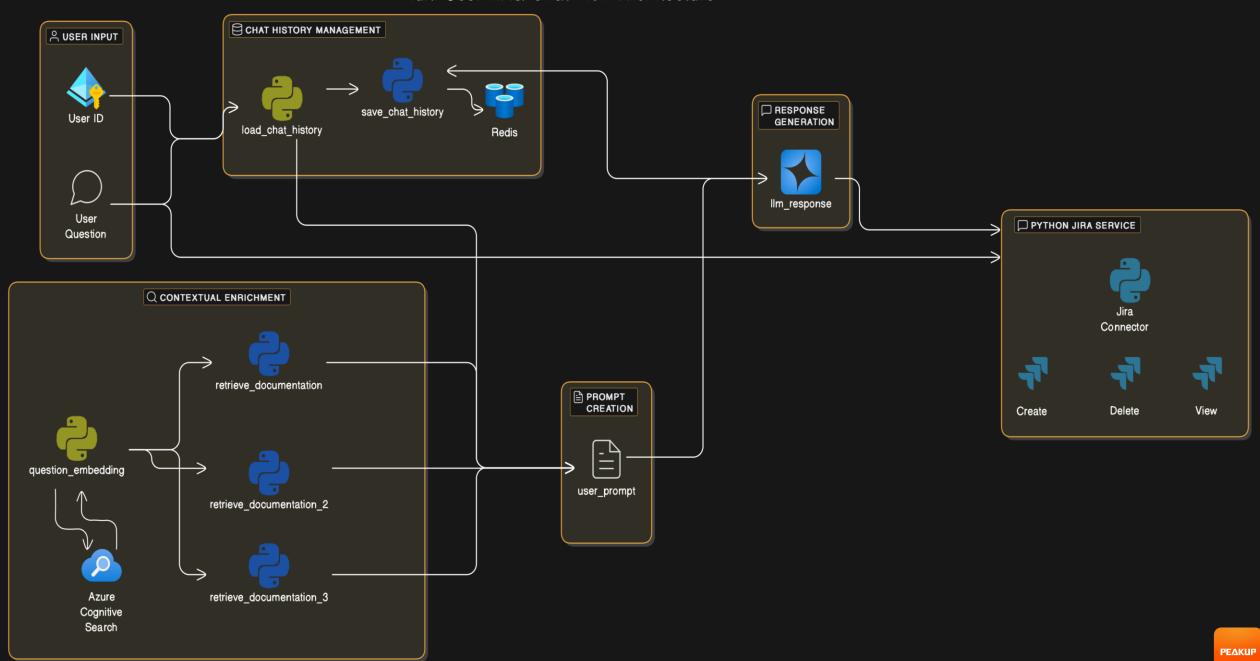




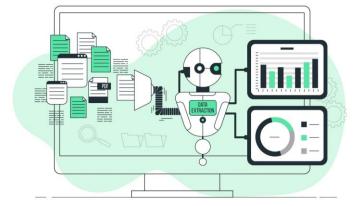
# PEAKUP AI Agent talking with Jira

Yavuz Buruk yavuz.buruk@peakup.org

#### Multi-User RAG Chat Flow Architecture



			Micı	rosoft Azure Estimate		
Your Estimate						
Service category	Service type	Custom name	Region	Description	Estimated monthly cost	Estimated upfront cost
Storage	Storage Accounts		West Europe	Block Blob Storage, General Purpose V2, Flat Namespace,	\$8,37	\$0,00
				LRS Redundancy, Hot Access Tier, 100 GB Capacity - Pay		
				as you go, 100 x 10,000 Write operations, 10 x 10,000 List		
				and Create Container Operations, 100 x 10,000 Read		
				operations, 10 x 10,000 Other operations. 100 GB Data		
				Retrieval, 1,000 GB Data Write, SFTP disabled		
Web	Azure Al Search		West Europe	Standard S3, 10 Unit(s), 1 Hours, 100K semantic queries	\$125,88	\$0,00
AI + machine learning	Azure OpenAl Service		East US	Language Models, Standard (On-Demand), GPT-4o-	\$350,00	\$0,00
				Global-Deployment-128K, 10,000 x 1,000 input tokens,		
				20,000 x 1,000 output tokens		
Analytics	Azure Machine Learnin	g	West Europe	1 F4s v2 (4 Core(s), 8 GB RAM) x 31 Days, Pay as you go	\$144,34	\$0,00
AI + machine learning	Azure OpenAl Service		East US	Embedding Models, Text-Embedding-3-Large, 100,000 x	\$13,00	\$0,00
				1,000 Tokens		
Support			Support		\$0,00	\$0,00
			Licensing Program	Microsoft Customer Agreement (MCA)		
			Billing Account			
			Billing Profile			
			Total		\$641,59	\$0,00



# AI Agent Using On-Prem Jira Data with Generative Artificial Intelligence

### Highlights

In this project a Smart Bot with Generative Artificial Intelligence has been developed. A dataset was created from scratch using on-premises Jira data, consisting solely of SD ticket descriptions and comments. Trained with this data, the bot was developed as an intelligent assistant to optimize business processes.

### **Challenges**

- Ensuring the AI model produces accurate results without relying on previously learned data.
- Addressing the challenges of capturing and interpreting onpremises data.
- Categorizing data and creating a list of frequently asked questions.

#### **Solution**

- •Data extracted from on-premises using **Azure services** was indexed, categorized, and used to create frequently asked questions.
- •All **Jira** tickets produced so far were analyzed to generate meaningful outputs, and the bot was trained with possible questions and answers.
- •Custom code was developed on **Azure App Services**, and the project was fully integrated into customer's operations.





# Highlights

- An LLM-based smart assistant integrated with the Jira platform, enabling instant responses to job tracking, status updates, and assignments while making Jira ticket solutions more accessible.
- Enhanced efficiency, speed, and accuracy through the use of Azure OpenAl GPT-4o models.
- Optimized API integrations for seamless data retrieval and updates.
- Strengthened security measures, including rigorous testing, authorization, and authentication mechanisms, ensuring compliance with corporate security standards.

# **LLM Based Smart Agent Project**

## **Challenges**

The data structure in Jira is dynamic and complex, encompassing elements such as issues, projects, and sprints. Key considerations include:

- Optimizing API calls and managing performance during integration.
- Conducting security testing and ensuring robust authentication, particularly focusing on authorization layers.
- Creating customized queries to meet the diverse needs of different users, such as managers and team members.

#### **Solution**

Preparing system instructions for the **Azure GPT-4** based "Jira Assistant" model.

Creating a data pool using **Jira Graph Connector**, **Copilot Studio Knowledge**, and **Atlassian Workflow Jira data**, and transferring the information.

Designing API services to ensure speed and scalability in data retrieval and update processes.

Eliminating potential vulnerabilities through comprehensive testing of authorization and authentication procedures.

#### Results

- Enhancing speed and efficiency in work tracking and project management processes using Jira.
- Making Jira information accessible to the public, preserving knowledge, and enabling data evaluation.
- Improving user and admin experience by reducing errors and support requests.
- Facilitating better internal audits and analysis through comprehensive recording and reporting of all changes.

