

Watsonx Orchestrate agents' integration lab

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

Prerequisites:

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

To obtain both information, finish 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

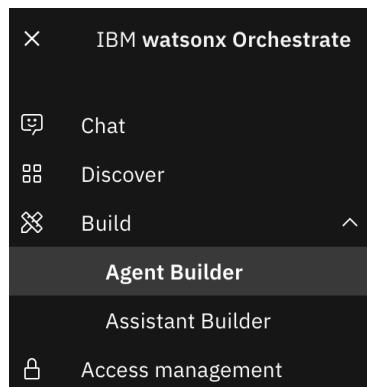
Go to <https://dl.watson-orchestrate.ibm.com> and log-in with the credentials.

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.*

Create an agent

Create from scratch ☒

Build your custom agent step by step to create a custom solution.

Create from template ☐

Browse the catalog and use the attributes of another agent as a template to create your agent.

Name*

Description*

Hlavní agent. Řídí řešení problému a odpovídá uživateli.

Describe your agent's purpose.

- 6) Click **Create**

3) Import watsonx.ai agent

1) Once you create the main agent, scroll down to section **Agents** and select **Add Agent**

2) Click **Import** and choose **External agent**.

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**

Agent details

Provider

watsonx.ai

Authentication type

API key

API key

.....

Service instance URL

https://eu-de.ml.cloud.ibm.com/ml/v4/deployments/151b59fa-29f6-41c1-b7d5-2c

①

If you need help finding this information, refer to [External-agent Assistant import documentation](#)

Define new agent

Provide details for how your agent will appear once added.

Display name

wxai_agent

The display name for this agent

Description of agent capabilities

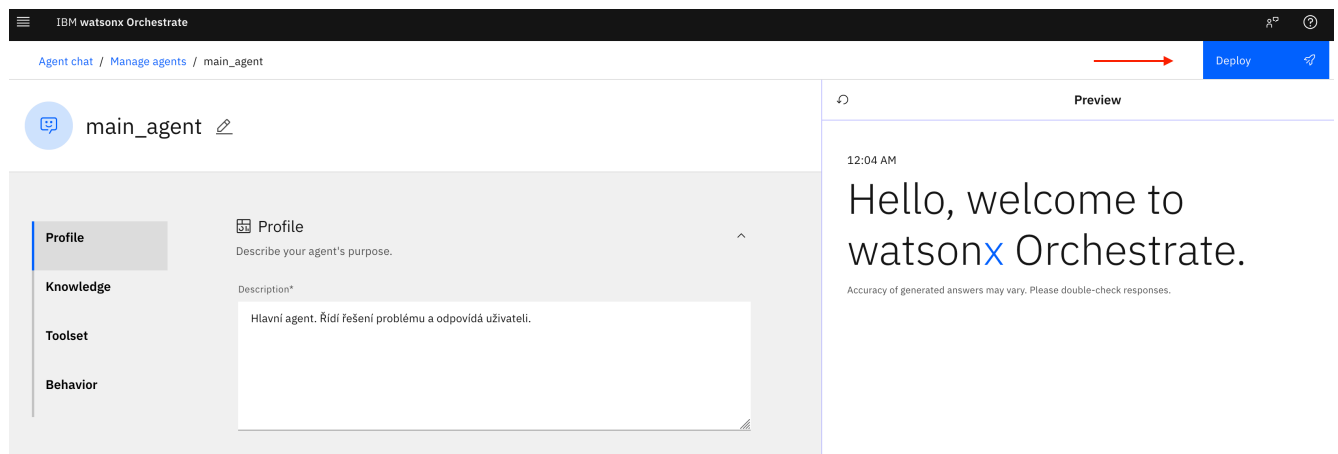
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Agent providing answers to questions that can be searched on the web or a given url. It also provides information on CSOB mortgage loans

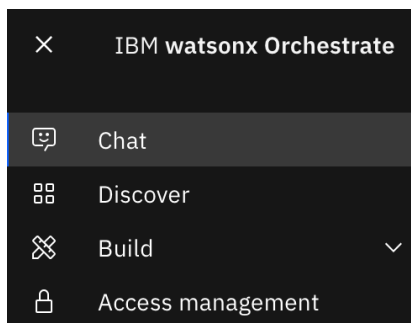
Produce a short description of what this agent is capable of providing to your users. This will help the AI model determine the best assistant that would help your users. [What makes a good description?](#)

4) Testing the agent

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



2) Go back to the chat:

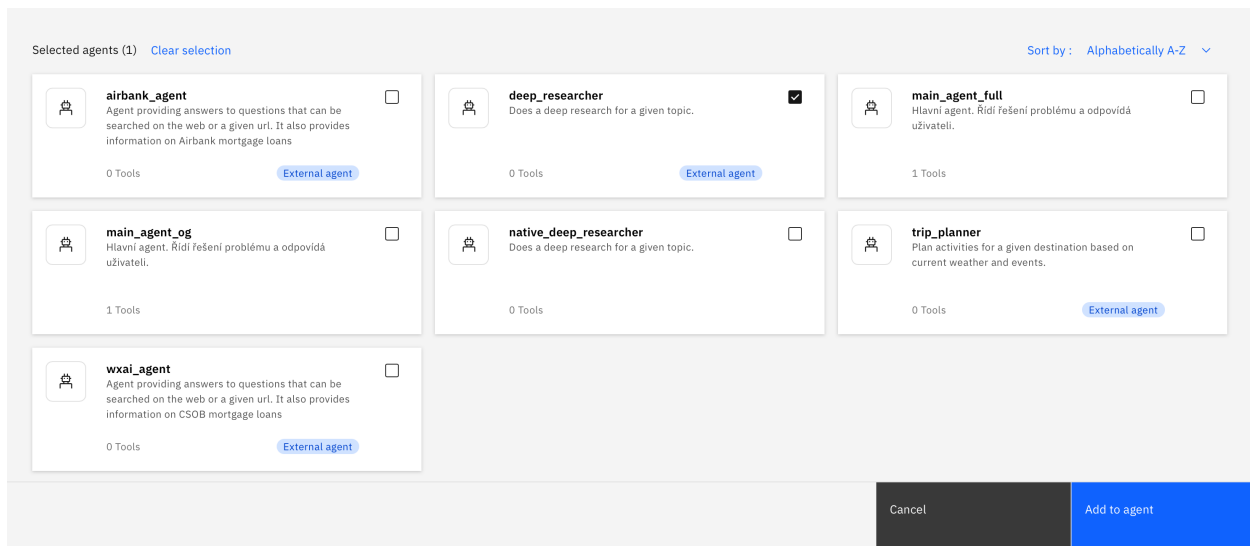


3) Lead following conversation:

- “Wat moet ik doen om een gunstige rente te krijgen? Gebruik de volgende website: <https://www.nn.nl/Particulier/Hypotheken.htm>” - *utilizing a wx.ai agent web crawler*
- “J Wat zijn de maandelijkse betalingen voor een lening van EUR 248.500 met een rentepercentage van 5,85% gedurende 25 jaar?” - *utilizing an ADK mortgage_advisor agent*
- “Wat is de drempeldatum?” - *utilizing a wx.ai agent knowledge base*
- “Wat is de reporente?” - *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:
 - “Wie is het staatshoofd van Nederland?”
 - “En wie is zijn vrouw?”

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>