) to find BigQuery resources in your organization. The results appear in a new tab in the details pane. You can use filters to narrow your search.

- You can access job histories by clicking Job history (/bigquery/docs/managing-jobs) in the Explorer pane. A new tab opens that displays a list of job histories. BigQuery Studio no longer has a bottom pane for job history.
- To reduce tab proliferation, clicking a resource opens it within the same tab. To open the resource in a separate tab, press `Ctrl` (or `Command` on macOS) and click the resource. To prevent the current tab from getting its content replaced, double-click the tab. The name changes from italicized to regular font. If you still lose your resource, you can click Recent tabs in the details pane to find the resource.
- You can use breadcrumbs to navigate through different tabs and resources in the details pane.
- In the Home tab, the What's new section (/bigquery/docs/bigquery-web-ui#welcome_tab) contains a list of new capabilities and changes to the BigQuery Studio.
- The notebook action bar is consolidated by default to give you more screen space for writing code.

October 15, 2025

Feature

You can visualize your geospatial query results (/bigquery/docs/geospatial-visualize) on an interactive map in BigQuery Studio. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can use the **`dbt-bigquery`** adapter to run Python code that's defined in BigQuery DataFrames. For more information, see Use BigQuery DataFrames in dbt (/bigquery/docs/dataframes-dbt). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

October 14, 2025

Feature You can now use SQL cells (/bigquery/docs/create-notebooks#cells) to write, edit, and run SQL queries on your BigQuery data directly from your notebooks. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Announcement The BigQuery Data Transfer API (bigquerydatatransfer.googleapis.com) is now enabled by default for every new Google Cloud project. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature You can now embed natural language as comments in existing SQL to refine and transform your code (/bigquery/docs/write-sql-gemini#generate_sql_from_a_comment). This feature is preview (https://cloud.google.com/products#product-launch-stages).

October 13, 2025

Libraries

October 09, 2025

Change An updated version of the ODBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#odbc_release_3151022) is now available.

Feature You can set a maximum slot limit (/bigquery/docs/reservations-workload-management#predictable) for a reservation. You can configure the maximum reservation size when creating or updating a reservation. This feature is now generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature You can allocate idle slots fairly (/bigquery/docs/slots#fairness) across reservations within a single admin project. This ensures each reservation receives an approximately equal share of available capacity. This feature is now generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Announcement Security, privacy, and compliance for Gemini in BigQuery (/gemini/docs/bigquery/security-privacy-compliance) details how customer data is protected and processed by Gemini in BigQuery.

October 08, 2025

Breaking

The default limit of `QueryUsagePerDay` (/bigquery/quotas#query_jobs) for on-demand pricing has changed. The default limit of all new projects is now 200 TiB. For existing projects, the default limit has been set based on your project's usage over the last 30 days. Projects that have custom cost controls (/bigquery/docs/custom-quotas) configured or that use reservations (/bigquery/docs/reservations-workload-management) aren't affected. If the new limit might affect your workload, create a custom cost control (/bigquery/docs/custom-quotas) based on your workload needs.

Feature

You can specify which reservation a query uses at runtime (/bigquery/docs/reservations-workload-management#flexible), and set IAM policies directly on reservations (/bigquery/docs/reservations-workload-management#securable). This provides more flexibility and fine-grained control over resource management. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can set labels (/bigquery/docs/labels-intro) on reservations. These labels can be used to organize your reservations and for billing analysis. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

October 07, 2025

Announcement

As of February 25, 2025, enhancements to the workload management autoscaler (/bigquery/docs/slots-autoscaling-intro) that were announced on July 31, 2024 (/bigquery/docs/release-notes#July_31_2024) have rolled out to all users. These enhancements are generally available (https://cloud.google.com/products#product-launch-stages) (GA).

October 06, 2025

Feature

The `INFORMATION_SCHEMA.SHARED_DATASET_USAGE` view (/bigquery/docs/information-schema-shared-dataset-usage#schema) now includes the

following schema fields to support usage metrics for external tables and routines:

- `shared_resource_id`: the ID of the queried resource
- `shared_resource_type`: the type of the queried resource
- `referenced_tables`: Contains `project_id`, `dataset_id`, `table_id`, and `processed_bytes` fields of the base table.

These fields are generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now set the priority of BigQuery jobs initiated by Dataform workflows to run queries as interactive jobs that start running as quickly as possible or as batch jobs with lower priority. For more information, see Create a pipeline schedule (/bigquery/docs/schedule-pipelines#create-schedule) and InvocationConfig (/dataform/reference/rest/v1/InvocationConfig). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

The BigQuery Data Transfer Service can now transfer reporting data from Google Analytics 4 (/bigquery/docs/google-analytics-4-transfer) into BigQuery. You can also include custom reports from Google Analytics 4 in your data transfer. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

The BigQuery Data Transfer Service can now transfer data from the following data sources:

- PayPal (/bigquery/docs/paypal-transfer)
- Stripe (/bigquery/docs/stripe-transfer)

Transfers from these data sources are supported in preview (https://cloud.google.com/products/#product-launch-stages).

Libraries

Announcement

Starting March 17, 2026, the BigQuery Data Transfer Service will require the `bigquery.datasets.setIamPolicy` and the `bigquery.datasets.getIamPolicy` permissions on the target dataset to

create or update a transfer configuration. For more information, see Changes to dataset-level access controls (/bigquery/docs/dataset-access-control).

October 02, 2025

Feature

You can now use the notebook gallery (/bigquery/docs/notebooks-introduction#notebook_gallery) in the BigQuery web UI as your central hub for discovering and using prebuilt notebook templates. This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

October 01, 2025

Feature

You can now apply SQL query generated in the Gemini Cloud Assist chat (/bigquery/docs/write-sql-gemini#chat) to the query open in your editor. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

September 29, 2025

Feature

To simplify access management for your Iceberg tables, you can use credential vending mode with the Apache Iceberg REST catalog (/bigquery/docs/blms-rest-catalog) in Lakehouse runtime catalog. Credential vending removes the need for catalog users to have direct access to Cloud Storage buckets. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now create BigQuery non-incremental materialized views over Spanner data (/bigquery/docs/materialized-views-create#spanner) to improve query performance by periodically caching results. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

BigQuery data preparation supports unnesting arrays, which expands each array element into its own row for easier analysis. For more information, see Unnest arrays (/bigquery/docs/data-prep-get-suggestions#unnest-arrays). This feature

is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Announcement History-based query optimizations (/bigquery/docs/history-based-optimizations) are now enabled by default. If history-based optimizations have been previously disabled, you can re-enable history-based optimizations (/bigquery/docs/history-based-optimizations#enable-history-based-optimization) for your project or organization.

September 25, 2025

Feature The `ARRAY_FIRST` (/bigquery/docs/reference/standard-sql/array_functions#array_first), `ARRAY_LAST` (/bigquery/docs/reference/standard-sql/array_functions#array_last), and `ARRAY_SLICE` (/bigquery/docs/reference/standard-sql/array_functions#array_slice) GoogleSQL functions are now generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature BigQuery data canvas (/bigquery/docs/data-canvas#destination_node) now supports destination table nodes. Destination table nodes let you persist query results to a new or existing table. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

September 24, 2025

Feature BigQuery ML now supports visualization of model monitoring metrics (/bigquery/docs/model-monitoring-overview#monitoring_visualization). This feature lets you use charts and graphs to analyze model monitoring function output (/vertex-ai/docs/model-monitoring/run-monitoring-job#analyze_monitoring_job_results). You can use metric visualization with the `ML.VALIDATE_DATA_SKEW` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-validate-data-skew) and `ML.VALIDATE_DATA_DRIFT` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-validate-data-drift) functions. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

For command-line users, BigQuery is now integrated with the Gemini CLI to provide an agentic CLI experience. Using the dedicated Gemini CLI extensions for BigQuery (https://cloud.google.com/bigquery/docs/develop-with-gemini-cli), you can search, explore, analyze, and gain insights from your data by asking natural language questions, generating forecasts, and running contribution analysis directly from the command line. This feature is available in beta.

September 22, 2025

Libraries

Feature

You can now run federated queries against PostgreSQL dialect databases in Spanner (/spanner/docs/reference/postgresql/overview) using BigQuery external datasets (/bigquery/docs/spanner-external-datasets) with GoogleSQL; this includes cross-region federated queries (https://cloud.google.com/bigquery/docs/spanner-federated-queries#cross_region_queries). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

September 16, 2025

Feature

You can now access snapshots of Apache Iceberg external tables (/bigquery/docs/iceberg-external-tables#query_historical_data) that are retained in your Iceberg metadata by using the `FOR SYSTEM_TIME AS OF` clause. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can use the `JSON_KEYS` function (/bigquery/docs/reference/standard-sql/json_functions#json_keys) to extract unique JSON keys from a JSON expression, and you can specify a mode (/bigquery/docs/reference/standard-sql/json_functions#JSONPath_mode) for some JSON functions that take a JSONPath to allow more flexibility in how the path matches the JSON structure. These features are generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

SQL code completion (/bigquery/docs/write-sql-gemini) is now available for all BigQuery projects. To learn how to enable and activate Gemini in BigQuery features, see Set up Gemini in BigQuery (/gemini/docs/bigquery/set-up-gemini). This feature is available in preview (https://cloud.google.com/products#product-launch-stages).

September 15, 2025

Libraries

Libraries

Feature

In the BigQuery Studio, in the Explorer pane, you can now open saved queries in Connected Sheets (/bigquery/docs/manage-saved-queries#open-saved-queries-in-sheets). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now enable the BigQuery advanced runtime (/bigquery/docs/advanced-runtime) to improve query execution time and slot usage. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA). Between September 15, 2025 and early 2026, the BigQuery advanced runtime will become the default runtime for all projects.

September 11, 2025

Feature

Gemini now recommends natural language prompts for you in the SQL generation tool (/bigquery/docs/write-sql-gemini#generate_a_sql_query). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature

When you use the Data Science Agent (/bigquery/docs/colab-data-science-agent) in BigQuery, you can now use the Apache Spark or PySpark keywords in your prompt. The Data Science Agent is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature Use the BigQuery migration assessment for Informatica (/bigquery/docs/migration-assessment) to assess the complexity of migrating data from your Informatica platform to BigQuery. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

September 10, 2025

Feature You can load files from Cloud Storage in BigQuery data preparations (/bigquery/docs/data-prep-get-suggestions#create-new-from-gcs). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

September 09, 2025

Feature You can configure reusable, default Cloud resource connections in a project. Default connections (/bigquery/docs/default-connections) are generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature The batch (/bigquery/docs/batch-sql-translator) and interactive translators (/bigquery/docs/interactive-sql-translator) now caches your metadata, which can improve latency when you run a SQL translation. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Change You can now perform supervised tuning (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model#supervised_tuning) on a BigQuery ML remote model (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model) based on a Vertex AI `gemini-2.5-pro` or `gemini-2.5-flash-lite` model.

September 08, 2025

Feature When you use the Data Science Agent (/bigquery/docs/colab-data-science-agent) in BigQuery, you can now use the `@` symbol to search for BigQuery tables in your project, and you can use the `+` symbol to search for files to upload. The Data

Science Agent is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature You can now add tables and views as tasks to BigQuery pipelines. For more information, see Add a pipeline task (/bigquery/docs/create-pipelines#add_a_pipeline_task). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature You can now include table parameters (/bigquery/docs/table-functions#table_parameters) when you create a table-valued function (TVF). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

September 03, 2025

Feature The `INFORMATION_SCHEMA.RESERVATIONS_TIMELINE` view now includes the `per_second_details` schema field (/bigquery/docs/information-schema-reservation-timeline#schema). This new field provides information regarding reservation capacity and usage on a per-second basis, and also includes details on autoscale utilization. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature BigQuery now supports soft failover (/bigquery/docs/managed-disaster-recovery) with managed disaster recovery. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature You can flatten records (/bigquery/docs/data-prep-get-suggestions#flatten-records) in BigQuery data preparation (/bigquery/docs/data-prep-introduction) with a single operation. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

September 02, 2025

Feature You can now configure listings for multiple regions for shared datasets and linked dataset replicas in BigQuery sharing. For more information, see Create a

listing (/bigquery/docs/analytics-hub-manage-listings#create_a_listing). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now reference BigQuery ML and DataFrames in your prompts (/bigquery/docs/colab-data-science-agent#sample-prompts) when you use the Data Science Agent (/bigquery/docs/colab-data-science-agent) in a BigQuery notebook. The Data Science Agent is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now create a remote model (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model) based on the Vertex AI `gemini-embedding-001` model. You can then use the `ML.GENERATE_EMBEDDING` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-embedding) with this remote model to generate embeddings. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now enable the automatic selection of a processing location in your pipeline configurations. For more information, see Create pipelines (/bigquery/docs/create-pipelines). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now create a remote model based on an open embedding model from Vertex Model Garden or Hugging Face that is deployed to Vertex AI (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open). Options include E5 Embedding and other leading open embedding generation models. You can then use the `ML.GENERATE_EMBEDDING` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-embedding) with this remote model to generate embeddings.

Try this feature with the Generate text embeddings by using an open model and the `ML.GENERATE_EMBEDDING` function (/bigquery/docs/generate-text-embedding-tutorial-open-models) tutorial.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

September 01, 2025

Libraries

Libraries

August 28, 2025

Feature

For additional layers of security and control, you can now use query templates to predefine and limit the queries that can be run in data clean rooms. For more information, see Use query templates (/bigquery/docs/query-templates). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

August 26, 2025

Feature

You can deduplicate table data (/bigquery/docs/data-prep-get-suggestions#deduplicate) with Gemini assistance in your BigQuery data preparations (/bigquery/docs/data-prep-introduction). Deduplication is in Preview (https://cloud.google.com/products#product-launch-stages).

August 25, 2025

Libraries

Feature

You can use the `ST_REGIONSTATS` geography function (/bigquery/docs/reference/standard-sql/geography_functions#st_regionstats) to combine raster data using Earth Engine with your vector data stored in BigQuery. For more information, see Work with raster data (/bigquery/docs/raster-data) and try the tutorial that shows you how to use raster data to analyze global temperature (/bigquery/docs/raster-tutorial-weather). This feature is generally available (https://cloud.google.com/products#product-launch-stages).

Feature

You can now use data insights to have Gemini generate table and column descriptions from table metadata (/bigquery/docs/data-insights). This feature is

generally available (https://cloud.google.com/products#product-launch-stages) (GA).

August 22, 2025

Feature

Multi-statement transactions are now available for BigLake Iceberg tables in BigQuery (/bigquery/docs/iceberg-tables#use_multi-statement_transactions). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

August 21, 2025

Announcement

Starting September 25, 2025, the BigQuery Data Transfer Service for third-party SAAS and database connectors will update to a consumption-based pricing model. With this new pricing model, you will be charged based on the compute resources consumed by your data transfers, measured in slot-hours. For more information, see Data Transfer Service pricing (https://cloud.google.com/bigquery/pricing#section-5). This pricing update applies to the following third-party connectors when they are generally available (GA) (https://cloud.google.com/products#product-launch-stages):

- Facebook Ads (/bigquery/docs/facebook-ads-transfer)
- MySQL (/bigquery/docs/mysql-transfer)
- Oracle (/bigquery/docs/oracle-transfer)
- PostgreSQL (/bigquery/docs/postgresql-transfer)
- Salesforce (/bigquery/docs/salesforce-transfer)
- Salesforce Marketing Cloud (/bigquery/docs/sfmc-transfer)
- ServiceNow (/bigquery/docs/servicenow-transfer)
- Other third-party connectors planned for future releases

August 18, 2025

Libraries

Feature In the BigQuery console, you can now use the **Reference** panel to do the following:

- In the query editor, you can use the Reference panel (/bigquery/docs/running-queries#use-reference-panel) to preview the schema details of tables, snapshots, views, and materialized views, or open these resources in a new tab. You can also use the panel to construct new queries or edit existing queries by inserting query snippets or field names.
- In the notebook editor, you can use the Reference panel (/bigquery/docs/create-notebooks#create-notebook-console) to preview the schema details of tables, snapshots, views, or materialized views, or open these resources in a new tab.

This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature When you use the Data Science Agent in BigQuery, you can now use the table selector (/bigquery/docs/colab-data-science-agent#analyze-table) to choose one or more BigQuery tables to analyze. The Data Science Agent is in Preview (https://cloud.google.com/products#product-launch-stages).

August 14, 2025

Feature You can use cross region federated queries (https://cloud.google.com/bigquery/docs/spanner-federated-queries#cross_region_queries) to query Spanner tables from regions other than the source BigQuery region. These cross region queries incur additional Spanner network egress charges (/spanner/pricing#network). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature You can now visualize your geospatial query results (/bigquery/docs/geospatial-visualize) on an interactive map in BigQuery studio. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

August 13, 2025

Feature

You can aggregate table data with Gemini assistance in your BigQuery data preparations (/bigquery/docs/data-prep-get-suggestions). Aggregations in data preparations are in Preview (https://cloud.google.com/products#product-launch-stages).

August 12, 2025

Feature

You can now save query results to Cloud Storage (/bigquery/docs/export-file#saving-query-results-to-cloud-storage). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

August 11, 2025

Feature

BigQuery resource utilization charts (/bigquery/docs/admin-resource-charts#view-resource-utilization) are generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use chained function call syntax (/bigquery/docs/reference/standard-sql/functions-reference#chained-function-calls) in GoogleSQL to make deeply nested function calls easier to read. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use `WITH` expressions (/bigquery/docs/reference/standard-sql/operators#with_expression) in your GoogleSQL queries to create temporary variables. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Change

BigQuery data preparations are now represented in the SQLX format and in the pipe query syntax to simplify the CI/CD code review process. For more information, see Manage data preparations (/bigquery/docs/manage-data-preparations).

August 06, 2025

Feature

Enabling the advanced runtime now includes short query optimizations (/bigquery/docs/advanced-runtime#short_query_optimizations). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

August 04, 2025

Libraries

Feature

You can now use the new Data Science Agent (DSA) (/bigquery/docs/colab-data-science-agent) for Colab Enterprise and BigQuery to automate exploratory data analysis, perform machine learning tasks, and deliver insights all within a Colab Enterprise notebook. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

July 31, 2025

Feature

You can manage data profile scans and data quality scans across your project by using the **Metadata curation** page in the Google Cloud console. For more information, see Profile your data (/bigquery/docs/data-profile-scan) and Scan for data quality issues (/bigquery/docs/data-quality-scan). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Change

BigQuery ML now can automatically detect model quota increases in Vertex AI, and automatically adjusts the quota for any BigQuery ML functions that use those models. You no longer need to email the BigQuery ML team to increase model quota.

Change

BigQuery ML has improved throughput by more than 100x for the following generative AI functions:

- `ML.GENERATE_TEXT` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-text)

- `AI.GENERATE_TABLE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-table)
- `AI.GENERATE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate)
- `AI.GENERATE_BOOL` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-bool)
- `AI.GENERATE_DOUBLE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-double)
- `AI.GENERATE_INT` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-int)

Actual performance varies based on the number of input and output tokens in the request, but a typical 6-hour job can now process millions of rows. For more information, see Generative AI functions (/bigquery/quotas#generative_ai_functions).

Feature

You can now use continuous queries (/bigquery/docs/continuous-queries-introduction) to export BigQuery data to Spanner in real time (/bigquery/docs/export-to-spanner). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

July 30, 2025

Announcement

The Gemini for Google Cloud API (cloudaicompanion.googleapis.com) is now enabled by default for most BigQuery projects. Exceptions include projects where customers have opted out, and those linked to accounts based in EMEA regions including BigQuery Europe, Middle East, and Africa regions (/bigquery/docs/locations#supported_locations).

July 28, 2025

Libraries

Libraries

Feature You can now associate data policies directly on columns (/bigquery/docs/column-data-masking#data-policies-on-column). This feature enables direct database administration for controlling access and applying masking and transformation rules at the column level. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

July 22, 2025

Feature You can now use the `MATCH_RECOGNIZE` clause (/bigquery/docs/reference/standard-sql/query-syntax#match_recognize_clause) in your SQL queries to filter and aggregate matches across rows in a table. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature The `CREATE EXTERNAL TABLE` (/bigquery/docs/reference/standard-sql/data-definition-language#create_external_table_statement) and `LOAD DATA` (/bigquery/docs/reference/standard-sql/load-statements) statements now support the following options in Preview (https://cloud.google.com/products#product-launch-stages):

- `null_markers`: define the strings that represent `NULL` values in CSV files.
- `source_column_match`: specify how loaded columns are matched to the schema. You can match columns by position or by name.

Feature Access Transparency (/assured-workloads/access-transparency/docs/supported-services) supports BigQuery data preparation (/bigquery/docs/data-prep-introduction) in the GA (https://cloud.google.com/products#product-launch-stages) stage.

Feature You can now use the `VECTOR_INDEX.STATISTICS` function (/bigquery/docs/reference/standard-sql/vectorindex_functions#vector_indexstatistics) to calculate how much an indexed table's data has drifted between when a vector index was created and the present. If table data has changed enough to require a vector index rebuild (/bigquery/docs/vector-index#rebuild_a_vector_index), you can use the `ALTER VECTOR INDEX REBUILD` statement

(/bigquery/docs/reference/standard-sql/data-definition-language#alter_vector_index_rebuild_statement) to rebuild the vector index. This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

July 21, 2025

Libraries

Libraries

Feature

You can now use the `DISTINCT` pipe operator (/bigquery/docs/reference/standard-sql/pipe-syntax#distinct_pipe_operator) to select distinct rows from a table in your pipe syntax queries. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

July 17, 2025

Feature

You can now use the `WITH` pipe operator (/bigquery/docs/reference/standard-sql/pipe-syntax#with_pipe_operator) to define common table expressions in your pipe syntax queries. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use named windows (/bigquery/docs/reference/standard-sql/pipe-syntax#select_pipe_operator) in your pipe syntax queries. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

July 16, 2025

Feature

You can now create BigQuery ML models by using the Google Cloud console user interface (https://cloud.google.com/bigquery/docs/create-machine-learning-model-console). This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now add comments to notebooks (/bigquery/docs/create-notebooks#create-notebook-console), data canvases (/bigquery/docs/data-canvas#work-with-data-canvas), data preparation files (/bigquery/docs/data-prep-get-suggestions#open-data-prep-editor), or saved queries (/bigquery/docs/work-with-saved-queries#create_saved_queries). You can also reply to existing comments or get a link to them. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

July 15, 2025

Feature

You can flatten JSON columns (/bigquery/docs/data-prep-get-suggestions#flatten-json) in BigQuery data preparation with a single operation. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now commercialize your BigQuery sharing listings on Google Cloud Marketplace (/bigquery/docs/analytics-hub-cloud-marketplace). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

July 08, 2025

Announcement

Starting August 1, 2025, GoogleSQL will become the default dialect for queries run from the command line interface (CLI) or API. To use LegacySQL, you will need to explicitly specify it in your requests or set the configuration setting (/bigquery/docs/reference/standard-sql/data-definition-language#alter_project_set_options_statement) `default_sql_dialect_option` to `'default_legacy_sql'` at the project or organization level.

July 07, 2025

Feature

You can now use your Google Account user credentials to authorize the execution of a data preparation in development. For more information, see Manually run a data preparation in development

(/bigquery/docs/orchestrate-data-preparations#run-undeployed-manually). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

July 01, 2025

Feature

You can now update a Cloud KMS encryption key (/bigquery/docs/customer-managed-encryption#key_rotation) by updating the table with the same key. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can use the `@@location` system variable (/bigquery/docs/reference/system-variables) to set the location in which to run a query. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

BigQuery now supports the following Apache Hadoop migration features in Preview (https://cloud.google.com/products#product-launch-stages):

- Use the `dwh-migration-dumper` tool to migrate the metadata (/bigquery/docs/hadoop-metadata) necessary for a Hadoop permissions and data migration.
- Migrate permissions from Apache Hadoop, Apache Hive, and Ranger HDFS (/bigquery/docs/hadoop-permissions-migration) to BigQuery.
- Migrate tables from a HDFS data lake (/bigquery/docs/hdfs-data-lake-transfer) to Google Cloud.

June 30, 2025

Libraries

Feature

You can now create and manage scheduled notebooks (/bigquery/docs/orchestrate-notebooks) using the **Schedule details** pane in BigQuery Studio. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

June 26, 2025

Feature

BigQuery search indexes (/bigquery/docs/search-intro) provide free index management until your organization reaches the limit (/bigquery/quotas#index_limits) in a given region. You can now use the `INFORMATION_SCHEMA.SEARCH_INDEXES_BY_ORGANIZATION` view (/bigquery/docs/information-schema-indexes-by-organization) to understand your current consumption towards that limit, broken down by projects and tables. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now use the use the `PARTITION BY` clause of the `CREATE VECTOR INDEX` statement (/bigquery/docs/reference/standard-sql/data-definition-language#create_vector_index_statement) to partition TreeAH vector indexes (/bigquery/docs/vector-index#partitions). Partitioning enables partition pruning and can decrease I/O costs. This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

June 23, 2025

Feature

You can now use the Apache Iceberg REST catalog in BigLake metastore (/bigquery/docs/blms-rest-catalog) to create interoperability between your query engines by allowing your open source engines to access Iceberg data in Cloud Storage. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature

Colab Enterprise notebooks in BigQuery let you do the following in Preview (https://cloud.google.com/products/#product-launch-stages):

- Explain code with Gemini assistance (/bigquery/docs/write-sql-gemini#explain_python_code)
- Fix and explain errors with Gemini assistance (/bigquery/docs/write-sql-gemini#fix_and_explain_python_errors)

June 18, 2025

Feature

You can now publish the results of a data quality scan as Dataplex Universal Catalog metadata (/bigquery/docs/data-quality-scan). Previously, data quality scan results were published only to the Google Cloud console. The latest results are saved to the entry that represents the source table. You can view the results in the Google Cloud console. If you want to enable catalog publishing for an existing data quality scan, you must edit the scan and re-enable the publishing option. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now use data insights to have Gemini generate table and column descriptions from table metadata (/bigquery/docs/data-insights). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

June 16, 2025

Feature

The BigQuery migration assessment is now available for workflows that use Cloudera and Apache Hadoop (/bigquery/docs/migration-assessment#hadoop-cloudera). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now manage IAM tags (/bigquery/docs/tags) on BigQuery datasets and tables using SQL. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

The Merchant Center best sellers report (/bigquery/docs/merchant-center-best-sellers-schema) supports multi-client accounts (MCAs). If you have an MCA, you can use the `aggregator_id` to query the tables. The `BestSellersEntityProductMapping` table maps the best-selling entities to the products in the sub-accounts' inventory. This provides a consolidated view of best-selling products, which you can then join with product data for more detailed insights. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

In BigQuery ML, you can now forecast multiple time series at once by using the `TIME_SERIES_ID_COL` option

(/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-multivariate-time-series#time_series_id_col)
that is available in `ARIMA_PLUS_XREG` multivariate time series models. Try this feature with the Forecast multiple time series with a multivariate model (/bigquery/docs/arima-plus-xreg-multiple-time-series-forecasting-tutorial) tutorial. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

BigQuery now offers the following Gemini-enhanced SQL translation features:

- Create Gemini-based configuration YAML files (/bigquery/docs/config-yaml-translation#ai_yaml_guidelines) to generate AI suggestions for batch or interactive SQL translations. This feature is now generally available (https://cloud.google.com/products#product-launch-stages) (GA).
- After making a batch SQL translation, review your translation output, including Gemini-based suggestions, using the code tab (/bigquery/docs/batch-sql-translator#code-tab) and configuration tab (/bigquery/docs/batch-sql-translator#configuration_tab). This feature is now generally available (https://cloud.google.com/products#product-launch-stages) (GA).
- When making an interactive SQL translation, create and apply Gemini-enhanced translation rules (/bigquery/docs/interactive-sql-translator#create-apply-rules) to customize your SQL inputs. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

June 12, 2025

Feature

Dark theme is now available for BigQuery in Preview (https://cloud.google.com/products#product-launch-stages). To enable the dark theme, in the Google Cloud console, click **Settings and utilities > Preferences**. In the navigation menu, click **Appearance**, and then select your color theme and click **Save**.

June 11, 2025

Feature

The following GoogleSQL functions are now available in preview (https://cloud.google.com/products#product-launch-stages):

- The `ARRAY_FIRST` function (/bigquery/docs/reference/standard-sql/array_functions#array_first) returns the first element of the input array.
- The `ARRAY_LAST` function (/bigquery/docs/reference/standard-sql/array_functions#array_last) returns the last element of the input array.
- The `ARRAY_SLICE` function (/bigquery/docs/reference/standard-sql/array_functions#array_slice) returns an array that contains consecutive elements from the input array.

June 10, 2025

Change

An updated version of the ODBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#odbc_release_3121009) is now available.

Feature

For supported Gemini models (/vertex-ai/generative-ai/docs/provisioned-throughput/supported-models), you can now use Vertex AI Provisioned Throughput (/vertex-ai/generative-ai/docs/provisioned-throughput/overview) with the `ML.GENERATE_TEXT` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-text#provisioned-throughput) and `AI.GENERATE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate#provisioned-throughput) functions to provide consistent high throughput for requests.

This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

June 09, 2025

Libraries

Feature You can reference Iceberg external tables in materialized views (/bigquery/docs/materialized-views-create#iceberg) instead of migrating that data to BigQuery-managed storage. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

June 04, 2025

Change The organization-level configuration settings (/bigquery/docs/default-configuration) for `default_sql_dialect_option` and `query_runtime` are unsupported.

June 03, 2025

Feature BigQuery metastore has been renamed BigLake metastore (/bigquery/docs/about-blms) and is now generally available (https://cloud.google.com/products#product-launch-stages) (GA). The feature formerly known as BigLake metastore has been renamed BigLake metastore (classic).

Feature You can now use the BigQuery advanced runtime (/bigquery/docs/advanced-runtime) to improve query execution time and slot usage. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

Feature BigQuery tables for Apache Iceberg have been renamed BigLake tables for Apache Iceberg in BigQuery (/bigquery/docs/iceberg-tables). This feature is now generally available (https://cloud.google.com/products#product-launch-stages) (GA).

June 02, 2025

Libraries

Libraries

Libraries

Feature

BigQuery now supports using Spanner external datasets (/bigquery/docs/spanner-external-datasets) with authorized views (/bigquery/docs/authorized-views), authorized routines (/bigquery/docs/authorized-routines), and Cloud resource connections (/bigquery/docs/create-cloud-resource-connection). This feature is generally available (https://cloud.google.com/products?e=48754805&hl=en#product-launch-stages) (GA).

Feature

The `CREATE EXTERNAL TABLE` (/bigquery/docs/reference/standard-sql/data-definition-language#create_external_table_statement) and `LOAD DATA` (/bigquery/docs/reference/standard-sql/load-statements) statements now support the following options in preview (https://cloud.google.com/products/#product-launch-stages):

- `time_zone`: specify a time zone to use when loading data
- `date_format`, `datetime_format`, `time_format`, and `timestamp_format`: define how date and time values are formatted in your source files

Feature

In the navigation menu, you can now go to **Settings** and select **Configuration settings** to customize the BigQuery Studio experience (/bigquery/docs/bigquery-web-ui#navigation_menu) for users within the selected project or organization. This is achieved by showing or hiding user interface elements. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature

In the BigQuery console, in the **Welcome** tab, you can now try the Apache Spark demo notebook (/bigquery/docs/bigquery-web-ui#run_spark_notebook_demo_guide) that walks you through the basics of Spark notebook and showcases serverless Spark in BigQuery (/bigquery/docs/use-spark). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

May 29, 2025

Feature You can now use the `dbt-bigquery` adapter to run Python code that's defined in BigQuery DataFrames. For more information, see Use BigQuery DataFrames in dbt (/bigquery/docs/dataframes-dbt). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature You can now use your Google Account user credentials to authorize the creation, scheduling, and running of pipelines as well as the scheduling of notebooks and data preparations. For more information, see Create a pipeline schedule (/bigquery/docs/schedule-pipelines#create-schedule). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature You can now create event-driven transfers (/bigquery/docs/event-driven-transfer) when transferring data from Cloud Storage to BigQuery. Event-driven transfers can automatically trigger transfer runs when data in your Cloud Storage bucket has been modified or added. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

May 28, 2025

Feature You can now create a serverless Spark session and run PySpark code in a BigQuery notebook (/bigquery/docs/use-spark). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature Column metadata indexing is now available for both BigQuery tables (/bigquery/docs/metadata-indexing-managed-tables) and external tables (/bigquery/docs/metadata-caching-external-tables). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

May 27, 2025

Feature BigQuery offers optional job creation mode (/bigquery/docs/running-queries#optional-job-creation) to speed up small queries that you use in your dashboards, data exploration, and other workflows. This mode automatically optimizes eligible queries and uses a cache to improve latency. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now share Pub/Sub streaming data through BigQuery sharing (/bigquery/docs/analytics-hub-stream-sharing) with additional client libraries (/bigquery/docs/reference/analytics-hub) support and provider usage metrics. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

May 26, 2025

Libraries

Libraries

May 22, 2025

Change

Starting March 17 2026, the `bigquery.datasets.getIamPolicy` IAM permission is required to view a dataset's access controls and to query the `INFORMATION_SCHEMA.OBJECT_PRIVILEGES` (/bigquery/docs/information-schema-object-privileges) view. The `bigquery.datasets.setIamPolicy` permission is required to update a dataset's access controls or to create a dataset with access controls using the API (https://cloud.google.com/bigquery/docs/dataset-access-control#changes_to_api_methods). For more information on this change and how to opt into early enforcement, see Changes to dataset-level access controls (/bigquery/docs/dataset-access-control).

Feature

When you migrate Teradata data to BigQuery using the BigQuery Data Transfer Service, you can now specify the outputs of the BigQuery translation engine to use as schema mapping (/bigquery/docs/migration/teradata-overview#using_translation_engine_output_for_schema). This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

Feature You can use custom constraints (/bigquery/docs/custom-constraints) with Organization Policy to provide more granular control over specific fields for some BigQuery resources. This feature is available in Preview (https://cloud.google.com/products#product-launch-stages).

Feature When you Set up Gemini in BigQuery (/gemini/docs/bigquery/set-up-gemini) you are now prompted to grant the BigQuery Studio User and BigQuery Studio Admin roles. These roles now include permission to use Gemini in BigQuery features. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature You can select multiple columns and perform data preparation tasks on them, including dropping columns. For more information, see Prepare data with Gemini (/bigquery/docs/data-prep-get-suggestions). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

May 21, 2025

Change You can now perform supervised tuning (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model#supervised_tuning) on a BigQuery ML remote model (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model) based on a Vertex AI `gemini-2.0-flash-001` or `gemini-2.0-flash-lite-001` model.

Feature You are now able to set access controls on routines (/bigquery/docs/control-access-to-resources-iam#grant_access_to_a_routine). This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

May 19, 2025

Libraries

Libraries

Feature

Continuous queries (/bigquery/docs/continuous-queries-introduction) let you build long-lived, continuously processing SQL statements that can analyze, process, and perform machine learning (ML) inference on incoming data in BigQuery in real time.

- To monitor your continuous queries, you can use a custom job ID prefix (/bigquery/docs/continuous-queries#custom-job-id) to simplify filtering or view metrics specific to continuous queries (/bigquery/docs/monitoring-dashboard#metrics) in Cloud Monitoring.
- Continuous queries can use slot autoscaling (/bigquery/docs/continuous-queries-introduction#slots_autoscaling) to dynamically scale allocated capacity to accommodate your workload.

This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

Spanner now supports cross regional federated queries (https://cloud.google.com/bigquery/docs/spanner-federated-queries#cross_region_queries) from BigQuery which allow BigQuery users to query Spanner tables from regions other than their BigQuery region. Users don't incur Spanner network egress charges (/spanner/pricing#network) during the preview period. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

May 14, 2025

Feature

You can now schedule automated data transfers from Snowflake to BigQuery (/bigquery/docs/migration/snowflake-transfer) using the BigQuery Data Transfer Service. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature

Vector indexes support the TreeAH index type (/bigquery/docs/vector-index#tree-ah-index), which uses Google's ScaNN algorithm. The TreeAH index is optimized for efficient batch processing, capable of handling anywhere from a few thousand to hundreds of thousands of embeddings at once. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

BigQuery now supports cross-region transfers for batch loading (/bigquery/docs/batch-loading-data) and exporting (/bigquery/docs/exporting-data#export-data-in-bigquery) data. You can load or export your data from any region or multi-region to any other region or multi-region using a single `bq load` (/bigquery/docs/reference/bq-cli-reference#bq_load), `LOAD DATA` (/bigquery/docs/reference/standard-sql/load-statements#load_data_statement), `bq extract` (/bigquery/docs/reference/bq-cli-reference#bq_extract), or `EXPORT DATA` (/bigquery/docs/reference/standard-sql/export-statements#export_data_statement) statement. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

May 13, 2025

Feature

The following SQL features are now generally available (https://cloud.google.com/products/#product-launch-stages) (GA) in BigQuery:

- `GROUP BY STRUCT` (/bigquery/docs/reference/standard-sql/data-types#group_with_structs) and the `SELECT DISTINCT` clause.
- `GROUP BY ARRAY` (/bigquery/docs/reference/standard-sql/data-types#group_with_arrays) and the `SELECT DISTINCT` clause.
- `GROUP BY ALL` (/bigquery/docs/reference/standard-sql/query-syntax#group_by_all) clause.

May 12, 2025

Libraries

Feature

You can now view the Query text section (/bigquery/docs/query-plan-explanation#understand_steps_with_query_text) in a BigQuery execution graph to understand how the stage steps are related to the query text. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature

BigQuery resource utilization charts (/bigquery/docs/admin-resource-charts#view-resource-utilization) have the following changes:

- The default timeline shown in the event timeline chart has changed from one to six hours.
- Several improvements have been made to the views, including a new reservation slot usage view. This view helps monitor idle, baseline, and autoscaled slot usage.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use BigQuery and BigQuery DataFrames to enable multimodal analysis, transformation, and data engineering (ELT) workflows in both SQL and Python. Use multimodal data features to do the following:

- Integrate unstructured data into standard tables by using `ObjectRef` (/bigquery/docs/analyze-multimodal-data#objectref_values) values, and then work with this data in analysis and transformation workflows by using `ObjectRefRuntime` (/bigquery/docs/analyze-multimodal-data#objectrefruntime_values) values.
- Use generative AI to analyze multimodal data and generate embeddings by using BigQuery ML SQL functions (/bigquery/docs/analyze-multimodal-data#generative_ai_functions) or BigQuery DataFrames methods (/bigquery/docs/analyze-multimodal-data#generative_ai_methods) with Gemini and multimodal embedding models.
- Create multimodal DataFrames (/bigquery/docs/analyze-multimodal-data#multimodal_dataframes) in BigQuery DataFrames, and then use object transformation methods (/bigquery/docs/analyze-multimodal-data#object_transformation_methods) to transform images and chunk PDF files.
- Use Python user-defined functions (UDFs) (/bigquery/docs/multimodal-data-sql-tutorial) to transform images and chunk PDF files.

This feature is in Preview (https://cloud.google.com/products/#product-launch-stages) .

May 06, 2025

Change In the Google Cloud console, Analytics Hub has been renamed BigQuery sharing (Analytics Hub) (/bigquery/docs/analytics-hub-introduction).

May 05, 2025

Libraries

Feature Changes that you make to your saved queries are now automatically saved (/bigquery/docs/work-with-saved-queries#update_saved_queries). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

April 28, 2025

Libraries

Libraries

Feature Dataplex automatic discovery (/bigquery/docs/automatic-discovery) in BigQuery scans your data in Cloud Storage buckets to extract and catalog metadata, creating BigLake, external, or object tables for analytics and AI for insights, security, and governance. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature When you translate SQL queries from your source database, you can use configuration YAML files to optimize and improve the performance of your translated SQL (/bigquery/docs/config-yaml-translation#optimize_and_improve_the_performance_of_translated_sql)

. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

April 24, 2025

Feature

You can now work with a Gemini powered assistant (/bigquery/docs/data-canvas#assistant) in a BigQuery data canvas. The data canvas assistant is an agent-like tool, capable of constructing and modifying a data canvas to answer data analytics questions from user prompting. This feature is now in Preview (https://cloud.google.com/products#product-launch-stages).

April 23, 2025

Feature

You can now specify which reservation a query uses at runtime (/bigquery/docs/reservations-workload-management#flexible), and set IAM policies directly on reservations (/bigquery/docs/reservations-workload-management#securable). This provides more flexibility and fine-grained control over resource management. This feature is in public preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now set a maximum slot limit (/bigquery/docs/reservations-workload-management#predictable) for a reservation. You can configure the maximum reservation size when creating or updating a reservation. This feature is in public preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now allocate idle slots fairly (/bigquery/docs/slots#fairness) across reservations within a single admin project. This ensures each reservation receives an approximately equal share of available capacity. This feature is in public preview (https://cloud.google.com/products#product-launch-stages).

April 21, 2025

Libraries

Announcement BigQuery now provides spend-based committed use discounts (/bigquery/docs/bigquery-cud) (CUDs). Spend-based committed use discounts provide a discount in exchange for your commitment to spend a minimum amount per hour on PAYG compute resources listed here (/bigquery/docs/bigquery-cud#usage). You can purchase CUDs with a one or three year commitment period.

Feature You can now enable fine-grained access control on BigQuery metastore Iceberg tables (/bigquery/docs/bqms-features#set_access_control_policies). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Change You can get the required permissions to use BigQuery data preparation through the BigQuery Studio User (/iam/docs/roles-permissions/bigquery#bigquery.studioUser) (`roles/bigquery.studioUser`) and Gemini for Google Cloud User (/iam/docs/roles-permissions/cloudaicompanion#cloudaicompanion.user) (`roles/cloudaicompanion.user`) roles, and permission to access the data you're preparing.

BigQuery data preparation no longer requires that you have the permissions granted by the following IAM roles:

- BigQuery Data Editor (/iam/docs/roles-permissions/bigquery#bigquery.dataEditor) (`roles/bigquery.dataEditor`)
- Service Usage Consumer (/iam/docs/roles-permissions/serviceusage#serviceusage.serviceUsageConsumer) (`roles/serviceusage.serviceUsageConsumer`)

For more information about the required roles, see Manage data preparations (/bigquery/docs/manage-data-preparations).

April 17, 2025

Feature You can use partial ordering mode (/bigquery/docs/use-bigquery-dataframes#partial-ordering-mode) in BigQuery DataFrames to generate efficient queries. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature You can now use BigQuery DataFrames version 2.0 (/bigquery/docs/use-bigquery-dataframes#version-2), which makes security and performance improvements to the BigQuery DataFrames API, adds new features, and introduces breaking changes.

April 09, 2025

Announcement *Dataplex Catalog* has been renamed *BigQuery universal catalog*. You'll see this new name in the product page of the Google Cloud console, the documentation set, and the marketing collateral. Universal catalog brings together the data catalog capabilities of Dataplex Catalog (/dataplex/docs/catalog-overview) and the runtime metastore capabilities of BigQuery metastore (/bigquery/docs/about-bqms). For more information, see Introduction to data governance in BigQuery (/bigquery/docs/data-governance).

Change Updated pricing, packaging, and setup guidance is now available for Gemini in BigQuery (/gemini/docs/bigquery/set-up-gemini).

Feature You can now use the Apache Arrow format to stream data to BigQuery with the Storage Write API (/bigquery/docs/supported-data-types#supported-apache-arrow-data-types). This feature is available in preview (https://cloud.google.com/products/#product-launch-stages).

Change *Analytics Hub* has been renamed *BigQuery sharing* (/bigquery/docs/analytics-hub-introduction). You'll see this new name in the documentation set and the marketing collateral. The product functionality and endpoints remain the same. For more information, see Introduction to data governance in BigQuery (/bigquery/docs/data-governance).

Feature You can now combine raster and vector data with the `ST_REGIONSTATS` geography function (/bigquery/docs/reference/standard-sql/geography_functions#st_regionstats) to perform geospatial analysis in BigQuery. For more information, see Work with raster data (/bigquery/docs/raster-data) and try the tutorial that shows you how to use raster data to analyze global temperature by country (/bigquery/docs/raster-tutorial-weather). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

April 08, 2025

Feature

You can now create, view, modify, and delete Apache Iceberg resources in BigQuery metastore (/bigquery/docs/bqms-manage-resources). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now connect BigQuery metastore to Apache Flink (/bigquery/docs/bqms-use-dataproc#connect-bigquery-flink). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

BigQuery ML now offers a built-in TimesFM univariate time series forecasting model (/bigquery/docs/timesfm-model) that implements Google Research's open source TimesFM model. You can use BigQuery ML's built-in TimesFM model with the `AI.FORECAST` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-forecast) to perform forecasting without having to create and train your own model. This lets you avoid the need for model management.

To try using a TimesFM model with the `AI.FORECAST` function, see Forecast a time series with a TimesFM univariate model (/bigquery/docs/timesfm-time-series-forecasting-tutorial).

This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

April 07, 2025

Feature

You can now create remote models (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model) in BigQuery ML based on Llama (/vertex-ai/generative-ai/docs/partner-models/llama) and Mistral AI (/vertex-ai/generative-ai/docs/partner-models/mistral) models in Vertex AI.

Use the `ML.GENERATE_TEXT` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-text) with these remote models to perform generative natural language tasks for text stored in BigQuery tables. Try this feature with the Generate text by using the `ML.GENERATE_TEXT` function (/bigquery/docs/generate-text) tutorial.

This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Change An updated version of JDBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#current_jdbc_driver) is now available.

Feature BigQuery data preparation (/bigquery/docs/data-prep-introduction) is generally available (https://cloud.google.com/products#product-launch-stages) (GA). It offers AI-powered suggestions from Gemini for data cleansing, transformation, and enrichment. BigQuery supports visual data preparation pipelines and pipeline scheduling with Dataform.

Feature Smart-tuning (/bigquery/docs/materialized-views-use#smart_tuning) is now supported for materialized views (/bigquery/docs/materialized-views-intro) when they are in the same project as one of their base tables, or when they are in the project running the query. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Change BigQuery ML now uses dynamic token-based batching for embedding generation (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-embedding) requests. Dynamic token-based batching puts as many rows as possible into one request. This change boosts per-request utilization and improves scalability for any queries per minute (QPM) quota (/bigquery/quotas#cloud_ai_service_functions). Actual performance varies based on the embedding content length, with an average 10x improvement.

April 04, 2025

Feature BigQuery ML now supports the following generative AI functions (/bigquery/docs/generative-ai-overview#generative_ai_functions), which let you analyze text using a Vertex AI Gemini model. The function output includes a response that matches the type in the function name:

- `AI.GENERATE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate)

- `AI.GENERATE_BOOL` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-bool)
- `AI.GENERATE_INT` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-int)
- `AI.GENERATE_DOUBLE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-ai-generate-double)

This feature is in preview (https://cloud.google.com/products#product-launch-stages).

April 03, 2025

Feature

BigQuery migration assessment (https://cloud.google.com/bigquery/docs/migration-assessment) now includes support for Amazon Redshift Serverless. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature

You can now generate structured data by using BigQuery ML's `AI.GENERATE_TABLE` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-table) with Gemini 1.5 Pro, Gemini 1.5 Flash, and Gemini 2.0 Flash models. You can use the `AI.GENERATE_TABLE` function's `output_schema` argument to more easily format the model's response. The `output_schema` argument lets you specify a SQL schema for formatting, similar to the schema used in the `CREATE TABLE` statement. By creating structured output, you can more easily convert the function output into a BigQuery table.

Try this feature with the Generate structured data by using the `AI.GENERATE_TABLE` function (/bigquery/docs/generate-table) tutorial.

This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

April 02, 2025

Feature

You can now create and use Python user-defined functions (https://cloud.google.com/bigquery/docs/user-defined-functions-python) (UDFs) in BigQuery. Python UDFs support the use of additional libraries and external APIs. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Change

The Python code that you generate using Gemini in BigQuery Notebooks (/bigquery/docs/write-sql-gemini) is now much more likely to leverage your data. With this change, BigQuery Notebooks can intelligently pull relevant table names directly from your BigQuery project, resulting in personalized, executable Python code.

Feature

You can now generate Dataframes code in BigQuery Notebooks (/bigquery/docs/write-sql-gemini#dataframe) that use BigFrames libraries. In your code generation prompt, include the word `BigFrames` to generate code that uses BigQuery DataFrames (/bigquery/docs/use-bigquery-dataframes). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

April 01, 2025

Feature

You can use a `CREATE MODEL` statement (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-contribution-analysis) to create a contribution analysis (/bigquery/docs/contribution-analysis) model in BigQuery ML. The `top_k_insights_by_apriori_support` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-contribution-analysis#top_k_insights_by_apriori_support) and `pruning_method model` options (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-contribution-analysis#pruning_method) are now supported. You can use a contribution analysis model with the `ML.GET_INSIGHTS` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-get-insights) to generate insights about changes to key metrics in your multi-dimensional data. The following metric types are supported:

- Summable metric (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-contribution-analysis#use_a_summable_metric)

- Summable ratio metric (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-contribution-analysis#use_a_summable_ratio_metric)
- Summable by category metric (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-contribution-analysis#use_a_summable_by_category_metric)

This feature is generally available (//products#product-launch-stages) (GA).

Feature

Pipe syntax (/bigquery/docs/pipe-syntax-guide) supports a linear query structure designed to make your queries easier to read, write, and maintain. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

March 31, 2025

Feature

Iceberg external tables (/bigquery/docs/iceberg-external-tables) now support merge-on-read. You can query Iceberg tables with position deletes and equality deletes. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Libraries

Feature

BigQuery now supports subqueries (/bigquery/docs/reference/standard-sql/subqueries) in row level access policies (/bigquery/docs/managing-row-level-security#create_or_update_a_row-level_access_policy). It also includes support for BigLake managed tables (/bigquery/docs/biglake-intro) and the BigQuery Storage Read API. (/bigquery/docs/reference/storage) This feature is now generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now configure the repeat frequency of BigQuery Data Transfer Service for Google Ad Manager (/bigquery/docs/doubleclick-publisher-transfer). This option has a default of every 8 hours and a minimum of every 4 hours. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can build BigQuery pipelines (/bigquery/docs/workflows-introduction) (formerly workflows), composed of SQL queries or notebooks, in BigQuery Studio. You can then run these pipelines on a schedule. You can also configure notebook runtimes for a pipeline, share a pipeline, or share a pipeline link. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now skip loading match tables for BigQuery Data Transfer Service for Google Ad Manager (/bigquery/docs/doubleclick-publisher-transfer). If match tables are not needed, you can set parameter `load_match_tables` to `FALSE`. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now use BigQuery Data Transfer Service for Search Ads (/bigquery/docs/search-ads-transfer#pmax-support) to view Performance Max (PMax) campaign data (https://support.google.com/google-ads/answer/10724817) for the following tables:

- CartDataSalesStats
- ProductAdvertised
- ProductAdvertisedDeviceStats
- ProductAdvertisedConversionActionAndDeviceStats

This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

On the Scheduling page, you can now view existing schedules, create new schedules, and perform other actions for data preparations, notebooks, BigQuery pipelines, and scheduled queries. For more information, see Create a pipeline schedule (/bigquery/docs/orchestrate-workflows#create-schedule). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now define a `_CHANGE_SEQUENCE_NUMBER` (/bigquery/docs/change-data-capture#manage_custom_ordering) for BigQuery change data capture (CDC) to manage streaming `UPSERT` ordering for BigQuery. This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can include data preparation tasks in BigQuery pipelines (/bigquery/docs/workflows-introduction) that execute your code assets in sequence at a scheduled time. This feature is in Preview (https://cloud.google.com/products#product-launch-stages).

March 27, 2025

Feature

You can now enable metadata caching for SQL translation (/bigquery/docs/interactive-sql-translator#translate-with-additional-configs), which can significantly reduce latency for subsequent translation requests. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

March 26, 2025

Feature

You can now set the column granularity (/bigquery/docs/search-index#column-granularity) when you create a search index (/bigquery/docs/reference/standard-sql/data-definition-language#create_search_index_statement), which stores additional column information in your search index to further optimize your search query performance. This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

March 25, 2025

Feature

BigQuery ML now supports visualization of model monitoring metrics (/bigquery/docs/model-monitoring-overview#monitoring_visualization). This feature lets you use charts and graphs to analyze model monitoring function output (/vertex-ai/docs/model-monitoring/run-monitoring-job#analyze_monitoring_job_results). The following functions support metric visualization:

- `ML.VALIDATE_DATA_SKEW` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-validate-data-skew): compute the statistics for a set of serving data, and then compare them

to the statistics for the data used to train a BigQuery ML model in order to identify anomalous differences between the two data sets.

- `ML.VALIDATE_DATA_DRIFT` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-validate-data-drift): compute and compare the statistics for two sets of serving data in order to identify anomalous differences between the two data sets.

This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

March 24, 2025

Libraries

Libraries

Libraries

Feature

We have redesigned the Add Data (/bigquery/docs/bigquery-web-ui#Add_data) dialog to guide you through loading data into BigQuery with a source-first experience and enhanced search and filtering capabilities. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

You can now set labels (/bigquery/docs/labels-intro) on reservations. These labels can be used to organize your reservations and for billing analysis. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature

The BigQuery Data Transfer Service can now transfer reporting and configuration data from Google Analytics 4 (/bigquery/docs/google-analytics-4-transfer) into BigQuery. This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can now use KLL quantile functions (/bigquery/docs/reference/standard-sql/kll_functions) to efficiently compute approximate quantiles. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

March 20, 2025

Feature

You can now create remote models (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model) in BigQuery ML based on the Anthropic Claude model (/vertex-ai/generative-ai/docs/partner-models/use-claude) in Vertex AI.

Use the `ML.GENERATE_TEXT` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-text) with these remote models to perform generative natural language tasks for text stored in BigQuery tables. Try this feature with the Generate text by using the `ML.GENERATE_TEXT` function (/bigquery/docs/generate-text) tutorial.

You can also evaluate Claude models by using the `ML.EVALUATE` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-evaluate).

This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature

You can now use repositories (/bigquery/docs/repository-intro) and workspaces (/bigquery/docs/workspaces-intro) in BigQuery to perform version control.

Repositories perform version control on files by using Git to record changes and manage file versions. You can use workspaces within repositories to edit the code stored in the repository.

You can have a repository use Git directly on BigQuery, or you can connect a repository to a third-party Git provider (/bigquery/docs/repositories#connect-third-party).

This feature is in preview (https://cloud.google.com/products/#product-launch-stages) .

Announcement

BigQuery workflows have been renamed to BigQuery pipelines in the Google Cloud console. For more information, see Introduction to BigQuery pipelines (/bigquery/docs/workflows-introduction).

March 17, 2025

Feature You can now use `EXPORT DATA` statements (/bigquery/docs/reference/standard-sql/other-statements) to reverse ETL BigQuery data to Spanner (/bigquery/docs/export-to-spanner). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Feature You can now use the `TYPEOF` function (/bigquery/docs/reference/standard-sql/utility-functions#typeof) to determine the data type of an expression. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature You can now create an external dataset (/bigquery/docs/spanner-external-datasets) in BigQuery that links to an existing database in Spanner (/spanner/docs). This feature is generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

March 13, 2025

Feature Dataform (/dataform/docs/cmek#org-policy) now supports the CMEK organization policy (//kms/docs/cmek-org-policy).

Feature You can now use Gemini Cloud Assist chat to generate SQL queries (/bigquery/docs/write-sql-gemini#chat) and Python code (/bigquery/docs/write-sql-gemini#chat-python). This feature is in preview (https://cloud.google.com/products#product-launch-stages).

March 12, 2025

Feature You can configure reusable, default Cloud resource connections in a project. Default connections (/bigquery/docs/default-connections) are available in Preview (https://cloud.google.com/products#product-launch-stages).

Change An updated version of ODBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#odbc_release_3121004) is now available.

March 10, 2025

Announcement Analytics Hub egress controls (/bigquery/docs/analytics-hub-introduction#data_egress) and data clean room (/bigquery/docs/data-clean-rooms#subscriber_workflows) subscriptions are now available in all BigQuery editions (/bigquery/docs/editions-intro#analysis_features) and on-demand pricing.

March 06, 2025

Feature BigQuery Data Transfer Service now supports custom reports for Google Ads (/bigquery/docs/google-ads-transfer#custom_reports). You can use Google Ads Query Language (GAQL) queries in your transfer configuration to ingest custom Google Ads reports and fields beyond those available in the standard reports and fields (/bigquery/docs/google-ads-transformation). This feature is now generally available (https://cloud.google.com/products#product-launch-stages) (GA).

March 04, 2025

Change BigQuery is now available in the Stockholm (europe-north2) region (/bigquery/docs/locations#regions).

March 03, 2025

Libraries

Libraries

Feature Gemini in BigQuery can help you complete Python code (/bigquery/docs/write-sql-gemini#complete_python_code) with contextually appropriate recommendations that are based on content in the query editor. This feature is now generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature You can create a SQL user-defined aggregate function (/bigquery/docs/user-defined-aggregates#create-sql-udaf) by using the `CREATE`

`AGGREGATE FUNCTION` statement (/bigquery/docs/reference/standard-sql/data-definition-language#sql-create-udaf-function). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

February 25, 2025

Feature

BigQuery resource utilization charts (/bigquery/docs/admin-resource-charts#view-resource-utilization) provide metrics views and more chart configuration options in Preview (https://cloud.google.com/products/#product-launch-stages).

Feature

You can use the best sellers (/bigquery/docs/merchant-center-best-sellers-migration) and price competitiveness (/bigquery/docs/merchant-center-price-competitiveness-migration) migration guides to transition to the newer version of the reports. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Announcement

You can now see a list of BigQuery API and service dependencies (/bigquery/docs/service-dependencies). You can also review the effects of disabling an API or service.

February 24, 2025

Feature

You can now use the `@@location` system variable (/bigquery/docs/reference/system-variables) to set the location in which to run a query. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

February 17, 2025

Libraries

Libraries

Feature

Subscriber email logging lets you log the principal identifiers of users who execute jobs and queries against linked datasets. You can enable logging at the listing level (/bigquery/docs/analytics-hub-manage-listings#create_a_listing) and the data exchange level (/bigquery/docs/analytics-hub-manage-exchanges#create-exchange) (for all the listings in the data exchange). Once you enable and save subscriber email logging, this setting cannot be edited. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

February 10, 2025

Libraries

Libraries

Feature

BigQuery data preparation provides context-aware join operation recommendations from Gemini (/bigquery/docs/data-prep-get-suggestions#add-join). Data preparation is available in Preview (https://cloud.google.com/products#product-launch-stages).

February 06, 2025

Feature

You can create a JavaScript user-defined aggregate function (/bigquery/docs/user-defined-aggregates#create-javascript-udaf) by using the `CREATE AGGREGATE FUNCTION` statement (/bigquery/docs/reference/standard-sql/data-definition-language#javascript-create-udaf-function). This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

February 03, 2025

Libraries

Feature You can now use the `BY NAME` and `CORRESPONDING` modifiers (/bigquery/docs/reference/standard-sql/query-syntax#by_name_or_corresponding) with set operations to match columns by name instead of by position. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Change The BigQuery ML `ML.BUCKETIZE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-bucketize) and `ML.QUANTILE_BUCKETIZE` (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-quantile-bucketize) functions now support formatting of the function output. You can use the `output_format` argument to format the function output as one of the following:

- A string in the format `bin_<bucket_index>`
- A string in interval notation (https://en.wikipedia.org/wiki/Interval_(mathematics))
- A JSON-formatted string

January 28, 2025

Feature You can now view stored column usage (/bigquery/docs/reference/rest/v2/Job#StoredColumnsUsage) information for a query job that performs vector search using stored columns. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

January 27, 2025

Libraries

Libraries

Feature You can now set conditional IAM access on BigQuery datasets (/bigquery/docs/conditions) with access control lists (ACLs). This feature is

generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature

The following BigQuery ML generative AI features are now available:

- Creating a remote model (//bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open) based on an open model from Vertex Model Garden or Hugging Face that is deployed to Vertex AI (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-remote-model-open). Options include Llama, Gemma, and other leading open text generation models.
- Using the `ML.GENERATE_TEXT` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-generate-text) with this remote model to perform a broad range of generative AI tasks.
- Using the `ML.EVALUATE` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-evaluate) to evaluate the remote model.

Try these features with the Generate text by using the `ML.GENERATE_TEXT` function (/bigquery/docs/generate-text) how-to topic and the Generate text by using a Gemma open model and the `ML.GENERATE_TEXT` function (/bigquery/docs/generate-text-tutorial-gemma) tutorial.

These features are generally available (https://cloud.google.com/products/#product-launch-stages) (GA).

Announcement

We previously communicated that after January 27, 2025, a purchase would be required to use Gemini in BigQuery features (https://cloud.google.com/gemini/docs/bigquery/overview). We are temporarily delaying enforcement of these procurement methods, and no purchase is required at this time. For more information, see Gemini for Google Cloud pricing (https://cloud.google.com/products/gemini/pricing).

January 22, 2025

Feature

BigQuery metastore (/bigquery/docs/about-bqms) lets you access and manage metadata from a variety of processing engines, including BigQuery and Apache Spark. BigQuery metastore supports BigQuery tables and open formats such as Apache Iceberg. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

January 21, 2025

Feature

You can use natural language to prepare data with Gemini in BigQuery (/bigquery/docs/data-prep-get-suggestions).

Feature

In BigQuery ML, you can now evaluate Anthropic Claude models by using the `ML.EVALUATE` function (/bigquery/docs/reference/standard-sql/bigqueryml-syntax-evaluate). The quotas (/bigquery/quotas#cloud_ai_service_functions) for use of Anthropic Claude models in BigQuery ML have also been brought into parity with Vertex AI quotas.

This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

Feature

Data preparation in BigQuery lets you test data preparations you're developing before you deploy and schedule runs in production. For more information, see Develop a data preparation (/bigquery/docs/orchestrate-data-preparations#develop).

January 20, 2025

Libraries

Libraries

January 17, 2025

Feature

In the navigation menu (/bigquery/docs/bigquery-web-ui#navigation_menu), you can now go to the **Settings** page to set default settings that are applied when you

start a session in BigQuery Studio. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature The BigQuery Data Transfer Service can now transfer data from the following data sources:

- MySQL (/bigquery/docs/mysql-transfer)
- PostgreSQL (/bigquery/docs/postgresql-transfer)

Transfers from these data sources are supported in Preview (https://cloud.google.com/products#product-launch-stages).

January 16, 2025

Feature The BigQuery migration assessment for Oracle (/bigquery/docs/migration-assessment) now includes a total cost of ownership (TCO) calculator that provides an estimation of compute and storage costs for migrating your Oracle data warehouse to BigQuery. This feature is in preview (https://cloud.google.com/products#product-launch-stages).

Feature We have rearranged the navigation menu (/bigquery/docs/bigquery-web-ui#navigation_menu) into new categories. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

January 13, 2025

Feature You can now use BigQuery Omni Virtual Private Cloud (VPC) allowlists to restrict access to AWS S3 buckets (/bigquery/docs/omni-aws-create-external-table#allow-vpc) and Azure Blob Storage (/bigquery/docs/omni-azure-create-external-table#allow-vpc) from specific BigQuery Omni VPCs. This feature is generally available (https://cloud.google.com/products#product-launch-stages) (GA).

Feature In BigQuery ML, you can now forecast multiple time series at once by using the new `TIME_SERIES_ID_COL` option

(/bigquery/docs/reference/standard-sql/bigqueryml-syntax-create-multivariate-time-series#time_series_id_col)
that is available in `ARIMA_PLUS_XREG` multivariate time series models. Try this feature with the Forecast multiple time series with a multivariate model (/bigquery/docs/arima-plus-xreg-multiple-time-series-forecasting-tutorial) tutorial.

This feature is in preview (https://cloud.google.com/products/#product-launch-stages).

January 02, 2025

Change An updated version of JDBC driver for BigQuery (/bigquery/docs/reference/odbc-jdbc-drivers#current_jdbc_driver) is now available.

Last updated 2026-04-29 UTC.