

Building Knowledge Graph RAG with LlamaIndex

使用 LlamaIndex 构建知识图谱 RAG

Basic Steps for Building the Knowledge Graph

在 LlamaIndex 中构建知识图谱 RAG 的基本步骤

- Import Packages(导入软件包)
- Load documents(加载文件)
- Configure service_context and storage_context(配置服务上下文和存储上下文)
- Create Index(创建索引)
- Create query_engine(创建查询引擎)
- Query with query_engine(使用查询引擎进行查询)

service_context

storage_context

- SimpleGraphStore
 - Neo4jGraphStore
 - NebulaGraphStore
- 本期焦点

Extending the Knowledge Graph RAG based on graph-store

基于graph-store扩展知识图谱RAG

- SimpleGraphStore
- Neo4jGraphStore
- NebulaGraphStore

graph_store = SimpleGraphStore()

Code + Doc

Prepare Neo4jGraphStore

graph_store = Neo4jGraphStore(
 username="neo4j",
 password="LDAARWSFFASDEFPIFJCe20sd1sCd32v",
 url="neo4j+s://instance_id.databases.neo4j.io",
 database="neo4j",
)

Create Neo4jGraph Database

Reference Notebook

Doc

Prepare NebulaGraphStore

Run the code in Nebula Studio

CREATE SPACE llamaindex(vid_type=FIXED_STRING(256), partition_num=1, replica_factor=1);

:sleep 10;

USE llamaindex;

CREATE TAG entity(name string);

CREATE EDGE relationship(relationship string);

CREATE TAG INDEX entity_index ON entity(name(256));

os.environ["NEBULA_USER"] = "root"

os.environ["NEBULA_PASSWORD"] = "nebula" # default is "nebula"

os.environ[
 "NEBULA_ADDRESS"
] = "127.0.0.1:9669"

space_name = "your space name" #

edge_types, rel_prop_names = ["relationship"], [
 "relationship"
] # default, could be omit if create from an empty kg

tags = ["entity"]

graph_store = NebulaGraphStore(
 space_name=space_name,
 edge_types=edge_types,
 rel_prop_names=rel_prop_names,
 tags=tags,
)

Create NebulaGraph Database

Reference Notebook

Doc

代码实现

- Official Github官方
- 可乐i_Klay版本