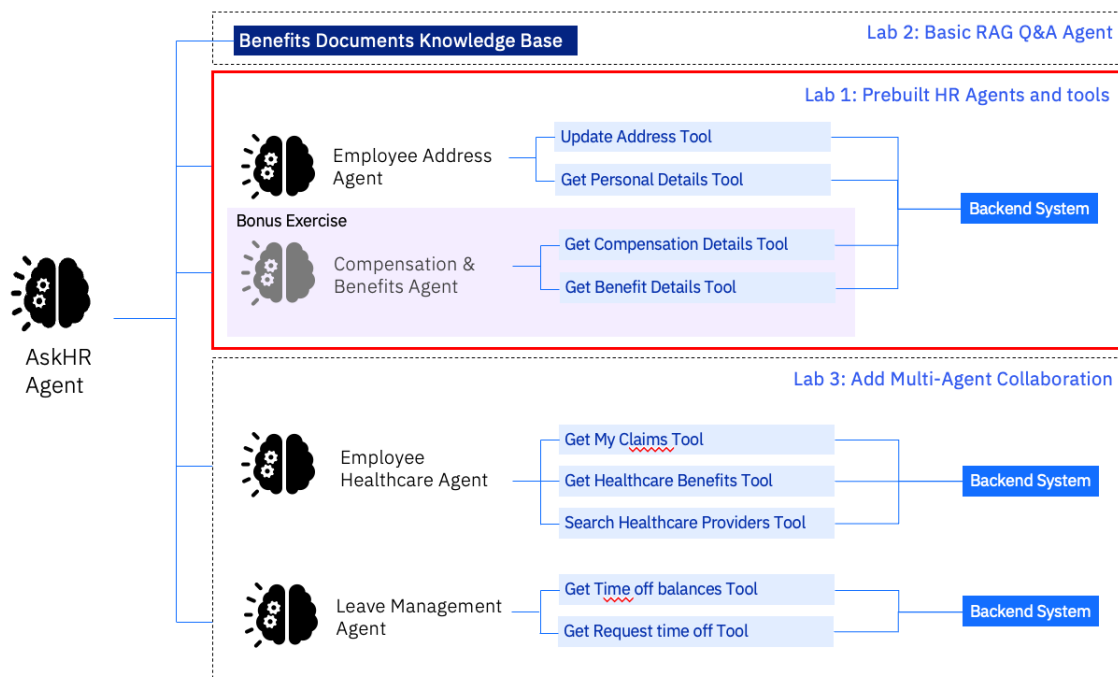


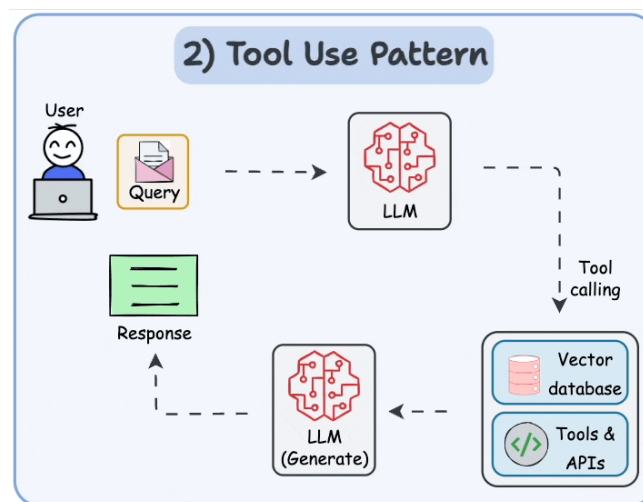
Lab 1: Using Pre-built Agents and Tools

Watsonx Orchestrate offers a catalog of ready-to-use agents and tools for builders. In this lab, we will be exploring HR-related agents and tools that integrate with SAP SuccessFactors.

Lab Architecture



Design Pattern



The agents built in this lab primarily follow the **Tool Use Agentic Design Pattern**. This design pattern enables the AI to go beyond generating answers on its own by knowing when to call external tools, APIs, or databases to retrieve accurate information. This approach enhances response accuracy and relevance, particularly for business scenarios.

For instance, if a user asks, *'What were our Q3 sales numbers?'*, the AI can access the company's sales database, extract the latest data, and present it as a concise summary, such as *'Q3 sales grew by 12% compared to Q2, with the highest growth in North America.'*

In this pattern, the AI functions as an intelligent assistant that not only understands the question but also leverages the right resources to deliver the most reliable answer.

Benefits of Tool-Calling Design Pattern

Dynamic Knowledge & Data

An LLM on its own often has **outdated knowledge** due to being trained on data from several years before the LLM is put into production. With tool-calling we enable it to access data via APIs that is **live, dynamic, and up-to-date**.

Multi-Step Problem Solving

Certain problems require using data from **multiple systems**, or **multiple steps** of reasoning in a dynamic manner. For example, a data analysis agent may need to query data from an SQL database, call different predictive APIs, perform other calculations, etc before returning a response to the user's original query

Go Beyond Linguistic Expertise

LLMs are powerful, but they may not be **domain experts** in many fields. For example, there may be carefully honed **formulas or models** that an organization may want applied to their financial forecasting – the LLM may not be able to do these forecasts or calculations, and so it can **call external tools** to do so