Cloud SQL

Fully managed relational database service for MySQL, PostgreSQL, and SQL Server with rich extension collections, configuration flags, and developer ecosystems.

New customers get $300 in free credits to spend on Cloud SQL. You won't be charged until you upgrade.

- Reduce maintenance costs with fully managed MySQL, PostgreSQL and SQL Server databases
- Ensure business continuity with reliable and secure services backed by 24/7 SRE team
- Automate database provisioning, storage capacity management, and other time-consuming tasks
- Database observability made easy for developers with Cloud SQL Insights
- Easy integration with existing apps and Google Cloud services like GKE and BigQuery

Cloud SQL is a fully-managed database service that helps you set up, maintain, manage, and administer your relational databases on Google Cloud Platform.

You can use Cloud SQL with MySQL, PostgreSQL, or SQL Server.

BENEFITS

Secure and compliant

Data encryption at rest and in transit. Private connectivity with Virtual Private Cloud and user-controlled network access with firewall protection. Compliant with SSAE 16, ISO 27001, PCI DSS, and HIPAA.

Scale as you go

Scale your instances effortlessly with a single API call whether you start with simple testing or you need a highly available database in production.

Set up in minutes

Standard connection drivers and built-in migration tools allow you to create and connect to your first database in just a few minutes.

Key features

Fully managed

Cloud SQL automatically ensures your databases are reliable, secure, and scalable so that your business continues to run without disruption. Cloud SQL automates all your backups, replication, encryption patches, and capacity increases—while ensuring greater than 99.95% availability, anywhere in the world. Learn more about Cloud SQL availability features in this guide.

Integrated

Access Cloud SQL instances from just about any application. Easily connect from App Engine, Compute Engine, Google Kubernetes Engine, and your workstation. Open up analytics possibilities by using BigQuery to directly query your Cloud SQL databases.

Reliable

Easily configure replication and backups to protect your data. Go further by enabling automatic failover to make your database highly available. Your data is automatically encrypted, and Cloud SQL is SSAE 16, ISO 27001, and PCI DSS compliant and supports HIPAA compliance.

Easy migrations to Cloud SQL

Database Migration Service (DMS) makes it easy to migrate your production databases to Cloud SQL with minimal downtime. This serverless offering eliminates the hassle of manually provisioning, managing, and monitoring migration-specific resources. DMS leverages the native replication capabilities of MySQL, PostgreSQL, SQL Server and Oracle to maximize the fidelity and reliability of your migration. And it's available at no additional charge for migrations to Cloud SQL. Learn more.

All features

Fast, easy migrations	Database Migration Service makes it easy to migrate databases from on-premises, Compute Engine, and other clouds to Cloud SQL with minimal downtime.
Secure access and connectivity	Cloud SQL data is encrypted when on Google's internal networks and when stored in database tables, temporary files, and backups. Cloud SQL supports private connectivity with Virtual Private

	Cloud (VPC), and every Cloud SQL instance includes a network firewall, allowing you to control public network access to your database instance.
Built-in high availability	Replicate your instance to another zone or region with just a click of a button. Leverage built-in HA to provide isolation from many types of infrastructure hardware, and software failures. Cloud SQL for MySQL HA Cloud SQL for PostgreSQL HA Cloud SQL for SQL Server HA Learn more about Cloud SQL availability features in this guide.
Scalability	Easily scale up as your data grows—add processor cores, RAM and storage, and scale out by adding read replicas to handle increasing read traffic. Read replicas support high availability, can have their own read replicas, and can be located across regions and platforms.
Automatic storage increases	Cloud SQL can automatically scale up storage capacity when you are near your limit. This way you don't have to spend time estimating future storage needs or spend money on capacity until you need it.
Cloud SQL Insights	Quickly understand and resolve database performance issues on Cloud SQL. Pre-built dashboards and visual query plans help developers identify the root cause of problems. Access database metrics and traces in existing tools using OpenTelemetry. Monitor databases through the lens of the application using query tags. Available now for PostgreSQL and MySQL.

High performance	Cloud SQL supports performance-intensive workloads with very high IOPS and no extra cost for IO.
Easy integration	Access Cloud SQL instances from just about any application. Easily connect from App Engine, Compute Engine, Google Kubernetes Engine, and your workstation. Open up analytics possibilities by using BigQuery to directly query your Cloud SQL databases.
Real-time change data capture and replication	Synchronize data across heterogeneous databases, storage systems, and applications reliably and with minimal latency with Datastream. Seamlessly deliver change streams from Oracle and MySQL databases into Google Cloud services such as BigQuery, Cloud SQL, Google Cloud Storage, and Cloud Spanner for up-to-date information.
Automatic backups	Automate daily backups and binary logging (for replication or point-in-time recovery).
Point-in-time recovery	Restore your instance to its state at an earlier point in time.
Compatibility	Build and deploy for the cloud faster because Cloud SQL offers standard MySQL, PostgreSQL, and Microsoft SQL Server databases, ensuring application compatibility.
Standard APIs	Build and deploy for the cloud faster because Cloud SQL offers standard MySQL, PostgreSQL, and SQL Server databases, ensuring application compatibility. Use standard connection drivers and built-in migration tools to get started quickly.