



Aurora Database with EC2



Benjamin Kofi Yankey

Create database [Info](#)

Choose a database creation method

Standard create
You set all of the configuration options, including ones for availability, security, backups, and maintenance.

Easy create
Use recommended best-practice configurations. Some configuration options can be changed after the database is created.

Engine options

Engine type [Info](#)

<input checked="" type="radio"/> Aurora (MySQL Compatible) 	<input type="radio"/> Aurora (PostgreSQL Compatible)
<input type="radio"/> MySQL 	<input type="radio"/> MariaDB
<input type="radio"/> PostgreSQL 	<input type="radio"/> Oracle
<input type="radio"/> Microsoft SQL Server 	<input type="radio"/> IBM Db2

Engine version

Aurora MySQL 3.05.2 (compatible with MySQL 8.0.32) - default for major version 8.0

⚠ Parallel query is off by default. To enable it, use a DB instance parameter group with the `aurora_parallel_query` parameter enabled. [Learn more](#)



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Introducing Today's Project!

What is Amazon Aurora?

Amazon Aurora is a fully managed relational database service that offers high performance, scalability, and availability. It's cost-effective, compatible with MySQL and PostgreSQL, and provides robust security features.

How I used Amazon Aurora in this project

In today's project, I used Amazon Aurora by creating a relational database to store data for a web app. I connected it to an EC2 instance, allowing the app to efficiently interact with the database for data operations.

One thing I didn't expect in this project was...

One thing I didn't expect in this project was how seamless the integration between Amazon Aurora and EC2 would be. The ease of setting up the connection and the automated scaling features of Aurora exceeded my expectations.

This project took me...

1:30min



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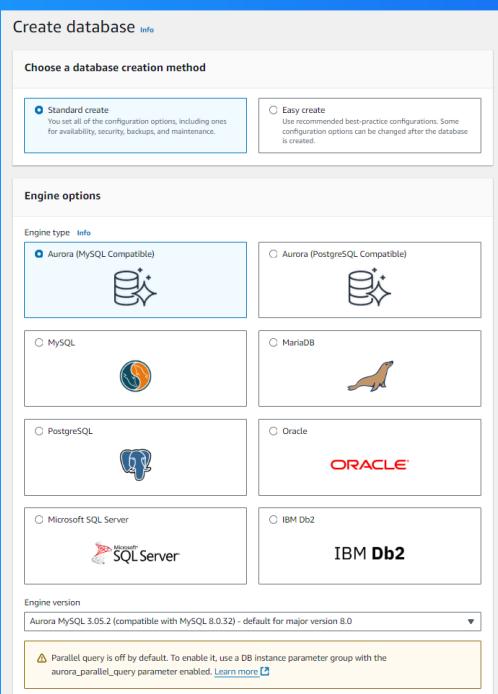
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In the first part of my project...

Creating an Aurora Cluster

A relational database is a structured collection of data organized into tables with rows and columns. It uses relationships between tables to efficiently store, manage, and query data using SQL.

Aurora is a good choice when you need a high-performance, fully managed relational database that offers automatic scaling, durability, and compatibility with MySQL and PostgreSQL, all at a lower cost.





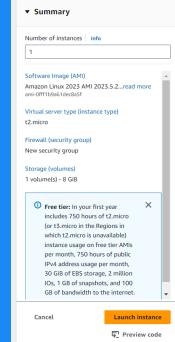
Halfway through I stopped!

I stopped creating my Aurora database because I realized we need to first create an EC2 instance to serve as the web app server. The EC2 instance will connect to the Aurora database for data operations.

Features of my EC2 instance

I created a new key pair for my EC2 instance because it allows me to securely connect to the instance via SSH. The private key will be used to authenticate and ensure secure access to the virtual server.

When I created my EC2 instance, I took particular note of the instance type, key pair, public DNS/IP, security groups, and the VPC/subnet. These are important for ensuring proper access, performance, and secure connectivity to the instance.





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Then I could finish setting up my database

The screenshot shows the 'Connectivity' section of the AWS Aurora Database configuration. It includes:

- Compute resource:** A radio button option to "Connect to an EC2 compute resource" is selected, indicating the setup of a connection to an EC2 instance.
- EC2 instance:** A dropdown menu shows the selected EC2 instance: "i-0cd55e3a33c9f3683 nextwork-ec2-instance-web-server".
- Network type:** A radio button option to "IPv4" is selected, indicating communication over IPv4.
- Informational message:** A callout box states: "Some VPC settings can't be changed when a compute resource is added. Adding an EC2 compute resource automatically selects the VPC, DB subnet group, and public access settings for this database. To allow the EC2 instance to access the database, a VPC security group rds-ec2-X is added to the database and another called ec2-rds-X to the EC2 instance. You can remove the new security group for the database only by removing the compute resource."

Aurora Database uses clusters because they provide high availability, fault tolerance, and scalability. Clusters distribute data across multiple instances, ensuring continuous access even if one instance fails.



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