Implementation of ElasticSearch Search Engine on Order Management System Data

Abstract

Elasticsearch is a search engine, generally searching full-text formatted data. It organizes the data and makes them more accessible. Elasticsearch is built with Java programming language, open-source, and under the Apache license. Elasticsearch is utilized technically by querying searched keywords, which communicated via API. It is installed in a standalone database server using HTTP/JSON protocol, retrieved and stored data in optimized form. It becomes a reliable technology in today’s IT industries that needs optimization in searching full-text formatted data. The bigger size of data, the slower the accessibility, meantime, recent requirements need faster access for very large transaction. The research discussed the influence of adding Elasticsearch in web-based system and the non-adding Elasticsearch. The study implemented Agile Scrum methodology in developing the system. The result of this study is the data access becomes faster by 10.01% when implemented Elasticsearch.

Index Terms

Computer Science

Information Systems

Keywords

Elasticsearch; MongoDB; Replica Set; PHP