Deployment Report: Monolithic Architecture with WordPress and MySQL

Objective: Deploy WordPress and MySQL on a single EC2 instance to streamline resource usage and simplify management.

Steps Taken:

- 1. Instance Setup: We launched a new EC2 instance on the AWS platform, selecting an appropriate instance type based on our resource requirements and budget constraints.
- 2. Operating System Installation: We chose a Linux-based operating system (e.g., Ubuntu, CentOS) for our EC2 instance, as it is commonly used for web hosting environments and is compatible with both WordPress and MySQL.
- 3. WordPress Installation: Using package managers like apt (for Ubuntu) or yum (for CentOS), we installed the necessary software packages to support a WordPress installation, including Apache web server, PHP, and other dependencies.
- 4. MySQL Installation: Similarly, we installed the MySQL database server on the same EC2 instance, ensuring compatibility with the chosen operating system. We configured MySQL to allocate appropriate resources based on the anticipated workload of our WordPress site.
- 5. WordPress Configuration: After the installations were complete, we configured WordPress to connect to the MySQL database running on the same EC2 instance. This involved updating the WordPress configuration file (wp-config.php) with the database connection details.
- 6. Security Measures: We implemented security best practices to protect both WordPress and MySQL from potential threats. This included setting up firewalls, configuring access controls, and regularly updating software components to patch known vulnerabilities.
- 7. Monitoring and Maintenance: To ensure the continued health and performance of our monolithic deployment, we set up monitoring tools to track resource utilization, identify any potential issues, and perform routine maintenance tasks such as software updates and backups.

Resources Used:

EC2 Instance: We utilized a single EC2 instance to host both WordPress and MySQL, optimizing resource usage and minimizing costs.

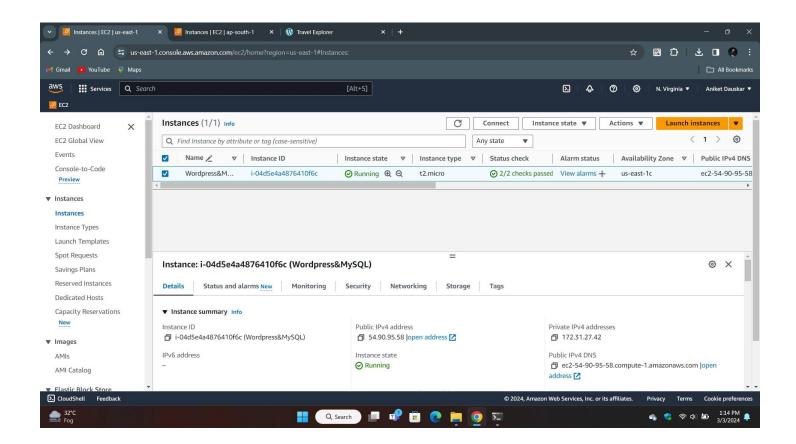
-Operating System: We selected a Linux-based operating system for its compatibility with WordPress, MySQL, and our desired configuration.

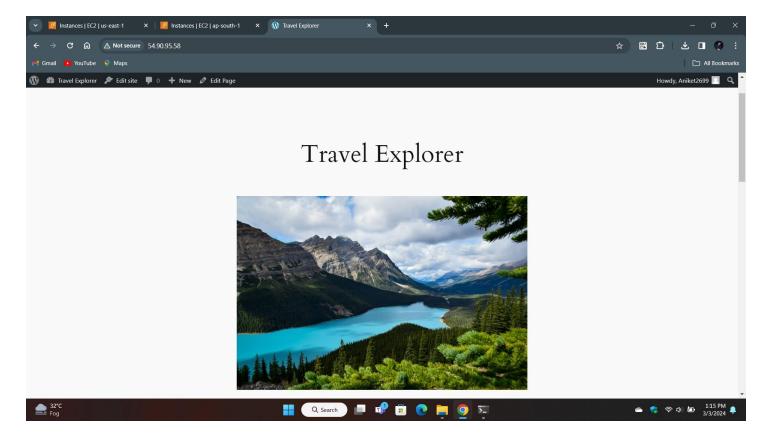
Software Packages: We installed Apache web server, PHP, MySQL database server, and other necessary dependencies to support WordPress and MySQL.

Monitoring Tools: We employed monitoring tools such as AWS CloudWatch or third-party solutions to monitor the health and performance of our EC2 instance and its hosted services.

Conclusion:

Deploying WordPress and MySQL on a single EC2 instance using a monolithic architecture proved to be an efficient and cost-effective solution for our website hosting needs. By consolidating both applications on a single instance, we simplified management, reduced complexity, and optimized resource usage, ultimately contributing to a more streamlined and manageable infrastructure.





Reference: linuxbeast.com