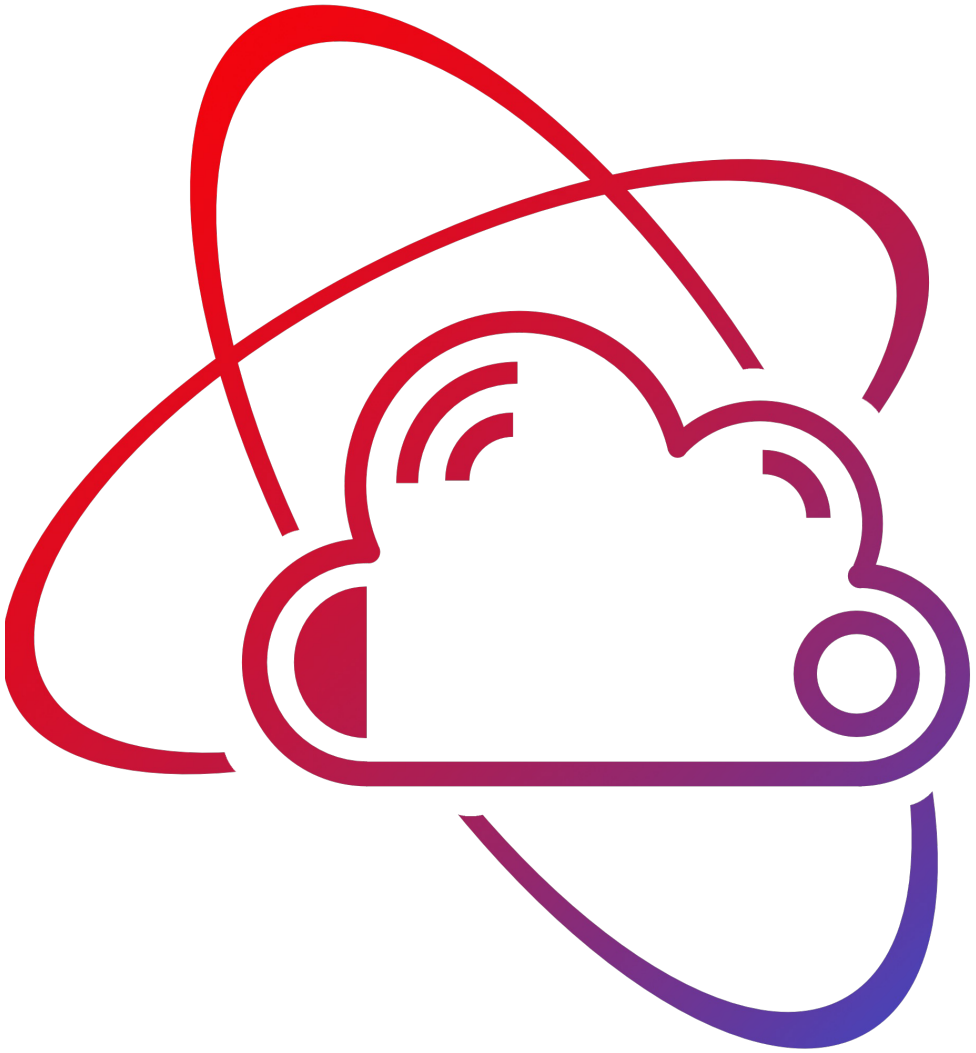
# Cloud Computing Architecture

## Amazon DynamoDB and Other Database Technologies



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# Acknowledgement of Country

We respectfully acknowledge the Wurundjeri People of the Kulin Nation, who are the Traditional Owners of the land on which Swinburne's Australian campuses are located in Melbourne's east and outer-east, and pay our respect to their Elders past, present and emerging.

We are honoured to recognise our connection to Wurundjeri Country, history, culture, and spirituality through these locations, and strive to ensure that we operate in a manner that respects and honours the Elders and Ancestors of these lands.

We also respectfully acknowledge Swinburne's Aboriginal and Torres Strait Islander staff, students, alumni, partners and visitors.

We also acknowledge and respect the Traditional Owners of lands across Australia, their Elders, Ancestors, cultures, and heritage, and recognise the continuing sovereignties of all Aboriginal and Torres Strait Islander Nations.

# In this Presentation:

- Introduction to Amazon DynamoDB
- DynamoDB Consistency
- Amazon Redshift and Aurora

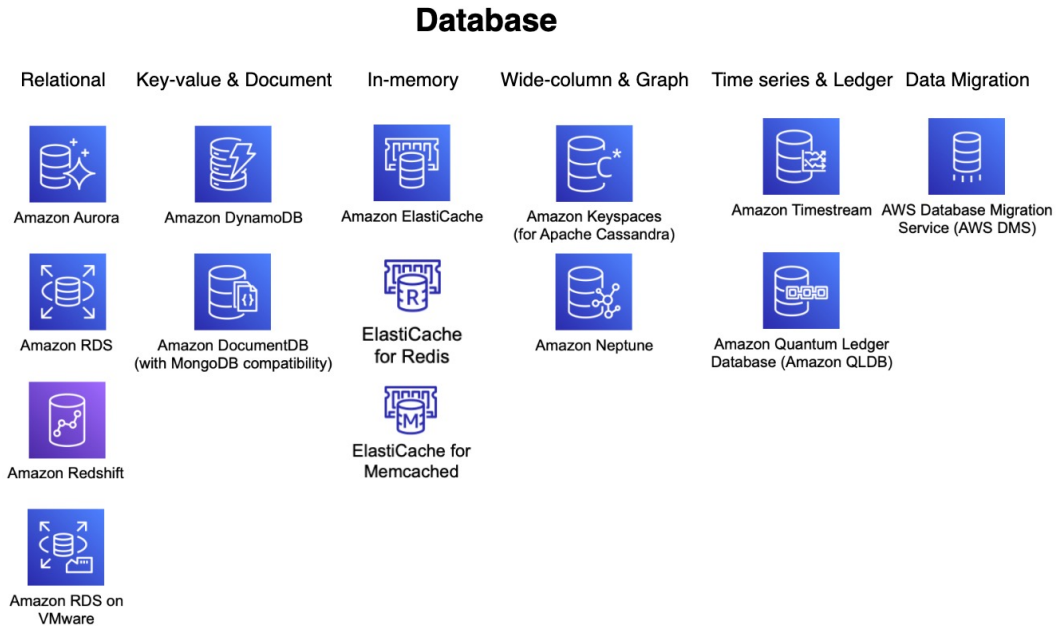


Image from: https://catalog.workshops.aws/general-immersionday/en-US/basic-modules/50-rds



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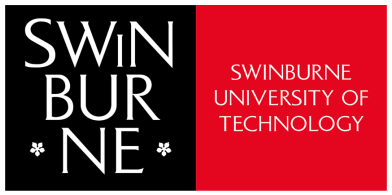
# Introduction to Amazon DynamoDB



## What is Amazon DynamoDB?

Fast and flexible NoSQL database service for any scale

**Amazon DynamoDB**

- NoSQL database tables
- Virtually unlimited storage
- Items can have differing attributes
- Low-latency queries
- Scalable read/write throughput

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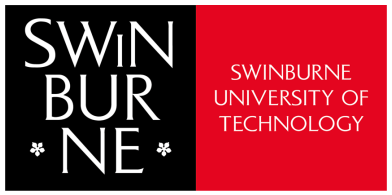
# DynamoDB Consistency



# Amazon DynamoDB Consistency

- DynamoDB synchronously replicates data across three facilities within an AWS Region.
- You can specify, at the time of the read request, whether a read should be **eventually** or **strongly** consistent.

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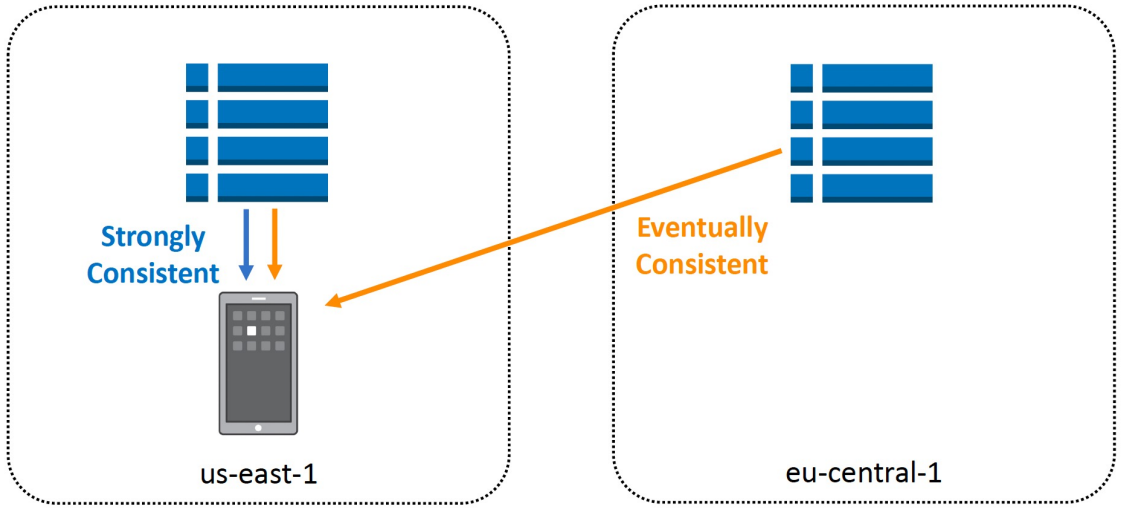
# Global Tables

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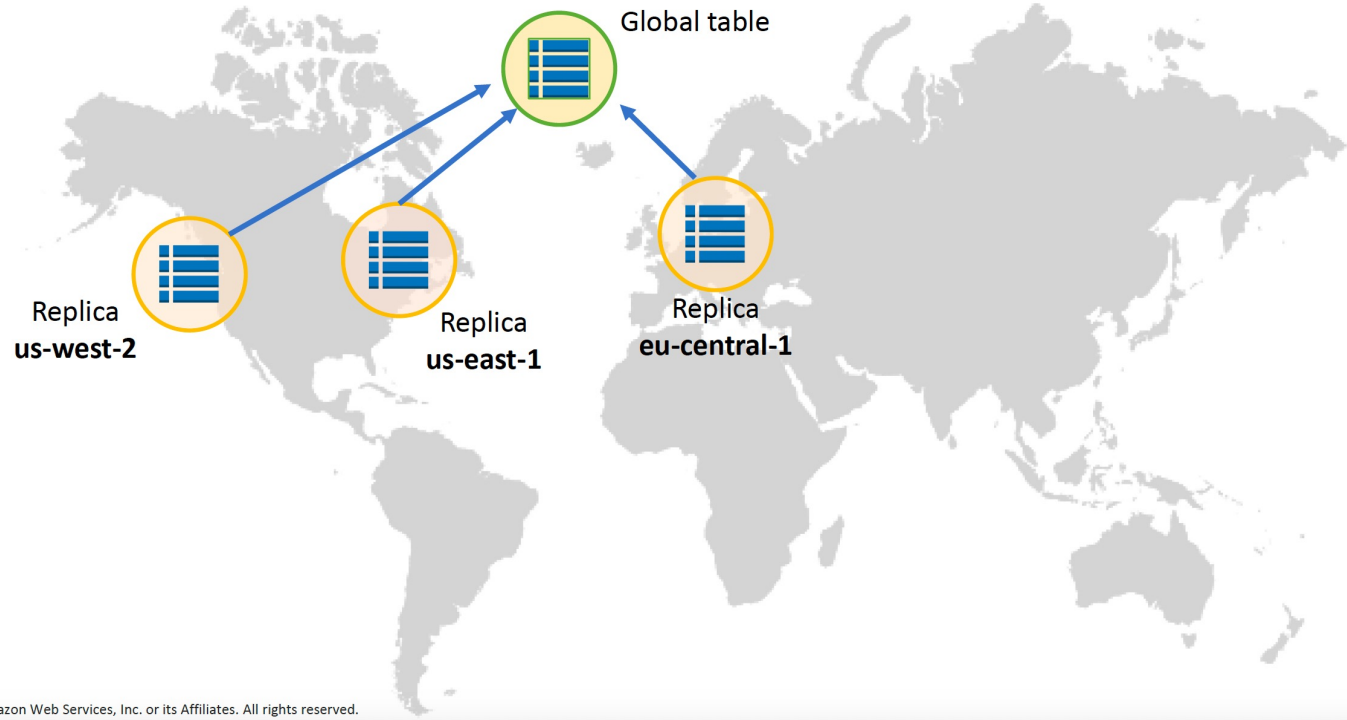
# Global Tables

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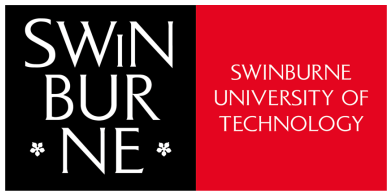
# Amazon Redshift and Aurora



## Amazon Redshift

Amazon Redshift

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## Amazon Aurora

Amazon Aurora

- Enterprise-class relational database
- Compatible with MySQL or PostgreSQL
- Automate time-consuming tasks (such as provisioning, patching, backup, recovery, failure detection, and repair).

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# Want to learn more?

Check out:

AWS Academy – ACF Module 8: Databases

AWS Documentation



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