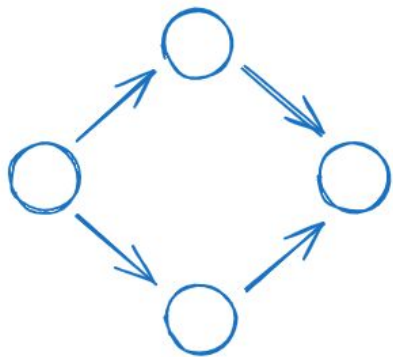


LangChain Academy

Deployment with  LangGraph

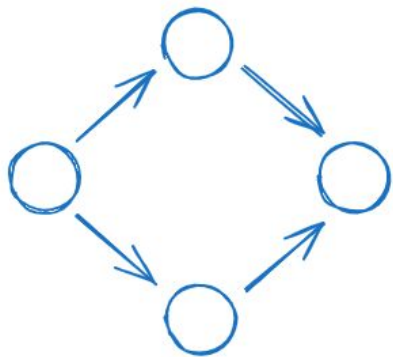
LangGraph

Build controllable agents



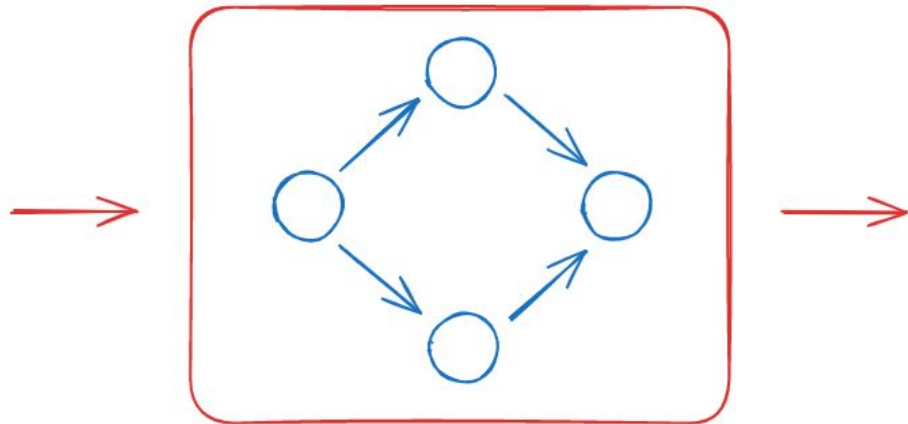
LangGraph

Build controllable agents



LangGraph Platform

Deploy agents to production



Productionize Existing LangGraph Features

- Streaming
- Checkpoints / short-term memory
- Human-In-The-Loop
- Long-term memory

Productionize Existing LangGraph Features

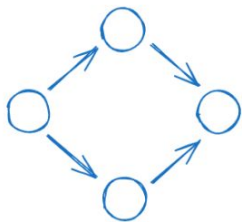
- Streaming
- Checkpoints / short-term memory
- Human-In-The-Loop
- Long-term memory

Also Get New Features For Agent Productionisation

- [Agent scheduling](#): Cron Jobs
- [Long-running agents](#): Background runs / task queue
- [Better chat UX](#): Support for double texting
- [Agent configuration](#): Assistants

3 Components

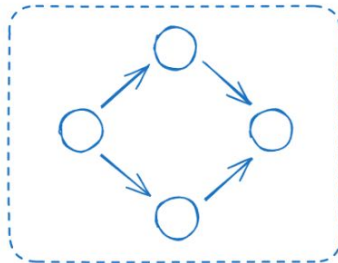
Graph Definition
(e.g., graph.py)



LangGraph
CLI

Deployment

Graph



Development Tools

LangGraph
Studio

Clients

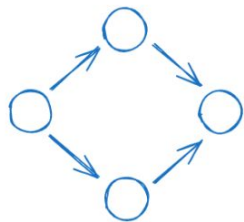
Python / JS SDK

Remote Graph

HTTP / CURL



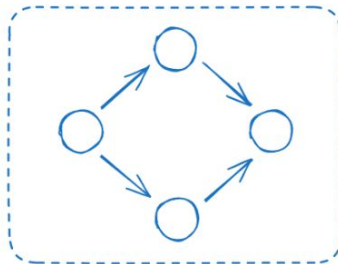
Graph Definition
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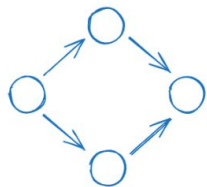
Remote Graph

HTTP / CURL

- CLI: Builds Docker image w/ code for the server, your graph, and dependencies

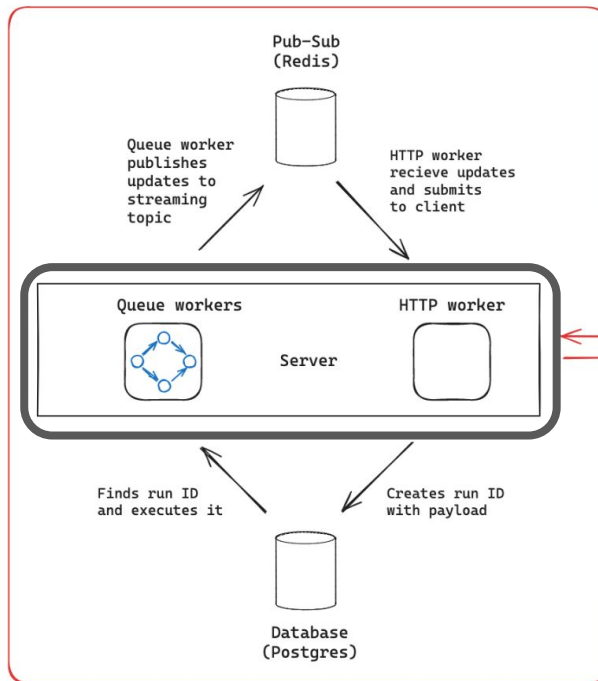
3 Components: Server

Graph Definition
(e.g., graph.py)



LangGraph
CLI

Deployment



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Studio

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Python / JS SDK

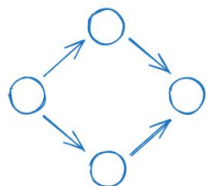
Remote Graph

HTTP / CURL

- **HTTP worker**: Client communication, creating run ID for requests to execute graph (e.g., invoke, stream)
- **Queue worker**: Executing the graph

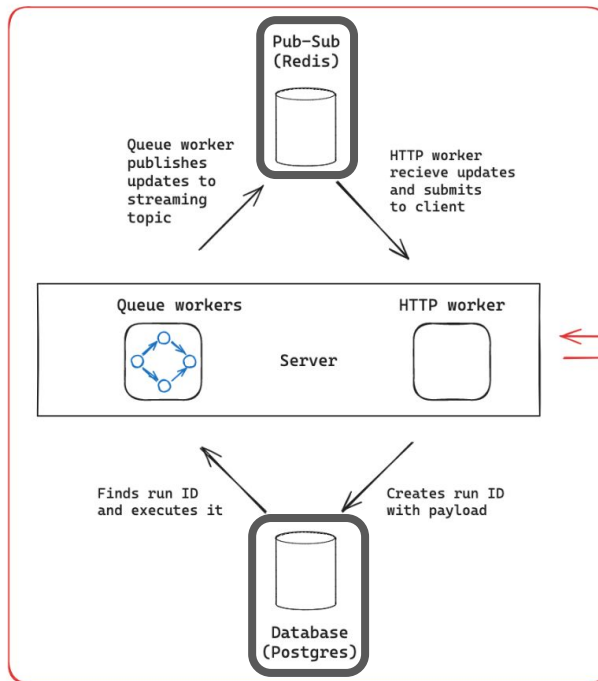
3 Components: Databases

Graph Definition
(e.g., graph.py)



LangGraph
CLI

Deployment



Development Tools

LangGraph
Studio

Clients

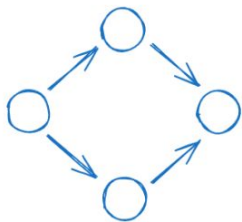
Python / JS SDK

Remote Graph

HTTP / CURL

- Redis: Communication between workers (streaming, run cancellation)
- Postgres: Support for short / long-term memory, task queue

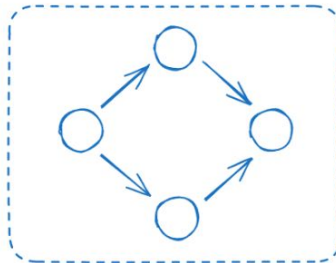
Graph Definition
(e.g., graph.py)



LangGraph
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Development Tools

LangGraph
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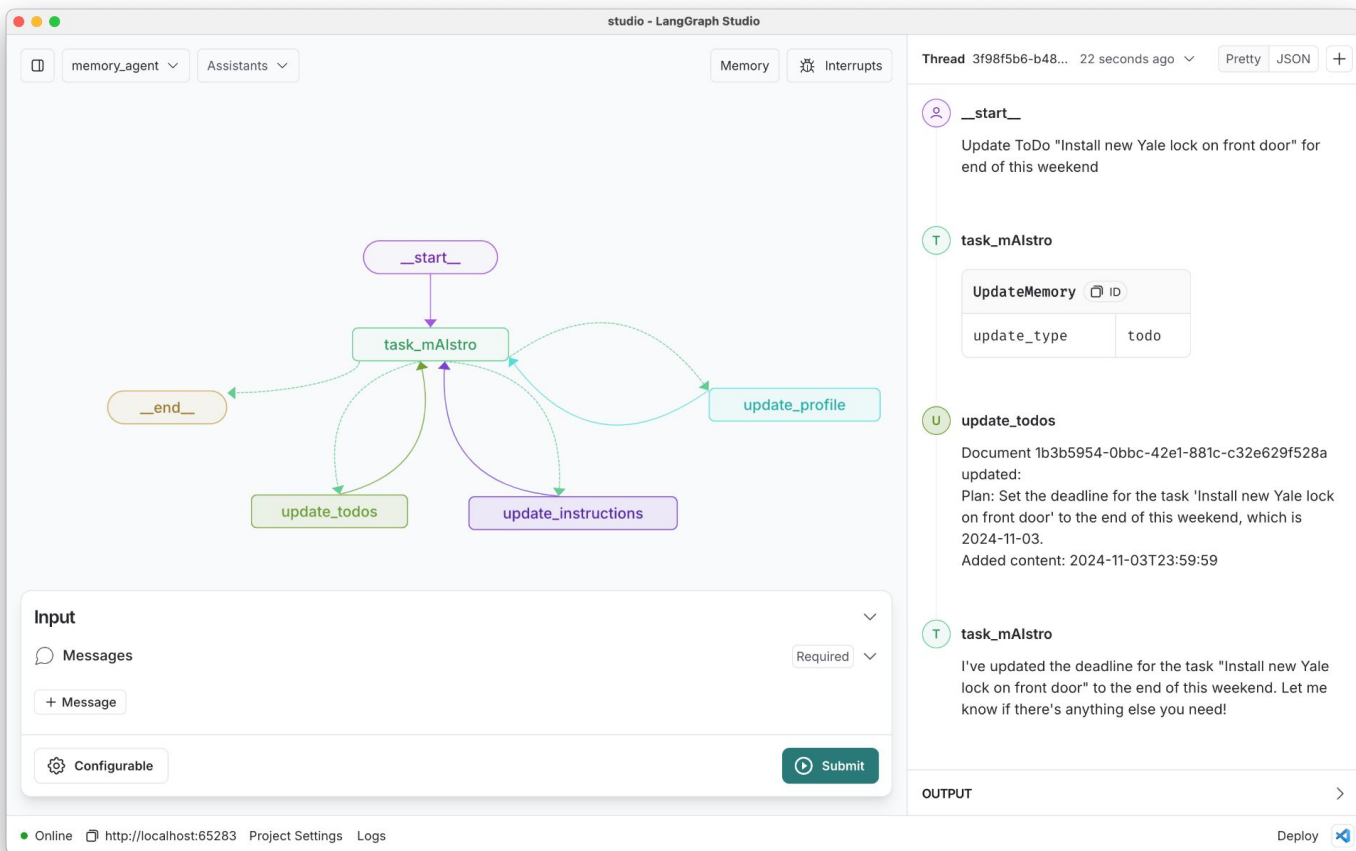
Clients

Python / JS SDK

Remote Graph

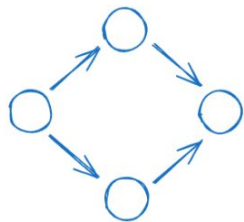
HTTP / CURL

- LangGraph [Cloud](#) and [Studio](#): Use the [CLI](#) to build the Docker image for you



3 Components: Clients

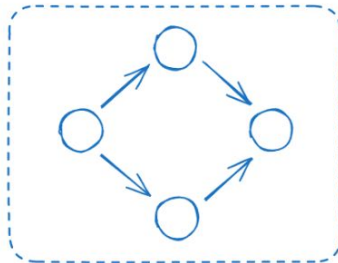
Graph Definition
(e.g., graph.py)



LangGraph
CLI

Deployment

Graph



Development Tools

LangGraph
Studio

Clients

Python / JS SDK

Remote Graph

HTTP / CURL

- [Python and JS SDK](#): Clients for working with LangGraph server API
- [Remote Graph](#): For working with deployed graphs in LangGraph library

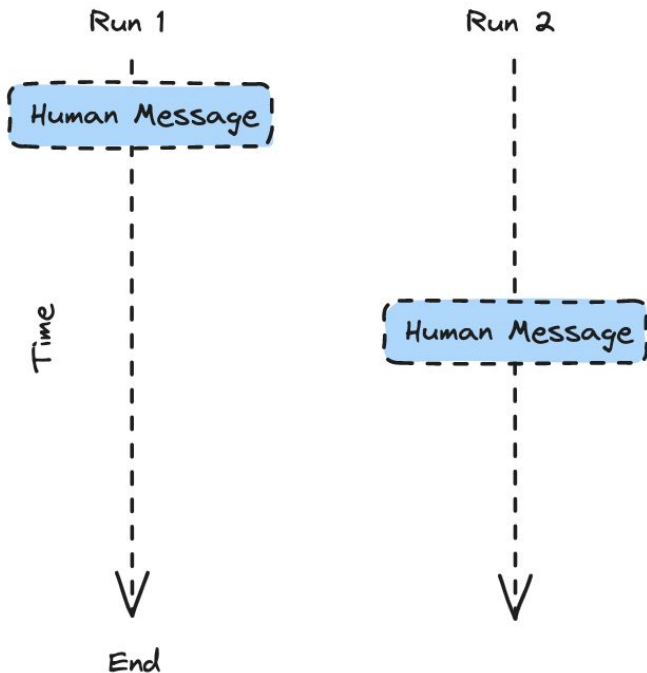
Self-Hosted Lite

- Free
- Limited to 1M nodes executed / year
- Some missing features
- Quickstart: Just download the CLI!

Option	Manage	Infra	Considerations
LangGraph Cloud	Managed for you	Our infrastructure	Fully managed for easy onboarding
BYOC	Managed for you	Your infrastructure	Data privacy but managed
Self-Hosted (Enterprise)	Managed by you	Your infrastructure	Gives you full control

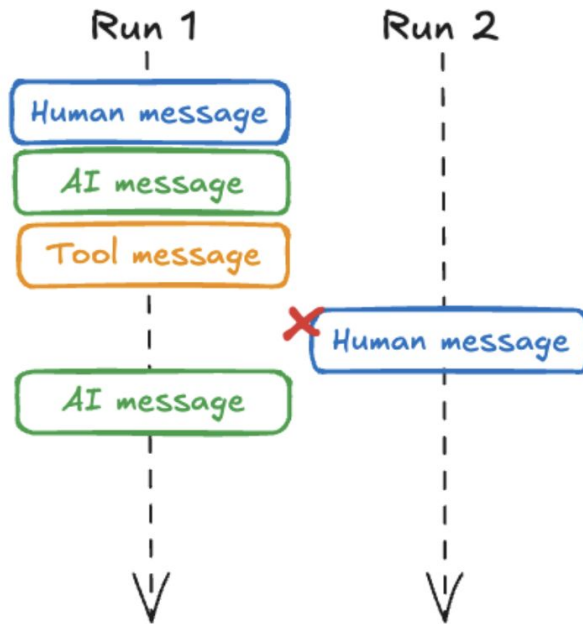
Double Texting

1 Motivation



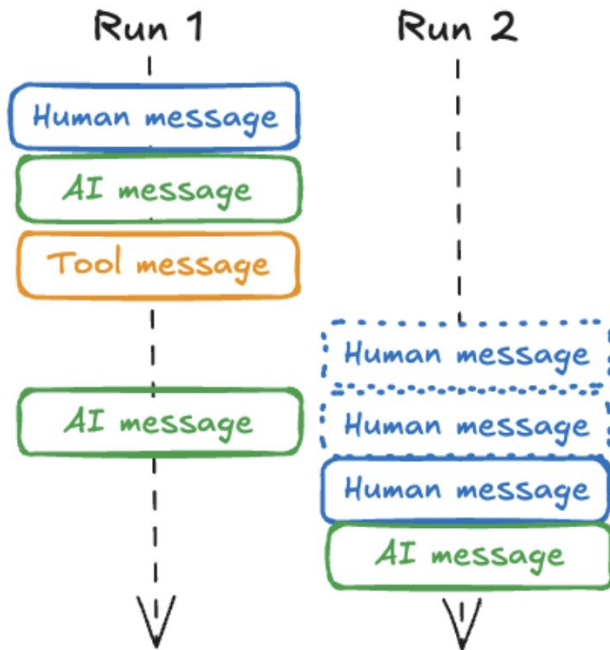
Real-world usage challenge: second request comes before the first one finishes! 4 different approaches.

Reject



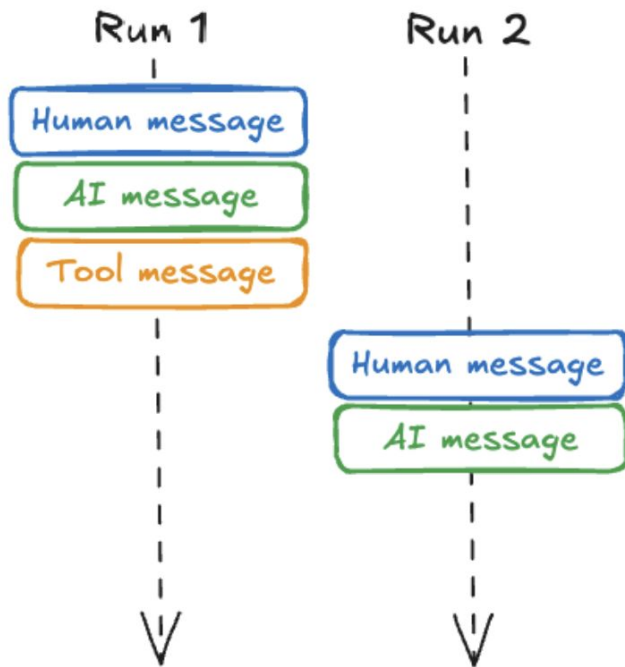
Rejects any follow up runs and does not allow double texting

Enqueue



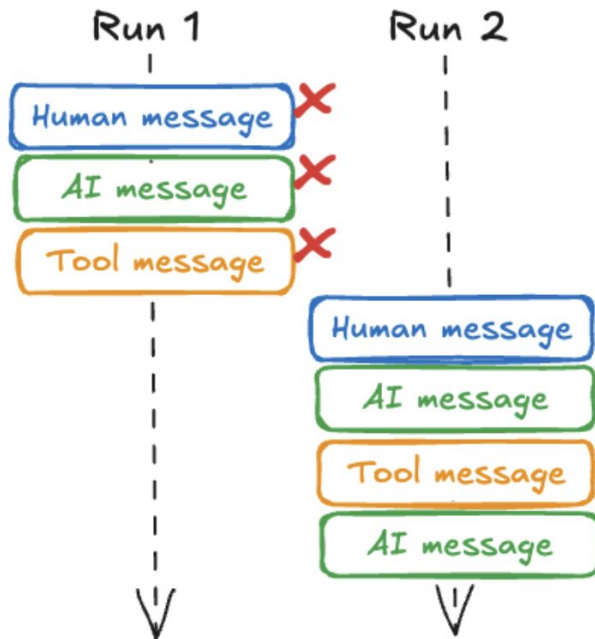
Continues the first run until it completes the whole run

Interrupt



Interrupts the prior run

Rollback

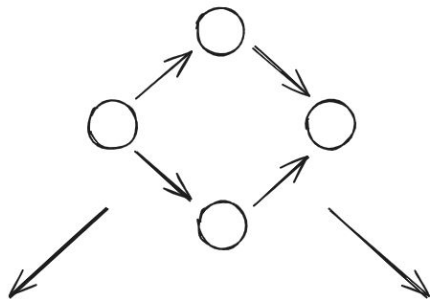


Interrupts and delete the prior run

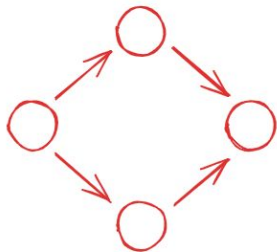
Assistants

Assistants give developers / users an easy way (w/ SDK or no-code) to manage agent versions

task_mAIstro Graph

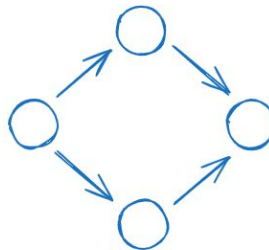


Work Assistant



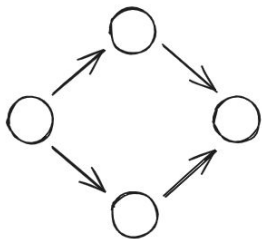
```
{user_id: "Lance",  
  todo_category: "work"  
  task_maistro_role: "..."}  
}
```

Personal Assistant



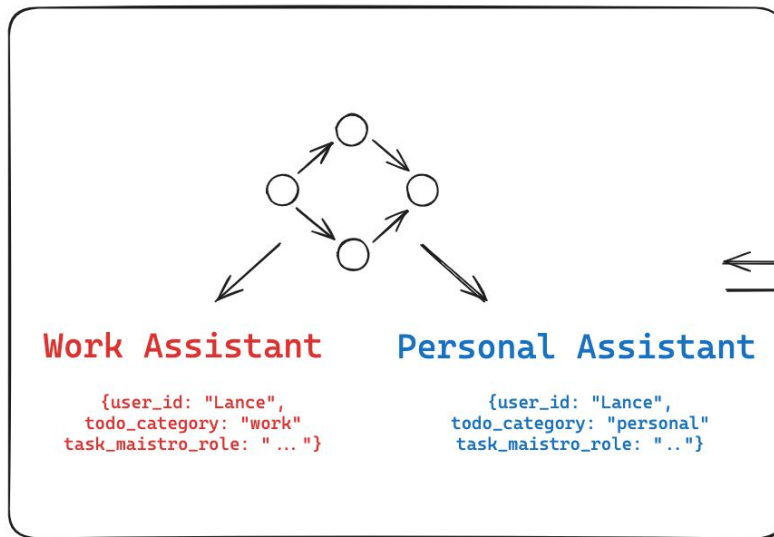
```
{user_id: "Lance",  
  todo_category: "personal"  
  task_maistro_role: ".."}  
}
```

task_mAistro Graph

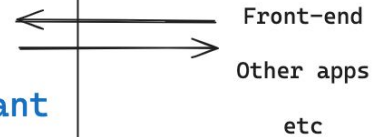


LangGraph
CLI

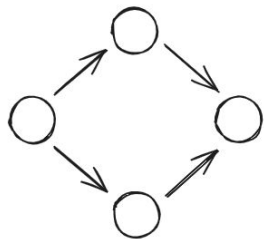
Deployment



Clients

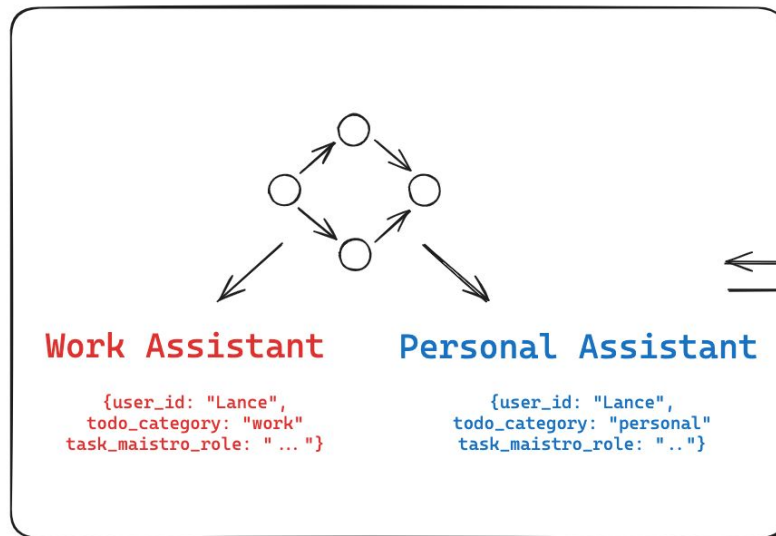


task_mAistro Graph



LangGraph
CLI

Deployment



Clients

