Instance locations

MySQL | PostgreSQL (https://cloud.google.com/sql/docs/postgres/locations) | SQL Server (https://cloud.google.com/sql/docs/sqlserver/locations)

When you create a Cloud SQL instance, you choose a *region* where the instance and its data are stored. To reduce latency and increase availability, choose the same region for your data and your Compute Engine instances, App Engine apps, and other services.

There are different location types:

A regional location (#location-r) is a specific geographic place, such as London.

A multi-regional location (#location-mr) is a large geographic area, such as the United States, that contains at least two geographic places. Multi- regional locations are only used for backups.

Regional Locations

Regional locations are specific geographic locations within a multi-region location. You can create a Cloud SQL instance in the following regions:

	Region Name	Region Description	Notes
North America			
	`northamerica-northeast1`	Montréal	Second Generation instances only
	`us-central`	Iowa	First Generation instances only
	`us-central1`	Iowa	Second Generation instances only
	`us-east1`	South Carolina	
	`us-east4`	Northern Virginia	Second Generation instances only
	`us-west1`	Oregon	Second Generation instances only

	Region Name	Region Description	Notes
	us-west2	Los Angeles	Second Generation instances only
South America			
	southamerica-east1	São Paulo	Second Generation instances only
Europe			
	europe-north1	Finland	Second Generation instances only
	europe-west1	Belgium	
	europe-west2	London	Second Generation instances only
	europe-west3	Frankfurt	Second Generation instances only
	europe-west4	Netherlands	Second Generation instances only
	europe-west6	Zürich	Second Generation instances only
Asia			
	asia-east1	Taiwan	
	asia-east2	Hong Kong	Second Generation instances only
	asia-northeast1	Tokyo	Second Generation instances only
	asia-northeast2	Osaka	Second Generation instances only
	asia-south1	Mumbai	Second Generation instances only
	asia-southeast1	Singapore	Second Generation instances only
Australia			
	australia-southeast1	Sydney	Second Generation instances only

Multi-regional backup locations

Multi-Region Name	Multi-Region Description
asia	Data centers in Asia

Multi-Region Name	Multi-Region Description
eu	Data centers in the European Union
us	Data centers in the United States

Zones

Zones are sub-locations within a region where you can create zonal resources such as Second Generation instances. For example, a zone named `us-central1-a` indicates a zone within the `us-central1` region. A zone is independent of other zones in the same region.

For Second Generation instances, you can choose your zone, and you can choose whether your data is replicated between zones or not. If you want your Second Generation instance to be replicated between zones, configure it for high availability (https://cloud.google.com/sql/docs/mysql/high-availability).

For First Generation instances, you cannot choose your zone. Data in First Generation instances is replicated across multiple zones, so a zonal failure does not affect the availability of your instance.

Note: Second Generation is replacing First Generation; support for First Generation instances ends January 30, 2020. To upgrade a First Generation instance to Second Generation, see Upgrading a First Generation Instance to Second Generation (https://cloud.google.com/sql/docs/mysql/upgrade-2nd-gen).

Preferred Location

For Second Generation instances, you can select your zone (#zones). Choose **Any** if you want the system to select and assign a zone for you during instance creation.

For First Generation instances, you can store your data close to a Compute Engine or App Engine service hosted within the same region. Choosing a preferred location will reduce latency and improve availability for that service. Note that if the service you have requested to remain close to moves to another zone, your Cloud SQL instance is moved also, which causes downtime.

Note: Second Generation is replacing First Generation; support for First Generation instances ends January 30, 2020. To upgrade a First Generation instance to Second Generation, see Upgrading a First Generation Instance to Second Generation (https://cloud.google.com/sql/docs/mysql/upgrade-2nd-gen).

For more information about zones, see Geography and Regions (https://cloud.google.com/docs/geography-and-regions).

What's next

- Get more information about building applications to meet your latency, availability, and durability requirements (https://cloud.google.com/docs/geography-and-regions).
- See a worldwide region map (https://cloud.google.com/about/locations/).