

Deploy & Monitor LLM apps with Azure AI Studio

Azure AI Studio supports deploying large language models (LLMs), flows, and web apps. Deploying an LLM or flow makes it available for use in a website, an application, or other production environments. This typically involves hosting the model on a server or in the cloud, and creating an API or other interface for users to interact with the model.

You often hear this interaction with a model referred to as "inferencing". Inferencing is the process of applying new input data to a model to generate outputs. Inferencing can be used in various applications. For example, a chat completion model can be used to autocomplete words or phrases that a person is typing in real-time. A chat model can be used to generate a response to "can you create an itinerary for a single day visit in Seattle?".

Introduction

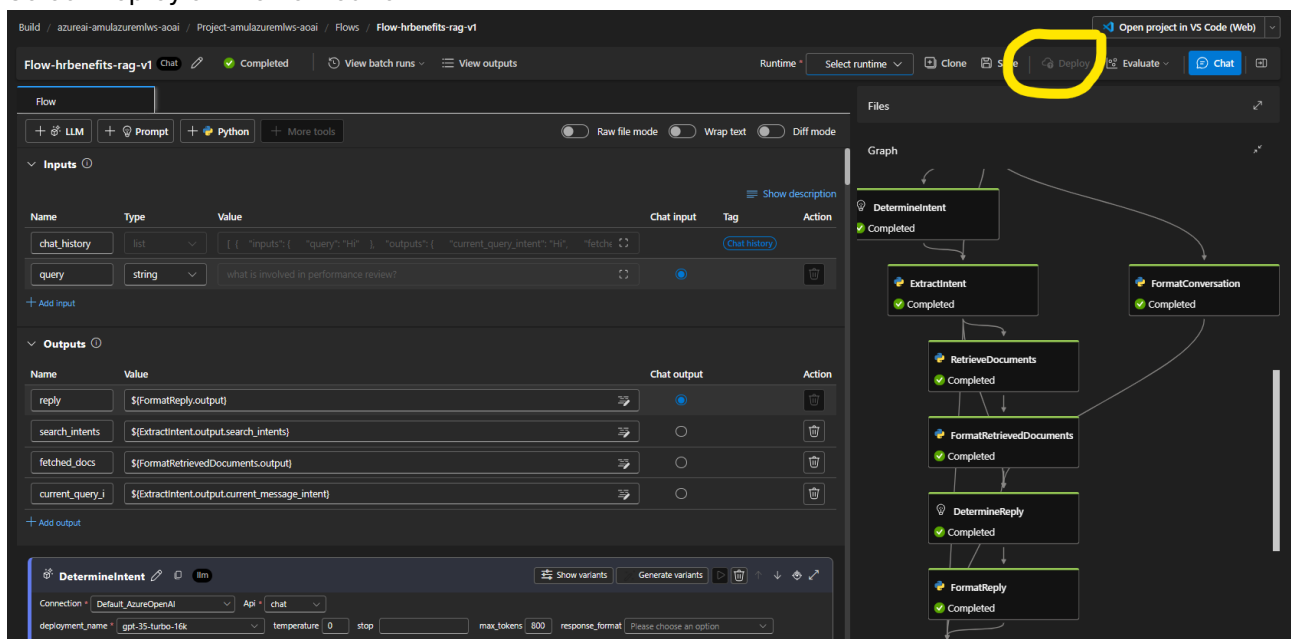
After you build a prompt flow and test it properly, you might want to deploy it as an online endpoint. Deployments are hosted within an endpoint, and can receive data from clients and send responses back in real-time. You can invoke the endpoint for real-time inference for chat, copilot, or another generative AI application. Prompt flow supports endpoint deployment from a flow, or from a bulk test run.

Follow steps below to deploy a flow for real-time inference. Source: [Deploy a flow as a managed online endpoint for real-time inference - Azure AI Studio | Microsoft Learn](#)

- Test your flow and get it ready for deployment.
- Create an online deployment.
- Grant permissions to the endpoint.
- Test the endpoint.
- Consume the endpoint.

Create an online deployment

1. Have a prompt flow ready for deployment. We will use the RAG flow created in previous labs.
2. Select Deploy on the flow editor.



- Provide the requested information on the Basic Settings page in the deployment wizard.

Deploy From Playground

Basic settings

Deploy your flow to a managed online endpoint for real-time inference. [Learn more](#)

Endpoint

☒ New ☐ Existing

Endpoint name *

Deployment name *

Virtual machine *

Instance count *

Inferencing data collection (preview) ☒ Enabled

Application Insights diagnostics ☒ Enabled

[Review + Create](#) [Back](#) [Next](#) [Cancel](#)

- Select Review + Create to review the settings and create the deployment. Otherwise you can select Next to proceed to the advanced settings pages.

- Select Create to deploy the prompt flow.

Deploy Flow-hrbenefits-rag-v1

Review the deployment settings

Basic settings

Endpoint name
flow-hrbenefits-ragv1

Deployment Name
flow-hrbenefits-ragv1-1

Virtual machine
Standard_DS2_v2

Instance count
1

Inferencing data collection (preview)
Enabled

Application Insights diagnostics
Enabled

Endpoint

Authentication type
Key

Description
--

Identity type
system

Enforce access to connection secrets (preview)
Enabled

Endpoint tags
☐ No tags

Deployment

Tags
☐ No tags

Environment
Use environment of current flow definition

Outputs

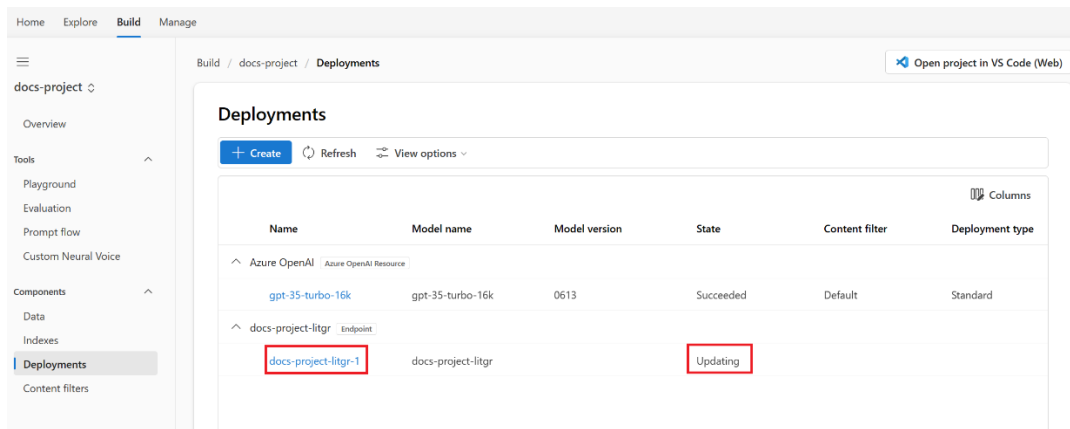
Output name	Type
reply	string
search_intents	string
fetched_docs	string
current_query_intent	string

Connection

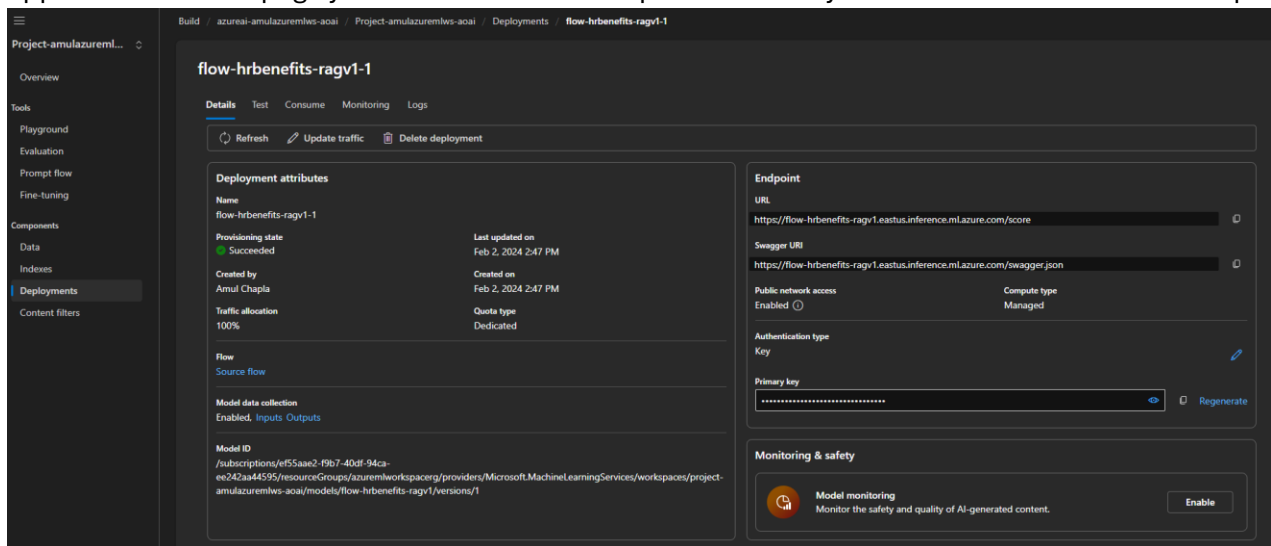
Node name	Provider	Connection	Deployment name / Model
DetermineIntent	AzureOpenAI	Default_AzureOpenAI	gpt-35-turbo-16k
DetermineReply	AzureOpenAI	Default_AzureOpenAI	gpt-35-turbo-16k
RetrieveDocuments	AzureOpenAI	Default_AzureOpenAI	
RetrieveDocuments	CognitiveSearch	AzureAISearch	

[Create](#) [Back](#) [Cancel](#)

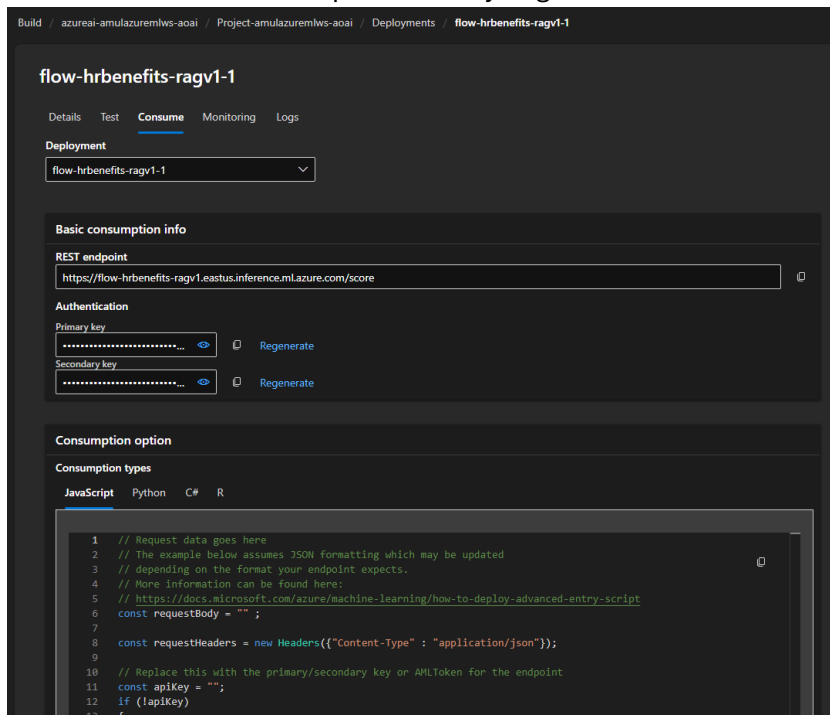
- To view the status of your deployment, select Deployments from the left navigation. Once the deployment is created successfully, you can select the deployment to view the details.



7. Select the Consume tab to see code samples that can be used to consume the deployed model in your application. On this page you can also see the endpoint URL that you can use to consume the endpoint.



8. You can use the REST endpoint directly or get started with one of the samples shown here.



9. Plug-in API key and consume the LLM app REST API.

```
Promptflow-Client-hrbenefits-ragv1.py > ...
1 import urllib.request
2 import json
3 import os
4 import ssl
5
6 def allowSelfSignedHttps(allowed):
7     # bypass the server certificate verification on client side
8     if allowed and not os.environ.get('PYTHONHTTPSVERIFY', '') and getattr(ssl, '_create_unverified_context', None):
9         ssl._create_default_https_context = ssl._create_unverified_context
10
11 allowSelfSignedHttps(True) # this line is needed if you use self-signed certificate in your scoring service.
12
13 # Request data goes here
14 # The example below assumes JSON formatting which may be updated
15 # depending on the format your endpoint expects.
16 # More information can be found here:
17 # https://docs.microsoft.com/azure/machine-learning/how-to-deploy-advanced-entry-script
18 data = {"query": "Does my plan cover dental exams?"}
19
20 body = str.encode(json.dumps(data))
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