中国电信 | 研究院
CHINA TELECOM | CTRI

Agent Gateway for Dynamic Multi-agent Secured Collaboration

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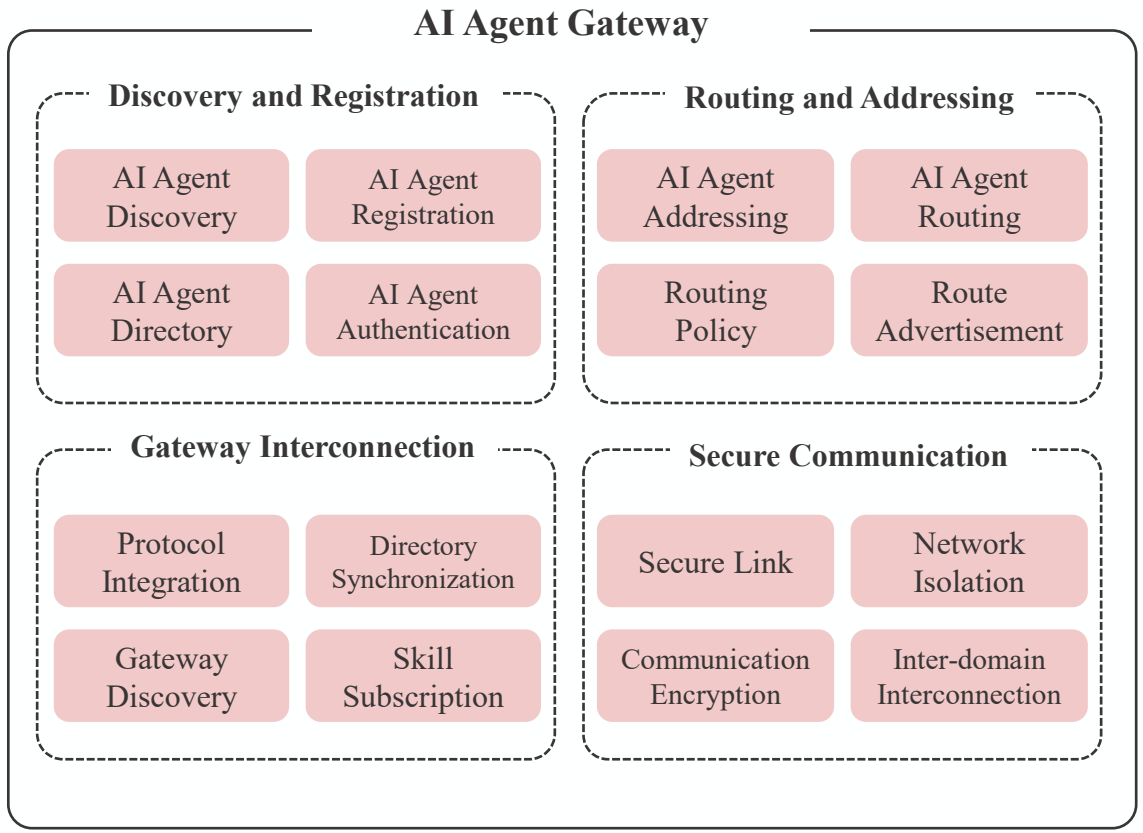
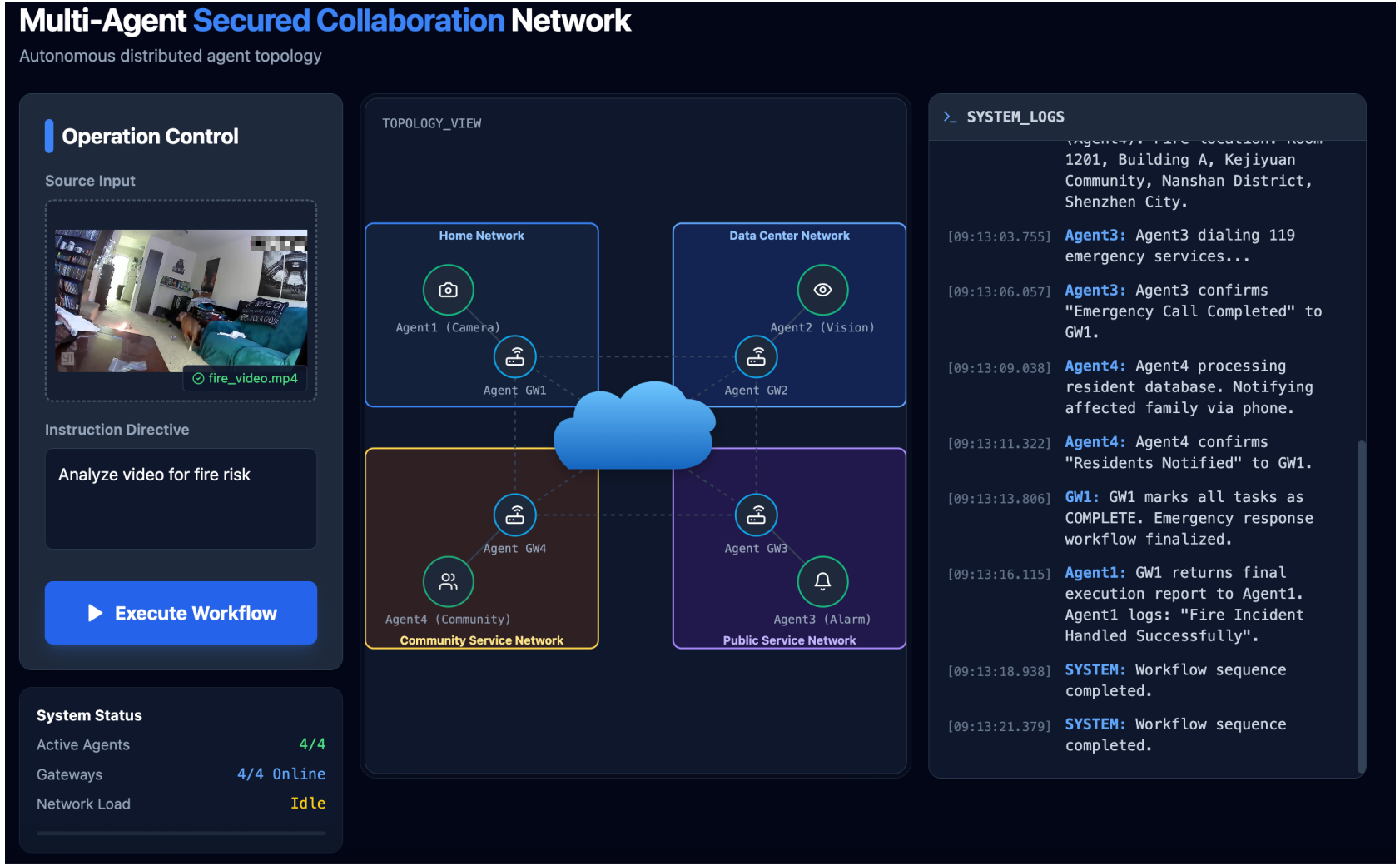
What is AI Agent Gateway?

- An **AI Agent Gateway** is a device aimed at managing and **simplifying the interactions** between applications, users, and various AI agents.
- **The AI Agent Gateway has emerged to serve as a unified entry point and control panel for traffic**, with its core value lying in achieving intelligent dispatching and security governance.
- **Key Capabilities of the AI Agent Gateway:**



AI Agent Gateway Demo

- Agent 1-4 have been connected and registered to AI Agent Gateway 1-4 respectively. The Gateways have synchronized with each other and linked via EVN6 to form secure connections.



1) Agent 1 discovers an abnormal situation and sends a photo/video to Gateway 1.

2) Gateway 1 receives the photo/video and forwards it to Agent 2.

3) Agent 2 analyzes the photo/video, identifies the "fire" incident. Then, it sends the analysis back to Gateway 1.

4) Upon receiving the result and level information, Gateway 1 performs intent analysis to confirm the fire is at Agent 1's home. Subsequently, it sends Agent 1's home address and family member's phone number to Agent 3 and Agent 4.

5) Agent 3 calls the fire department and the emergency medical services. After completion, it feeds back the result to Gateway 1.

6) Agent 4 contacts the family member to inform them of the incident and notifies the community manager of the home address. After completion, it feeds back the result to Gateway 1.

7) Gateway 1 collects the feedback information from Agent 3 and Agent 4, consolidates all processing results, and sends the final summary information to Agent 1.

Related Documents & Information

- Dynamic Multi-agent Secured Collaboration Infrastructure Architecture
  https://datatracker.ietf.org/doc/draft-li-dmsc-inf-architecture/

- Multi-agent Collaboration Protocol Suite
  https://datatracker.ietf.org/doc/draft-li-dmsc-macp/

- Side meetings
  - 14:30 – 16:30, March 18 (Wed), Jiangsu
  - 10:00 – 12:00, March 19 (Thu), Jiangsu

- DMSC mailing list: dmsc@ietf.org

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THANK YOU!

IETF 125 Hackathon, Shen Zhen, China

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