

Sage Agent Toolshed BETA

By Dave Hardin
Upperbay Systems

Reference: OmniBus.pdf

An agent node communicates with one, or possibly more, GPT assistant nodes but an assistant node can only talk to one agent at a time. (Queuing is not supported.) If many agents need the same assistant functions then clone the assistant and assign it a new name.

Based on Openai Assistant API beta
Agent app can be written in any language
Assistant Server Node app written in Python

Assistant Types

1. Coder with function call-backs for alarms, alarms, notices and control signals.
2. Retriever with uploaded reference documents to include in prompts.
3. Both

IMPORTANT:

Obtain an API key from OpenAI
Set an environment variable using setx

```
setx OPENAI_API_KEY sk-  
NG9XUYYYYYYYH0ZkW9XXXXXXXXbKFJ2VEq1ETnfh0GXXXXXX
```

Monitor assistants on Openai site, <https://platform.openai.com/playground>
Monitor Openai API operations, <https://status.openai.com/>

Cd to OmniBus-1-0-0 directory

Makeagent.py python .\makeagent.py
Creates the assistant within the Openai cloud

runserver.py - python .\runserver.py

Runs the main assistant proxy object. Waits for incoming MQTT message or keyboard input. All other agents in the cluster communicate to the server using MQTT messages.

It uses the modules:

openailib.py

xfunctionlib.py

xnetworklib.py

runclient.py - python .\runclient.py

Run the client app that sends user prompt messages to the server.

runpump.py - python .\runpump.py

The pump agent runs every xxx seconds. It gets Matlab thingspeak data and sends the data to the openai GPT.

It uses the modules:

thingspeaklib.py

xnetworklib.py

runsink.py - python .\runsink.py

Receives messages from functions called by the GPT and speaks them.

runsource.py - - python .\runsource.py

Sends data to the server cache that is accessible by the getSensorValueByName function callback from the server.

NOTE: Delete assistant using openai site

Cloning agent

- Copy agent directory
- Rename agent_name in agentname.py file
- Modify Python scripts as needed to obtain functionality desired
- Run python .\makeagent.py and verify it on openai site

