ARIS RAG System Technical Documentation

1. System Overview

The ARIS RAG (Retrieval-Augmented Generation) system is a powerful document analysis platform that uses advanced AI to answer questions about technical documents. It supports multiple document types including PDF, DOCX, and TXT files.

2. Key Features

- Multi-parser support: PyMuPDF, Docling, LlamaScan, OCRmyPDF, Textract
- Vector storage: OpenSearch with hybrid search capabilities
- Agentic RAG: Query decomposition for complex questions
- Multi-language support: Automatic translation and language filtering
- Image extraction: OCR and visual content analysis

3. Technical Architecture

The system consists of three main services: Ingestion Service for document processing, Retrieval Service for search and RAG, and Gateway Service for orchestration.