



AMOS SS23 Project OpenSearch Metadata-Hub

Project name	OpenSearch Metadata-Hub
Project mission	<p>Our mission was to build an OpenSearch-based search engine. Our partner, GRAU DATA, has a product called 'Metadata-Hub,' which serves as a data mining tool, extracting metadata from hundreds of file formats. Our search engine is required to be a standalone tool that automatically imports data from the Metadata-Hub and allows users to perform queries on this dataset. It should support simple text-based searches, as well as complex advanced search queries with type-aware operators. Additionally, minor quality-of-life features like autocompletion for metadata tags should be included.</p> <p>Furthermore, extensive documentation for both users and developers is strictly required. GRAU DATA has many customers, each with their individual needs, making a one-size-fits-all solution impossible. Hence, our product needs to be easily adaptable and extensible to cater to various requirements.</p>
Industry partner	GRAU DATA
Team logo	<div><div>OPEN SEARCH</div><div>META DATA HUB</div></div>
Project summary	<p>The OpenSearch Metadata-Hub is an OpenSearch based search engine that seamlessly imports data from GRAU DATA's Metadata-Hub. It offers an easy to use and intuitive web interface that allows clients to query simple and complex search queries. All features requested by our industry partner could be implemented successfully. Further, we were able to integrate OpenSearch Dashboards' data visualization capabilities into our product. Thus, we provide a powerful search and data visualization tool in one product. Since every client has their own requirements for a search engine, we documented everything extensively - also the code itself. This allows GRAU DATA and its customers to easily adapt</p>

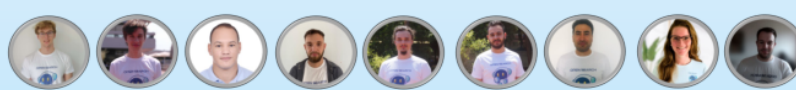

our product to individual needs.

Project illustration




The OpenSearch Metadata-Hub


- Search engine based on OpenSearch
- Automatic transfer between OpenSearch and MdH
- > 100.000 metadata tags and > 400 file types



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Project Requirements




Open Search

Highly performant search through the use of Open Search




Metadata Hub

Enable searching throughout the complete Metadata Hub



Easy to use


System is easy to use and requires no technical knowledge



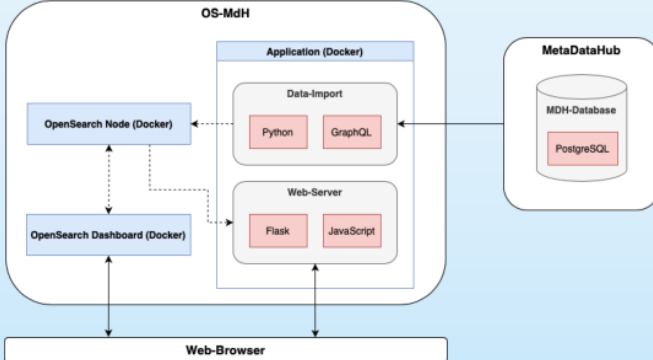
Accessible to everyone

The system runs as a website and is accessible for everyone

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Architecture



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Project repository

<https://github.com/amosproj/amos2023ss02-open-search-meta-data-hub>