Knowledge Management Information Tool Analytics with Distributed Database Engine

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INTRODUCTION

• The D&D KM-IT is a web-based knowledge management information tool custom built for the deactivation and decommissioning (D&D) user community
• The system allows interested users to post information which goes through a custom work flow
• To better improve the performance and user experience, the analysis of server logs is being conducted using MongoDB
• MongoDB is a document database that provides high performance, high availability, and easy scalability

OBJECTIVES

• Feasibility study of Distributed Database Engine, MongoDB for web analytics
• Analyze server logs to evaluate D&D KM-IT module usage
• Generate useful information from the analysis

METHOD

• The server logs were loaded and stored in MongoDB for analysis
• Analysis and visualization was performed using NodeJS and Java Script library

RESULTS

• It was possible to store log files in MongoDB
• Log files with different time stamps and groups from different servers can be aggregated
• Queries can be written to extract meaningful information from aggregated log files (e.g. users from different countries/organizations)

CONCLUSION

• MongoDB is useful for server log analytics as the analyst can immediately access, analyze, and visualize MongoDB data based on the requirements
• The information can be extracted to develop custom reports
• Optimized queries can be run for fast data access

PATH FORWARD

• Custom queries need to be developed to extract information leading to improved user information

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