



Connect a Web App to Amazon Aurora



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The screenshot shows the 'Create database' step in the AWS Aurora and RDS wizard. The 'Engine type' dropdown is set to 'Aurora (MySQL Compatible)'. Other options shown include 'PostgreSQL', 'MariaDB', 'MySQL', 'Oracle', 'IBM Db2', and 'Microsoft SQL Server'. Below the engine selection, the 'Engine version' dropdown is set to 'Aurora MySQL 3.05.2 (compatible with MySQL 8.0.32)'. A checkbox for 'Enable RDS Extended Support' is checked. In the 'Templates' section, the 'Production' radio button is selected, while 'Dev/Test' is highlighted with a blue border.



Introducing Today's Project!

What is Amazon Aurora?

Amazon Aurora is a managed relational database service from AWS. It's useful because it's fast, scales easily, and handles backups and failover automatically, saving time and effort.

How I used Amazon Aurora in this project

In today's project, I used Amazon Aurora to create a database and connect it to an EC2 instance. This showed me how a web server can use Aurora to store and manage data.

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

One thing I didn't expect in this project was that Aurora creates a cluster with writer and reader instances. I didn't realise the database is split into roles for better performance and reliability.

This project took me...

This project took me about 45 minutes, including the time waiting for the Aurora cluster and EC2 instance to be created.



In the first part of my project...

Creating an Aurora Cluster

A relational database is a database that stores data in tables with rows and columns, similar to a spreadsheet. Each row represents a record and each column represents a field. It's called "relational" because the data in different tables can be linked together, and we use SQL to query and manage it.

Aurora is a good choice when you need a relational database that is fast, highly available, and can scale easily. It's managed by AWS, so backups, updates, and failover are handled for you. Aurora works well for bigger applications that need strong performance and reliability, while still being compatible with MySQL or PostgreSQL.



The screenshot shows the 'Create database' wizard in the AWS RDS console. The 'Engine type' is set to 'Info'. Under 'Engine options', 'Aurora (MySQL Compatible)' is selected. Other options shown include Aurora (PostgreSQL Compatible), MySQL, PostgreSQL, MariaDB, Oracle, Microsoft SQL Server, and IBM Db2. The 'Engine version' dropdown is set to 'Aurora MySQL 5.6.5 (compatible with MySQL 8.0.32)'. A checkbox for 'Enable RDS Extended Support' is checked, with a note about it being a paid offering. Under 'Templates', 'Production' is selected, with a note about it being for high availability and fast, consistent performance. 'Dev/Test' is also listed, with a note about it being intended for development use outside of a production environment.



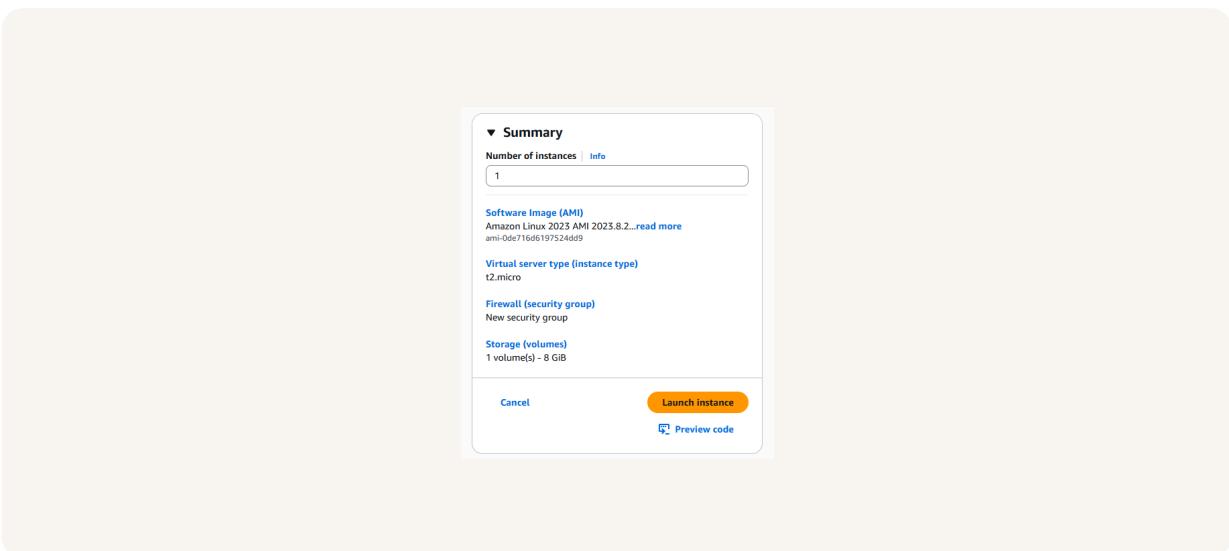
Halfway through I stopped!

I stopped creating my Aurora database because I first need to set up an EC2 instance. The database needs something to connect to, and the EC2 instance will act as the web app server.

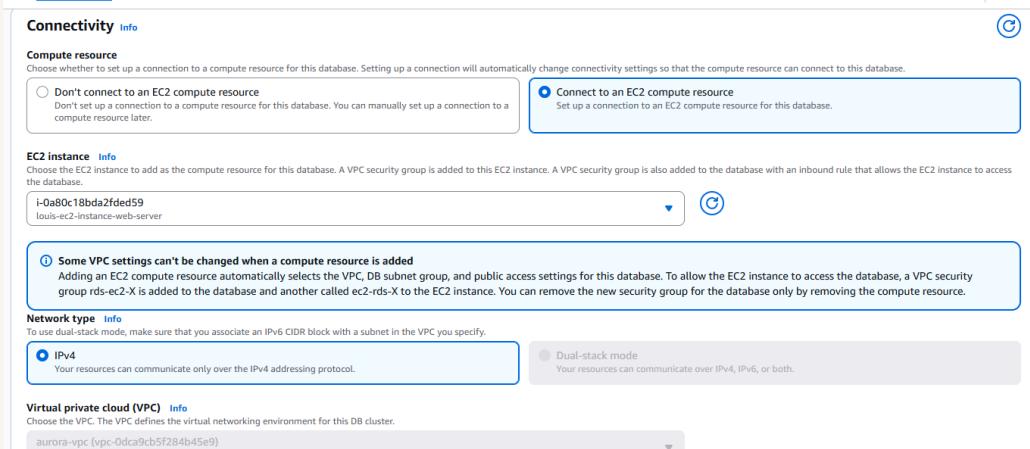
Features of my EC2 instance

I created a new key pair for my EC2 instance because it gives me secure access to the virtual server. The key pair works like login credentials, letting me connect to the instance later using SSH.

When I created my EC2 instance, I took particular note of the Public IPv4 DNS and the Key pair name. The Public IPv4 DNS is the address I use to connect to the server, and the Key pair name is what lets me securely access it. Both are needed to log in and manage the instance.



Then I could finish setting up my database



Aurora Database uses clusters because they make the database more reliable and scalable. A cluster has one writer instance for changes and one or more reader instances for backups and sharing the workload. This way, if the writer fails, a reader can take over, and as traffic grows, extra readers can handle more requests.



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