

Graph RAG Example with Azure OpenAI Service

1. git clone this repository and run the examples in the [GraphRAG](#) folder.

```
git clone https://github.com/microsoft/graphrag/
```

2. use this notebook to run the example [Graph RAG Example](#) or find under docs [examples_notebooks/local_search.ipynb](#).
3. Open the notebook in your Jupyter environment or any compatible notebook viewer.
4. Add a code block to install the required dependencies in your environment.

```
!pip install pandas tiktoken openai lancedb graphrag
```

5. Update the model setup to run with Azure OpenAI Service in the notebook.

```
from graphrag.config.enums import ModelType
from graphrag.config.models.language_model_config import LanguageModelConfig
from graphrag.language_model.manager import ModelManager

api_key = "your_api_key_here" # Replace with your actual API key
llm_model = "your_llm_model_here" # Replace with your actual LLM model name
embedding_model = "your_embedding_model_here" # Replace with your actual
embedding model name
api_version="replace_with_your_api_version" # Replace with your actual API
version, e.g., "2023-05-15"
api_base="your_api_base_here" # Replace with your actual API base URL, e.g.,
"https://your-resource-name.openai.azure.com/"

chat_config = LanguageModelConfig(
    api_key=api_key,
    api_base=api_base,
    api_version=api_version,
    type=ModelType.AzureOpenAIChat,
    model=llm_model,
    deployment_name=llm_model,
    max_retries=20,
)
chat_model = ModelManager().get_or_create_chat_model(
    name="local_search",
    model_type=ModelType.AzureOpenAIChat,
    config=chat_config,
)

token_encoder = tiktoken.encoding_for_model(llm_model)
```

```
embedding_config = LanguageModelConfig(  
    api_key=api_key,  
    api_base=api_base,  
    api_version=api_version,  
    type=ModelType.AzureOpenAIEmbedding,  
    model=embedding_model,  
    deployment_name=embedding_model,  
    max_retries=20,  
)  
  
text_embedder = ModelManager().get_or_create_embedding_model(  
    name="local_search_embedding",  
    model_type=ModelType.AzureOpenAIEmbedding,  
    config=embedding_config,  
)
```

5. Run the example in the notebook to test the Graph RAG implementation in a sequential manner.