

IMPLEMENTATION OF A CONTAINER DATABASE USING DOCKER IN A VIDEO GAME APPLICATION

MUHAMMAD ADITYA PRATAMA DIRGANTARA

Informatics Study Program, Faculty of Science & Technology

University of Technology Yogyakarta

Jl. Ringroad Utara, Jombor, Sleman, Yogyakarta

Email: ccoremapd@icloud.com

ABSTRACT

Since the emergence of the Docker application in 2013, companies have begun to adopt server management using the containerization method. In line with this, application developers have begun to implement application development and testing with Docker. This is based on the fact that the use of Docker as an open-source application is considered to lead to server resource management. can be used optimally, which results in stable server performance. Docker is also able to reduce or even eliminate the possibility of dependency conflicts, and Docker has easy configuration. The aim of this research is to implement the Docker application in using and preparing a container through containerization techniques in the scope of testing and developing video game applications. In this research, two types of data are used consisting of a prototype application, namely a video game application that acts as an HTTP client in connecting to a database server that can manage data, the second data is a file "docker-compose.yml" which is used to run an application such as a server and database in separate scopes. The research results show that by implementing Docker in preparing a container through containerization techniques in the scope of testing and developing video game applications, it shows that all resources, including the database server, can manage data quickly and efficiently, avoiding collisions and data redundancy.