Database Cloning

A database clone is an exact copy of an existing database, created usually for the purpose of testing, development, troubleshooting, or scaling. It replicates the entire database, including its structure, data, indexes, and sometimes user privileges, depending on the system. In the context of RDS, Database cloning is a method that allows us to create a database clone of an RDS database instance, with all the same settings and configurations.

RDS database cloning is also particularly useful when creating **staging databases** (i.e. temporary databases created to serve an Extract, Transform and Load, aka ETL procedure; ETL procedures will be discussed in-depth later) on-demand in a streamlined, efficient and almost real-time manner without the overhead of traditional backup and restore processes.

However, it is worth remembering that database clones are (by deliberate design) isolated from their source databases, meaning any modifications made to the cloned database do not affect the original, and the clone can be queried and updated independently. This isolation is critical for scenarios where testing or development needs to mimic production data without risking changes to the live environment.