

# **PHP on AWS**

**Topics: AWS** 

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Running PHP applications on AWS (Amazon Web Services) involves leveraging various AWS services to host, deploy, and manage your PHP applications. Here's a general guide on how you can deploy and manage PHP applications on AWS:

# 1. Compute Services:

- Amazon EC2 (Elastic Compute Cloud): EC2 provides virtual servers in the cloud. You
  can launch EC2 instances with PHP pre-installed or configure instances to run your PHP
  application.
- **AWS Elastic Beanstalk:** This is a Platform as a Service (PaaS) offering that abstracts the underlying infrastructure. Elastic Beanstalk supports PHP applications, and you can deploy your code without managing the infrastructure.

# 2. Containerized Deployments:

- Amazon ECS (Elastic Container Service): ECS allows you to run Docker containers on EC2 instances. You can containerize your PHP application and deploy it on ECS.
- **AWS Fargate:** Fargate is a serverless compute engine for containers. It allows you to run containers without managing the underlying infrastructure. You can use Fargate to deploy and scale your PHP containers.

# 3. Serverless Architectures:

• **AWS Lambda:** For serverless PHP, you can use Lambda with the help of custom runtimes. While PHP is not officially supported, you can use solutions like the Bref project to run PHP applications on Lambda.

#### 4. Database Services:

• Amazon RDS (Relational Database Service): RDS supports various database engines, including MySQL and PostgreSQL, which are commonly used with PHP applications. You

can use RDS to host and manage your databases.

• **Amazon Aurora:** Aurora is a MySQL and PostgreSQL-compatible relational database built for the cloud. It provides high performance and availability.

# 5. Caching:

 Amazon ElastiCache: ElastiCache supports popular caching engines like Redis and Memcached. You can use ElastiCache to cache frequently accessed data in your PHP application.

# 6. Content Delivery:

Amazon CloudFront: CloudFront is a Content Delivery Network (CDN) that can
accelerate the delivery of static and dynamic content. You can use CloudFront to
distribute your PHP application globally.

# 7. Monitoring and Logging:

• **Amazon CloudWatch:** CloudWatch provides monitoring and logging services. You can use it to monitor the performance of your PHP application and set up alarms.

# 8. **Security:**

- **AWS Identity and Access Management (IAM):** IAM allows you to manage access to AWS services securely.
- **AWS WAF (Web Application Firewall):** WAF helps protect your web applications from common web exploits.
- AWS Certificate Manager: ACM provides SSL/TLS certificates for securing your PHP applications.

# 9. Deployment and Continuous Integration:

- **AWS CodeDeploy:** CodeDeploy automates code deployments to EC2 instances, onpremises instances, or serverless Lambda functions.
- **AWS CodePipeline:** CodePipeline is a continuous delivery service that automates the build, test, and deployment phases of your release process.

#### 10. SDKs and CLI:

• Use the AWS SDKs for PHP or the AWS Command Line Interface (CLI) to interact with AWS services programmatically.

