

# Customer support chatbot

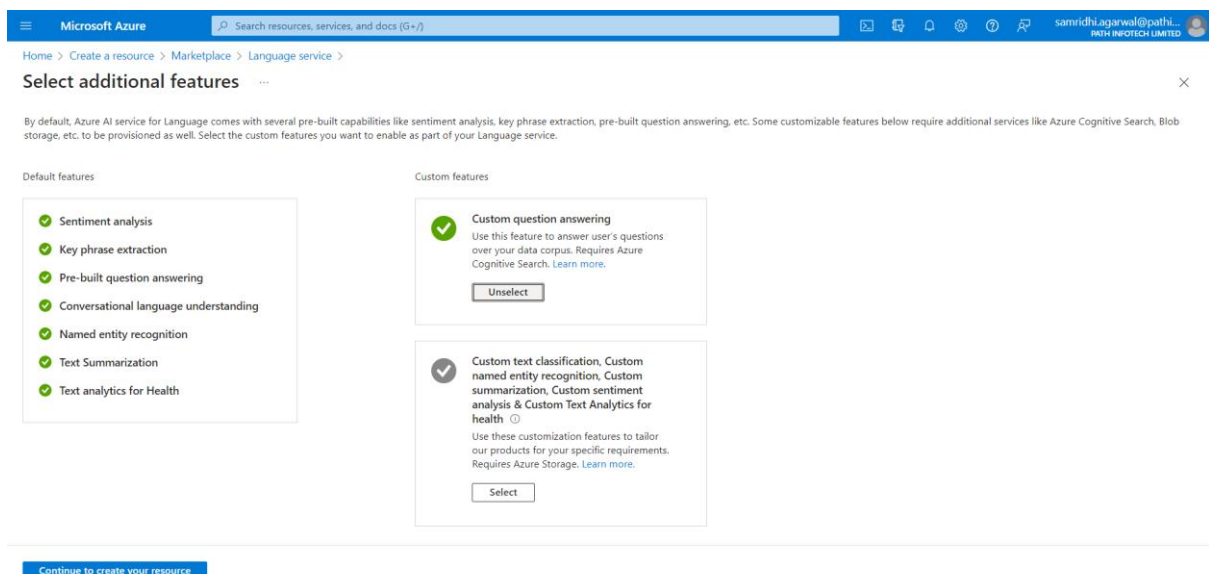
## Services used

1. **Language service:** The documentation explains the Language Service in Azure, which utilizes Natural Language Processing (NLP) to understand and interpret user input. It outlines the various features of the Language Service, such as language understanding, sentiment analysis and entity recognition.  
the Language Service's custom question answering feature enables one to define and publish a knowledge base of questions and answers with support for natural language querying.
2. **Bot service:** The documentation introduces the Bot services in Azure, which enables the creation, deployment and management of chatbots. It describes the key components of the Bot service, including bot runtime, bot framework SDKs and Azure Bot Channels.  
when combined with Azure Bot Service, one can use a knowledge base to deliver the bot that responds intelligently to user questions over multiple communication channels.

The ability to create conversational AI solutions with these services makes it possible for AI agents to reduce the support workload for human personnel; enabling organizations to provide user support at global scale.

## Steps

1. Create a language service resource, with all the default features and custom answering in the custom features.



### Basics

**Subscription:** Path Infotech Ltd

**Resource group:** pathinfo

**Region:** Central India

**Name:** intern16

**Pricing tier:** S (1K calls per minute)

*Custom question answering*

**Azure Search region:** Central India

**Azure search pricing tier:** Basic B (15 indexes)

Check the certification box

Microsoft Azure

Search resources, services, and docs (G+J)

Home > Azure AI services | Language service > Select additional features >

Create Language

Basics Network Identity Tags **Review + create**

View automation template

**Basics**

Subscription: Path Infotech Ltd  
Resource group: pathinfo  
Region: Central India  
Name: intern16  
Pricing tier: S (1K Calls per minute)  
Azure search region: Central India  
Azure search pricing tier: Basic B (15 Indexes)

**Identity**

Identity type: None

Previous Next Create

Give feedback

Wait for the deployment to complete then go to the deployed Azure OpenAI resource in Azure portal.

Microsoft Azure

Search resources, services, and docs (G+J)

Home >

TextAnalyticsCreate-20230904114407 | Overview

Deployment

Search

Delete Cancel Redeploy Download Refresh

**Your deployment is complete**

Deployment name: TextAnalyticsCreate-20230904114407 Start time: 9/4/2023, 11:45:56 AM  
Subscription: Path Infotech Ltd Correlation ID: 7f9cfe5c-f2d2-4285-8674-0d6dd84af9e5  
Resource group: PATHINFO

**Deployment details**

Resource	Type	Status	Operation details
attachSearchForCognitiveServicesAccount	Deployment	OK	Operation details
Samridhi5678	Azure AI service	OK	Operation details
Samridhi5678	Azure AI service	OK	Operation details
samridhi5678-aswvy2jsz3dffc	Search service	Created	Operation details

**Next steps**

Go to resource group

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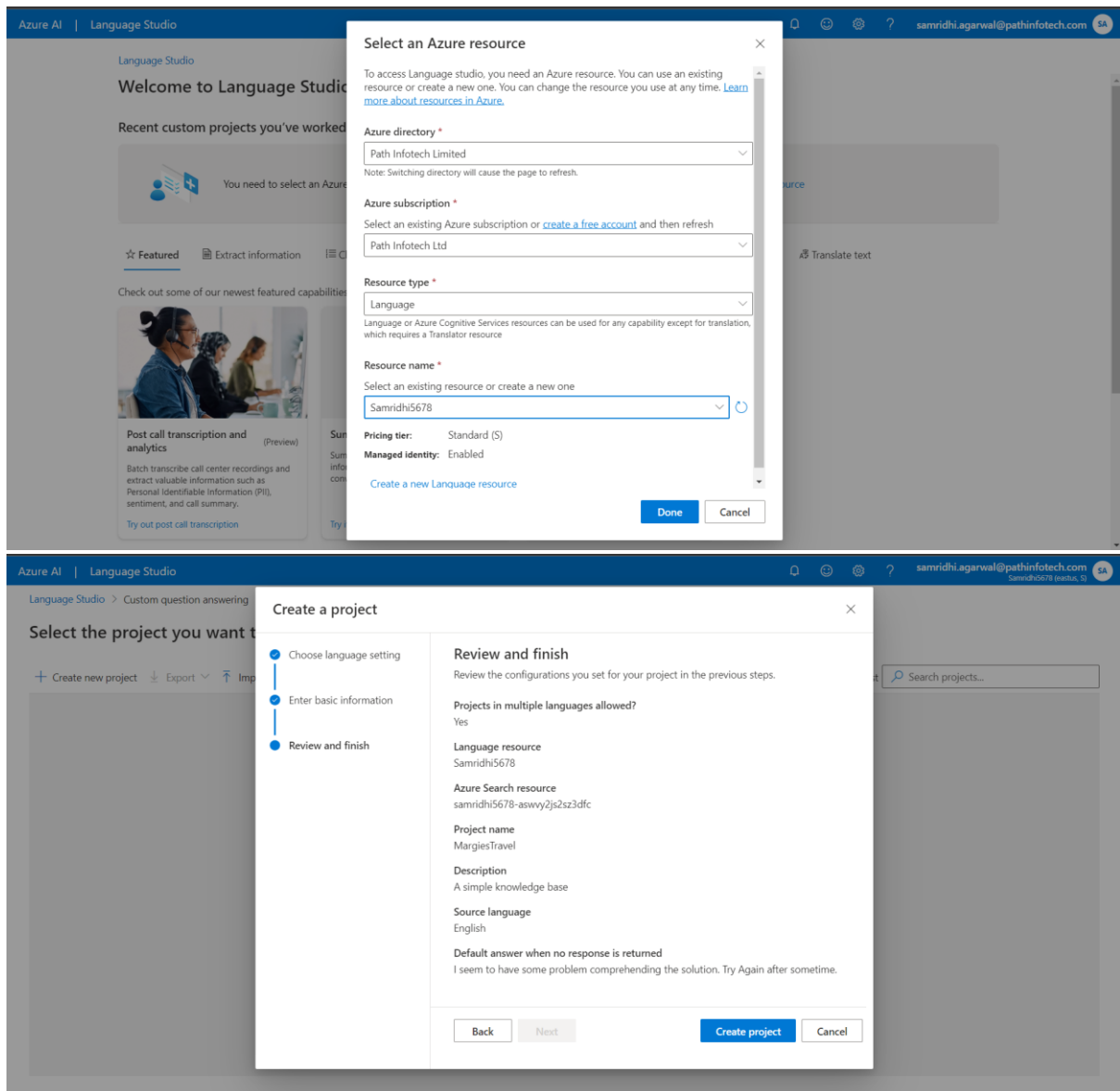
- Open Azure Language Studio and sign in with the subscribed account with the following credentials.

**Azure directory:** Path Infotech Limited

**Azure subscription:** Path Infotech Ltd.

**Resource type:** Language

Resource name: Samridhi5678

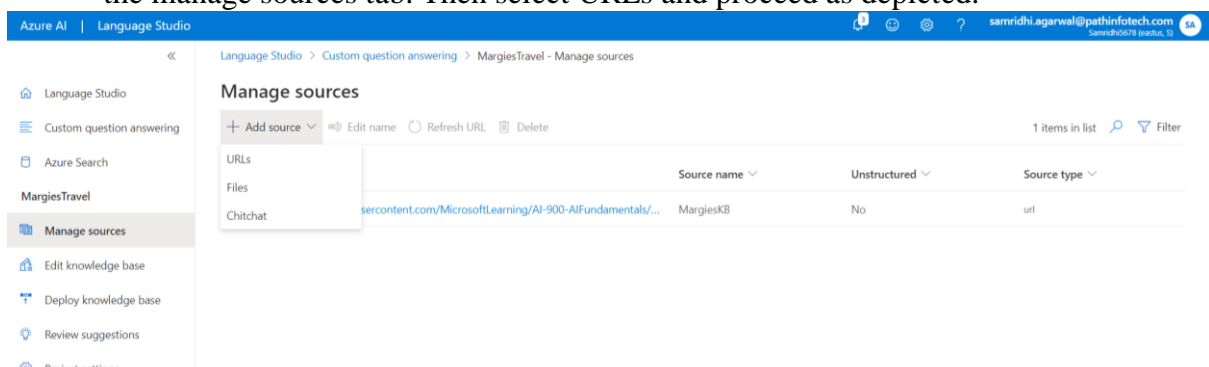


### 3. Editing and testing the knowledge base

Add a basic knowledge base from

[https://raw.githubusercontent.com/MicrosoftLearning/AI-900AIFundamentals/main/data/qna/margies\\_faq.docx](https://raw.githubusercontent.com/MicrosoftLearning/AI-900AIFundamentals/main/data/qna/margies_faq.docx)

by clicking on “Add source” on the manage sources tab. Then select URLs and proceed as depicted.



## Add URLs



You can add up to 10 URLs at a time. Question and answer pairs are extracted from each URL by default.

+ Add url   Edit   Delete

URL name ↓	URL	Classify file structure ↓
MargiesKB	https://raw.githubusercontent.com/...	Auto-detect ↓

Add all

Cancel

Once the knowledge base is added, select “Edit knowledge base” from the left pane and add question answer pairs.

## Add a new question answer pair



Add a new question answer pair by entering a question, answer, and selecting the source.

Source \*

Editorial

Question \*

What is your role?

Answer \*

I am a front-end developer.

Add metadata (optional)

+ Metadata

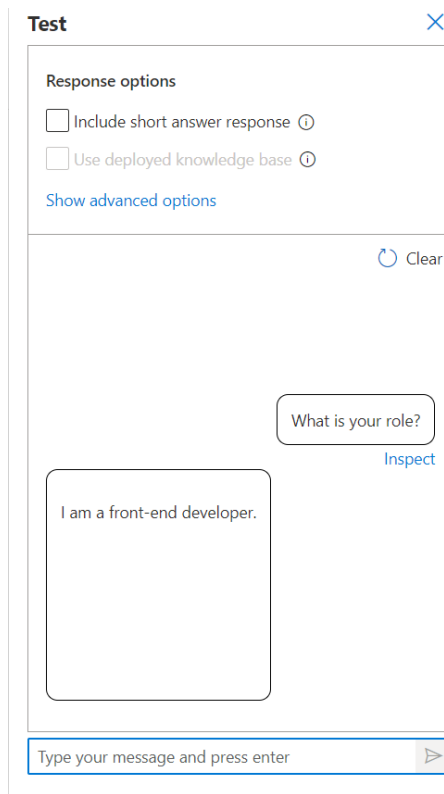
Add follow up prompts (optional)

+ Follow up prompt

Done

Cancel

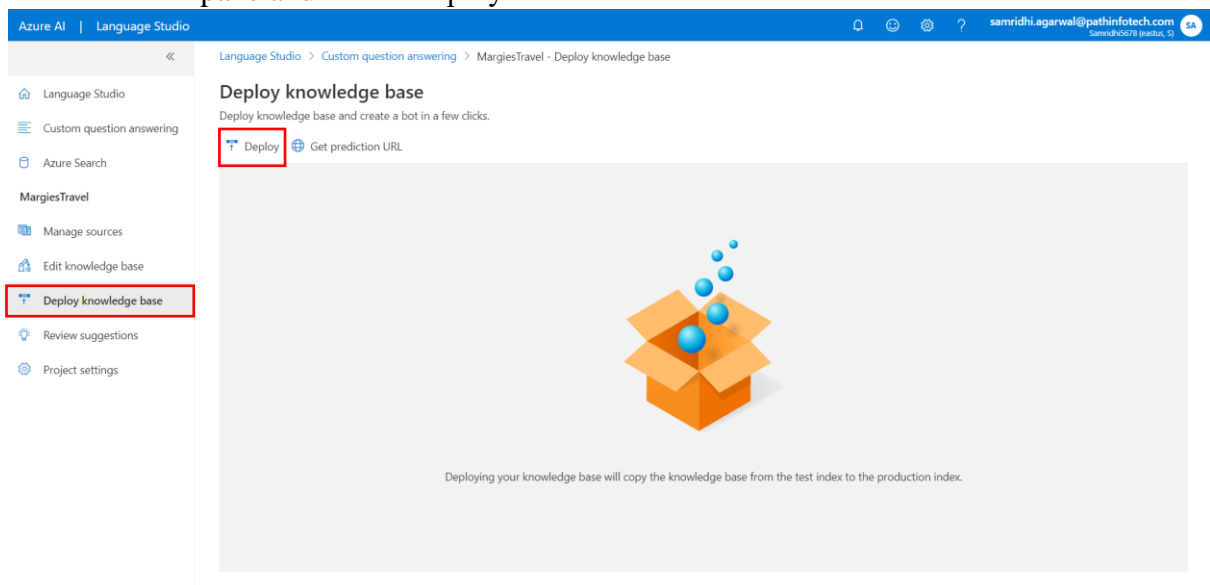
Upon testing, the chatbot prompts us with the same reply as we have entered in the question-answer pair. Thus, testing successful.



#### 4. Creating a chatbot for the knowledge check created above.

To make the knowledge base available to a bot, one must publish it as a service that can be accessed over HTTP. This is done using Azure Bot Services to create and host a bot that uses this knowledge base to answer the questions.

To deploy the knowledge base, select “Deploy Knowledge Base” from the left pane and click “Deploy”.



Wait for the knowledge base to be deployed. Then create a bot.

## Deploy knowledge base

Deploy knowledge base and create a bot in a few clicks.

Deploy Get prediction URL

✓ Your knowledge base is now deployed. You can get your prediction URL or create a bot.

### Knowledge base status

State:	Deployed	✓	Resource:	Samridhi5678
Deployment Date:	9/6/2023	✓	Location:	eastus
Deployment Time:	12:23:37 PM	✓	Tier:	Standard (S)

Next steps: Create a bot

Step 1: [Read the documentation](#) to learn more about creating bots.

Step 2: Go to Azure to create a bot.

Create a bot

Creating the bot opens Azure portal to create a Web App bot.

5. Create the Web App bot with the following credentials:

**Subscription:** Path Infotech Ltd

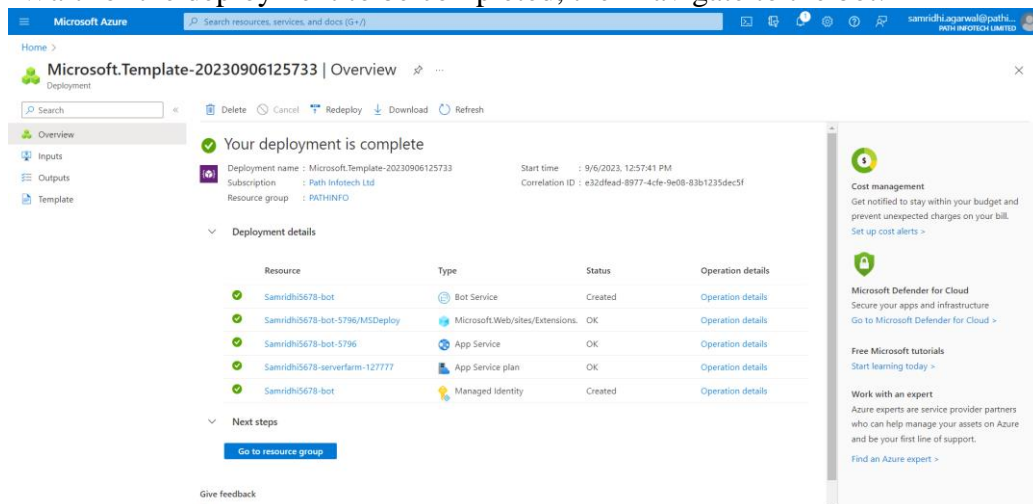
**Resource group:** PATHINFO

**Resource group location:** East US

**Bot handle:** Samridhi5678-bot

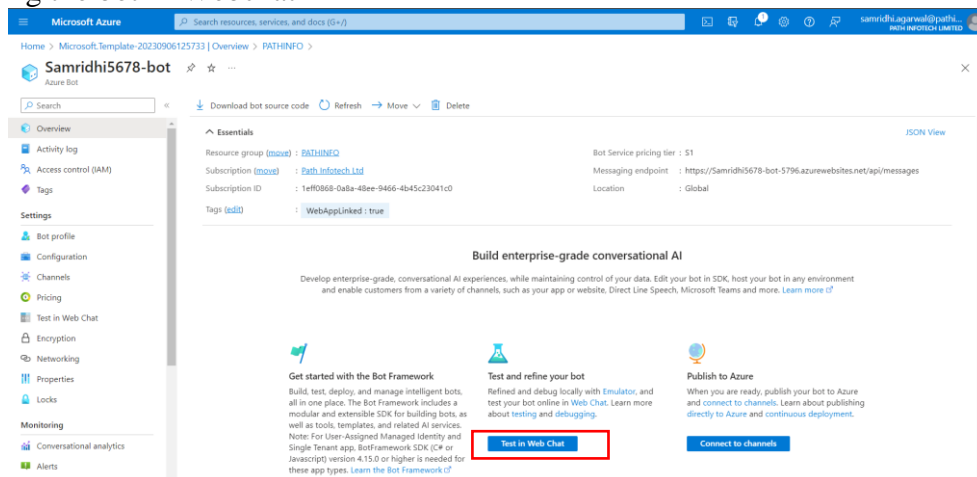
**Creation type:** create new user-assigned managed identity

Wait for the deployment to be completed, then navigate to the bot.



Resource	Type	Status	Operation details
Samridhi5678-bot	Bot Service	Created	<a href="#">Operation details</a>
Samridhi5678-bot-5796/MSDeploy	Microsoft.Web/sites/Extensions	OK	<a href="#">Operation details</a>
Samridhi5678-bot-5796	App Service	OK	<a href="#">Operation details</a>
Samridhi5678-serverfarm-127777	App Service plan	OK	<a href="#">Operation details</a>
Samridhi5678-bot	Managed Identity	Created	<a href="#">Operation details</a>

6. Testing the bot in Webchat



Build enterprise-grade conversational AI

Develop enterprise-grade, conversational AI experiences, while maintaining control of your data. Edit your bot in SDK, host your bot in any environment and enable customers from a variety of channels, such as your app or website, Direct Line Speech, Microsoft Teams and more. [Learn more](#)

Get started with the Bot Framework

Build, test, deploy, and manage intelligent bots, all in one place. The Bot Framework includes a modular and extensible SDK for building bots, as well as tools, templates, and related AI services. Note: For User-Assigned Managed Identity and Single Tenant app, Bot Framework SDK (C# or JavaScript) version 4.15.0 or higher is needed for these app types. [Learn the Bot Framework](#)

Test and refine your bot

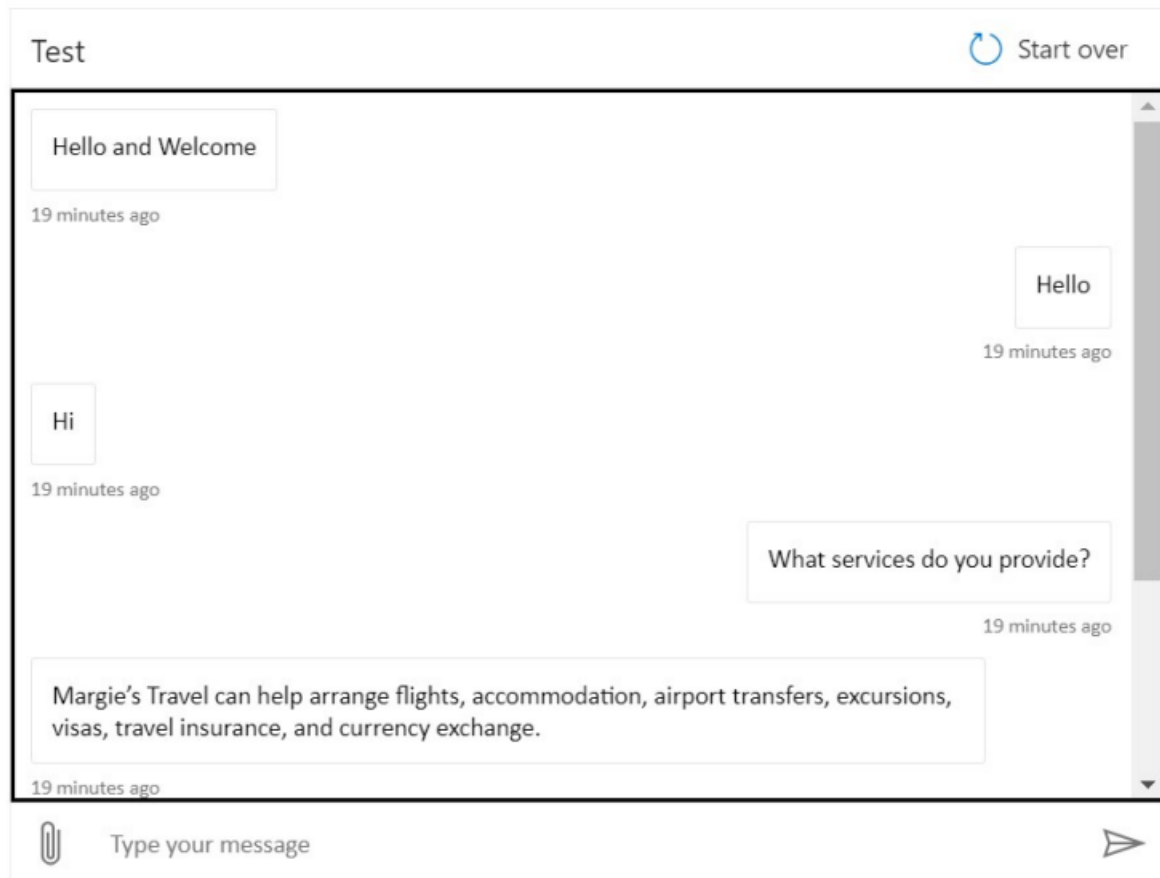
Refined and debug locally with [Emulator](#), and test your bot online in [Web Chat](#). Learn more about [testing](#) and [debugging](#).

Publish to Azure

When you are ready, publish your bot to Azure and connect to channels. Learn about publishing directly to Azure and continuous deployment.

[Test in Web Chat](#)

[Connect to channels](#)



## SUMMARY

The documentation provides a comprehensive guide on building conversational chatbots using Azure Language Services and Bot Service, covering the setup process in Azure portal, integrating NLP understanding with Language Service, designing effective conversations, testing, debugging, deploying and management of chatbot.

## REFERENCES

[https://www.youtube.com/watch?v=X\\_aS-37IOq0&t=1611s&ab\\_channel=MicrosoftReactor](https://www.youtube.com/watch?v=X_aS-37IOq0&t=1611s&ab_channel=MicrosoftReactor)