Abstract

In today's world, web-based applications are a popular technology used for various purposes, such as creating portfolios, product storefronts, and marketplace websites. It is important that the website is able to handle many requests from users while maintaining low costs. Two of the hosting solutions that meet the requirements above are analyzed in this study. They are virtual machines owned by Amazon Web Service (Elastic Compute Cloud instance) with Ansible scaling manager and Amazon Web Service Docker Orchestration (Amazon Elastic Container Service) with AWS Auto-scaling. A PHP-based monolithic application will be loaded, sorting 3,000 array elements. In the next step, Apache JMeter is used to experiment with both hosting methods using HTTP request protocol. Amazon CloudWatch is used to analyze the CPU utilization and memory usage of the EC2 instance and ECS docker. An analysis utilizing FinOps tools examines the costs associated with the implemented hosting methods.