Knowledge Graph for Network Management

IETF 125
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Shenzhen, China

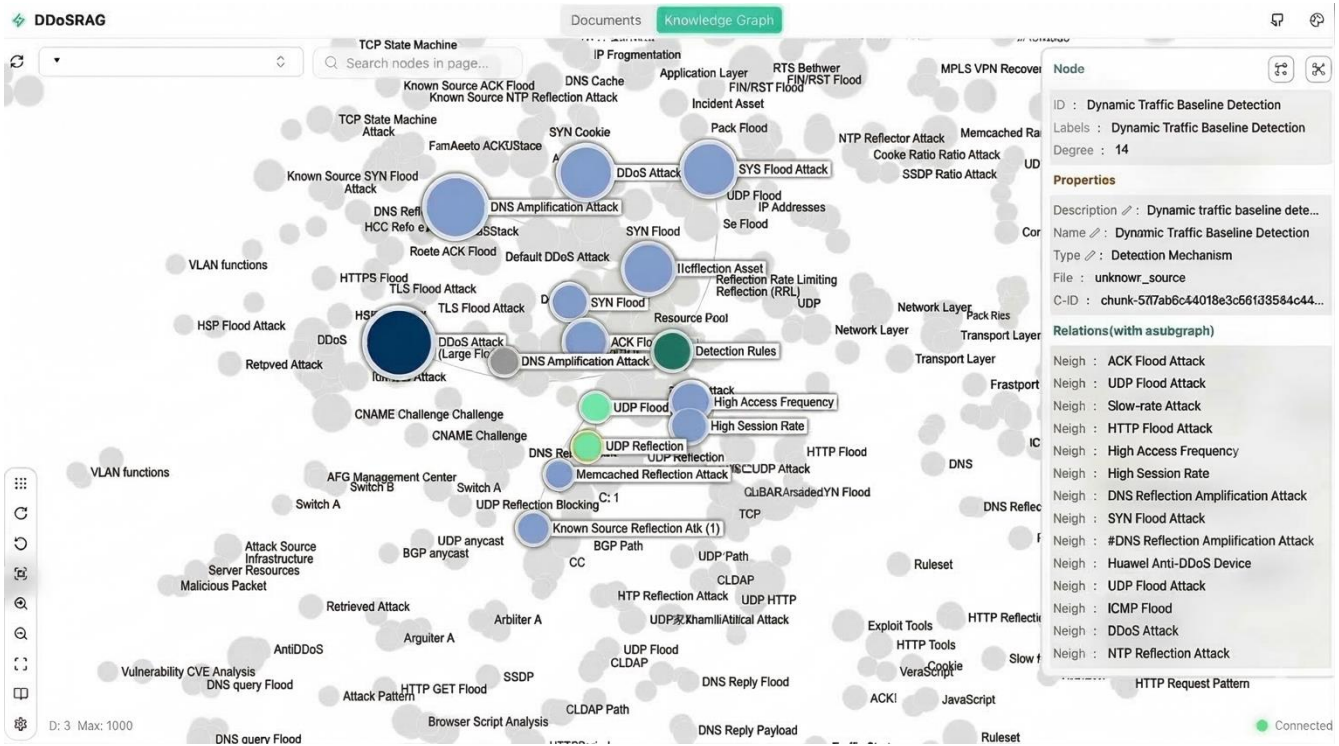
Hackathon Plan

- Network Data Challenge: **Unstructured, discrete and heterogenous** network knowledge, e.g., vendor-specific documentations, logs, etc.
- **Solution**: using knowledge graph to model and correlate network data

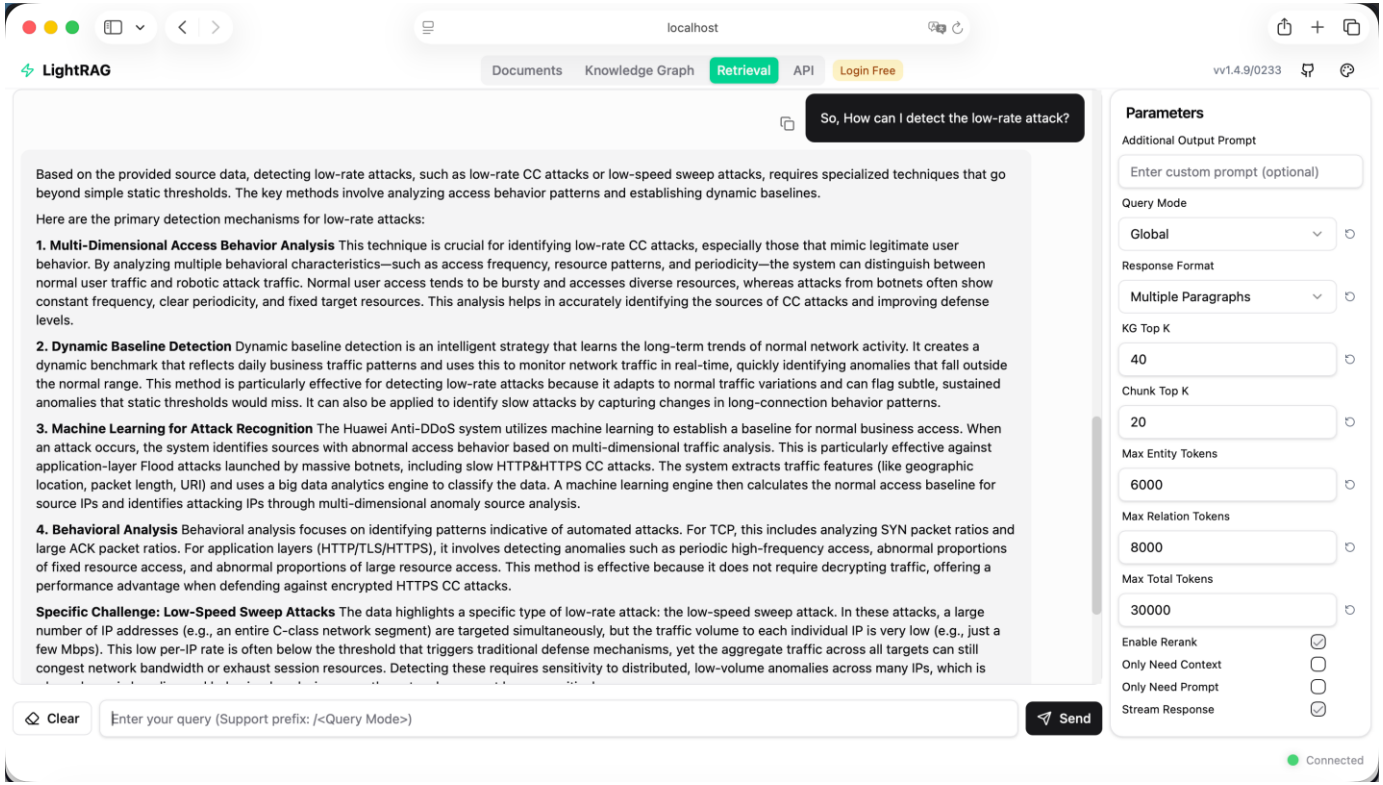
What got done

- A knowledge graph build with LLM and provide retrieval interface
  - Using LLM to analyze network corpus and build KG
  - LLM shows capability to accurately extract entities and relationships from heterogenous knowledge
  - Providing a natural language query interface for KG

What got done



What got done



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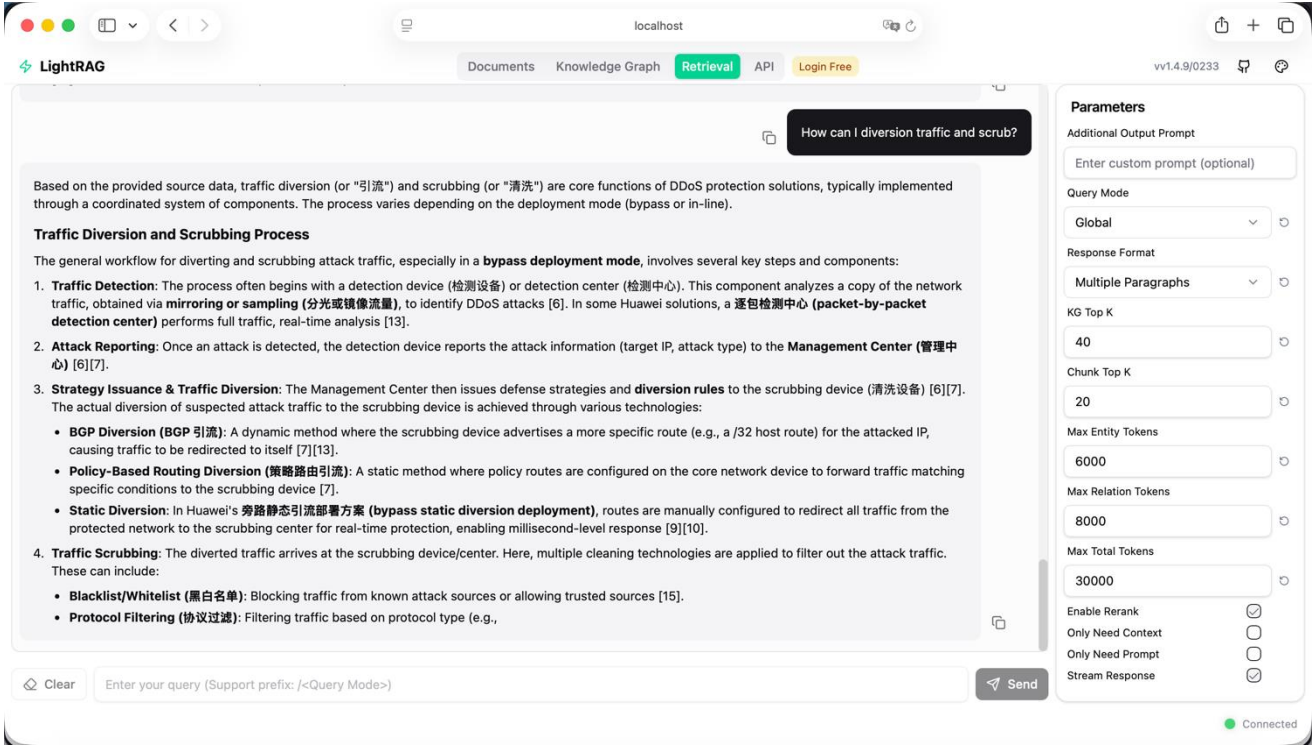

What we learned

- Lessons learned
  - Focus more on how to use KG in NM
  - LLM is a good tool for KG construction and interpreting
  - Explore Agentic KG and its interface for NM

Wrap Up

Team members:

- Mingzhe Xing (ZGC LAB)
- Haoran Luo (UESTC)
- Shuisong Hu (UESTC)
- Yujia Gao (ZGC LAB)

xingmz@zgclab.edu.cn