

# GEOGRAPHICALLY-DISTRIBUTED DATABASES

# CHALLENGES OF GEOGRAPHICALLY-DISTRIBUTED APPLICATIONS

- Applications may respond slowly when a user's data is not located in a region near the user.
- Applications may become unreliable if data is unavailable due to network partitions or other infrastructure failures.
- Adhering to data placement restrictions could introduce unmanageable complexity into an application.



**GEOGRAPHICALLY-DISTRIBUTED  
APPLICATIONS CAN BE PAIRED WITH A  
GEOGRAPHICALLY-DISTRIBUTED  
DATABASE**



# CHARACTERISTICS OF A GEOGRAPHICALLY-DISTRIBUTED DATABASE

- Has data located in more than one geographical location.
- Has active-active capabilities.
- Serves consistent, reliable data at scale with transparent replication.



# CHARACTERISTICS OF A GEOGRAPHICALLY DISTRIBUTED DATABASE (CONTINUED)

- Supports low-latency, fast responses.
- Supports adding or removing database regions in real time.
- Bonus, has multi-cloud support!

