IETF Hackathon

Agent Networking Framework

IETF 125

Huawei & China Unionpay

March 14-15, 2026

Hackathon Plan

Problems：

It is difficult for bank application parties (such as securities companies、 tax platforms, etc) to interconnect with banks due to the following issues:

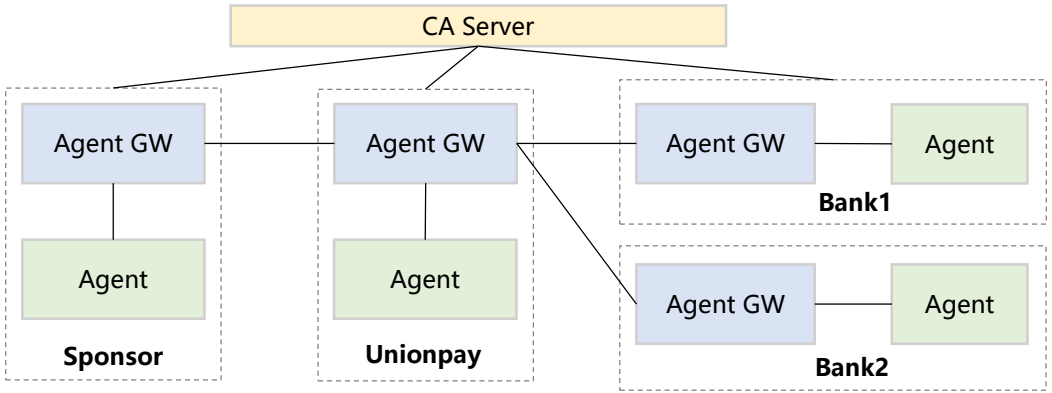
- Non-unified interfaces;
- Inconsistent protocols;
- Incomplete service access .

Plan：

- Developing the Agent Program.
- Developing the Agent Gateway Program.
- Simulating open banking services using Agent and Agent Gateway.

Simulation Introduction

We have implemented intelligent open banking business scenarios based on Agent and Agent Gateway, and simplified the interconnection between application parties.



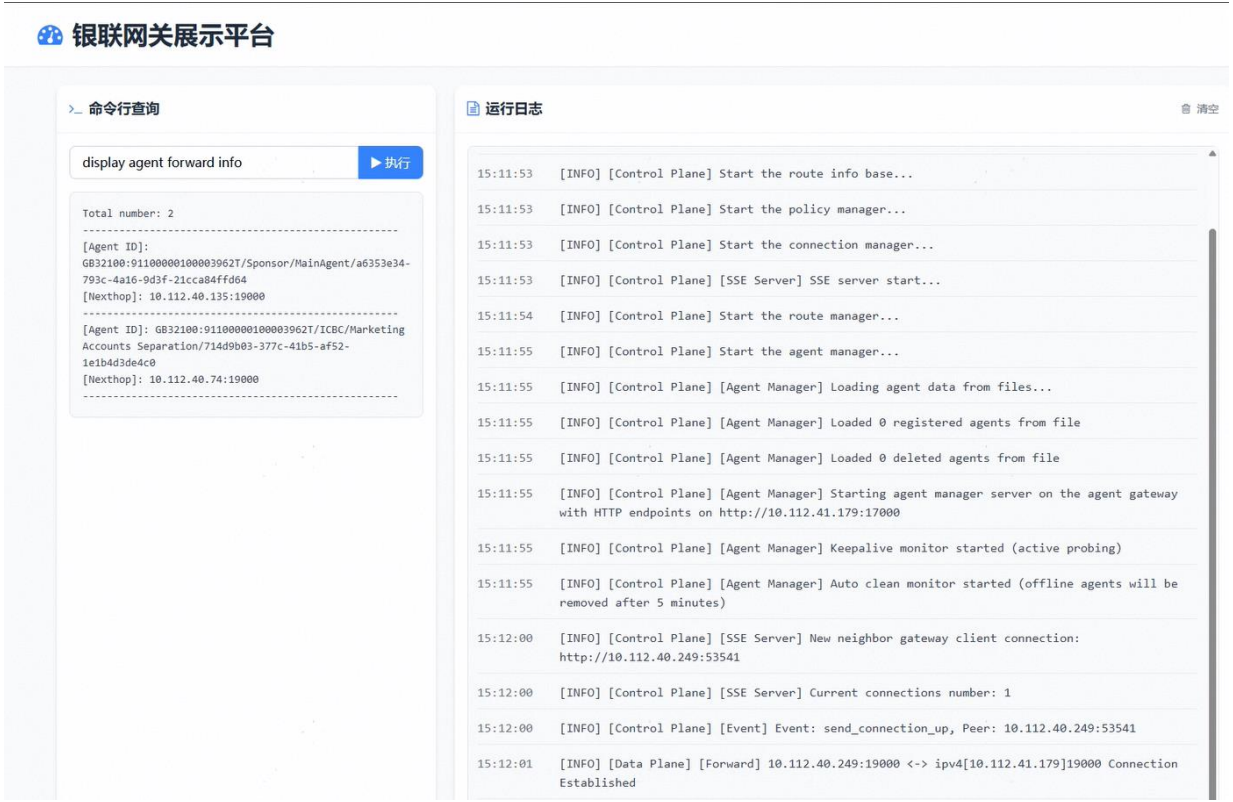
- **Sponsor:** Provide users with the ability to query bank transaction records.
- **Unionpay:** Shield the differences between banks and simplify the interaction between the Sponsor and different banks.
- **Bank:** Return the corresponding user transaction information based on the request.

Demo & Result

- We’ve implemented agents based on LangChain and Qwen-32B model.
- We’ve implemented the agent gateway based on Python 3.11.
- Functions in our demo:
  - **Agent:**
    1. Agent information modeling；
    2. Registration with the Agent gateway;
    3. Task breakdown and execution;
    4. Discovering other agents through the Agent gateway.
  - **Agent Gateway:**
    1. Agent registration and discovery;
    2. Information synchronization among multiple agents;
    3. Agent traffic Forwarding .

Demo & Result

Agent gateway



Demo & Result

Agent： Query bank account statements

```
]
请继续输入请求[退出:q]:
[DATA PLANE][2025-11-26 15:38:31.452949] Grpc send request data: 查询张三建行流水
[DATA PLANE][2025-11-26 15:38:31.464468] Receive a message from GB32100:91100000100003962T/CCB/Marketing Accounts Separation/a8fceaa1-8363-4615-afc6-62e63618ba9b
[DATA PLANE][2025-11-26 15:38:31.465467] Response Data from GB32100:91100000100003962T/CCB/Marketing Accounts Separation/a8fceaa1-8363-4615-afc6-62e63618ba9b :

        账户名称：张三
        账号：6227001188765432198
        开户行：中国建设银行深圳分行
        币种：人民币
        起始日期：2025-01-01
        终止日期：2025-01-31

        交易日期   摘要        借方金额（支出）  贷方金额（收入）  余额   对方账户                 备注
        2025-01-01 工资收入          0.00      19800.00  19800.00 深圳某某科技有限公司     工资
        2025-01-03 房租支出       3200.00          0.00  16600.00 房东王五                 1月房租
        2025-01-05 理财赎回          0.00       7500.00  24100.00 建设银行理财系统         理财到期
        2025-01-07 餐饮消费        285.00          0.00  23815.00 某某餐厅                 POS消费
        2025-01-10 网银转账       1800.00          0.00  22015.00 王五                     还款
        2025-01-15 基金定投       3200.00          0.00  18815.00 建设银行基金系统         定投扣款
        2025-01-18 信用卡还款     3800.00          0.00  15015.00 招商银行信用卡中心       信用卡自动还款
        2025-01-20 红包收入          0.00        288.00  15303.00 微信红包                 收到红包
        2025-01-25 利息收入          0.00         18.90  15321.90 建设银行                 存款利息
        2025-01-31 超市购物        630.00          0.00  14691.90 永辉超市                 POS消费

        期末余额：￥14691.90
```

What we learned

- Compared with traditional API communication, semantic communication of agents can provide stronger generalization capabilities, reducing the adaptation period and cost.
- Agent gateway can simplify the access and interconnection of cross-organization agents.

In the future:

- Agent Gateway provides the Agent protocol translation function to implement interconnection between heterogeneous platforms and protocols.
- Efficient information synchronization between agent gateways to simplify the discovery and interconnection of agents across large-scale organizations.
- The Agent Gateway provides the supervision and audit function to ensure that Agent communication is observable and traceable.

Thank you :)

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