✓ 100 XP

Identify key benefits of Azure Cosmos DB

3 minutes

Azure **Cosmos** DB is a fully managed NoSQL database designed to provide low latency, elastic scalability of throughput, well-defined semantics for data consistency, and high availability.

You can configure your databases to be globally distributed and available in any of the Azure regions. To lower the latency, place the data close to where your users are. Choosing the required regions depends on the global reach of your application and where your users are located.

With Azure Cosmos DB, you can add or remove the regions associated with your account at any time. Your application doesn't need to be paused or redeployed to add or remove a region.

Key benefits of global distribution

With its novel multi-master replication protocol, every region supports both writes and reads. The multi-master capability also enables:

- Unlimited elastic write and read scalability.
- 99.999% read and write availability all around the world.
- Guaranteed reads and writes served in less than 10 milliseconds at the 99th percentile.

Your application can perform near real-time reads and writes against all the regions you chose for your database. Azure Cosmos DB internally handles the data replication between regions with consistency level guarantees of the level you've selected.

Running a database in multiple regions worldwide increases the availability of a database. If one region is unavailable, other regions automatically handle application requests. Azure Cosmos DB offers 99.999% read and write availability for multi-region databases.

Next unit: Explore the resource hierarchy

