



# Aurora

Considered as a part of the RDS extended family of offerings, Amazon Aurora is a proprietary relational database engine built by Amazon to take full advantage of AWS's vast cloud infrastructure. Aurora was designed from the ground up to leverage the distributed, scalable, and fault-tolerant capabilities of the cloud. While it is a proprietary database engine, it is compatible with MySQL and PostgreSQL at the relational database layer, meaning that applications written for those databases can run on Aurora with little to no modification.

With features like Aurora Global Database allowing for cross-region replication and Multi-AZ deployments, Aurora can efficiently power modern, scalable applications. However, the privilege of having Amazon manage your servers for you does come at an extra cost, thereby making the service more expensive sometimes, especially in comparison to RDS. This cost is however worth it as Aurora is considered to be superior to RDS, delivering higher performance and scalability than traditional database engines with Aurora providing upto five times the throughput of normal MySQL and upto three times the throughput of normal PostgreSQL databases.

Aurora is also better suited for the handling of large, distributed workloads due to its superior availability and performance, with built-in support for features such as automatic scaling of storage (upto 128TB) and automatic addition of read replicas (upto 15 separate instances). Aurora DB clusters are also highly fault tolerant by nature, where cluster volumes span multiple Availability Zones (AZs; will be discussed in further sections) with each Availability Zone containing a copy of the data, allowing said clusters to tolerate the failure of an Availability Zone without any major interruptions.