

PROJECT REPORT

COMPARISON OF REDIS AND RABBITMQ PERFORMANCE ON E-TICKETING SYSTEM

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Faculty of Computer Science Soegijapranata Catholic University 2021

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ABSTRACT

In the current digital era, server service providers can be found everywhere. Prices and

specifications on server services will be different from computer specifications in general. Users

must think about how to use server services to function as efficiently as. Users can share system

performance so that CPU, Memory and Harddisk can work equally and reduce things that make

the system one-sided in one of the system resources.

One way to do that is to use a message broker. A message broker can reduce hard disk

performance because the message broker can store data in memory (IMDB). However, the use of

message brokers will have an impact on CPU and memory usage. This performance will be a

consideration for which message broker is more suitable for the system's needs. In this study, the

author compares the memory and CPU resources used in the message broker Redis and RabbitMQ

on the E-Ticketing System. The method will implement a message broker from Redis and

RabbitMQ. Data will be sent over a certain period, and the amount of data sent will vary.

The final result in this study is a comparison of latency, CPU usage and memory on Redis

and RabbitMQ. This study also compares the speed between systems that use a message broker

and systems that do not. By knowing the use of CPU resources, memory and latency, it is hoped

that users will be able to choose the message broker method that is suitable for the use.

Keyword: Message Broker, Redis, RabbitMQ, Go Languange

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