

AMAZON RDS Makes it easy to set up, operate, and scale a relational database in the cloud.

Amazon Relational Database Service

Amazon Relational Database Service (Amazon RDS) 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 FUNCTIONALITY

Amazon RDS is designed for developers or businesses who require the full features and capabilities of a relational database, or who wish to migrate existing applications and tools that utilize a relational database. It gives you access to the full capabilities of a MySQL database running on your own Amazon RDS database instance.

SERVICE HIGHLIGHTS

- Simple to Deploy – Use the AWS Management Console or simple API calls to access the capabilities of a production-ready relational database without provisioning infrastructure or installing and maintaining database software.
- Managed – Amazon RDS handles time-consuming database management tasks, such as patch management, backups, and replication, allowing you to pursue higher value application development or database refinements.
- Compatible – Amazon RDS provides native access to a MySQL database, so it works with your existing tools, applications, and drivers. Port an existing database to Amazon RDS without changing a line of code.
- Scalable – Easily scale the compute and storage resources available to your database to meet your needs. Read Replicas allow you to scale beyond the capacity of a single DB Instance for read-heavy database workloads.
- Reliable – Multiple features enhance reliability for critical production databases, including automated backups, DB snapshots, and Multi-AZ deployments. Amazon RDS runs on the same highly reliable infrastructure as other Amazon Web Services.
- Works with Other Services – For example, an application running in Amazon EC2 will experience low-latency database access to an Amazon RDS DB Instance in the same region.
- Secure – Amazon RDS provides web service interfaces to configure firewall settings that control network access to your database.
- Inexpensive – You pay very low rates and only for the resources you actually consume.

AMAZON RDS FEATURES

BACKUP & RECOVERY

- Automated Backups – Turned on by default, the automated backup feature enables point-in-time recovery for your DB Instance. Amazon RDS will backup your database and transaction logs and store both for a user-specified retention period.
- DB Snapshots are user-initiated backups of your DB Instance. These full database backups will be stored by Amazon RDS until you explicitly delete them. You can create a new DB Instance from a DB Snapshot whenever you desire.

REPLICATION

Amazon RDS for MySQL provides two distinct but complementary replication features that can be used in conjunction to gain enhanced database availability, protect your latest database updates against unplanned outages, and scale beyond the capacity constraints of a single DB Instance for read-heavy database workloads.

- Multi-AZ Deployments enhance database availability while protecting your latest database updates against unplanned outages. When you create or modify your DB Instance to run as a Multi-AZ deployment, Amazon RDS will automatically provision and manage a “standby” replica in a different Availability Zone (independent infrastructure in a physically separate location).
- Read Replicas – make it easy to elastically scale beyond the capacity constraints of a single DB Instance for read-heavy database workloads. You can create one or more replicas of a given source DB Instance and serve high-volume application read traffic from multiple copies of your data, thereby increasing aggregate read throughput.

MULTI-AZ DEPLOYMENTS

Multi-Availability Zone (Multi-AZ) deployments offer enhanced database durability and availability, making them a natural fit for production environments.



AMAZON RDS DB INSTANCE CLASSES

STANDARD DB INSTANCES

SMALL

1.7 GB of memory, 1 ECU, 64-bit platform, Moderate I/O Capacity

LARGE

7.5 GB of memory, 4 ECUs, 64-bit platform, High I/O Capacity

EXTRA LARGE

15 GB of memory, 8 ECUs, 64-bit platform, High I/O Capacity

HIGH-MEMORY DB INSTANCES

EXTRA LARGE

17.1 GB of memory, 6.5 ECUs, 64-bit platform, High I/O Capacity

DOUBLE EXTRA LARGE

34 GB of memory, 13 ECUs, 64-bit platform, High I/O Capacity

QUADRUPLE EXTRA LARGE

68 GB of memory, 26 ECUs, 64-bit platform, High I/O Capacity

For each DB Instance class, RDS provides you with the ability to select from 5GB to 1TB of associated storage capacity. One ECU provides the equivalent CPU capacity of a 1.0-1.2 GHz 2007 Opteron or 2007 Xeon processor.

GETTING STARTED WITH AMAZON RDS

To use Amazon RDS, you simply:

- Use the AWS Management Console or Amazon RDS APIs to launch a database instance (DB Instance), selecting the DB Instance class and storage capacity that best meets your needs.
- Connect to your DB Instance using your favorite database tool or programming language. Since you have direct access to a full-featured MySQL database, any tool designed for the MySQL engine will work unmodified with Amazon RDS.
- Monitor the compute and storage resource utilization of your DB Instance, for no additional charge, via Amazon CloudWatch metrics available using the AWS Management Console "DB Instances" tab or Amazon CloudWatch APIs. If at any point you need additional capacity, you can scale the compute and storage resources associated with your DB Instance with a few clicks of the console or a simple API call.
- Pay only for the resources you actually consume, based on your DB Instance hours consumed, database storage, backup storage, and data transfer.

SUPPORTED DATABASE ENGINES

Amazon RDS supports the following database engines:

MYSQL

Amazon RDS for MySQL is offered in high availability Multi-AZ and standard deployments.

ORACLE

Bring-Your-Own-License: Run Amazon RDS using your existing Oracle Database software licenses.

License Included: Run Oracle databases with Oracle software licensed by AWS.

BENEFITS

- Simple to Deploy
- Managed
- Compatible
- Scalable
- Reliable
- Secure
- Inexpensive

AMAZON RDS INSTANCE PURCHASING OPTIONS

ON-DEMAND DB INSTANCES let you pay for compute capacity by the hour with no long-term commitments. This frees you from the costs and complexities of planning, purchasing, and maintaining hardware and transforms what are commonly large fixed costs into much smaller variable costs.

RESERVED DB INSTANCES give you the option to make a low, one-time payment for each DB Instance you want to reserve and in turn receive a significant discount on the hourly usage charge for that DB Instance. Reserved DB Instances provide you a way to reduce your costs if you plan to run your DB Instance for most of a 1 or 3 year term.

[LEARN MORE](https://aws.amazon.com/rds) aws.amazon.com/rds

