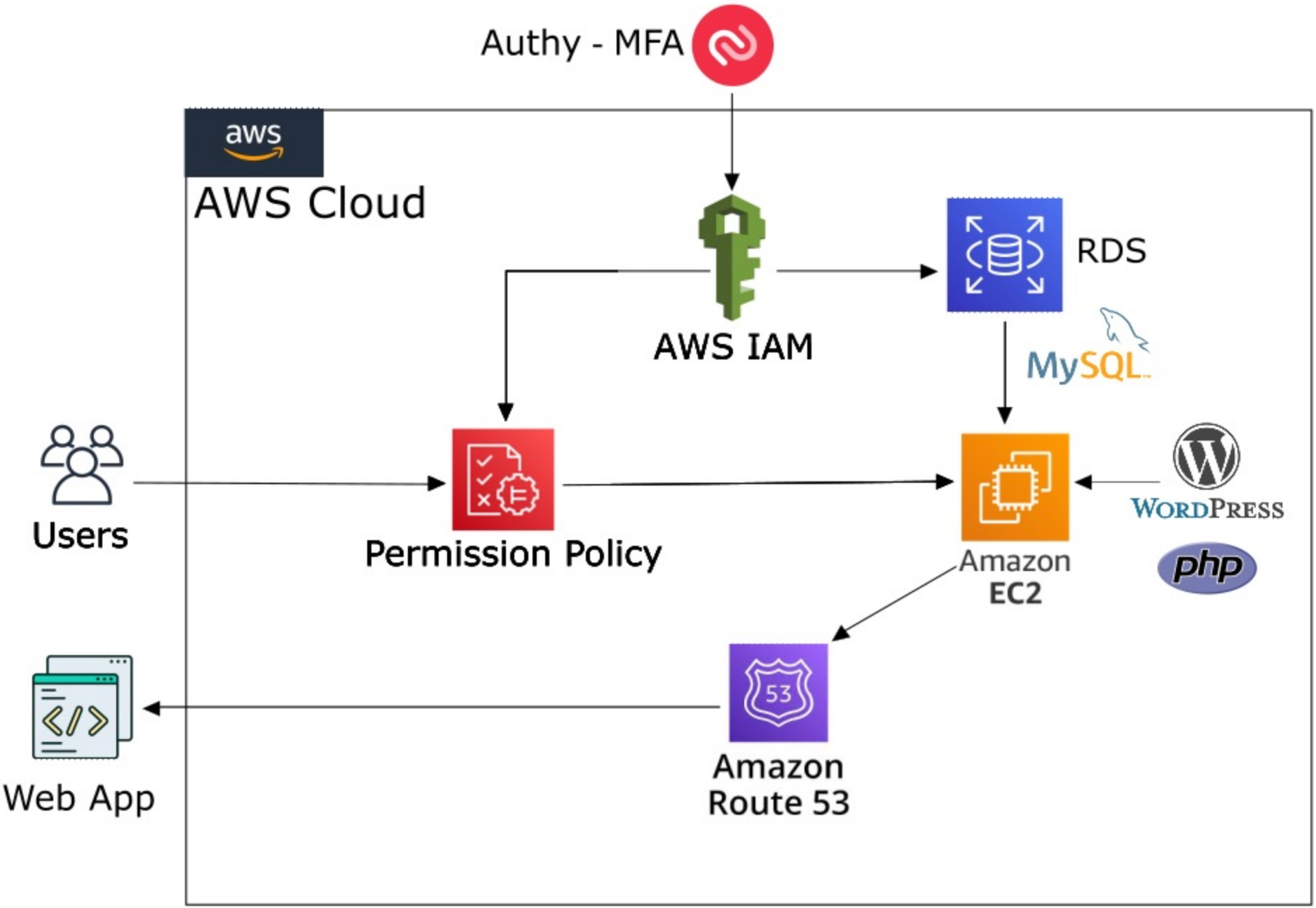
Authy - MFA
aws
AWS Cloud
AWS IAM
RDS
MySQL
Users
Permission Policy
Amazon
EC2
WordPress
php
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Amazon
Route 53
Web App

Project: WordPress Website Deployment Using AWS EC2, Route 53, and RDS MySQL

This project involved deploying a WordPress website on Amazon Web Services (AWS), leveraging various AWS resources for a scalable, secure, and highly available setup. The project includes the setup of an EC2 instance to host the WordPress application, Route 53 for domain name management, and Amazon RDS for a managed MySQL database.

Key Components of the Project:

1. EC2 Instance Setup:
- Launch EC2 Instance: Deployed an Amazon EC2 instance running a Linux-based operating system to host the WordPress application.
- Install Web Server and PHP: Installed Apache (or Nginx) web server along with PHP and necessary PHP extensions required for WordPress.
- Download and Install WordPress: Downloaded the latest version of WordPress and configured it on the EC2 instance.
- Configure Security Groups: Set up security groups to allow HTTP and HTTPS traffic to the EC2 instance and restricted access to other ports.

2. Amazon RDS for MySQL Database:
- Launch RDS Instance: Set up an Amazon RDS instance running MySQL to manage the WordPress database.
- Database Configuration: Created a new MySQL database for WordPress and configured WordPress to connect to this RDS instance.
- Security and Access: Configured RDS security groups to ensure secure communication between the EC2 instance and the RDS database.

3. Domain Management with Route 53:
- Domain Registration: Registered a domain name using Route 53 or configured an existing domain to use Route 53 for DNS management.
- DNS Configuration: Created DNS records to point the domain to the public IP address of the EC2 instance, enabling access to the WordPress site via a custom domain name.

4. Additional Security and Optimization:
- SSL Certificate: Configured SSL certificates using AWS Certificate Manager (ACM) to enable HTTPS for secure communication.
- IAM Roles and Policies: Set up IAM roles and policies to manage access to AWS resources securely.
- Automated Backups: Configured automated backups for the RDS instance to ensure data durability and disaster recovery.
- Performance Optimization: Implemented caching and other performance optimization techniques to ensure the WordPress site runs efficiently.

Outcome:

The project successfully demonstrated the deployment of a WordPress website using AWS resources, providing a scalable, secure, and highly available infrastructure. The setup leverages EC2 for hosting, RDS for database management, and Route 53 for DNS management, ensuring a robust and efficient WordPress deployment.