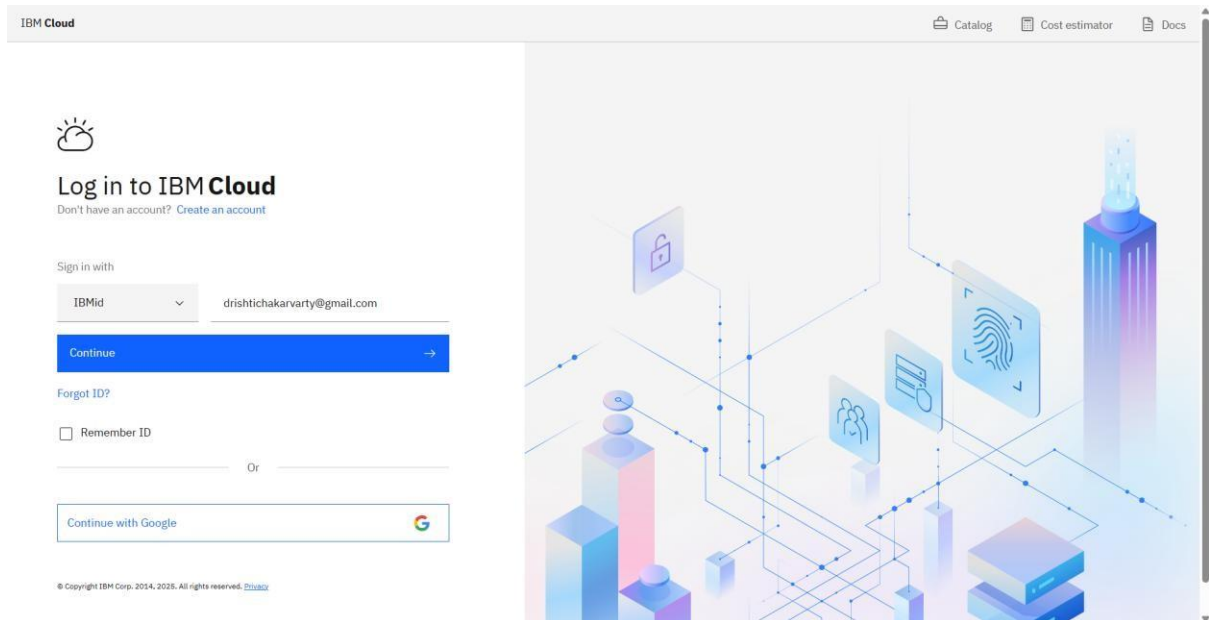


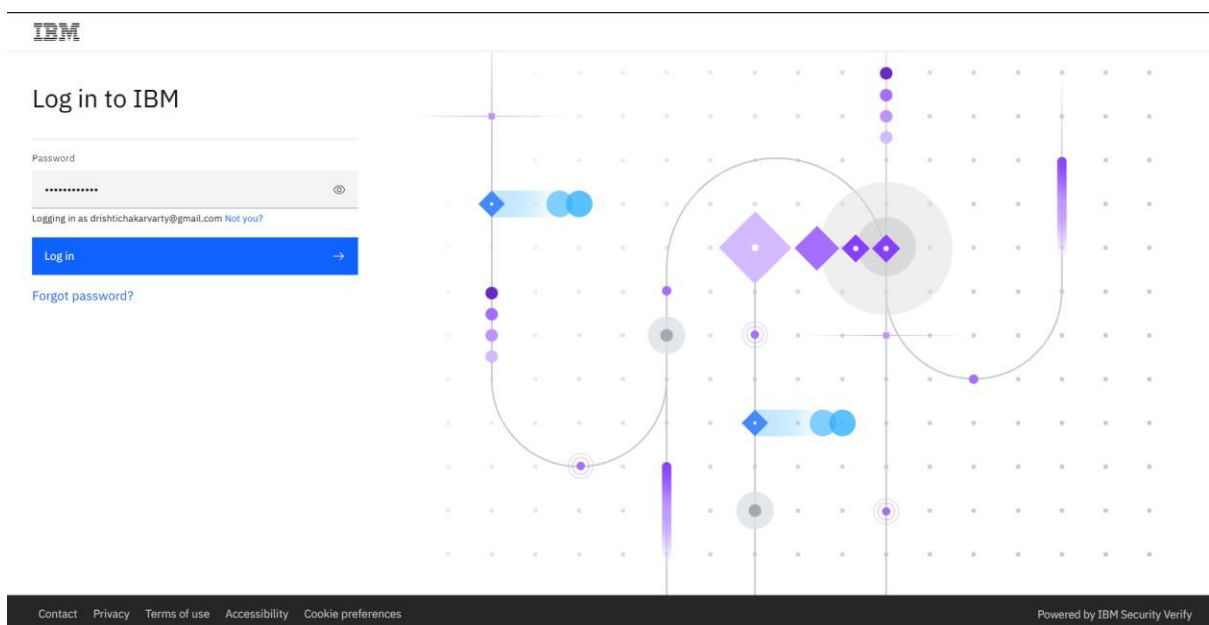
Agentic AI on IBM Cloud

By – Saumitra Purkayastha

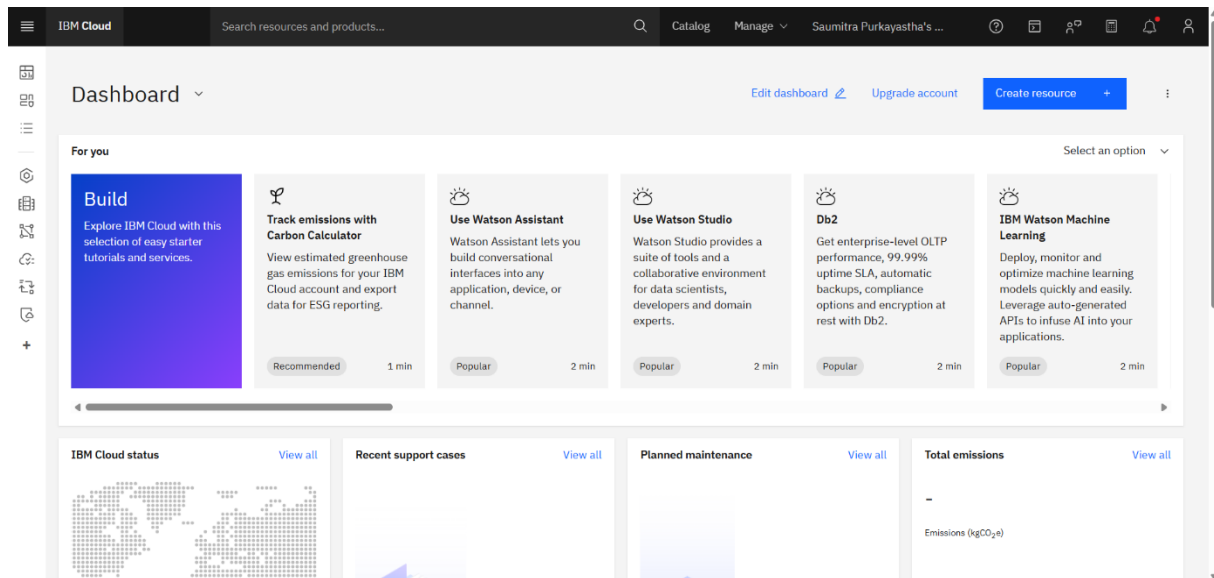
Step1: Open IBM Cloud login page using the link cloud.ibm.com, enter your Gmail and click on Continue.



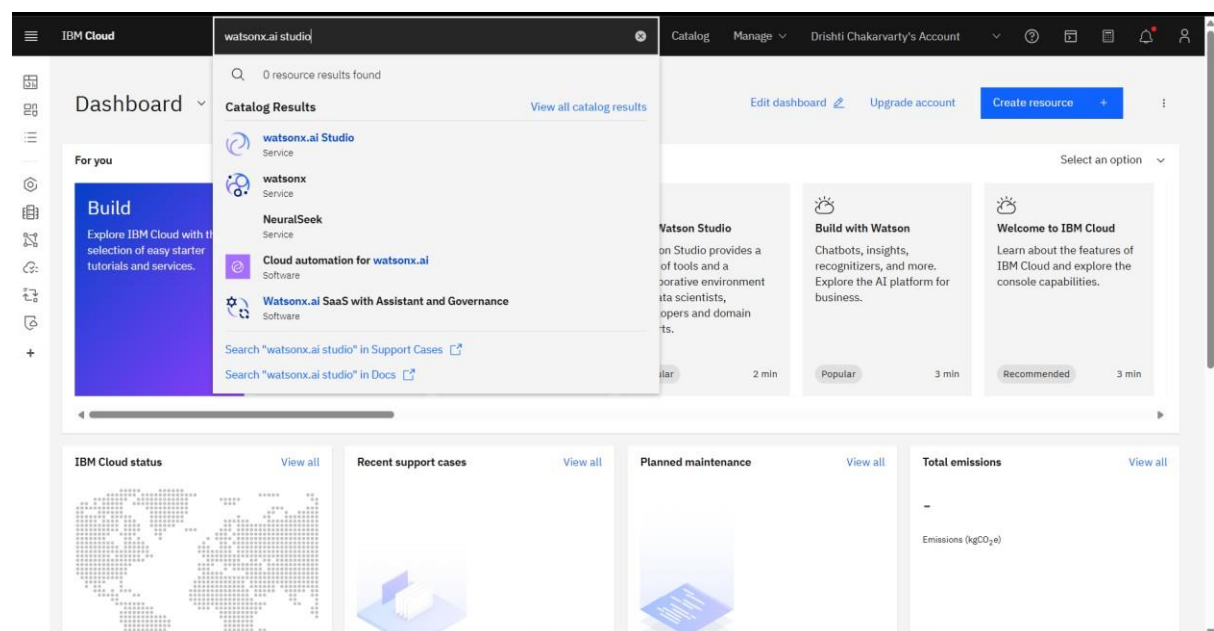
Step2: Enter your password click on login.



Step-3 Dashboard.



Step-4 Now click on the Search bar and write “Watsonx.ai Studio”.



Step-5 Now select region as London and click create

Catalog /

watsonx.ai Studio

(Formerly known as Watson Studio) Develop powerful AI solutions with an integrated collaborative studio and industry-standard APIs and SDKs.

Create About

Type: Service

Provider: IBM

Last updated: 05/06/2025

Category: AI / Machine Learning

Compliance: HIPAA Enabled, IAM-enabled

Location: Sydney (au-syd), Frankfurt (eu-de), London (eu-gb), Tokyo (jp-tok), Dallas (us-south), Toronto (ca-tor)

Related links: [Docs](#)

Select a location

London (eu-gb)

Select a pricing plan

Prices shown are for country or location: [United States](#)

Plan	Features and capabilities	Pricing
Lite	1 authorized user 10 capacity unit-hours monthly limit Environment = # of capacity units required per hour • 1 vCPU + 4 GB RAM = 0.5 • 2 vCPU + 8 GB RAM = 1 • 4 vCPU + 16 GB RAM = 2 • Decision Optimization + Watson NLP = Environment + 5 • Synthetic Data Generator, 2 vCPU + 8 GB RAM = 7 (requires watsonx.ai Runtime)	Free

Summary

watsonx.ai Studio **Free**

Location: London (eu-gb)
Plan: Lite
Service name: watsonx.ai Studio-vr
Resource group: Default

☒ I have read and agree to the following license agreements:
[Terms](#)

Create

[Add to estimate](#)

Step-6 Now click on the Dropdown and then select IBM watsonx.

Resource list /


watsonx.ai Studio-vr

[Add tags](#)

Details Actions

Manage

Plan

 **watsonx.ai Studio in Cloud Pak for Data and watsonx**

Build and deploy machine learning models on either platform.
Work with foundation models on watsonx as a Service.

Launch in

- IBM Cloud Pak for Data
- IBM watsonx

Helpful links

Documentation

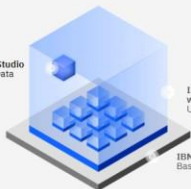
Learn about tools, features, and how to perform a wide variety of Data and AI tasks.

Learning path

Start a step-by-step tutorial to get up and running quickly.

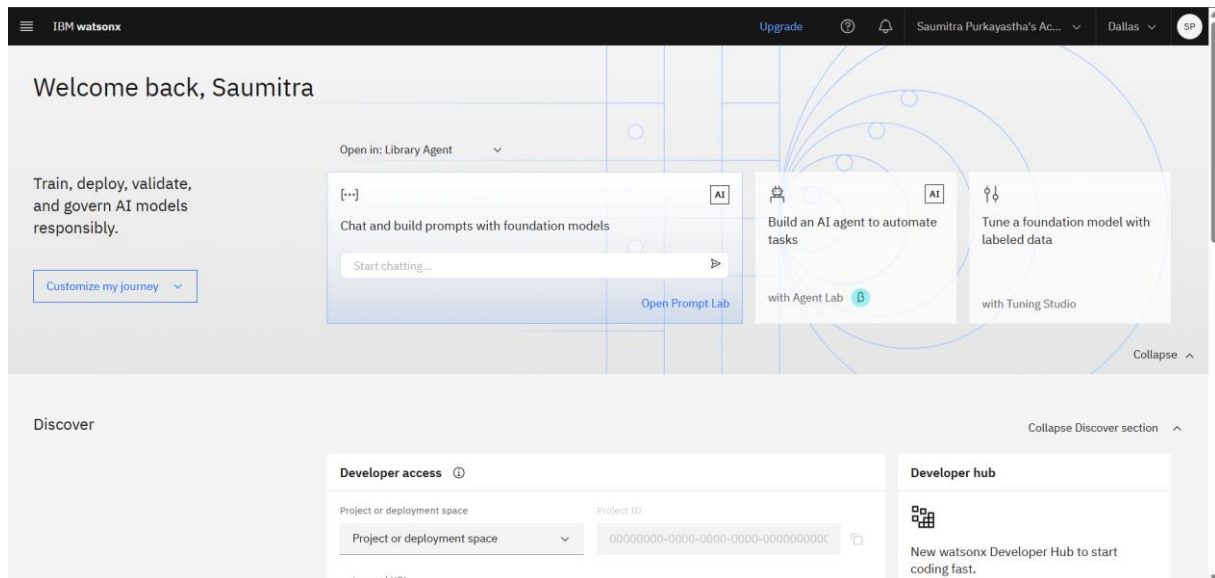
Videos

Watch videos to learn about watsonx.ai Studio.

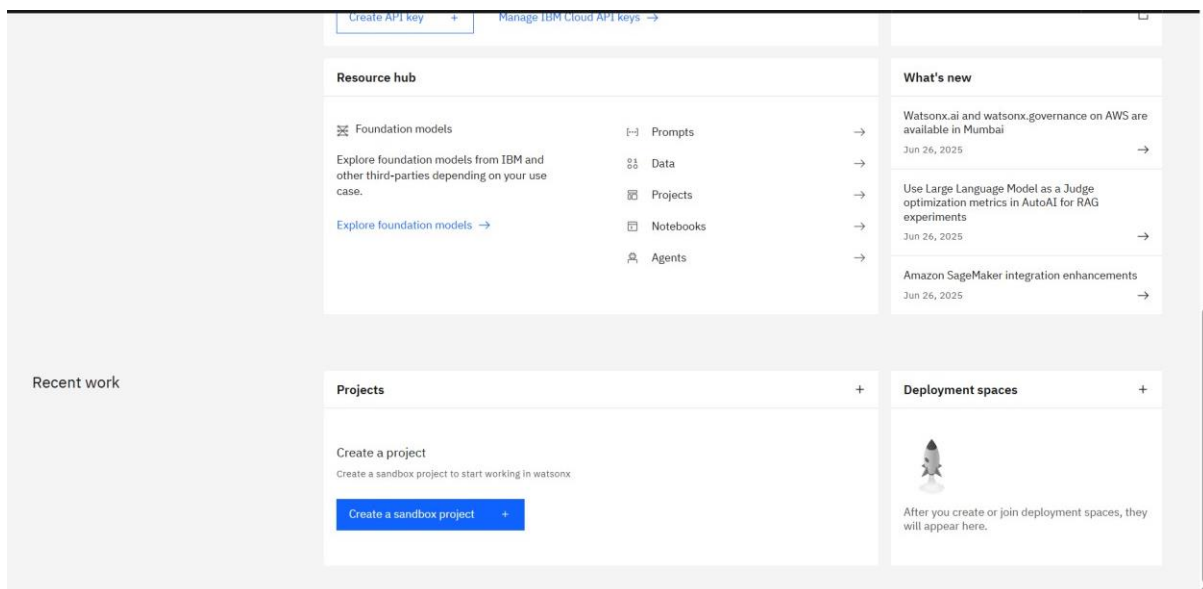


IBM watsonx.ai Studio is part of IBM Cloud Pak for Data and watsonx, and serves as the AI capability of the data fabric architecture.

Step-7 You will be redirected to this interface.



Step-8 Scroll little bit up and then click on Create a Sandbox Project.



Step- 9 Click on create project instead

The screenshot shows the IBM watsonx Resource hub. A red error message is displayed in the top right corner, stating: "Your sandbox project can't be cr... You don't have a watsonx.ai Runtime instance. Create a project instead. Then, open the Prompt Lab. You will be guided through associating a watsonx.ai Runtime instance with your project." The interface includes sections for "Resource hub", "Foundation models", "Data", "Projects", "Notebooks", "Agents", "Recent work", "Projects", and "Deployment spaces". The "Projects" section is highlighted, showing a "Create a project" button.

Step-10 Now give the name to your project and then click on Add to add the storage.


The screenshot shows the "Sample project" form in the IBM watsonx interface. The form is titled "Define details" and includes the following fields:

- Name:** Library_Agent
- Description (optional):** What's the purpose of this project?
- Tags (optional):** Add tags
- Storage:** CloudObjectStorage

The form also includes a "Cancel" button and a "Create" button. A note at the bottom states: "Project includes integration with Cloud Object Storage for storing project assets."

Step-11 Now create the Cloud Object Storage, make sure to select the lite plan and then click on Create.

Services catalog /

 Cloud Object Storage


Author: IBM • Date of last update: Apr 15, 2025 • [Docs](#) • [API Docs](#)

Create

About

Pricing plan

Displayed prices do not include tax. Monthly prices shown are for country or region: United States

Plan	Features	Pricing
One-Rate	One-Rate Plan is a Pay-as-You-Go option with a single, flat monthly rate (\$/GB) that includes storage, API operations, retrieval, and outbound bandwidth—making it ideal for high-activity workloads with frequent access and data transfer, such as analytics, media, and web apps. The plan includes built-in allowances that scale with stored capacity and offers automatic volume discounts as usage grows	
Lite(deprecated)	<div>Lite plan instance is free to use for Storage capacity up to 25 GB per month. Lite plan instance is used for trial, and can be easily upgraded to Standard plan for unlimited scalability and full functionality.</div> <div>None</div> <div>Lite plan services are deleted after 30 days of inactivity.</div>	Free 
Standard	Standard Plan is a flexible Pay-as-You-Go option with no minimum fee—ideal for workloads with large storage needs but low or infrequent access and outbound traffic. It includes a Free Tier with 5GB of Smart Tier storage for 12 months. Charges are based on actual usage, with separate billing for storage, outbound bandwidth, API operations, and data retrieval. Multiple storage classes help you optimize	

Summary

Cloud Object Storage

Region: Global

Plan: Lite(deprecated)

Service name: Cloud Object Storage-ty

Resource group: Default

Create

View terms


Cancel


Step-12 Now click on Refresh.

Create a project

Start with a new, blank project or select from where to import an existing project.

+ New

 Local file

 Sample

Tags (optional)

Add tags

Add tags to make projects easier to find. To add tags, separate them with commas and press Enter.

Define storage

① Select storage service

Add

Add an object storage instance, and then return to this page and click Refresh.

② Refresh

Project includes integration with [Cloud Object Storage](#) for storing project assets.

Advanced settings

Cancel

Create

Step-13 Now click on Create. Your project has been successfully created

IBM watsonx

Upgrade ⓘ 🔔

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Sample project

Library_Agent

Description (optional)
What's the purpose of this project?

Tags (optional)
Add tags
Add tags to make projects easier to find. To add tags, separate them with commas and press Enter.

Storage
CloudObjectStorage
Project includes integration with [Cloud Object Storage](#) for storing project assets.

Advanced settings

Cancel

Back

Create

Step-14 Now click on Manage at the top

IBM watsonx

Upgrade ⓘ 🔔

Saumitra Purkayastha's Acc... Dallas SP

Projects / Library Agent

Overview

Assets

Deployments

Jobs

Manage

Start working

Recommended

+

Add users as collaborators

→

+

Add data to work with

→

[-]

Chat and build prompts with foundation models

→

↑↓

Tune a foundation model with labeled data

→


View all

Collapse

Jump back in

By all

Assets that you create with tools show here. See all assets, including data assets, on the Assets page.



View all

Resource usage

For this month in this project

0 CUH

20188 Tokens

0 Hosting hours

Your documentation New!

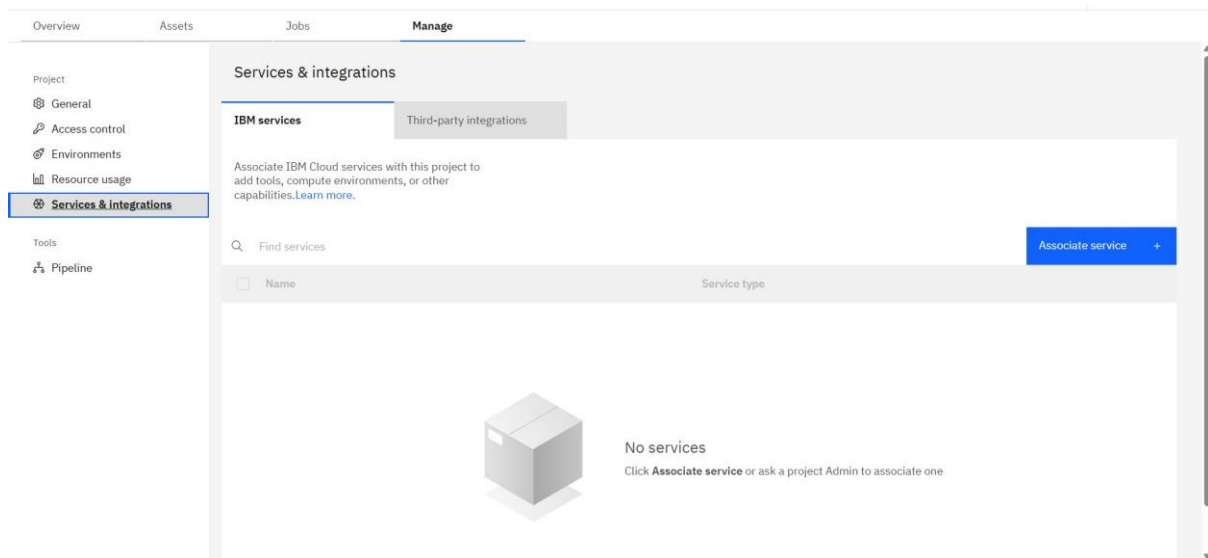
Get started with your documentation

You can create and manage documents about work that you do in this project.

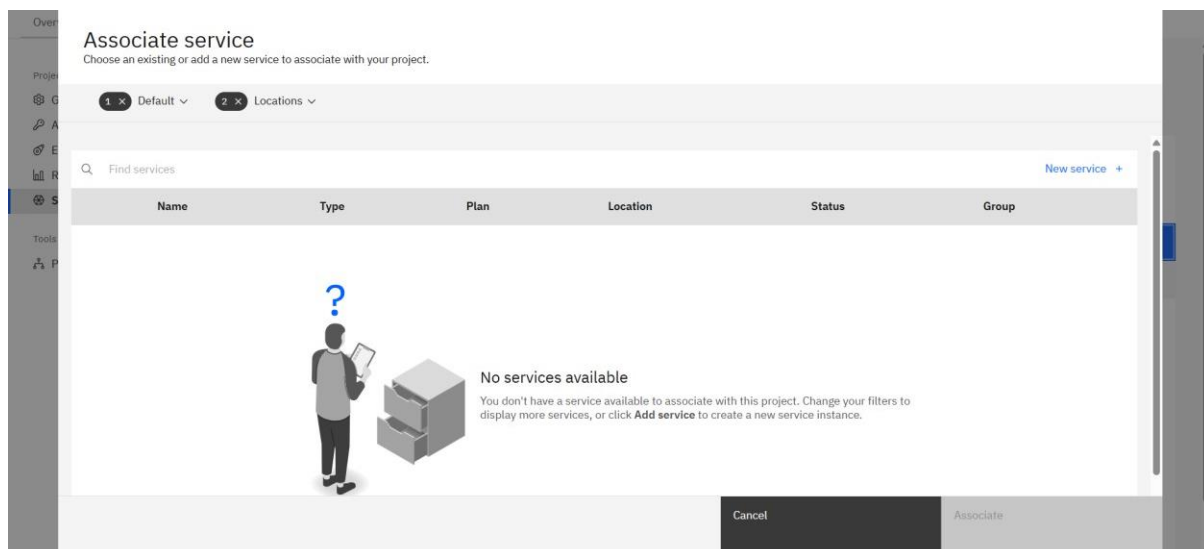
Open Documentation editor →

Project history

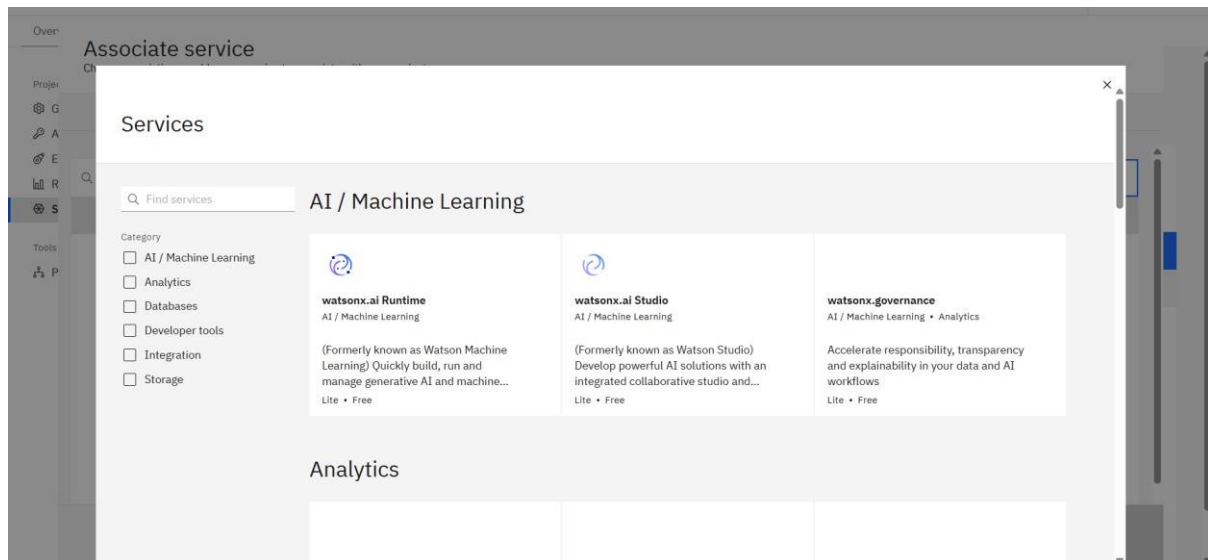
Step-15 Click on Services & Integrations and then click on Associate Service.



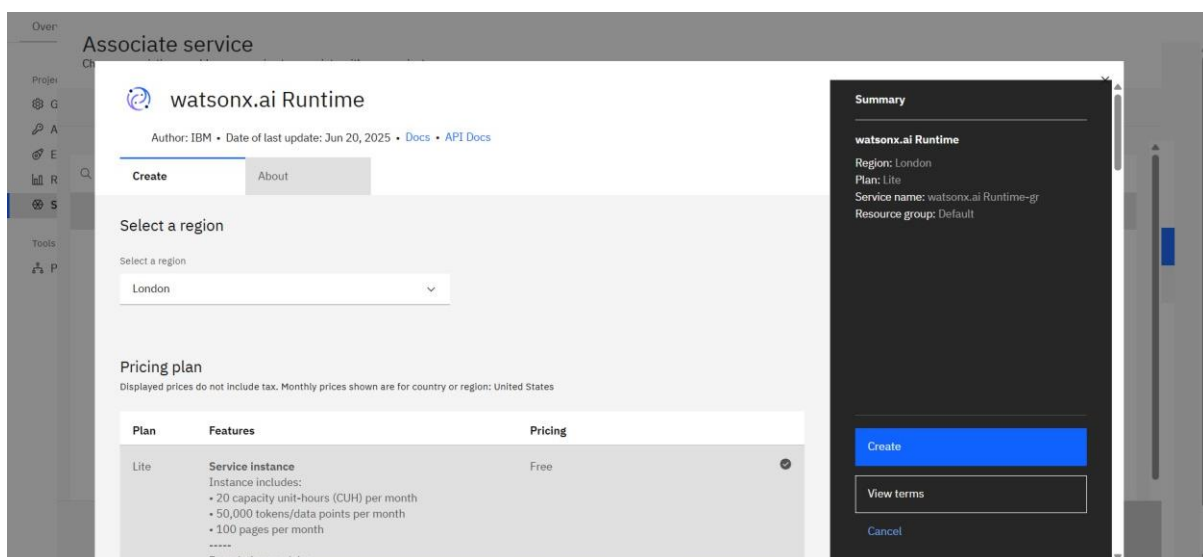
Step-16 Now click on New Service.



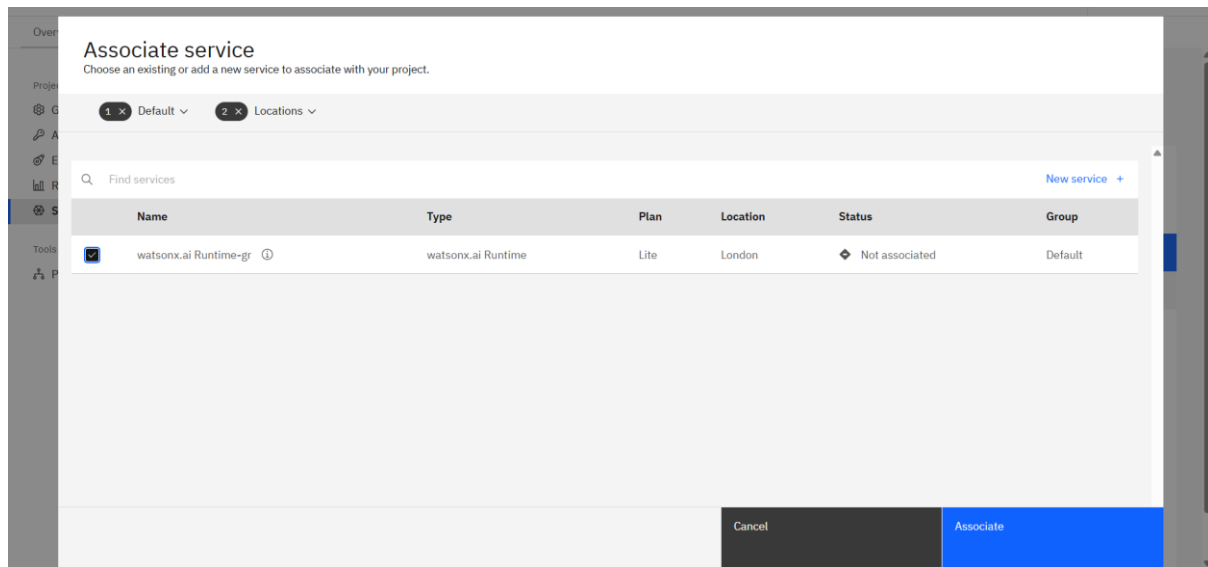
Step-17 Now select the watsonx.ai Runtime.



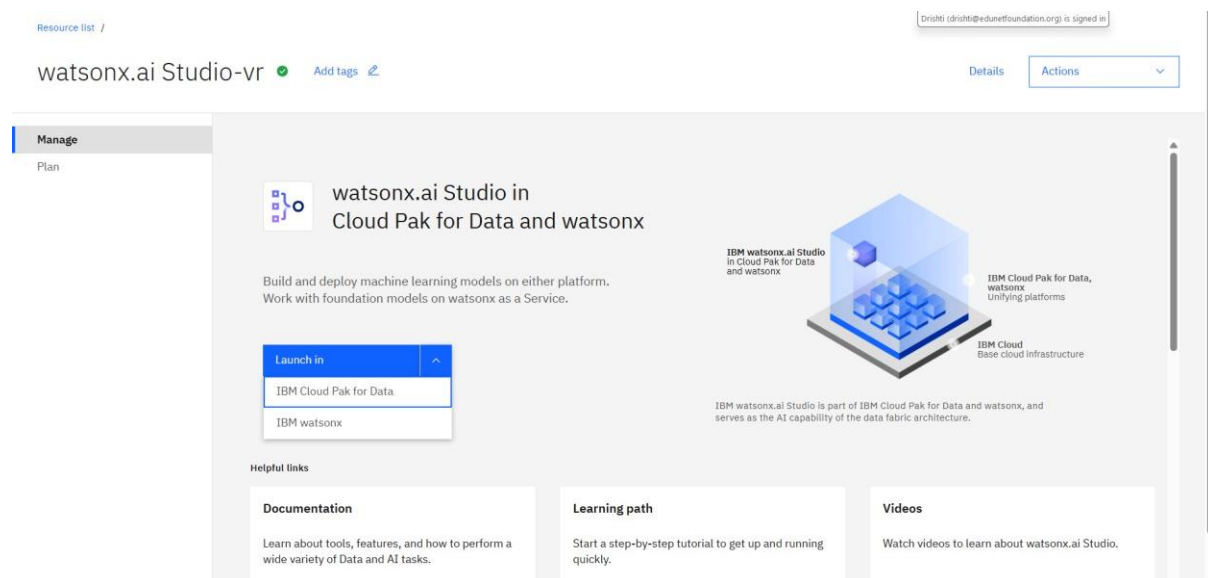
Step-18 Click on Create.



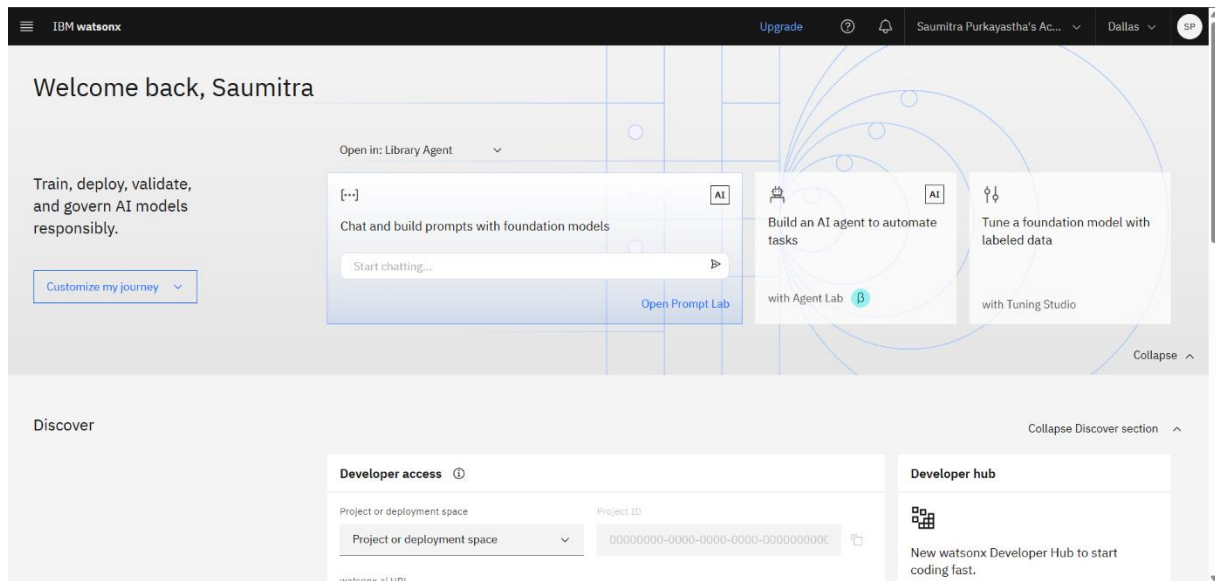
Step-19 Select created runtime service and then click Associate



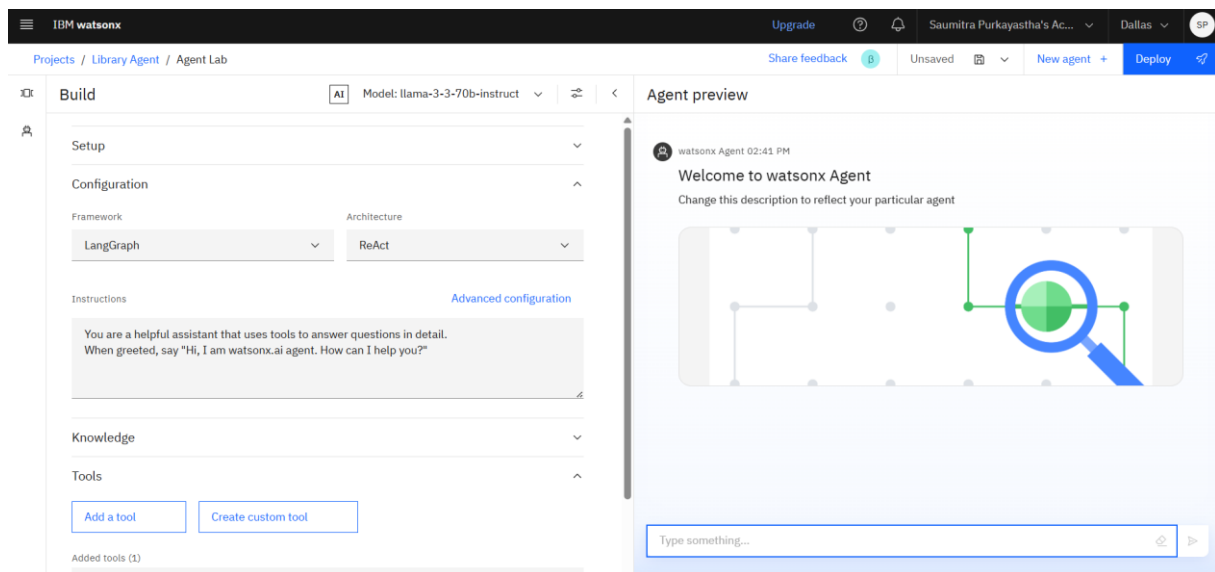
Step-20 Now again go back to the previous tab and again click on IBM watsonx.



Step-21 Now click on Build AI agent to automate tasks

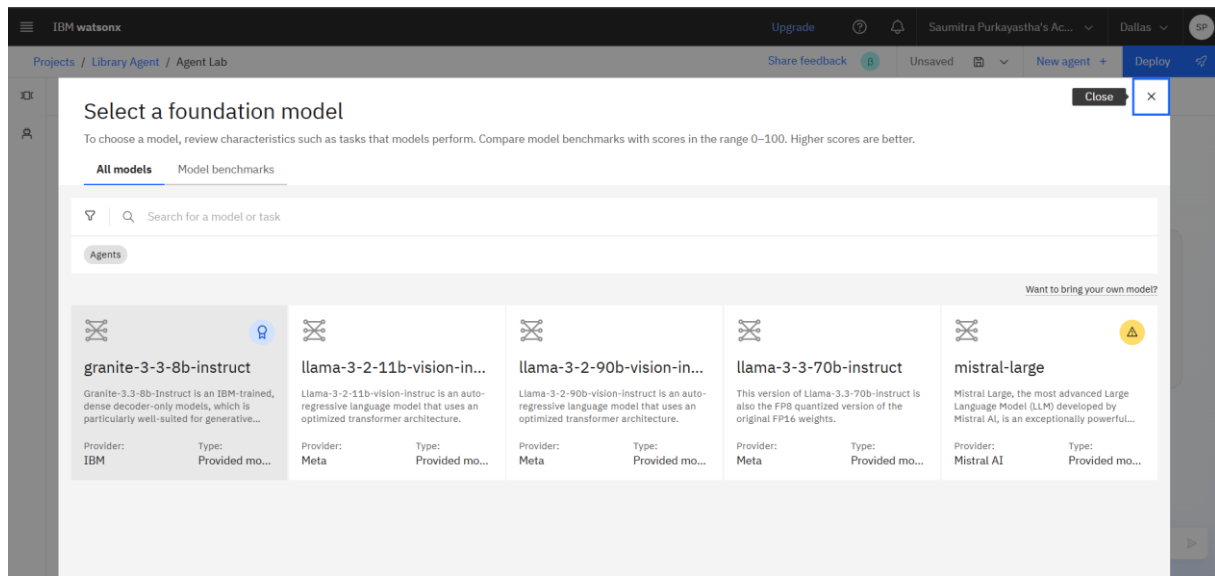


Step-22 This is Watsonx Agent , now change the model here to granite

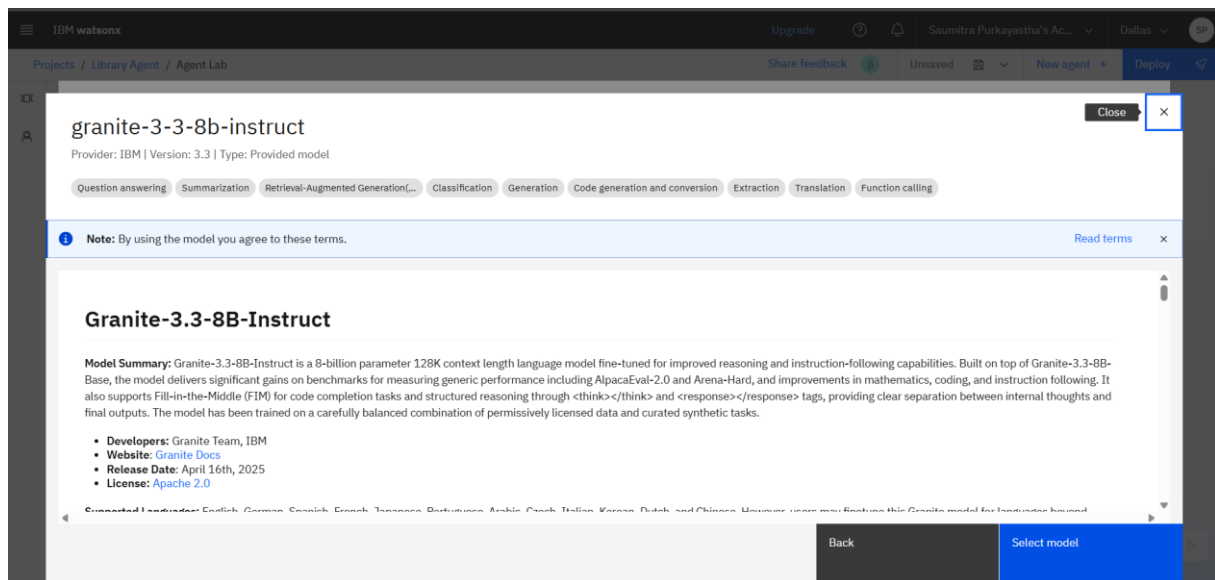


Step-23 Click on “ View all foundation models” to change the model.

Step-24 Now select granite-3-3-8b-instruct



Step-25 Now click on Select model .



Step-26 Now you can ask questions

The screenshot shows the IBM watsonx Agent Lab interface. The top navigation bar includes 'Upgrade', 'Drishti Chakarvarty's Account', 'London', and 'DC'. The breadcrumb trail is 'Projects / Agentic_AI / Agent Lab'. The 'Build' tab is active, showing the 'Model: mistral-large'. The 'Instructions' section contains the text: 'You are a helpful assistant that uses tools to answer questions in detail. When greeted, say "Hi, I am watsonx.ai agent. How can I help you?"'. The 'Knowledge' section shows a 'Vector Index' with the document 'Introduction to Retrieval Augmented Generation'. The 'Tools' section has buttons for 'Add a tool' and 'Create custom tool'. Below, the 'Added tools (1)' section shows 'Document search - Introduction to Retrieval Augmented Generation' with the description 'Search documents with vector indexes.'.

The 'Agent preview' chat on the right shows a conversation:

- You: 05:36 PM: Which document do you have?
- Research Agent 05:36 PM: I have the document "Introduction to Retrieval Augmented Generation".
► How did I get this answer?
- You: 05:36 PM: Summarize this document
- Research Agent 05:36 PM: Hi, I am watsonx.ai agent. How can I help you?

The agent's response to the summary request is: 'The document "Introduction to Retrieval Augmented Generation" provides an overview of the Retrieval Augmented Generation (RAG) workflow, which is a structured process for generating high-quality responses to user queries. The workflow consists of five key steps: 1. **Prompt Creation:** The user submits a query, which triggers the RAG system to capture the input and determine the intent and scope of the query. 2. **Information Search:** The RAG system searches external knowledge sources such as research papers, books, company databases, APIs, and web articles to gather the most recent and relevant information. 3. **Information Retrieval:** The system filters and extracts the most relevant and credible information...'

Step-27 Click on Add a tool.

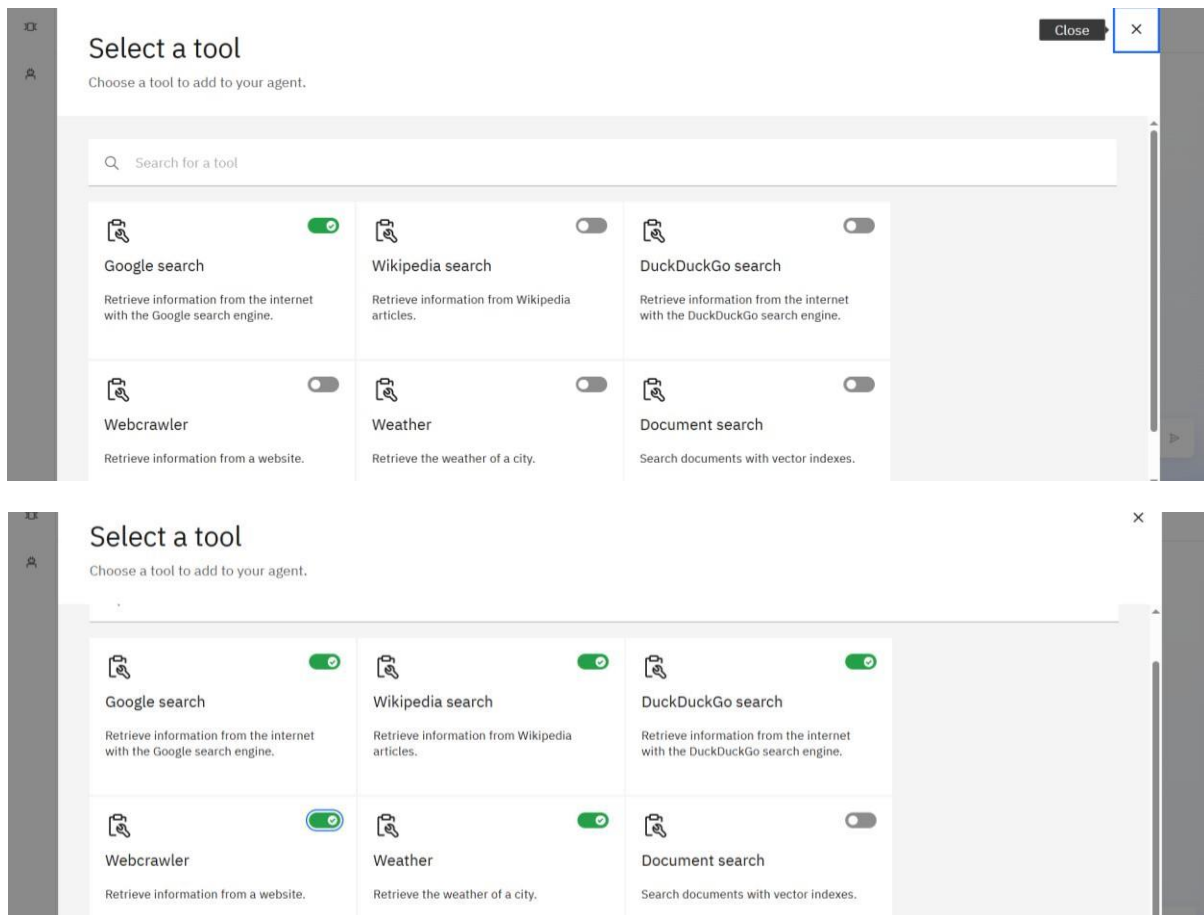
The screenshot shows the IBM watsonx Agent Lab interface. The top navigation bar includes 'Share feedback', 'Unsaved', 'New agent +', and 'Deploy'. The breadcrumb trail is 'Projects / Library Agent / Agent Lab'. The 'Build' tab is active, showing the 'Model: granite-3-3-8b-instruct'. The 'Framework' is set to 'LangGraph' and the 'Architecture' is 'ReAct'. The 'Instructions' section contains the text: 'You are a helpful assistant that uses tools to answer questions in detail. When greeted, say "Hi, I am watsonx.ai agent. How can I help you?"'. The 'Knowledge' section is empty. The 'Tools' section has buttons for 'Add a tool' and 'Create custom tool'. Below, the 'Added tools (1)' section shows 'Google search' with the description 'Retrieve information from the Internet with the Google search engine.'.

The 'Agent preview' chat on the right shows a conversation:

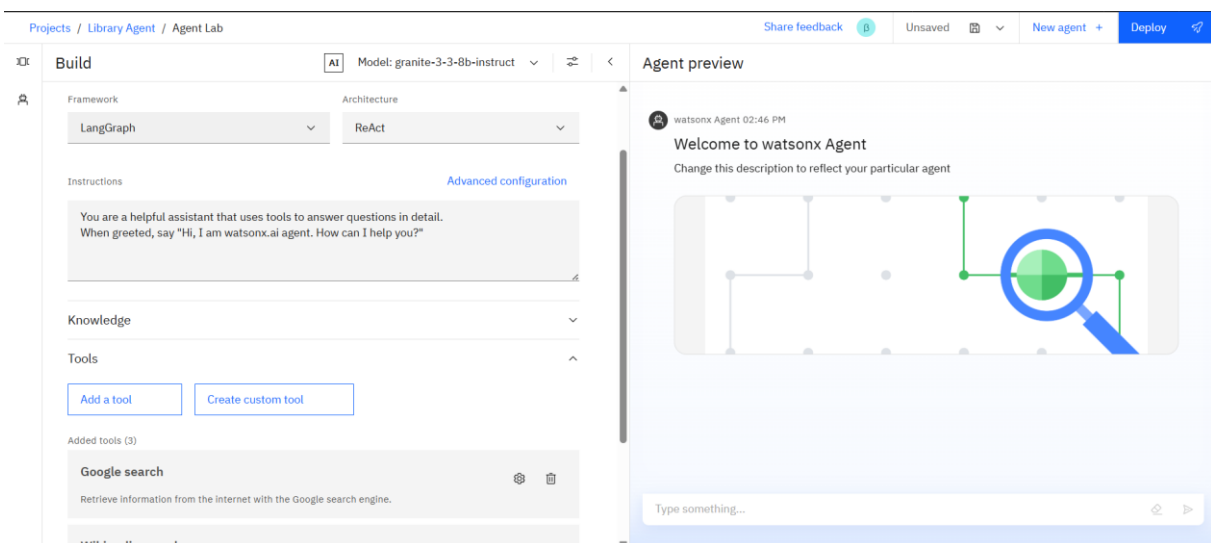
- watsonx Agent 02:46 PM: Welcome to watsonx Agent
Change this description to reflect your particular agent

The chat area displays a diagram of a workflow with nodes and a magnifying glass icon over one of the nodes.

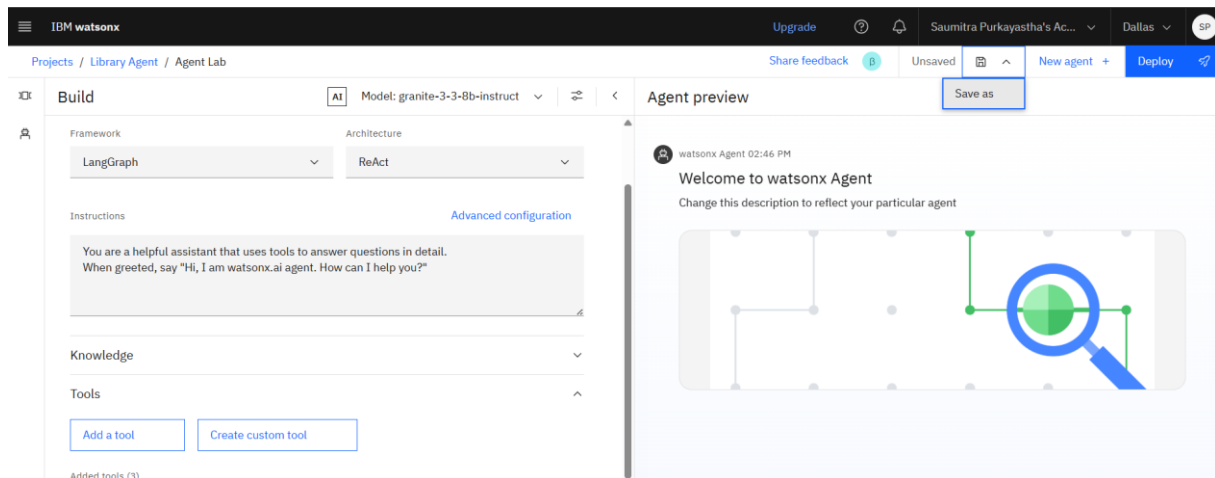
Step-28 Enable the tools (Shown in picture)



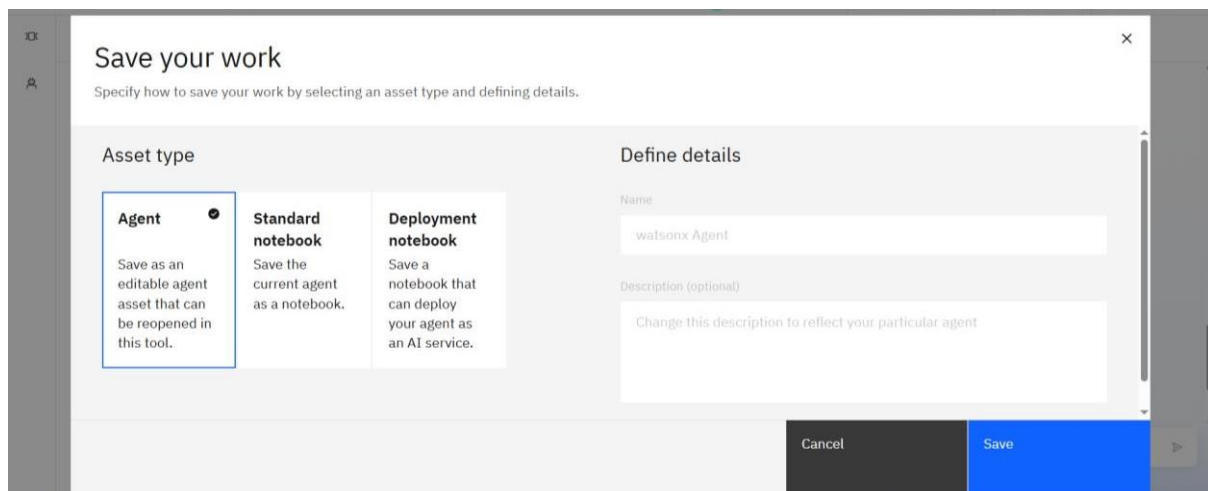
Step-29 Ask questions to make sure its working



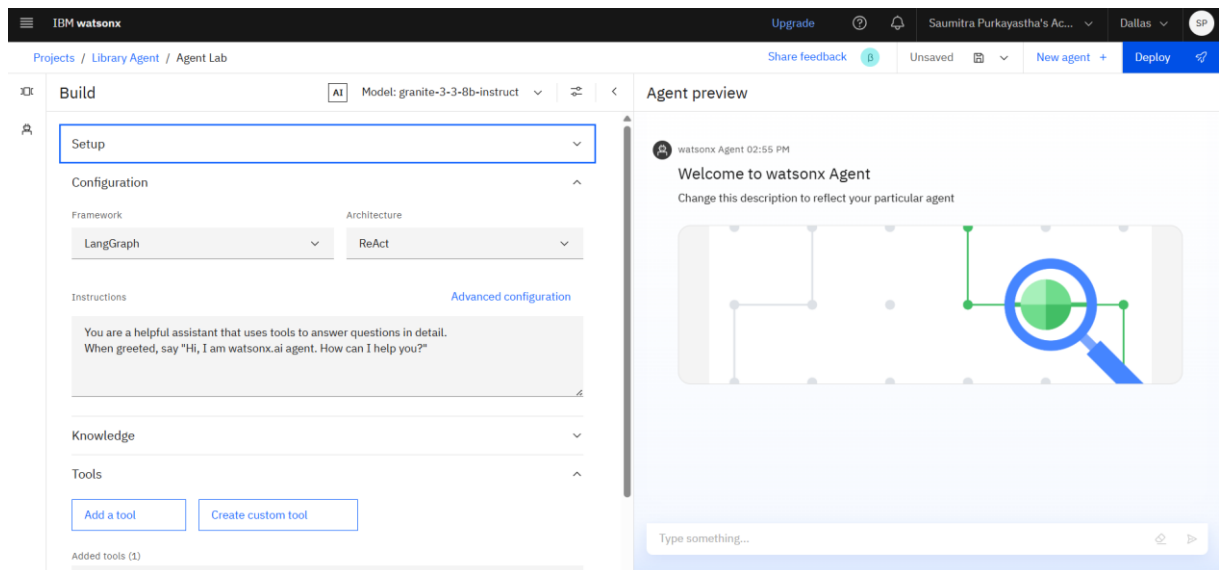
Step-30 Click on Save as icon .



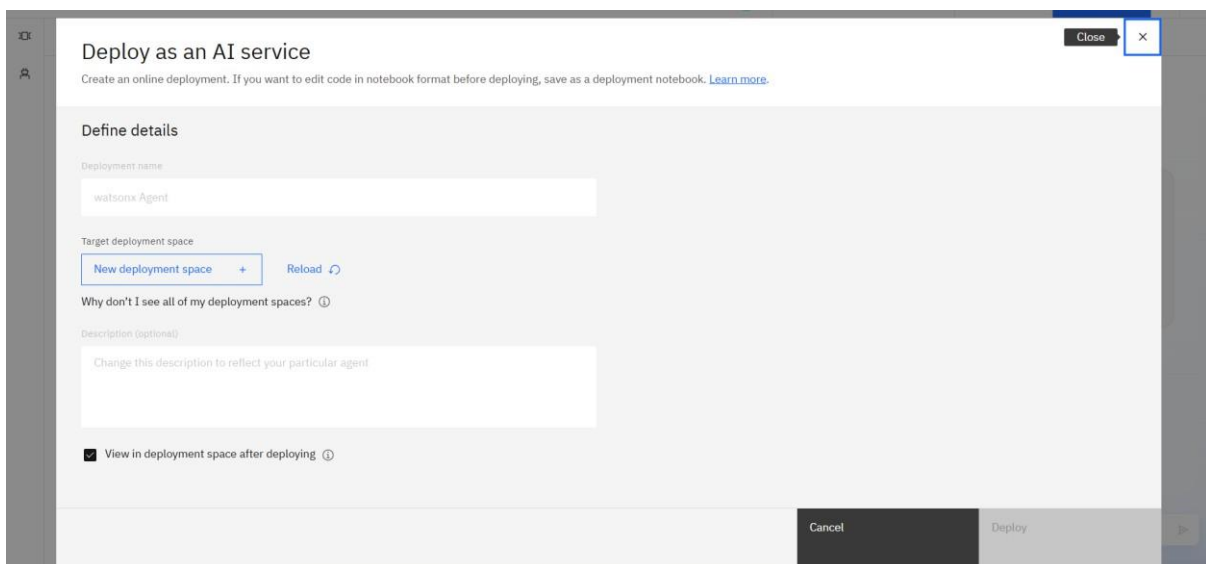
Step-31 Save your work, choose Agent , click on save



Step-32 Once you get required output from agent click on Deploy at the top right



Step-33 Now click on New Deployment Space.



Step-34 Now give the name to your deployment space and then click on Create.

Create a deployment space

Use a space to collect assets in one place to create, run, and manage deployments

The screenshot shows a web interface for creating a deployment space. On the left is a sidebar with a '+ New' button and a 'Local file' option. The main area is titled 'Define details' and contains several input fields: 'Name' (with 'Deployment' entered), 'Description (Optional)' (with a placeholder 'What's the purpose of this space?' and a 0/100 character count), 'Deployment stage' (a dropdown menu with 'Development' selected), and 'Tags (optional)' (a dropdown menu with 'Find or create tags' selected). Below these fields is a 'Storage' section. At the bottom right of the form are two buttons: 'Cancel' and 'Create'.

Step-35 You will get popup similar to this

This screenshot shows the same 'Create a deployment space' form as in Step 34, but with a modal popup displayed in the center. The popup is titled 'The space is ready' and contains the text: 'Click **View new space** to view the space and associated assets.' Below this, it shows a green checkmark and the text 'Step 1 of 1. Creating deployment space.' A blue button labeled 'View new space' is positioned at the bottom right of the popup. The background form is dimmed. At the bottom right of the main form, the 'Cancel' button is now disabled (grayed out), and a 'Creation successful' status indicator is visible.

Step-36 Go back to the Deployment space and the click on Reload.

The screenshot shows the 'Deploy as an AI service' dialog in the IBM watsonx interface. The dialog has a title bar with a close button (X). Below the title bar, there is a subtitle 'Deploy as an AI service' and a hint: 'Create an online deployment. If you want to edit code in notebook format before deploying, save as a deployment notebook. [Learn more.](#)'. The main section is titled 'Define details' and contains several fields: 'Deployment name' with the value 'watsonx Agent', 'Target deployment space' with a dropdown menu showing 'Deployment', and a 'Description (optional)' field with the placeholder text 'Change this description to reflect your particular agent'. There is also a checkbox labeled 'View in deployment space after deploying' which is checked. At the bottom right, there are two buttons: 'Cancel' and 'Deploy'. The 'Reload' button is highlighted in blue.

Step-37 Now click on Deploy

This screenshot is identical to the previous one, showing the 'Deploy as an AI service' dialog. The 'Target deployment space' dropdown is now set to 'Deployment'. The 'Deploy' button at the bottom right is highlighted in blue, indicating it is the next step in the process.

Step-38 Click on View Status.

The screenshot shows the 'Build' interface for a watsonx Agent. The left sidebar contains sections for Setup, Configuration, Instructions, Knowledge, and Tools. The Configuration section is expanded, showing Framework (LangGraph) and Architecture (ReAct). The Instructions section contains a text box with the instruction: 'You are a helpful assistant that uses tools to answer questions in detail. When greeted, say "Hi, I am watsonx.ai agent. How can I help you?"'. The Tools section shows 'Added tools (1)' with 'Google search' listed. The right pane shows the 'Agent preview' with a welcome message and a diagram of the agent's workflow. A notification banner at the top right states 'Deployment has started' with a 'View status' link.

Step-39 You will see that your agent is getting deployed

The screenshot shows the 'Deployment spaces' interface. The 'Deployments' tab is selected, displaying a table with the following data:

Name	Type	Status	Asset	Asset type	Tags	Last modified
watsonx Agent	Online	Initializing	watsonx Agent	AI service	wx-agent	24 seconds ago Drishti Chakarvarty (You)

The interface also includes a search bar, a table with columns for Name, Type, Status, Asset, Asset type, Tags, and Last modified, and a footer showing 'Items per page: 20' and '1-1 of 1 items'.

Step-40 You can see that your agent is successfully deployed, now click on watsonx Agent.

Deployment spaces /

Deployment

Overview Assets **Deployments** Jobs Manage

Search

Name	Type	Status	Asset	Asset type	Tags	Last modified
Watsonx Agent	Online	Deployed	watsonx Agent	AI service	wx-agent	1 minute ago Drishti Chakarvarty (You)

Items per page: 20 1-1 of 1 items 1 of 1 pages

Step-41 You can see the API references for your Deployed agent

IBM watsonx Upgrade ? Saumitra Purkayastha's Ac... Dallas SP

Deployment spaces / Library Agent / watsonx Agent /

watsonx Agent Deployed Online

API reference Test Evaluations Preview

Endpoints for inferencing ⓘ

Private endpoint

https://us-south.ml.cloud.ibm.com/ml/v4/deployments/da827463-382e-4e55-86e5-7776e9b8ec8b/a1_service?version=2021-05-01

https://us-south.ml.cloud.ibm.com/ml/v4/deployments/da827463-382e-4e55-86e5-7776e9b8ec8b/a1_service_stream?version=2021-05-01

Public endpoint

https://us-south.ml.cloud.ibm.com/ml/v4/deployments/da827463-382e-4e55-86e5-7776e9b8ec8b/a1_service?version=2021-05-01

https://us-south.ml.cloud.ibm.com/ml/v4/deployments/da827463-382e-4e55-86e5-7776e9b8ec8b/a1_service_stream?version=2021-05-01

Learn more about the 2021-05-01 version query parameter

Code snippets

cURL Java JavaScript Python Scala

Bearer <token> ⓘ

IAM

Step-42 Now you can click on Preview and ask questions to your agent

IBM watsonx

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[Deployment spaces](#) / [Library Agent](#) / [watsonx Agent](#) /

watsonx Agent Deployed Online

[API reference](#) [Test](#) [Evaluations](#) [Preview](#)

New chat +

 watsonx Agent 02:51 PM

Welcome to watsonx Agent
Change this description to reflect your particular agent

