

# ASAP Boosts Document and Code Creation with AI-Powered Natural Language Search in an Integrated Workspace v0.1

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## Executive Summary

This document provides an overview of how ASAP leverages AI-powered natural language search to enhance document and code creation within an integrated workspace.

## Revision History

Revision	Date	Author(s)	Description
v0.1	21/03/2024	Author	First draft

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15 1 Introduction

16 ASAP enhances efficiency and accuracy by integrating AI-powered natural language  
17 search in a seamless workspace.

18 1.1 Semantic Search

19 Semantic search ensures precise data retrieval via Microsoft Graph, accessing vast  
20 corporate data stored in a vectorized format in Cosmos DB.

21 1.2 Query Efficiency

22 Natural language queries streamline efficiency and accuracy.

1 Discuss the role of natu-  
ral language queries.

23 2 Automation and Productivity

24 Automation of document and code generation significantly boosts productivity.

25 2.1 User Accessibility

26 Designed to make advanced AI accessible and user-friendly for non-experts.

2 Consider user-  
friendliness in design.

27 3 Integration of AI Copilots

28 Integrates several AI copilots, including Code-Generation and Document-Generation  
29 Agents.

30 3.1 Retrieval Augmented Generation (RAG)

31 Utilizes Retrieval Augmented Generation (RAG) to enhance performance in knowledge-  
32 intensive tasks.

33 3.2 Workspace and Chat Sessions

34 Each copilot has its own workspace with chat sessions stored in a database for  
35 semantic search retrieval.

## 36 4 Overcoming AI Limitations

37 Overcomes AI limitations by leveraging contextual data through retrieval-augmented  
38 techniques, utilizing Cosmos DB and vectorization.

### 39 4.1 Lifelong Learning Agents

40 Implements Lifelong Learning Agents based on Cosmos DB and vectorization for  
41 continuous improvement.

## 42 5 Domain-Specific Copilots

43 Copilots are already trained and ready for use in domain expertise they are designed  
44 for.

### 45 5.1 Tech Docs and Code Gen

46 Tech Docs Copilot uses software documentation ontologies, while Code Gen Copilot  
47 uses software ontologies for languages and platforms like Blazor, Fluent UI, and  
48 Kubernetes.

## 49 6 Customized Settings

50 Copilots are designed with customized settings (e.g., target audience, response  
51 length, and level of creativity) stored with each interaction for easy recreation of  
52 original chats.

3 Highlight importance of customizable settings.