

Insurance Agent: Automate customers insurance queries with Agentic AI

Learning Objective

Time Required : 30 Mins

You will gain hands-on knowledge and practical skills to design, deploy, and interact with AI agents tailored for insurance domain workflows using Watsonx Orchestrate and Watsonx Assistant. Specifically, you will be able to:

- ✓ Design and deploy AI agents using Watsonx Orchestrate that can automate insurance-specific tasks such as policy lookup, claim status retrieval, and personalized product recommendations.
- ✓ Integrate custom tools (APIs or data sources) into your agent workflows to enable real-time interaction with customer data, documents, and business rules.
- ✓ Use the built-in chat interface in Watsonx Assistant to create a conversational experience that can understand natural language and respond with answers derived from your own uploaded documents, enabling chat-with-your-docs capability.
- ✓ Leverage Watsonx's low-code environment to orchestrate complex agent behaviors without needing deep programming expertise.
- ✓ Apply these techniques to real-world insurance use cases, improving customer engagement, reducing operational load, and enhancing decision-making using intelligent automation.

The Problem

FinSure Insurance is aiming to enhance customer satisfaction and improve cross-selling of insurance products by modernizing their customer service operations. However, their team of human insurance agents faces challenges in providing timely, consistent, and personalized support to policyholders.

The customer support process is largely manual, requiring agents to search through multiple systems to retrieve policy details, claims history, and product options. Customers often reach out with questions about their coverage, premium schedules, or claim status, and resolving these queries typically involves navigating siloed internal tools and reading through complex policy documents. In addition, agents struggle to proactively recommend relevant insurance products or add-ons, as it requires them to analyze historical customer data, risk profiles, and product offerings—often under time pressure.

To summarize, some of the challenges faced by insurance agents at **FinSure** Insurance include:

- **Manual processes and fragmented systems** result in long turnaround times for responding to customer queries.
- **Difficulty in accessing and summarizing policy and claims data** hinders agents' ability to provide clear, contextual answers.
- **Lack of proactive, data-driven product recommendations** limits opportunities for upselling or cross-selling tailored insurance plans.
- **Inconsistent customer experiences** due to varying levels of agent expertise and access to information.

An intelligent, autonomous **Insurance Agent Assistant** equipped with purpose-built tools such as policy lookup, claims history retrieval, and personalized recommendation engines could significantly streamline and elevate this process—offering real-time, personalized, and efficient customer support without the delays of manual intervention.

Objective

Finsure Insurance plans to implement an AI-powered **Insurance Agent Assistant** to support their team of insurance agents in delivering faster, more personalized, and efficient customer service. The goal is to create an AI-powered agentic solution that assists insurance agents in executing the following tasks:

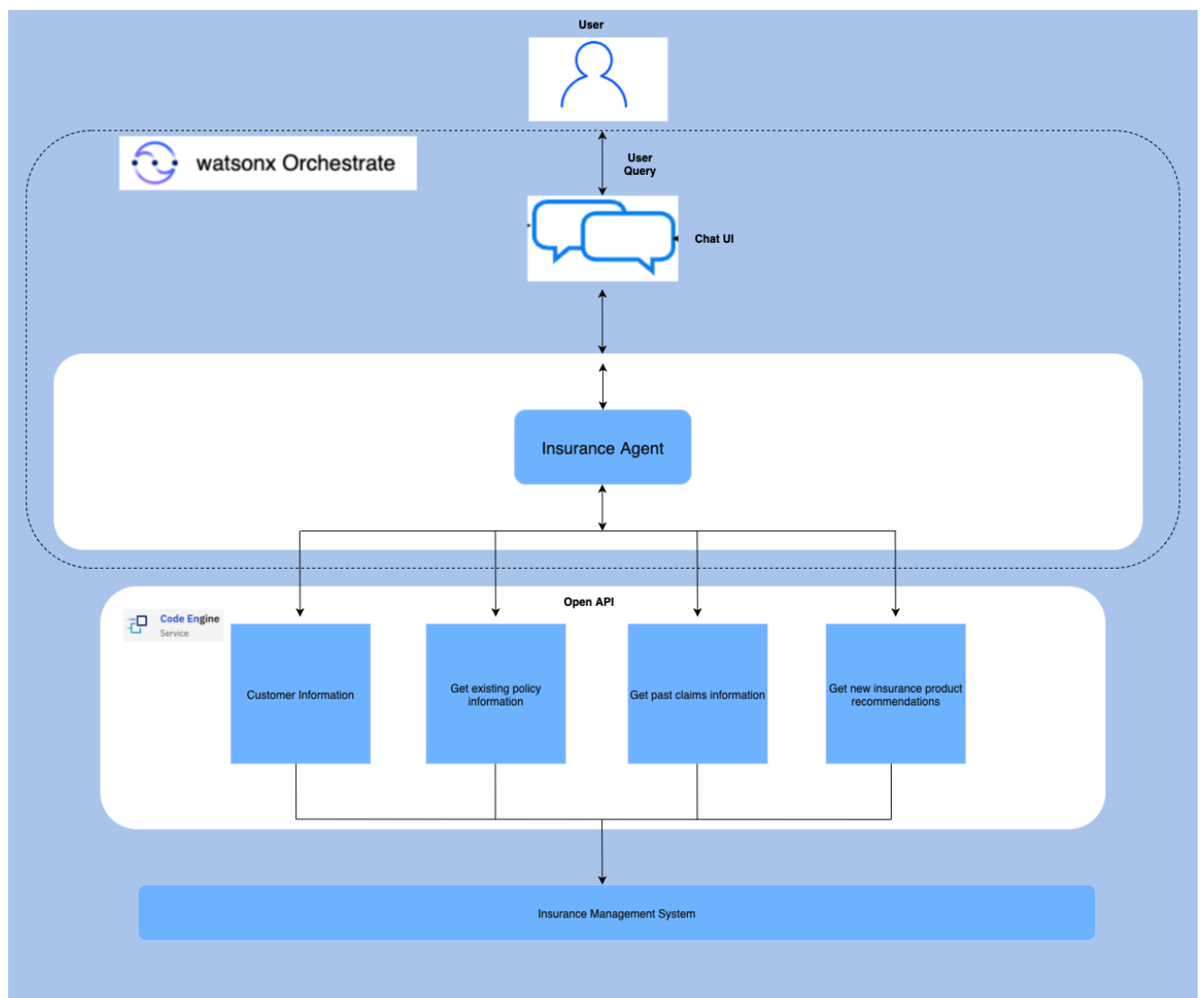
- Retrieve and summarize key details from customer insurance policies, including coverage, premiums, and terms.
- Provide a consolidated view of a customer's past and current claims, including status, reimbursement history, and reasons for approval or rejection.
- Perform intelligent search over public and internal data sources to surface relevant updates, policy changes, or regulatory shifts.
- Leverage recommendation engines to suggest suitable policy upgrades, add-on riders, or bundled insurance products based on customer profiles and history.
- Generate a contextual summary or response tailored to customer queries in real time.

By automating these tasks, the company aims to reduce agent workload, improve response times, and deliver a more consistent and personalized customer experience at scale.

Business Value

- **Significant reduction in operational overhead** by minimizing time spent on manual policy and claims research.
- **Instant, automated access to up-to-date customer and policy data**, enabling faster and more accurate service delivery.
- **Smarter product recommendations** driven by AI, improving customer satisfaction and increasing revenue opportunities through targeted upselling.

Architecture



Pre-requisites

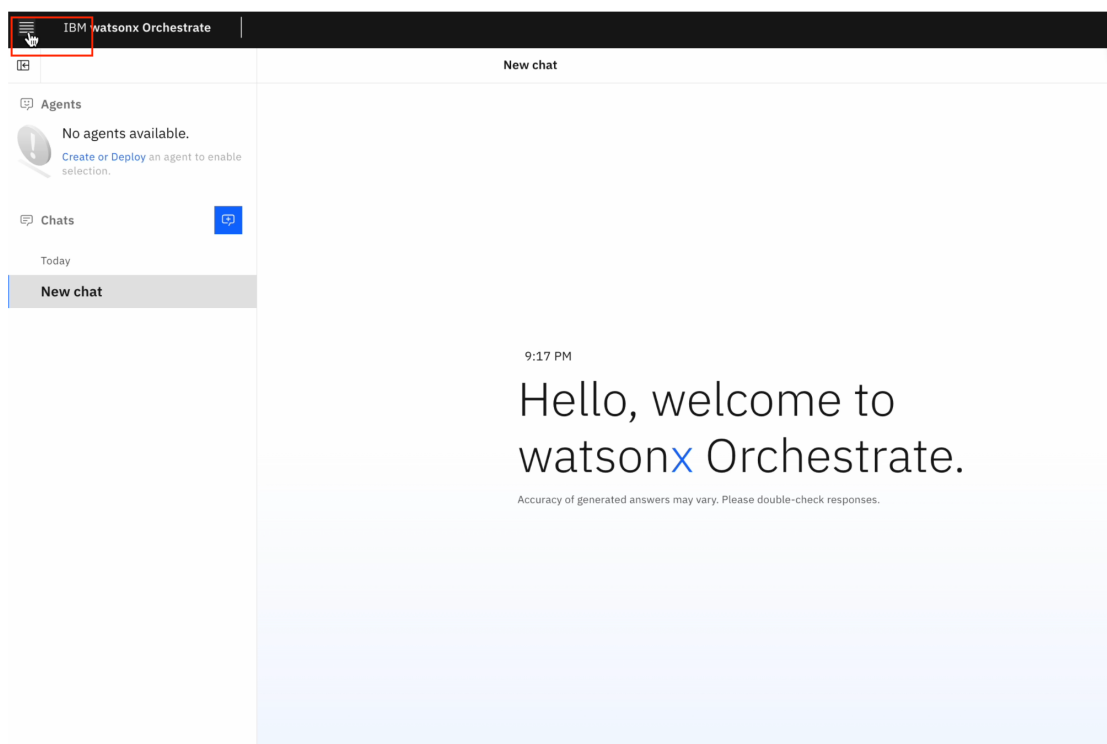
- Check with your instructor to make sure **all systems** are up and running before you continue.
- Validate that you have access to the right techzone environment for this lab.
- Validate that you have access to a credentials file that your instructor will share with you before starting the labs.

Accessing Your Watsonx Orchestrate Instance

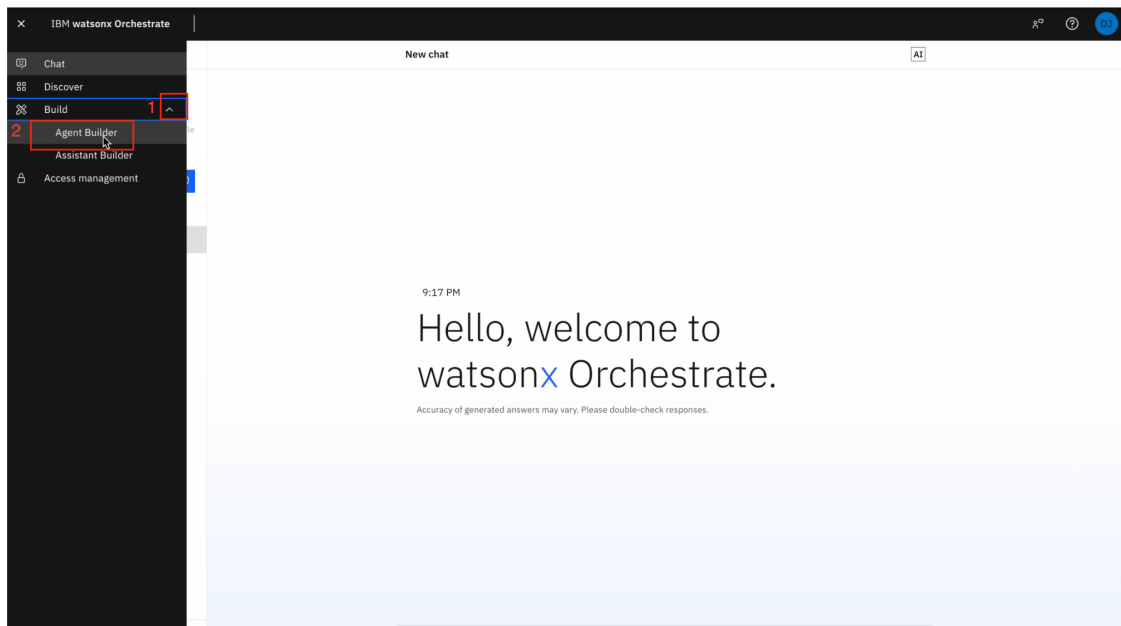
- A TechZone environment has been reserved for you, and you will receive the access details via email.
- To access your Watsonx Orchestrate instance, **please check with your instructor** for the access link and the necessary steps.

Step by step instructions to build the Insurance Agent:

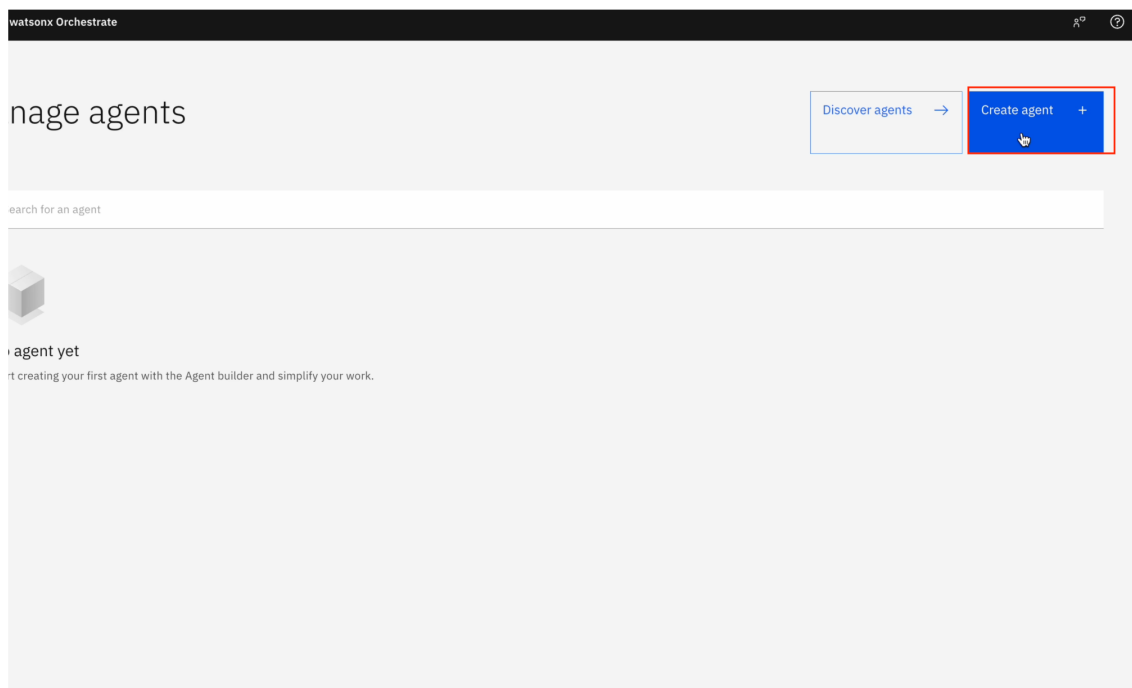
1. When you launch watsonx Orchestrate, you'll be directed to this page. Click on the hamburger menu in the top left corner:



2. Click on the down arrow next to **Build**. Then click on **Agent Builder**:



3. Click on **Create agent +**:



4. Select "Create from scratch", give your agent a name, e.g. "Insurance Agent", and fill in the description as shown below:

This agent helps in retrieving insurance customer details, policy info, claims, and upsell recommendations

Click on **Create**

The screenshot shows the 'Create an agent' interface in IBM watsonx Orchestrate. At the top, there are two tabs: 'Create from scratch' (selected) and 'Create from template'. Below the tabs, there are two input fields: 'Name*' with the value 'Insurance Agent' and 'Description*' with the text 'This agent helps in retrieving insurance customer details, policy info, claims, and upsell recommendations'. At the bottom, there are two buttons: 'Cancel' and 'Create'.

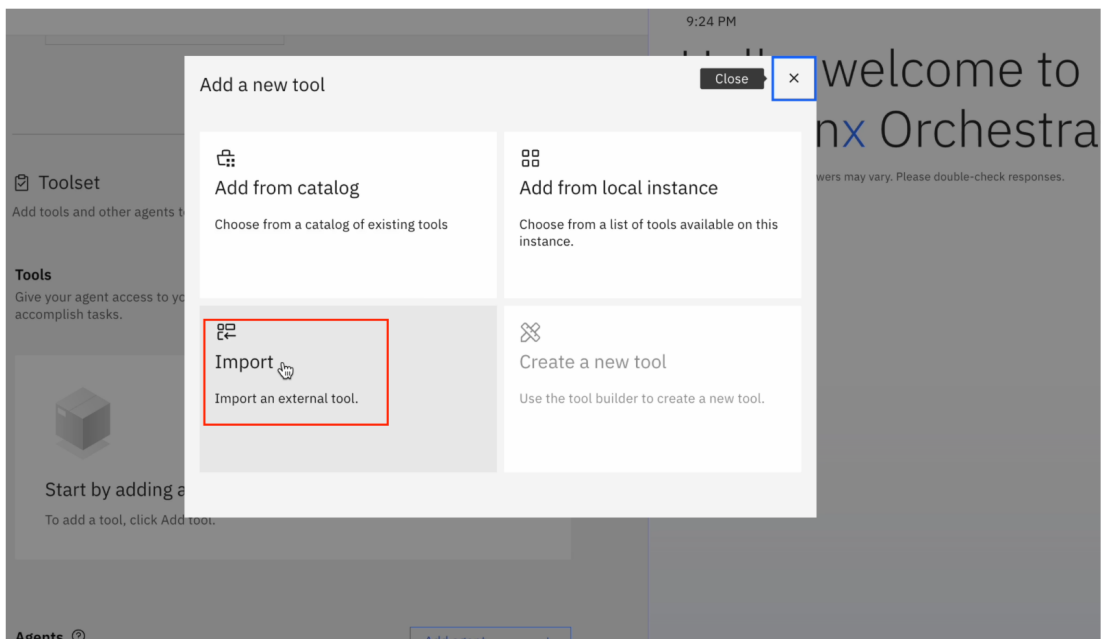
5. Scroll down to the Toolset section. Click on Add tool +:

The screenshot shows the 'Insurance Agent' configuration page in IBM watsonx Orchestrate. The page is divided into two main sections: 'Profile' and 'Toolset'. The 'Toolset' section is currently selected. It contains a 'Tools' section with a description 'Give your agent access to your organization's tool to help it accomplish tasks.' and an 'Add tool +' button. Below this, there is a 'Start by adding a tool' section with a description 'To add a tool, click Add tool.' and a 'Start by adding a tool' button. At the bottom, there is an 'Agents' section with a description 'Identify agents to whom your agent can delegate tasks.' and an 'Add agent +' button. On the right side, there is a 'Preview' section showing a chat interface with a message 'Hello, welcome to watsonx Orchestrate.' and a 'Type something...' input field.

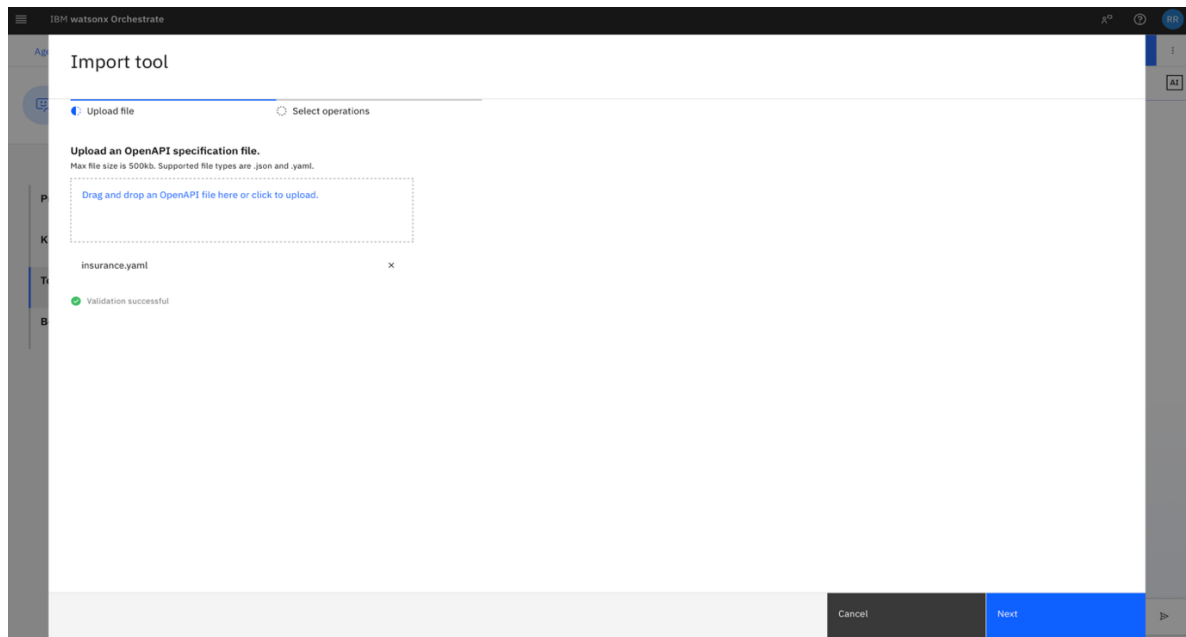
What happens behind the scene?

We have developed a backend FastAPI application containing custom tools for various insurance-related use cases and deployed it on IBM Code Engine. An OpenAPI specification (YAML file) has been generated for this application, with the deployed Code Engine URL included. To make these tools available to your AI agents, you simply need to upload the OpenAPI spec file into Watsonx Orchestrate—no additional configuration required.

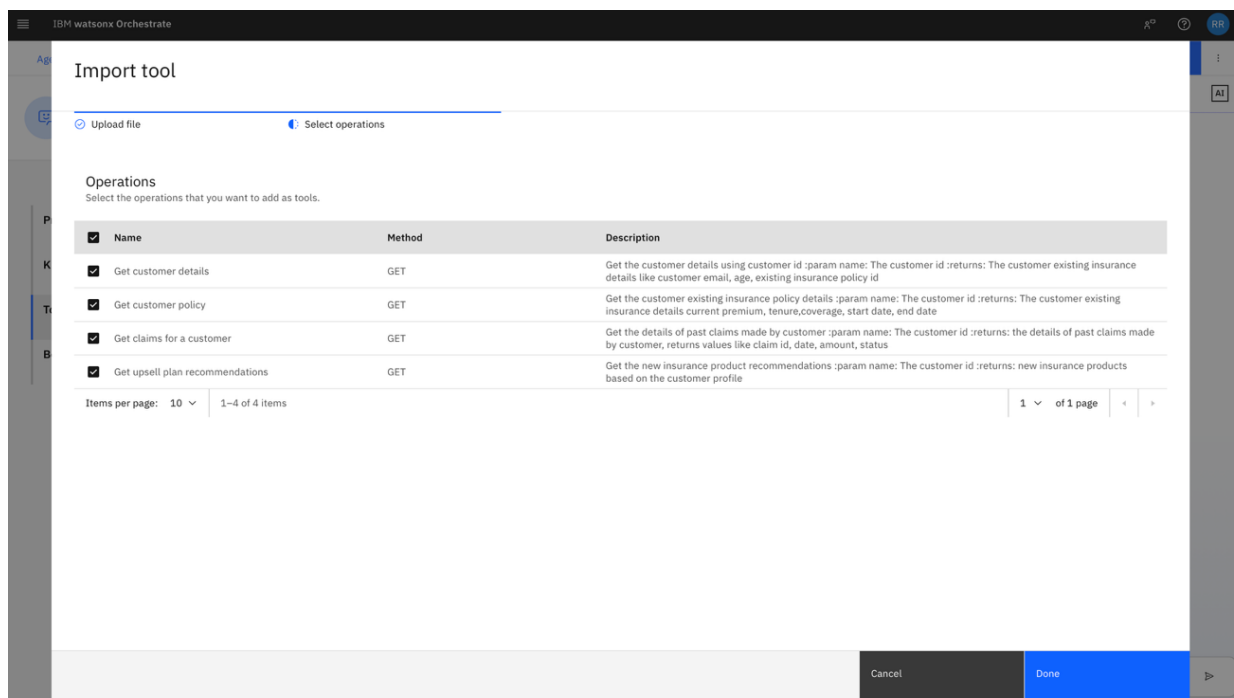
6. Select Import:



7. Drag and drop or click to upload the insurance.yaml file (provided to you by the instructor), then click on Next:




8. Select all the operations and click on Done:





9. Scroll down to the Behavior section. Insert the instructions below into the Instructions field:

Use the tools to get insurance specific information using your customer-id.

When a user inquiries about insurance details, prompt them to provide their customer ID. Follow up by asking about any past claims or suggest relevant new insurance products.

 IBM watsonx Orchestrate

[Agent chat](#) / [Manage agents](#) / Insurance Agent

 Insurance Agent 

Profile


Knowledge

Toolset

Behavior

Start by adding an agent

You haven't added any agents to support your agent in collaboration.

 Behavior

Define how and where your agent should react to requests and respond to users.

Instructions


Use the tools to get insurance specific information using your customer-id.

When a user inquiries about insurance details, prompt them to provide their customer ID. Follow up by asking about any past claims or suggest relevant new insurance products.


Specify what your agent should do, how it should respond and any restrictions it should follow.

Channels

Define where users can chat with this agent

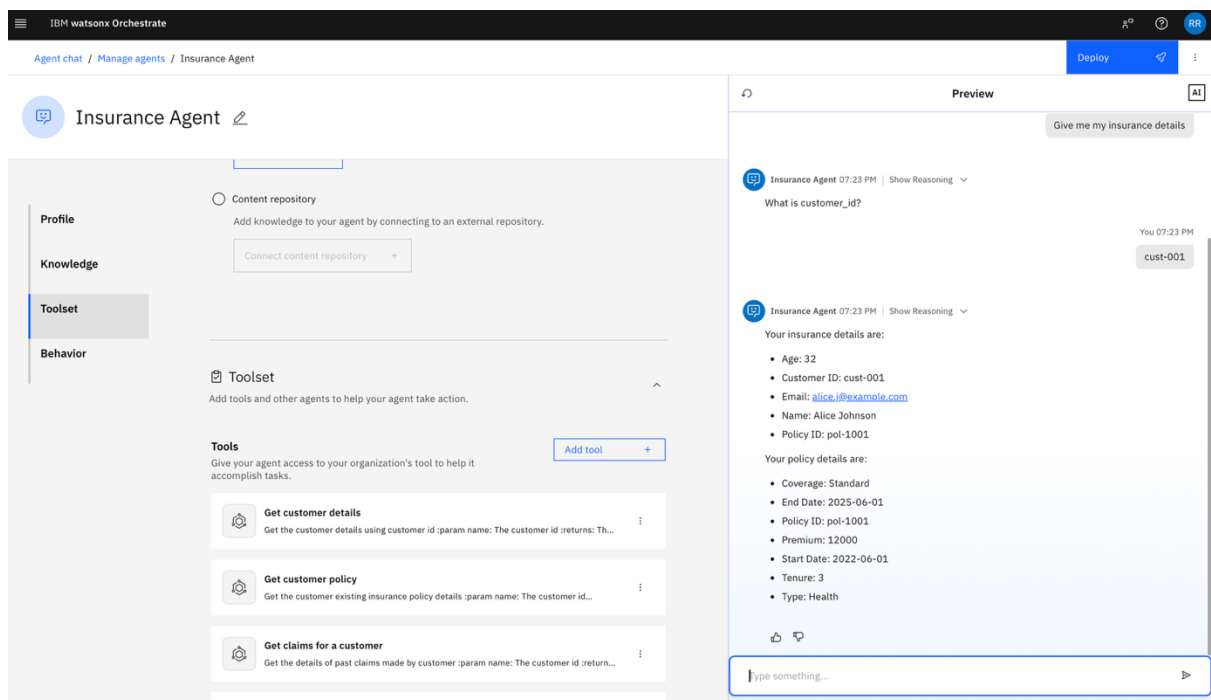
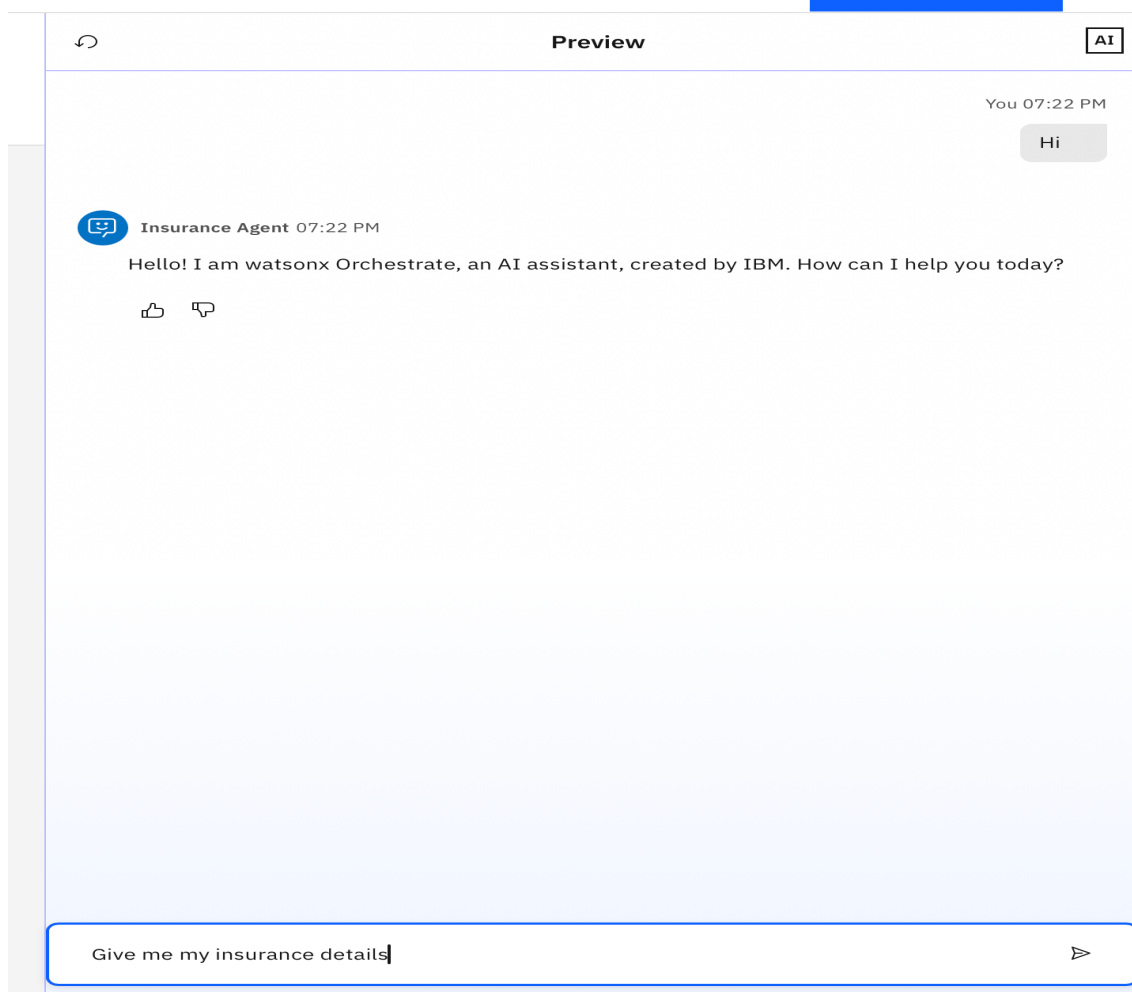
 Show agent ⓘ

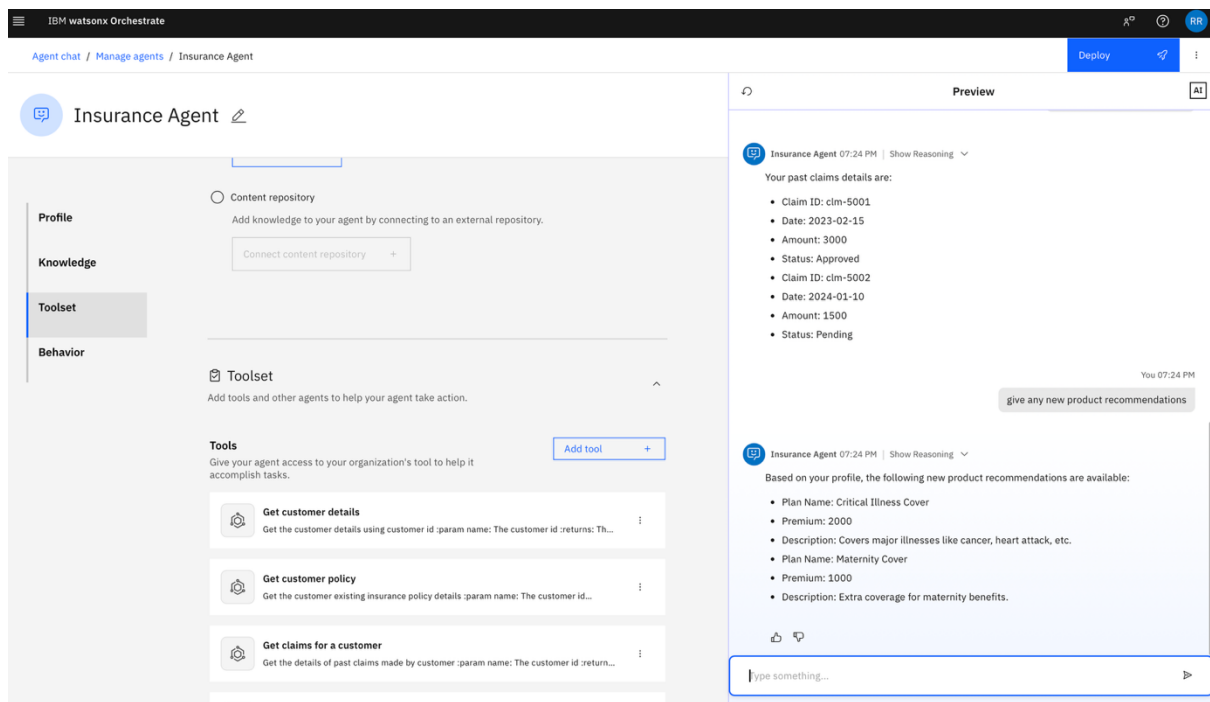
Enable your team to chat directly with this agent on the chat homepage



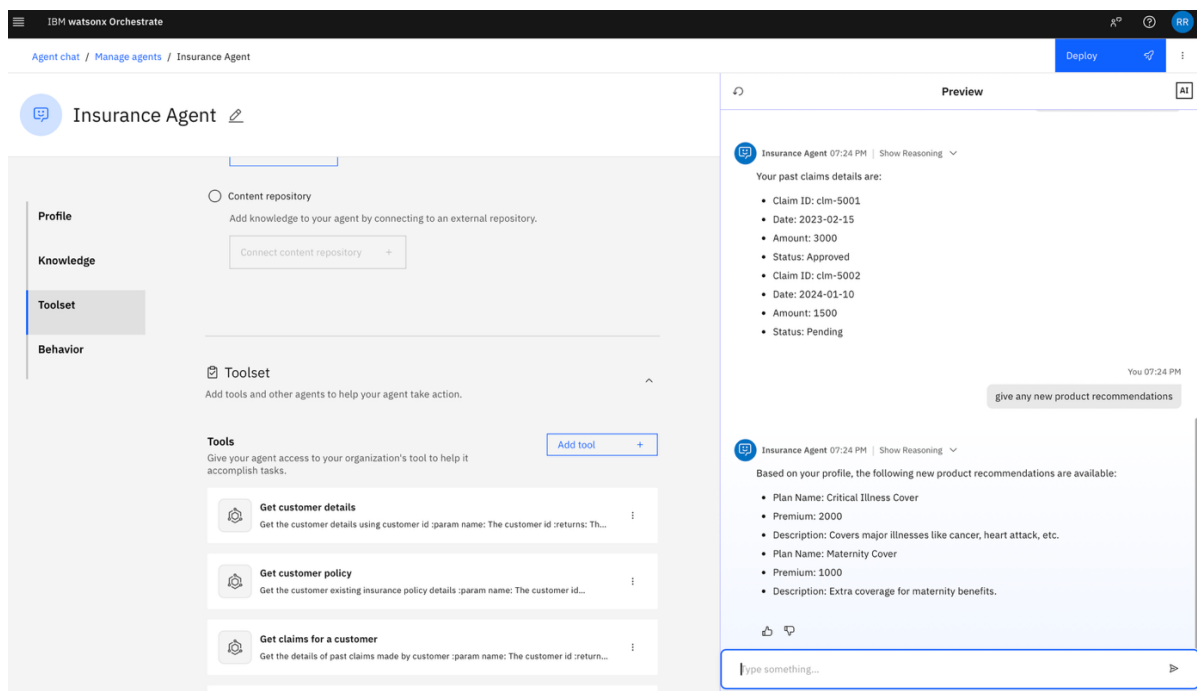
13. Test your agent in the preview chat on the right side by asking the following questions and validating the responses. They should look similar to what is shown in the screenshots below:

1. Give my insurance details ?
2. Enter customer-id **cust-001** when the agent prompts for customer id from the user
3. Give details of my past claims.
4. Recommend any new insurance plan?

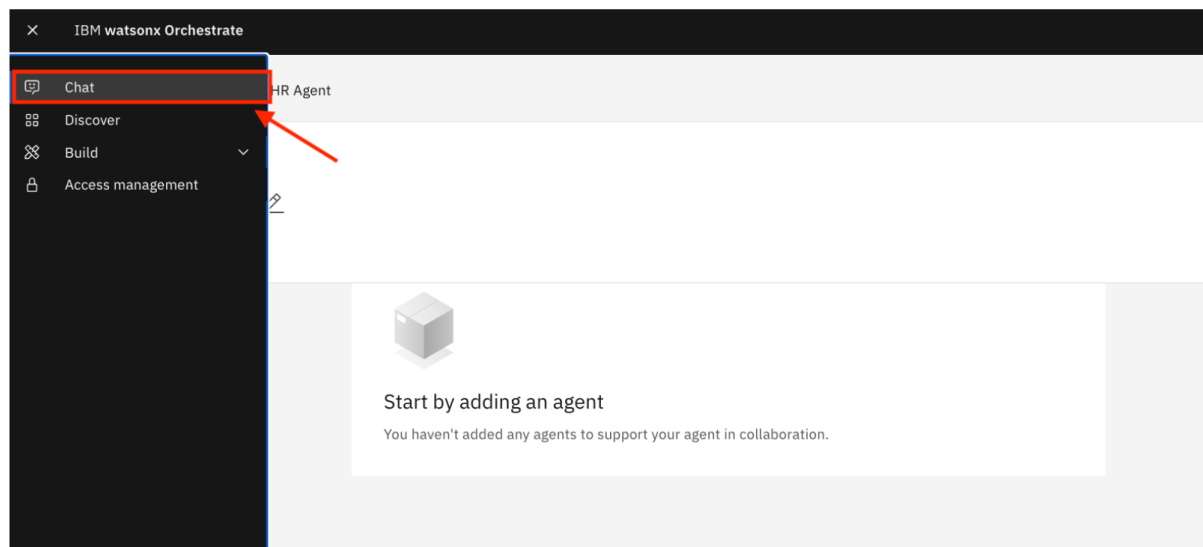




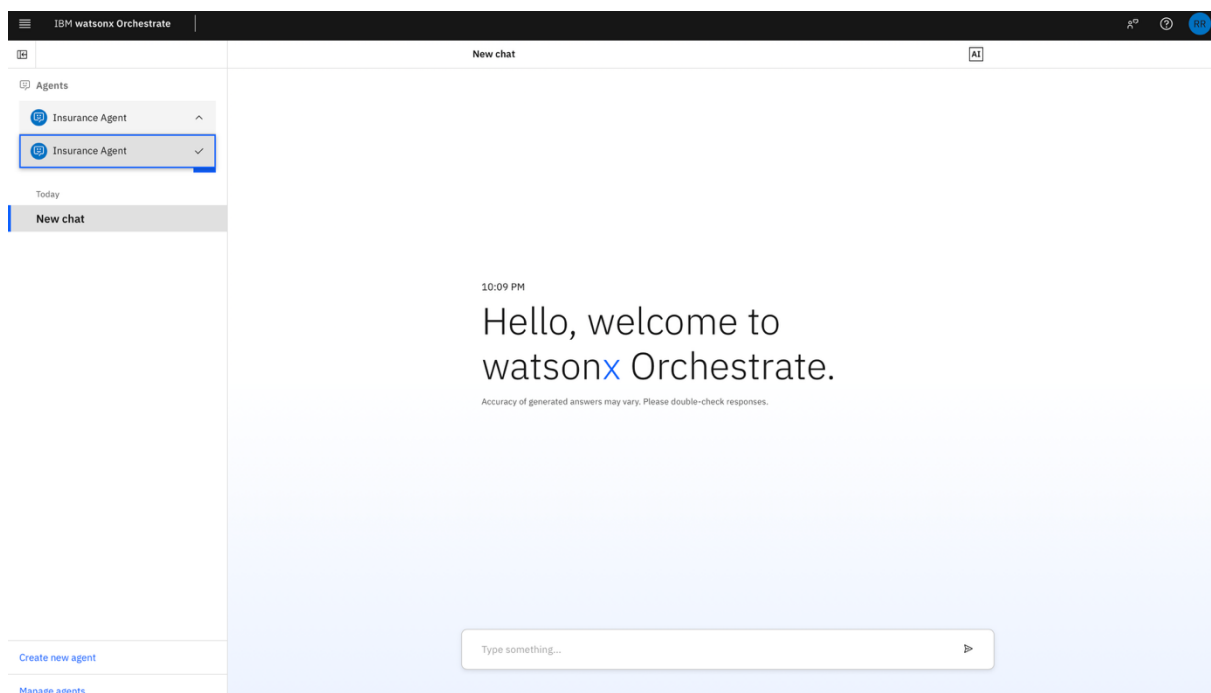
14. Once you have validated the answers, click on **Deploy** in the top right corner to deploy your agent:



15. Click on the hamburger menu in the top left corner and then click on **Chat**:



16. Make sure **Insurance Agent** is selected. You can now test your agent:



That's a wrap on today's learning!