## 350

# Lab - AWS re/Start Creando un servidor de base de datos







### **Explorando Amazon Relational Database Service**

A continuación, se muestra los objetivos del laboratorio:

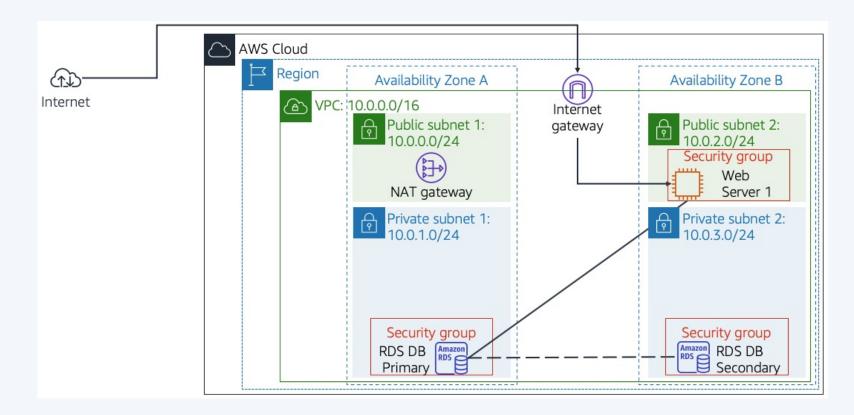
- Lanzar una instancia de base de datos de Amazon RDS con alta disponibilidad.
- Configurar la instancia de base de datos para permitir conexiones desde su servidor web.
- Abrir una aplicación web e interactuar con su base de datos.

**Nota.** Amazon RDS facilita las tareas de configuración, operación y escalado de una base de datos relacional en la nube. Proporciona una capacidad rentable y de tamaño ajustable y, al mismo tiempo, permite gestionar las tareas de administración de base de datos que consumen mucho tiempo, lo que permite centrarse en las aplicaciones y el negocio. Amazon RDS ofrece seis motores de base de datos familiares entre los que elegir: Amazon Aurora, Oracle, Microsoft SQL Server, PostgreSQL, MySQL y MariaDB.

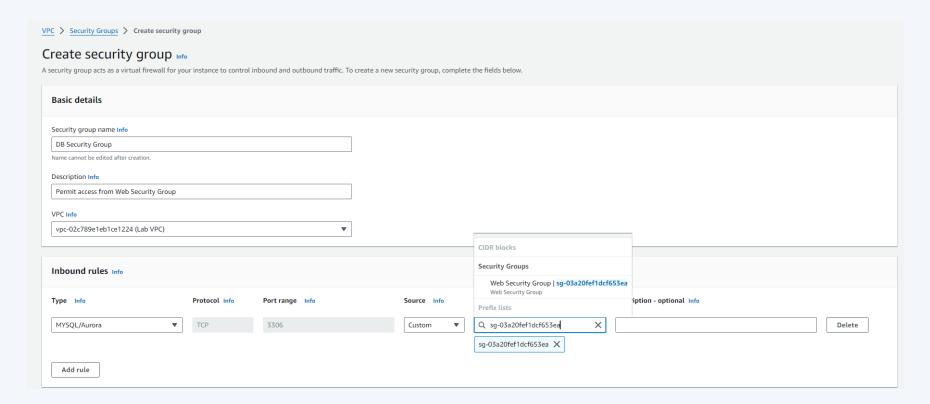




Al final del laboratorio, esta será la infraestructura:



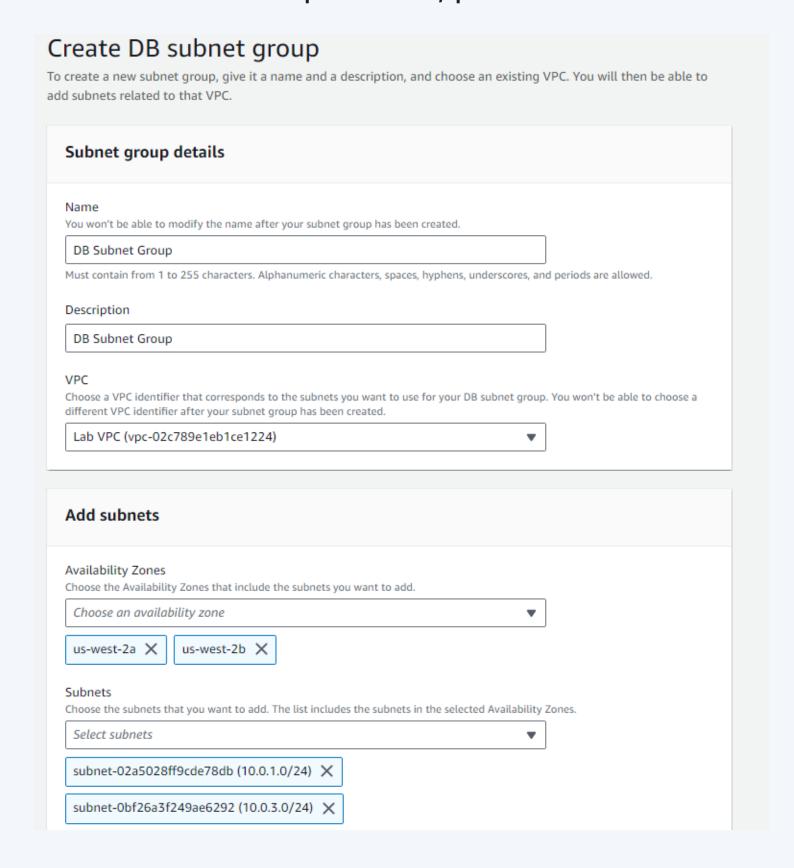
Empezamos por la creación del grupo de seguridad de la db que permita el tráfico de nuestro servidor hacia la instancia de db de AWS RDS. Para ello lo asociamos al grupo de seguridad del servidor (instancia de EC2)







Luego, procedemos a crear un grupo de subredes, las cuales pueden ser utilizadas por la base de datos de Amazon RDS. Como mínimo se requieren subredes en dos AZs. Recuerda que estas subredes son privadas, pues se trata de una DB.







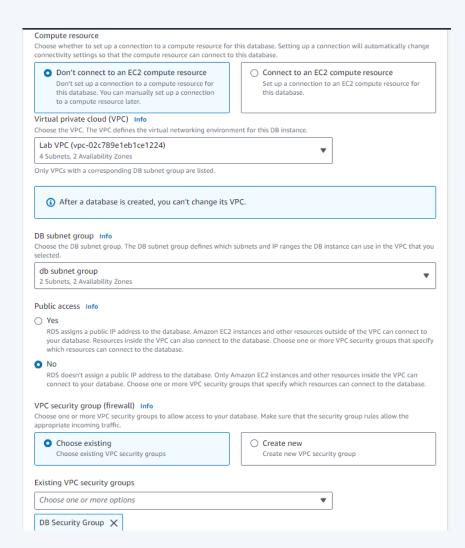
Ahora, procedemos a crear la instancia de Base de Datos de Amazon RDS. En este caso será una *Multi-AZ*, la cual crea una instancia *primaria* junto con una réplica síncrona en una instancia *en espera*.

		Settings
Create database		
Choose a database creation method Info		DB instance identifier Info  Type a name for your DB instance. The name must be unique across all DB instances owned by your AWS account in the current AWS Region.
		lab-db
<ul> <li>Standard create</li> <li>You set all of the configuration options, including ones for availability, security, backups, and</li> </ul>	Easy create     Use recommended best-practice configurations. Some configuration options can be changed after the	The DB instance identifier is case-insensitive, but is stored as all lowercase (as in "mydbinstance"). Constraints: 1 to 60 alphanumeric characters or hyphens. First character must be a letter. Can't contain two consecutive hyphens. Can't end with a hyphen.
maintenance.	database is created.	▼ Credentials Settings
Engine options		Master username Info  Type a login ID for the master user of your DB instance.
· .		1 to 16 alphanumeric characters. The first character must be a letter.
Engine type Info		☐ Manage master credentials in AWS Secrets Manager
O Aurora (MySQL Compatible)	O Aurora (PostgreSQL Compatible)	Manage master user credentials in Secrets Manager. RDS can generate a password for you and manage it throughout its lifecycle.
		If you manage the master user credentials in Secrets Manager, some RDS features aren't supported.      Learn more      ☐
• MySQL	○ MariaDB	Auto generate a password     Amazon RDS can generate a password for you, or you can specify your own password.
		Master password Info
○ PostgreSQL	○ Oracle	Constraints: At least 8 printable ASCII characters. Can't contain any of the following: / (slash), '(single quote), "(double quote) and @ (at sign).
(6 B)	ORACLE"	Confirm master password Info
ngine Version		Instance configuration
MySQL 8.0.35	▼	The DB instance configuration options below are limited to those supported by the engine that you selected above.
		DB instance class info  ▼ Hide filters
remplates remains a second remains a sec		Show instance classes that support Amazon RDS Optimized Writes Info  Info
Choose a sample template to meet your use case.		Amazon RDS Optimized Writes improves write throughput by up to 2x at no additional cost.  Include previous generation classes
		Standard classes (includes m classes)
<ul> <li>○ Production</li> <li>○ Dev/Test</li> <li>○ Free tier</li> <li>Use RDS Free Tier to develop</li> </ul>		Memory optimized classes (includes r and x classes)
availability and fast, consistent performance.  development use outside of a production environment.  development use outside of a applications, rest existing applications, or gain hands-on experience with Amazon RDS.  Info		Burstable classes (includes t classes)
		db.t3.micro 2 vCPUs 1 GiB RAM Network: 2,085 Mbps
orage		
arane type. Info		
orage type Info  Seneral Purpose SSD (gp2)  Total Info Info Info Info Info Info Info Info		
aseline performance determined by volume size  ocated storage Info		
20	GiB	
the minimum value is 20 GiB and the maximum value is 6,144 GiB		
<ul> <li>After you modify the storage for a DB instance, the status of the DB instance will be in storage-optimization. Your instance will remain available as the storage-optimization operation completes.</li> <li>Learn more </li> </ul>		
Storage autoscaling Storage autoscaling		

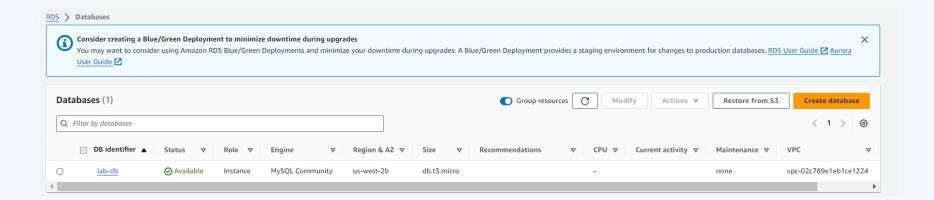




Con respecto a la conectividad, asignamos el grupo de seguridad previamente creado.



Aquí el resultado de la creación de la instancia RDS DB:







### Finalmente, procedemos a interactuar con nuestra BD:

