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Amazon RDS

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Amazon RDS

- Amazon Relational Database Service (Amazon RDS) makes it easy to set up, operate, and scale a relational database in the cloud.
- It provides cost-efficient and resizable capacity while managing time-consuming database administration tasks, freeing you up to focus on your applications and business. Amazon RDS provides you six familiar database engines to choose from, including Amazon Aurora, Oracle, Microsoft SQL Server, PostgreSQL, MySQL and MariaDB.

Benefits

- Easy to Administer
  - Amazon RDS makes it easy to go from project conception to deployment.
  - Use the AWS Management Console, the AWS RDS Command-Line Interface, or simple API calls to access the capabilities of a production-ready relational database in minutes.
  - No need for infrastructure provisioning, and no need for installing and maintaining database software.

Benefits

- Scalable
  - You can scale your database's compute and storage resources with only a few mouse clicks or an API call, often with no downtime.
  - Many Amazon RDS engine types allow you to launch one or more Read Replicas to offload read traffic from your primary database instance.

Benefits

- Available and Durable
  - Amazon RDS runs on the same highly reliable infrastructure used by other Amazon Web Services.
  - When you provision a Multi-AZ DB Instance, Amazon RDS synchronously replicates the data to a standby instance in a different Availability Zone (AZ).
  - Amazon RDS has many other features that enhance reliability for critical production databases, including automated backups, database snapshots, and automatic host replacement.

Benefits

- Fast
  - Amazon RDS offers database server sizing choices up to 32 vCPUs and 244 GiB, as well as storage choices for a wide range of application performance requirements.
  - You can choose SSD-backed storage optimized for high-performance OLTP applications or for cost-effective general-purpose use.
  - You can also choose magnetic storage for workloads in which data is accessed less frequently.

Benefits

- Secure
  - Amazon RDS makes it easy to control network access to your database.
  - Amazon RDS also lets you run your database instances in Amazon Virtual Private Cloud (Amazon VPC), which enables you to isolate your database instances and to connect to your existing IT infrastructure through an industry-standard encrypted IPsec VPN.
  - Many Amazon RDS engine types offer encryption at rest and encryption in transit.

Benefits

- Inexpensive
  - You pay very low rates and only for the resources you actually consume. In addition, you benefit from the option of On-Demand pricing with no up-front or long-term commitments, or even lower hourly rates via our reserved pricing option.

Database Instance Classes

Instance Type	vCPU	Memory (GiB)	PIOPS-Optimized	Network Performance
Standard - Latest Generation				
db.m4.large	2	8	Yes	Moderate
db.m4.xlarge	4	16	Yes	High
db.m4.2xlarge	8	32	Yes	High
db.m4.4xlarge	16	64	Yes	High
db.m4.10xlarge	40	160	Yes	10 Gigabit

Database Instance Classes

Memory Optimized - Current Generation				
db.r3.large	2	15	-	Moderate
db.r3.xlarge	4	30.5	Yes	Moderate
db.r3.2xlarge	8	61	Yes	High
db.r3.4xlarge	16	122	Yes	High
db.r3.8xlarge	32	244	-	10 Gigabit