Watsonx Orchestrate agents' integration lab

This short lab introduces how to easily integrate external agents from watsonx.ai with Watsonx Orchestrate.

Prerequisities:

- URL of a deployed agent in watsonx.ai
- API key of a deployed agent watsonx.ai

To obtain both information, see Lab1: watsonx.ai agent lab.

Watsonx Orchestrate instance

To initialize this instance, please finish Lab 2: watsonx Orchestrate ADK lab or follow instructions in **Watsonx Orchestrate trial.pdf** file.

1) Login

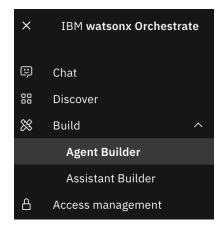
Go to https://dl.watson-orchestrate.ibm.com and log-in with the credentials.

2) Building the main agent

If you already finished ADK Lab, you can skip this step and use main_agent instead.

First, let's build a native watsonx Orchestrate agent distributing tasks to external agents – collaborators.

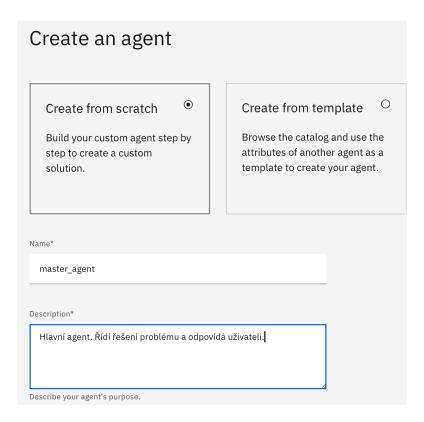
- 1) Open hamburger menu at the left top
- 2) Open Agent Builder



- 3) Click on Create agent button.
- 4) Enter name for your master agent.

Example: main_agent

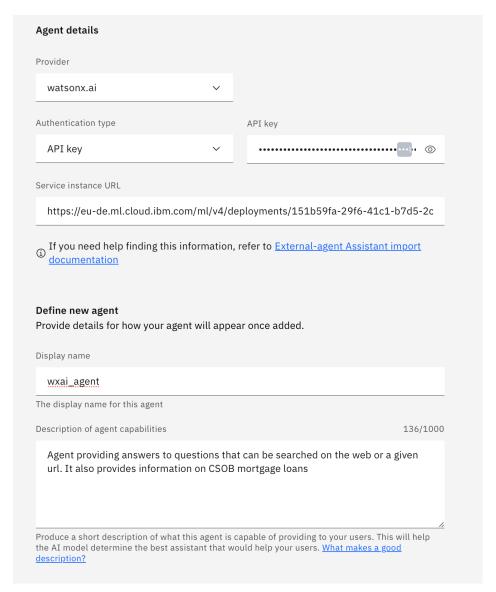
5) Enter the description. be clear in the instructions when the agent is to be used. Example: Hlavní agent. Řídí řešení problému a odpovídá uživateli.



6) Click Create

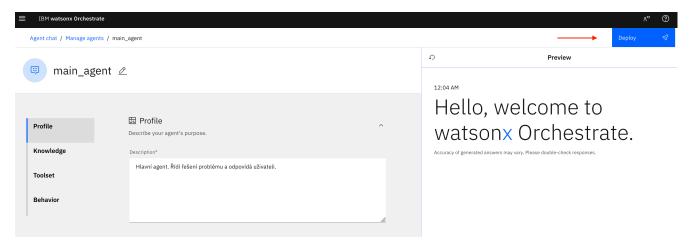
3) Import watsonx.ai agent

- Once you create the main agent, scroll down to section Agents and select Add Agent
- 2) a
- 3) Enter following information:
- Provider: watsonx.ai
- API key: <your_apikey>
- Service instance URL: <your_url>
- Name: airbank_agent
- **Description**: Agent providing answers to questions that can be searched on the web or a given url. It also provides information on Airbank mortgage loans
- 4) Click Import agent

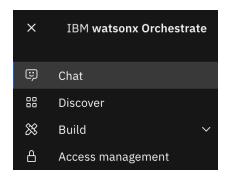


4) Testing the agent

1) Go back to main_agent and click **Deploy**



2) Go back to the chat:

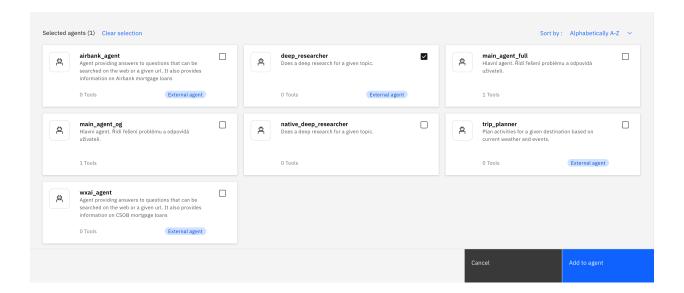


3) Lead following conversation:

- "Kolik nabízí nejlepší úrok Airbank? Čerpej z následujícího webu:
 https://www.airbank.cz/produkty/hypoteka/ "- utilizing a wx.ai agent web crawler
- "Jaká je výše měsíčních splátek úvěru ve výši 1 948 000 Kč s tímto úrokem na 20 let?"utilizing an ADK mortgage_advisor agent
- "Jak mi se splácením pomůže Chytrá rezerva z této banky?" utilizing a wx.ai agent knowledge base
- o "Co je to repo sazba?" utilizing a main agent wiki search tool from ADK lab

5) Bonus: Add BeeAI agent from local instance

- 1) Open your main agent again, scroll down to section Agents and select Add Agent
- 2) Choose Add from local instance
- 3) Select deep_researcher external agent and click Add to agent.



- 4) Replicate step 4) Testing the agent on previous page
- 5) Lead the same conversation as before, this time add following questions to utilize BeeAI researcher agent:
 - o "Kdo je prezidentem České republiky?"
 - o "A kdo je jeho žena?"

Appendix

Watsonx Orchestrate - adding an agent from external platforms:

https://www.ibm.com/docs/en/watsonx/watson-orchestrate/current?topic=agents-adding-orchestration#agents-third-party-platforms

Guidelines to describe agents' capabilities:

https://www.ibm.com/docs/en/watsonx/watson-orchestrate/current?topic=agents-guidelines-describe-capabilities