ABSTRACT

In the modern era, containerization has become the primary solution for managing server-based applications. Docker and Podman are two popular container technologies, each with its advantages in efficiency and flexibility in application management. This study aims to compare the performance of the Apache web server running in Docker and Podman environments based on server response time and CPU usage parameters. Testing was conducted using Apache Benchmark under various workload scenarios, including 500, 600, 750, and 1000 concurrent requests. The results indicate that Docker maintains more stable performance under high workloads, whereas Podman demonstrates better efficiency in CPU resource utilization. This analysis provides insights for developers and system administrators in selecting the optimal container technology for managing the Apache web server.

Keywords: Apache, Container, Docker, Podman, Web Server