

Deployment of WordPress on AWS Lightsail with RDS

1. Introduction

This project focuses on deploying a WordPress application on AWS Lightsail and integrating it with AWS RDS (MySQL) as the backend database. The aim is to understand cloud-based application deployment and managed database services.

2. Objective

The objective of this project is to deploy WordPress on AWS Lightsail and connect it with AWS RDS for database management while ensuring proper networking and security configuration.

3. Tools and Technologies Used

- AWS Lightsail
- AWS RDS (MySQL)
- WordPress
- Linux (Ubuntu)
- Apache Web Server
- PHP

4. Architecture

User Browser → AWS Lightsail (WordPress) → AWS RDS (MySQL)

5. Methodology

Step-by-step screenshots are attached to demonstrate the complete implementation process. The Lightsail instance was created using the WordPress blueprint. An RDS MySQL database was configured and connected to WordPress by updating configuration files.

6. Implementation Steps

- Created AWS Lightsail instance
- Installed and configured WordPress
- Created AWS RDS MySQL database
- Configured security groups
- Connected WordPress to RDS
- Verified successful deployment

7. Security Considerations

- Restricted database access using security groups
- Managed credentials securely
- Used AWS-managed database services

8. Results

The WordPress application was successfully deployed and connected to AWS RDS. The admin dashboard was accessible, confirming successful integration.

9. Conclusion

This project helped in understanding cloud deployment, managed database integration, and basic cloud security practices.

10. Future Scope

- Enable SSL/HTTPS
- Use auto-scaling
- Implement monitoring using CloudWatch