



# Microsoft Cloud for Healthcare **Industry Labs**

## Lab 04: Azure Health Bot

Step-by-Step Lab

September 2021

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# Overview

## Learning Objectives

In this lab, you will learn to do the following:

- Set up Azure Health Bot
- Configure Dynamics 365 Customer Service Omnichannel Live Chat
- Embed Azure Health Bot in a Power Apps Portal
- Extend Azure Health Bot with custom scenarios

## Prerequisites

- None

## Azure Health Bot

The Azure Health Bot Service is a cloud platform that empowers developers in healthcare organizations to build and deploy their compliant, AI-powered virtual health assistants and health bots, that help them improve processes and reduce costs. It allows you to offer your users *intelligent* and *personalized access* to health-related information and interactions through a natural conversation experience.

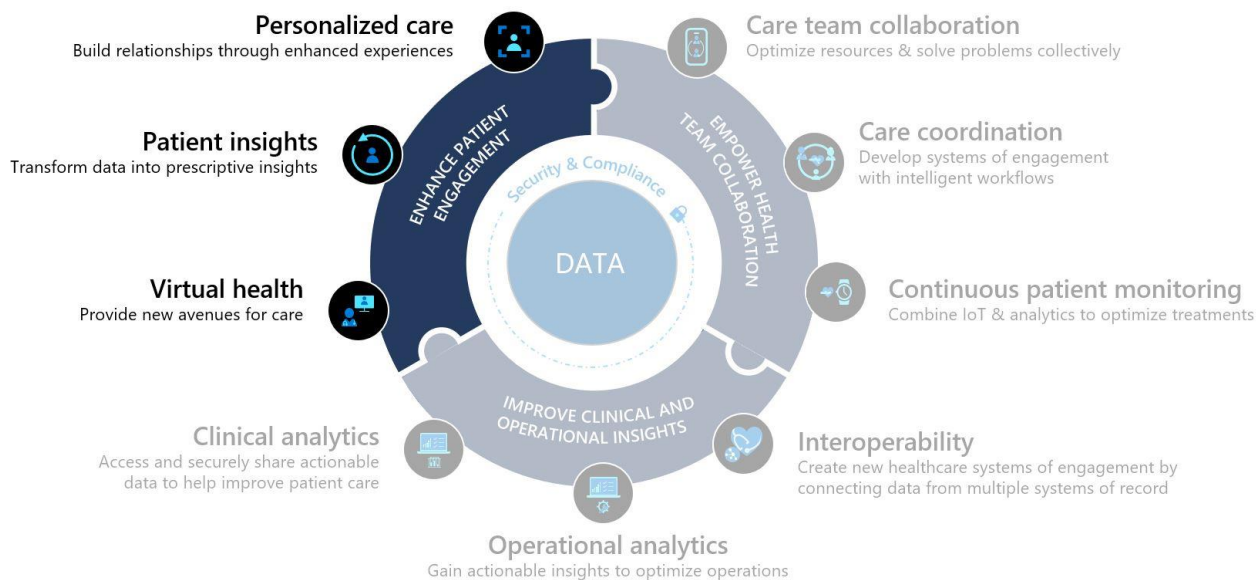
Using the service, healthcare organizations can build a "health bot instance" and integrate it with their systems that patients, nurses, doctors, and other representatives interact with. Building an instance allows you to:

- Improve processes
- Improve services
- Improve outcomes
- Reduces cost

The Health Bot Service contains a **built-in medical database**, including **triage protocols**. You can also extend a health bot instance to include your own scenarios and integrate with other IT systems and data sources. To learn more about Azure Health Bot, you can reference this Microsoft Docs article: [Azure Health Bot Overview](#).

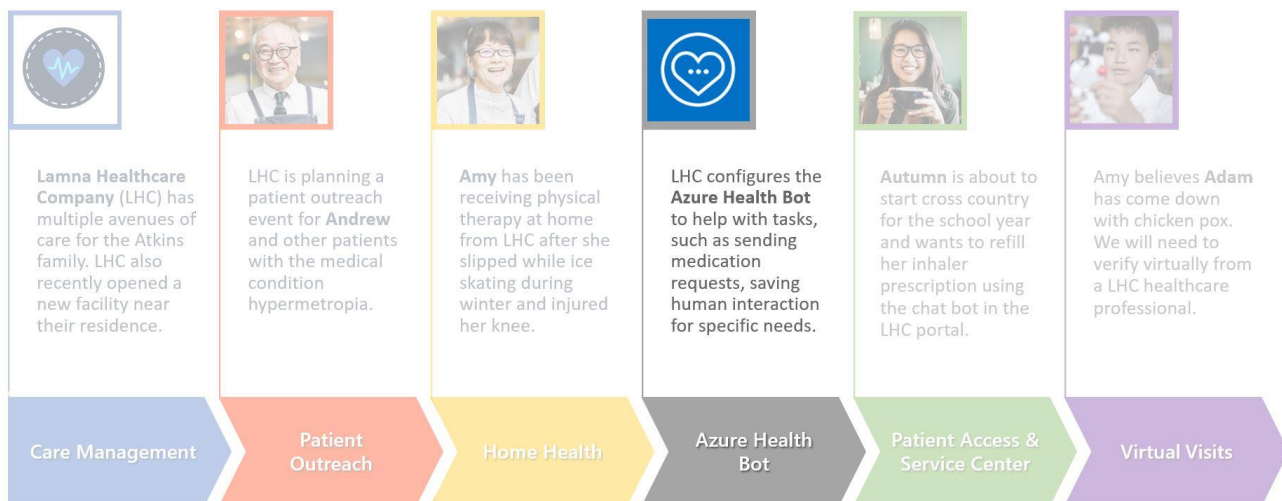
## Industry Prioritized Scenarios

The Azure Health Bot focuses on the **Enhance patient engagement** priority scenario by creating a virtual bot health option to allow for new avenues of care with embedded insights.



## Atkins Family Healthcare Story

This lab will focus on Lamna Healthcare Company.



As part of their digital transformation efforts, Lamna Healthcare Company is seeking to streamline their patient engagement capabilities by implementing Azure Health Bot to help improve processes and services, such as entering medication requests. By allowing patients to interact with this service, Lamna Healthcare Company will move one step closer to their goal of improving patient outcomes while reducing overall costs.

In this lab, you will play the role of a Lamna Healthcare IT developer and configure Azure Health Bot for a medication refill scenario.

# Exercise 1: Set Up Azure Health Bot

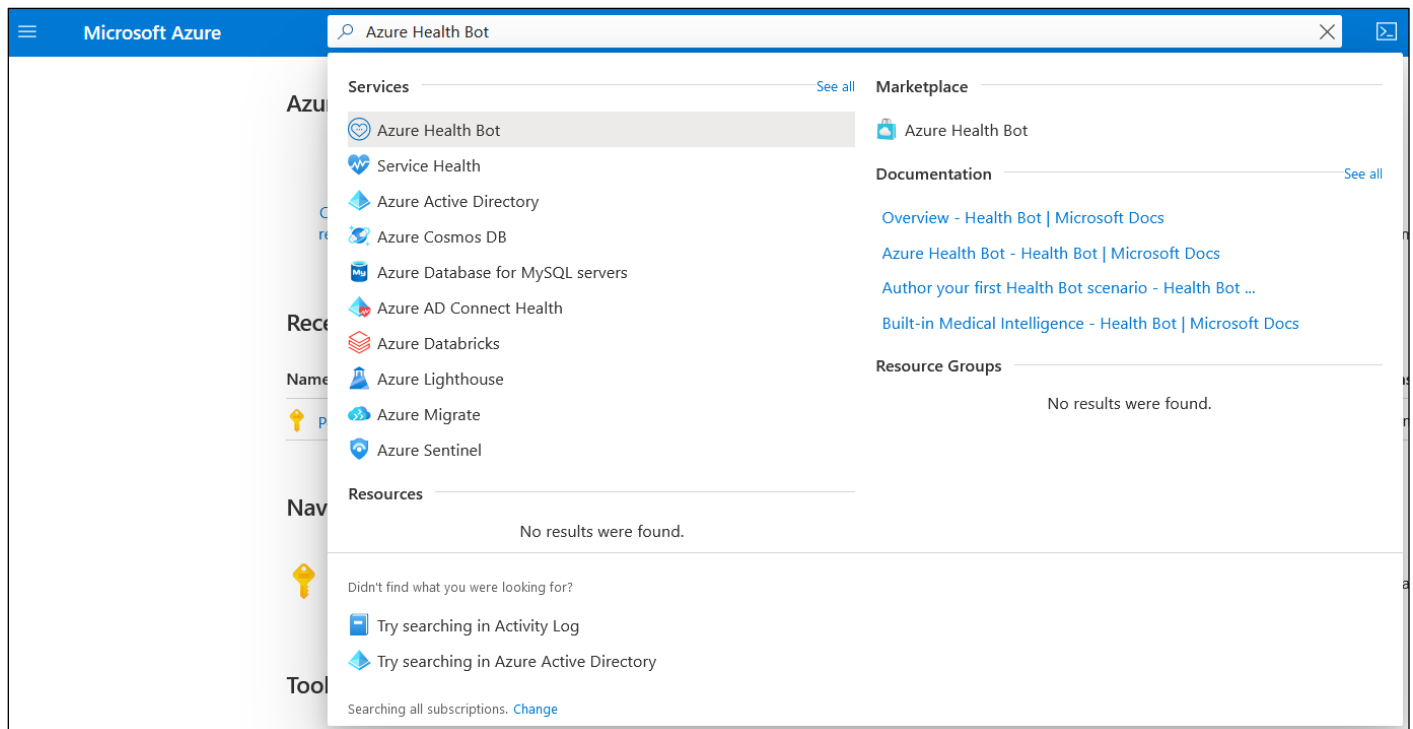
In this exercise, you will do the following:

- Set up Health Bot from Azure Portal
- Configure and enable the integration between Dynamics 365 Omnichannel and Health Bot
- Configure and enable Bot channel to obtain a Bot Id

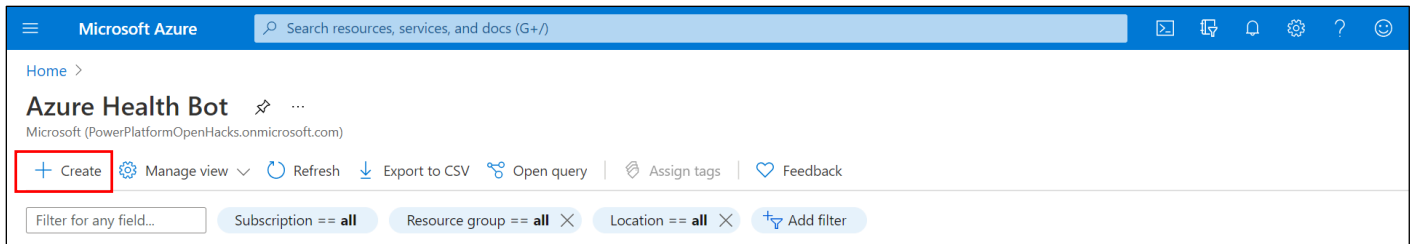
**Azure Health Bot** empowers developers in healthcare organizations to build and deploy AI-powered, compliant, conversational healthcare experiences at scale. It combines built-in medical database with natural language capabilities to understand clinical terminology and can be easily customized to support your organization's clinical use cases. The service ensures alignment with industry compliance requirements and is privacy protected to HIPAA standards. To learn more about Azure Health Bot, please reference this [Azure Health Bot documentation](#).

## Task 1: Install Azure Health Bot in Azure Subscription

1. While logged in to your Microsoft 365 tenant, open a new tab in your internet browser incognito or in private mode and navigate to Azure Portal at <https://portal.azure.com/>
2. Search for **Azure Health Bot** in the top search bar.
3. Select **"Azure Health Bot"** from the search results.



4. Click **Create** button to create a new Azure Health Bot instance.



5. You will be redirected to the Azure Health Bot page. Enter the following information:
- Subscription:** PowerPlatformOpenHacks Subscription
  - Resource Group:** IndustryLabs
  - Name:** iaduser[x]-healthbot (e.g., iaduser01-healthbot)
  - Region:** East US
  - Plan:** Free (F0)

The screenshot shows the 'Azure Health Bot' configuration page in the 'Basics' tab. The page has a header with 'Azure Health Bot' and a sub-header with 'Basics', 'Tags', and 'Review + create'. Below the sub-header, there's a section titled 'Project details' with a description: 'Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.' This section contains two dropdown menus: 'Subscription' (set to 'PowerPlatformOpenHacks Subscription') and 'Resource group' (set to 'IndustryLabs'). Below this is a section titled 'Instance details' with three input fields: 'Name' (set to 'iaduser99-healthbot' with a green checkmark), 'Region' (set to 'East US'), and 'Plan' (set to 'Free (F0)'). At the bottom of the page, there are three buttons: 'Review + create' (highlighted in blue), '< Previous', and 'Next : Tags >'. There is also a 'Create new' link below the 'Resource group' dropdown.

6. Select **Review + Create**.

7. On the Review and create page, verify your details are correct as Azure validates your Health Bot. When the create button is enabled after validation passes, click **Create**.

*Note: It will take few seconds to run the backend process before the Create button is enabled.*

## Azure Health Bot

Validation Passed

BasicsTagsReview + create

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

**Basics**

Subscription	PowerPlatformOpenHacks Subscription
Resource group	IndustryLabs
Name	iaduser99-healthbot
Region	East US
Plan	Free (F0)

Create < Previous Next Download a template for automation

8. You will be redirected to the **Deployment** page for your new Azure Health Bot.

Home >

Microsoft.HealthBot-20210915192409 | Overview

Deployment

Search (Ctrl+/) << Delete Cancel Redeploy Refresh

Overview

Inputs

Outputs

Template

We'd love your feedback! →

gress

Deployment name: Microsoft.HealthBot-20210915192409

Subscription: [PowerPlatformOpenHacks Subscription](#)

Resource group: [IndustryLabs](#)

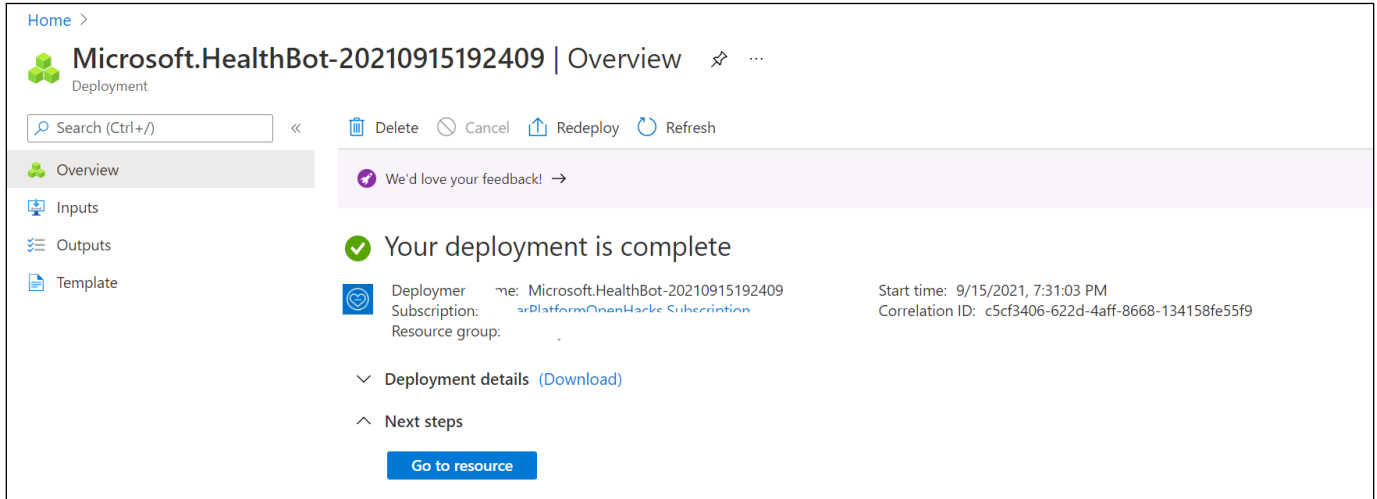
Start time: 9/15/2021, 7:31:03 PM

Correlation ID: c5cf3406-622d-4aff-8668-134158fe55f9

Deployment details (Download)

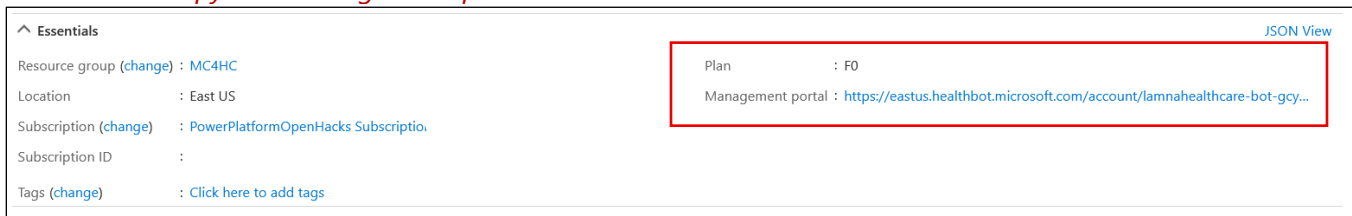
Resource	Type	Status	Operation details
iaduser99-healthbot	Microsoft.HealthBot/healthBots	Created	<a href="#">Operation details</a>

9. When deployment is complete, the **Go to resource** button will enable. Please wait until deployment is complete for the Azure Health Bot, then select **Go to resource** when enabled.

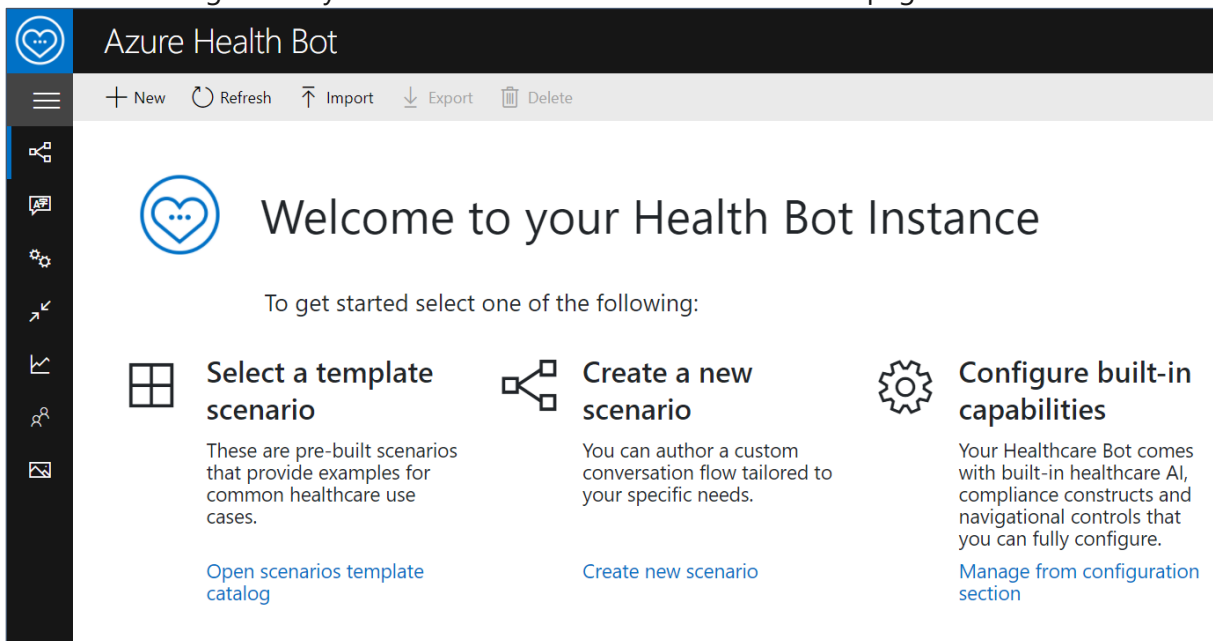


10. You will be redirected to the **Resource** page for your new Azure Health Bot. Click the **Management portal** link in the Essential section to open your Azure Health Bot instance configuration page.

*Note: Please copy this Management portal link and store it to access the Health Bot later.*



11. You will be navigated to your new Azure Health Bot instance homepage.

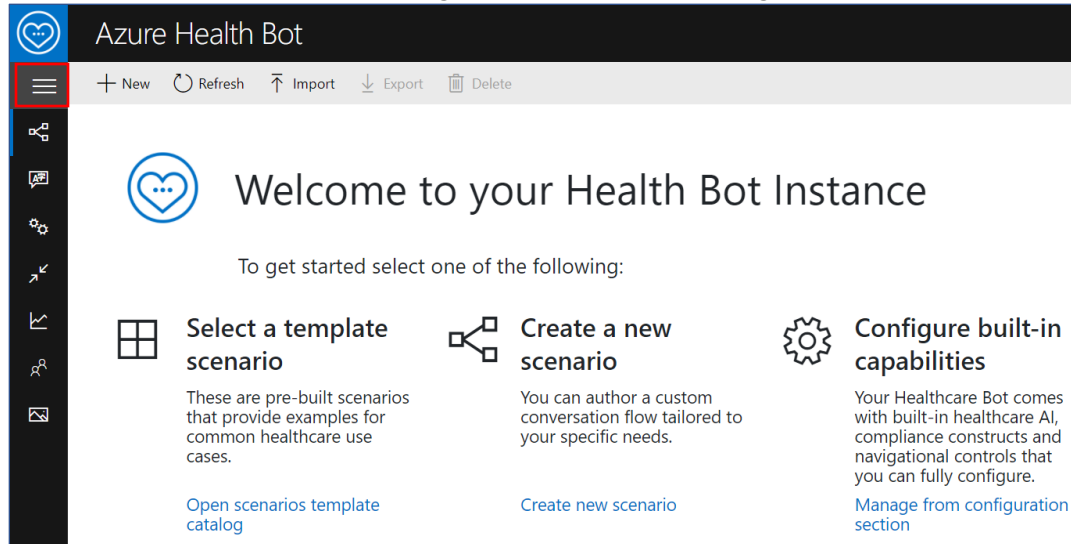


**Congratulations!** You have successfully created a new Health Bot instance in your Azure tenant.

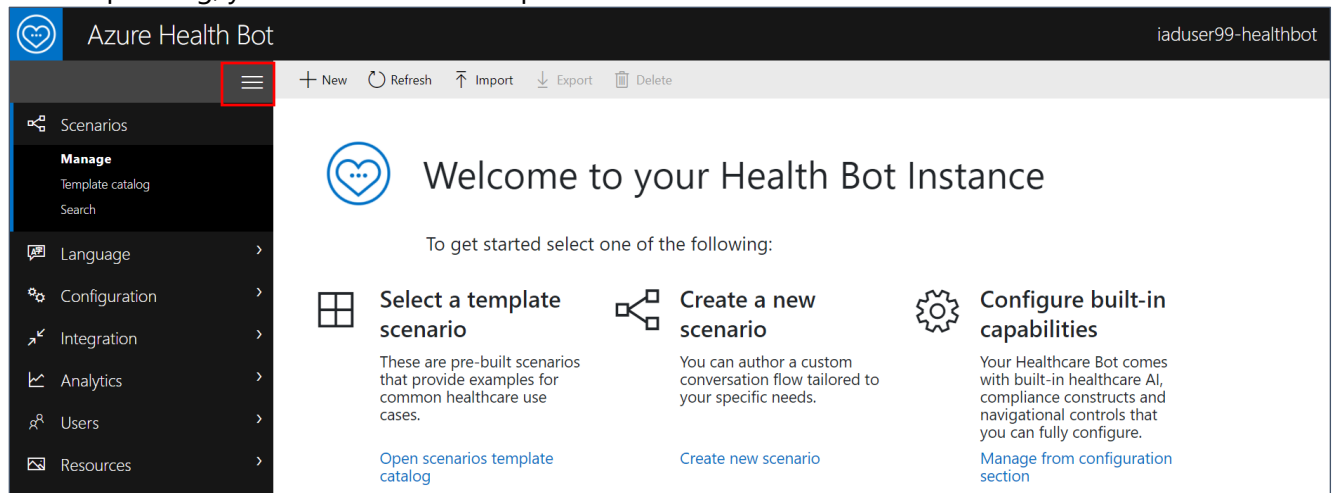


## Task 2: Update Azure Health Bot Settings to Enable Dynamics 365 Integration

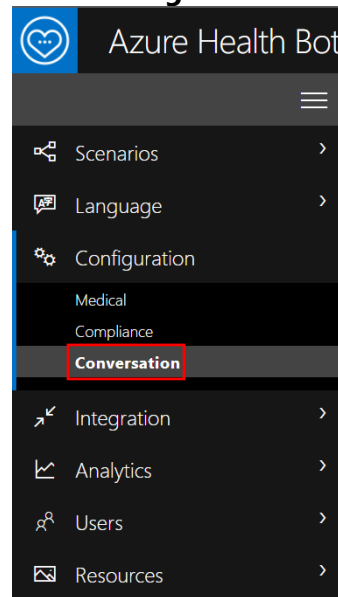
1. On the Azure Health Bot homepage, **expand** the side navigation bar to see the sitemap labels.



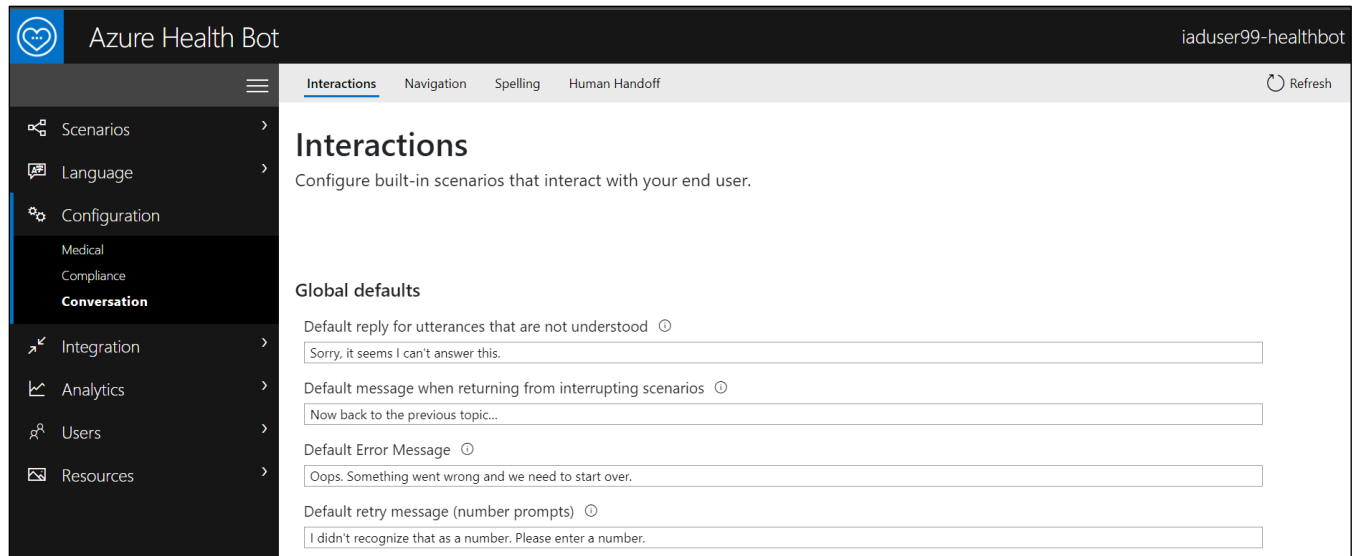
After expanding, you will see the sitemap labels next to the icons:



2. Select **Configuration** > **Conversation** on the navigation bar.

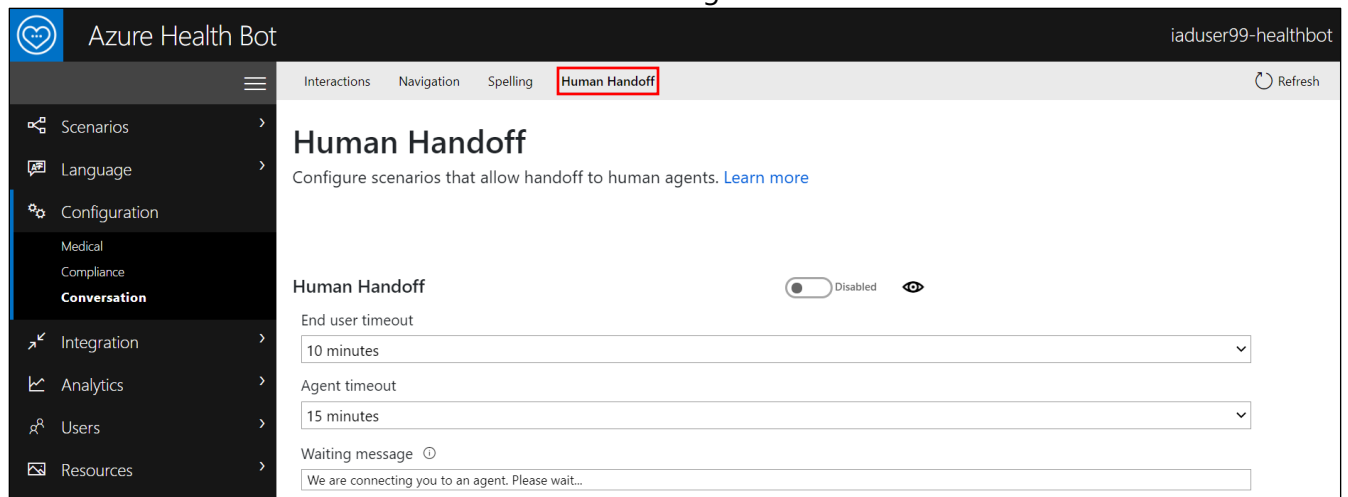


3. You will be landed in the **Interactions** tab.



The screenshot shows the Azure Health Bot interface. The top bar includes the Azure Health Bot logo, the name 'Azure Health Bot', and the user identifier 'iaduser99-healthbot'. Below the top bar is a navigation menu with tabs: 'Interactions' (selected), 'Navigation', 'Spelling', and 'Human Handoff'. A 'Refresh' button is in the top right. The left sidebar contains a list of settings categories: 'Scenarios', 'Language', 'Configuration' (with sub-items 'Medical', 'Compliance', and 'Conversation' highlighted), 'Integration', 'Analytics', 'Users', and 'Resources'. The main content area is titled 'Interactions' and contains the text 'Configure built-in scenarios that interact with your end user.' Below this is a section for 'Global defaults' with four text input fields: 'Default reply for utterances that are not understood' (containing 'Sorry, it seems I can't answer this.'), 'Default message when returning from interrupting scenarios' (containing 'Now back to the previous topic...'), 'Default Error Message' (containing 'Oops. Something went wrong and we need to start over.'), and 'Default retry message (number prompts)' (containing 'I didn't recognize that as a number. Please enter a number.').

4. Select **Human Handoff** tab in the Conversation settings.



The screenshot shows the Azure Health Bot interface with the 'Human Handoff' tab selected. The top bar is the same as the previous screenshot. The navigation menu now has 'Human Handoff' highlighted. The left sidebar is the same. The main content area is titled 'Human Handoff' and contains the text 'Configure scenarios that allow handoff to human agents. [Learn more](#)'. Below this is a section for 'Human Handoff' with a toggle switch set to 'Disabled' and an eye icon. There are three text input fields: 'End user timeout' (containing '10 minutes'), 'Agent timeout' (containing '15 minutes'), and 'Waiting message' (containing 'We are connecting you to an agent. Please wait...').

5. Scroll to the bottom of the **Human Handoff** page. Under **Dynamics 365 Omnichannel**, toggle **Enabled** for **Bridge Messages**. This is required to allow communication and bridge messages between the Azure health Bot and Dynamics 365 Omnichannel for Customer Service.

Interactions Navigation Spelling **Human Handoff** Refresh

Agent connection message (2 of 2) ⓘ  
 You can start chatting with the agent.

End of conversation message ⓘ  
 Agent (agentName) has left the conversation.

All agents unavailable message ⓘ  
 Sorry, no agents are currently available.

Connection error message ⓘ  
 An error occurred while connecting you to an agent. Please try again later.

**Agent Authentication (Microsoft Teams)** ⓘ

Active Directory Tenant ID ⓘ  
 Enter your active directory tenant ID

Azure Active Directory Group Object ID ⓘ  
 Enter your authorised agent group ID

Application (client) ID ⓘ  
 Enter your application (client) ID

Application (client) Secret ⓘ  
 Enter your application (client) secret

**Online Meetings (Microsoft Teams)**

Default Meeting Organizer Object ID (optional) ⓘ  
 Enter an object ID for default meeting organizer (optional)

**Dynamics 365 OmniChannel** ⓘ

Bridge Messages ☒ Enabled

6. Click **Save** in the top right.

Interactions Navigation Spelling **Human Handoff** Refresh **Save** Cancel changes

**Human Handoff**  
 Configure scenarios that allow handoff to human agents. [Learn more](#)

7. Now let's enable the Health Bot for **Microsoft Teams** Channel.

8. Navigate to **Integration > Channels**.

Scenarios >

Language >

Configuration >

Integration >

- Data connections
- Authentication
- Skills
- Secrets
- Channels**

Analytics >

Users >

Resources >

9. In the Channels list, select the toggle to **enable Microsoft Teams**.

### Channels

Make your Healthcare bot available on multiple channels. [Learn More](#)

Active	Channel
<input type="checkbox"/>	Web Chat
<input type="checkbox"/>	DirectLine
<input checked="" type="checkbox"/>	Microsoft Teams
<input type="checkbox"/>	Twilio
<input type="checkbox"/>	Facebook
<input type="checkbox"/>	Telegram
<input type="checkbox"/>	Alexa (preview)
<input type="checkbox"/>	WhatsApp (via Twilio - preview)

10. This will bring out a side window with your **Bot Id** information. **Copy and store** the BotId for later to use when creating the Dynamics 365 Application User.

### Microsoft Teams Channel

Connect your Health Bot to interact with Microsoft Teams users naturally through chat. [Learn how](#)

**Bot Id**

c7f90733-d6e3-4f3d-a95a-f28cfbc9b0b1

[Save](#) [Close](#)

11. Select **Save**. This should enable Teams channel and your Microsoft Teams toggle should reflect accordingly.

### Channels

Make your Healthcare bot available on multiple channels. [Learn More](#)

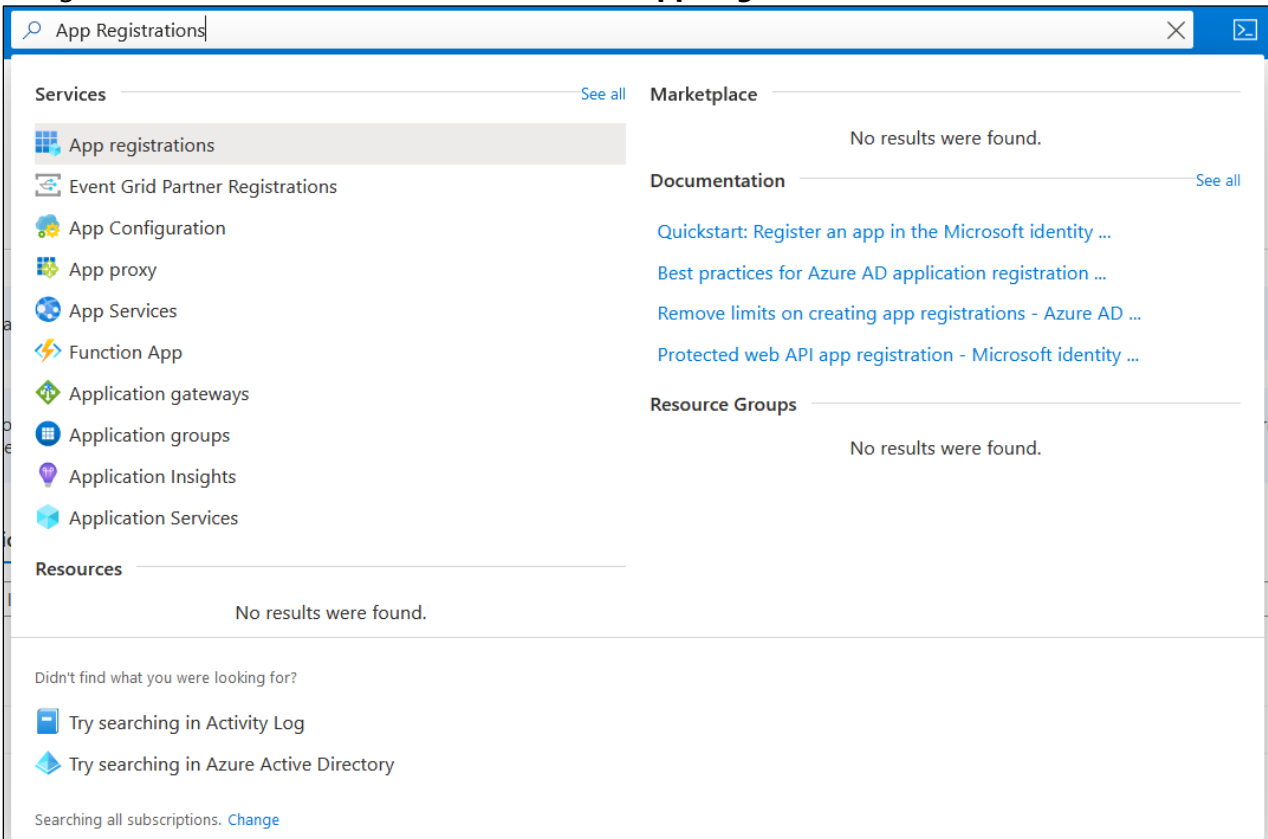
Active	Channel	Actions
<input type="checkbox"/>	Web Chat	<a href="#">View</a>
<input type="checkbox"/>	DirectLine	<a href="#">View</a>
<input checked="" type="checkbox"/>	Microsoft Teams	<a href="#">View</a> <a href="#">Test</a>
<input type="checkbox"/>	Twilio	
<input type="checkbox"/>	Facebook	
<input type="checkbox"/>	Telegram	
<input type="checkbox"/>	Alexa (preview)	
<input type="checkbox"/>	WhatsApp (via Twilio - preview)	

**Congratulations!** You completed the Azure Health Bot settings for integration with Microsoft Teams and Dynamics 365 Omnichannel for Customer Service.

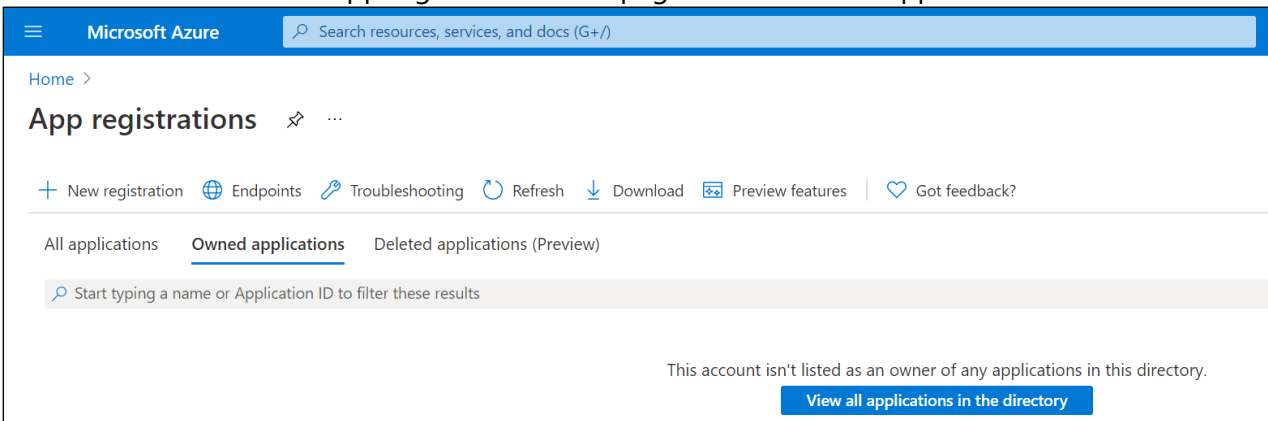
### Task 3: Obtain Azure Application ID

In this task, you will be using an Azure Application ID already created in our Azure tenant called “**MCH Application Id**”. Registering this Id establishes a trusted relationship between your Dynamics 365 app and the Microsoft identity platform. Using this Id, you will later create a Dynamics 365 Application User to bridge the authentication between Azure Health Bot and Power Apps.

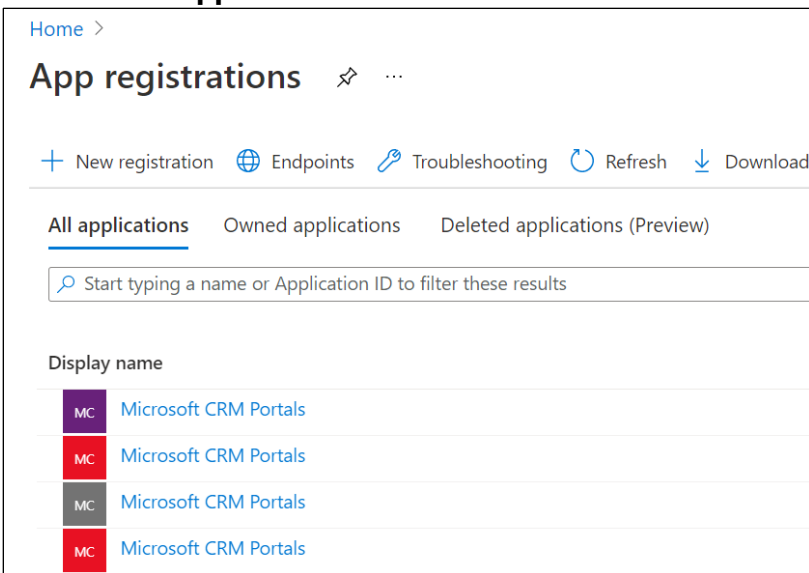
1. Navigate back to the Azure Portal and search for **App Registrations** in the Search box.



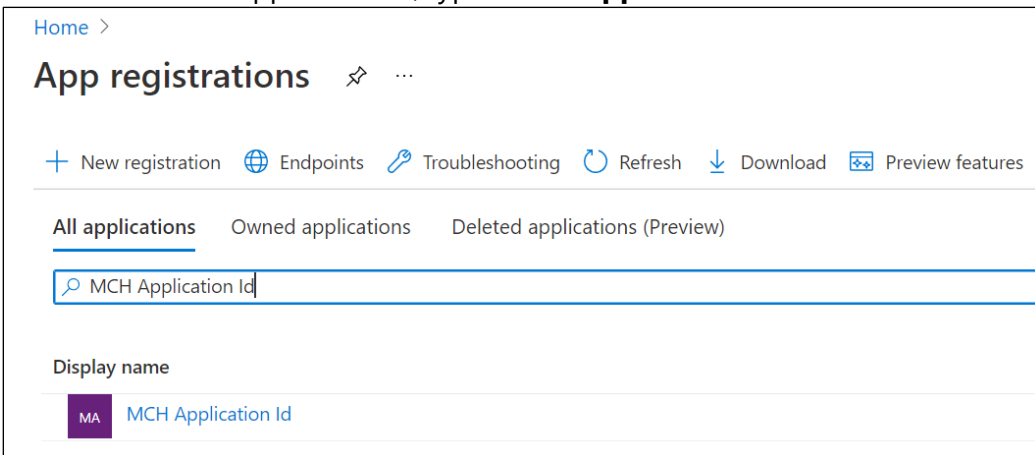
2. You will be landed in the App registration homepage on the Owned applications tab.



3. Select the **All applications** tab.

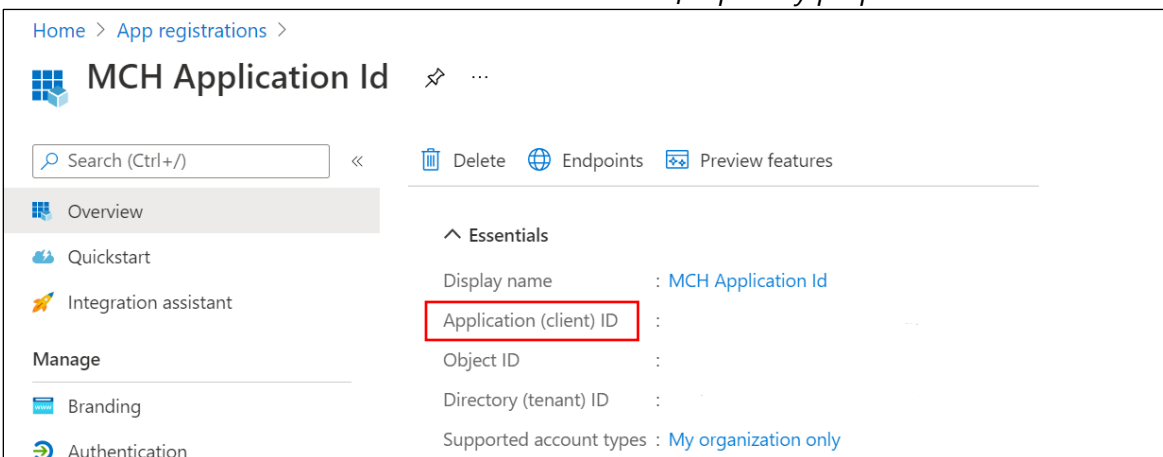


4. To **search** for our Application Id, type **"MCH Application Id"** in the Search box.



5. Select the **MCH Application Id** app registration resource. **Copy and store** the **Application (client) ID** for later to use when creating the Dynamics 365 Application User.

*Note: ID values have been removed in the screenshot for privacy purposes.*



**Congratulations!** You have successfully obtained the MCH Application ID from Application Registrations in the Azure Portal.

## Exercise 2: Configure Omnichannel Live Chat

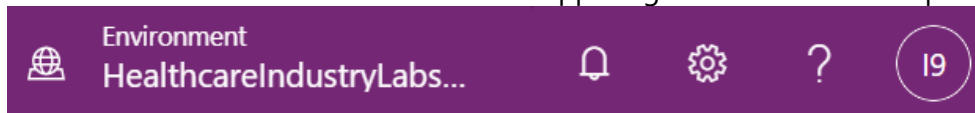
In this exercise, you will be configuring live chat for **Dynamics 365 Omnichannel for Customer Service**. Omnichannel for Customer Service offers a suite of capabilities that extend the power of Dynamics 365 Customer Service Enterprise to enable organizations to instantly connect and engage with their customers across digital messaging channels.

In the following tasks, you will complete the following:

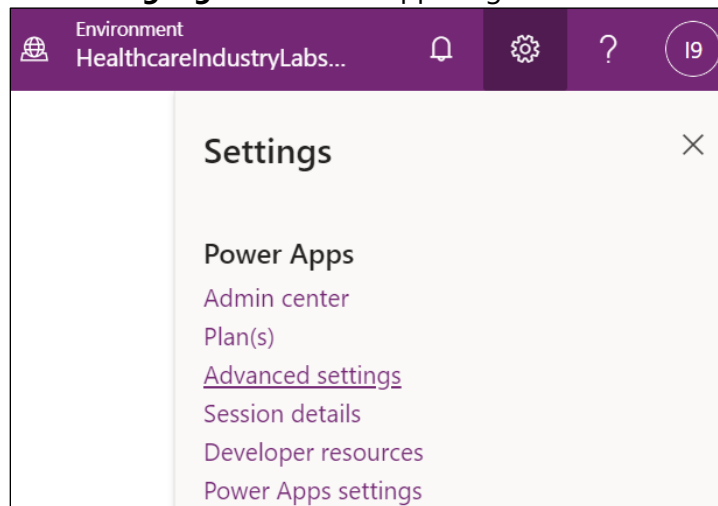
1. Assign Omnichannel agent security role
2. Create an Application User using the **MCH Application Id** and your **Bot ID**
3. Configure Queues for Bot and Agent Users
4. Configure a Context Variable and Routing rule to route the message either to a Bot or Agent.

### Task 1: Assign Omnichannel Agent Security Role

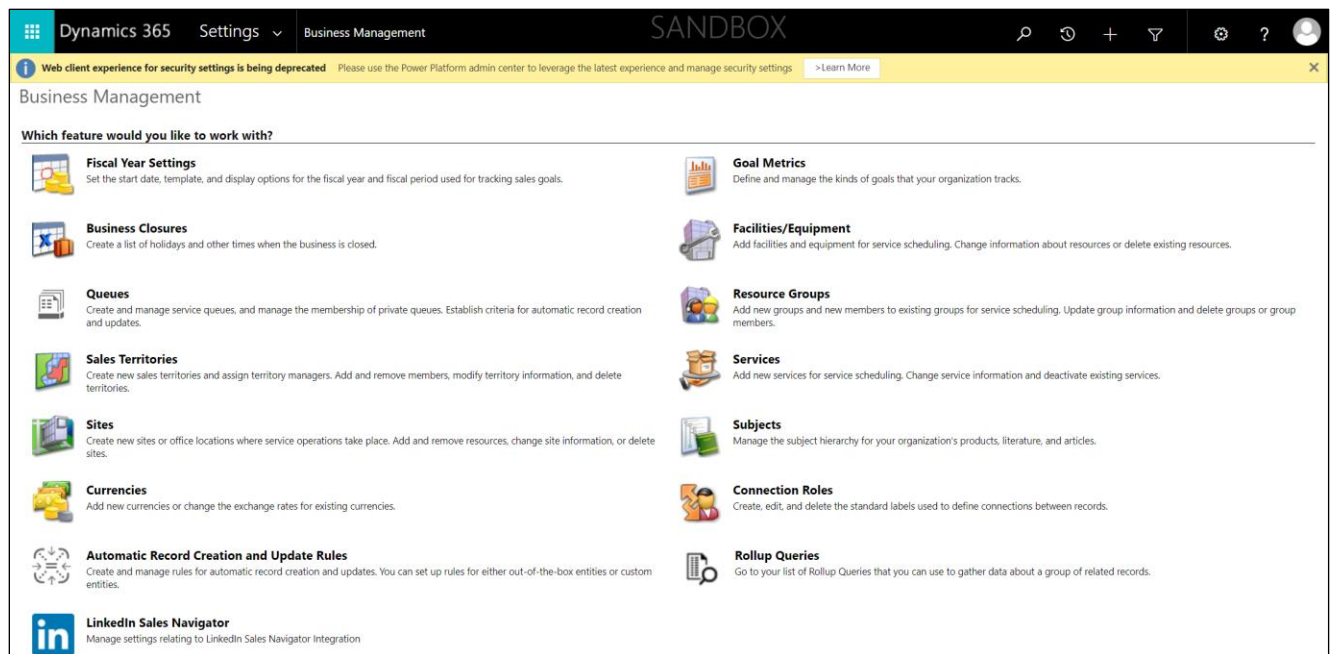
1. While in the In-Private or Incognito window, navigate to [Power Apps](#).
2. Ensure the correct environment from the upper right **Environment** drop down is selected.



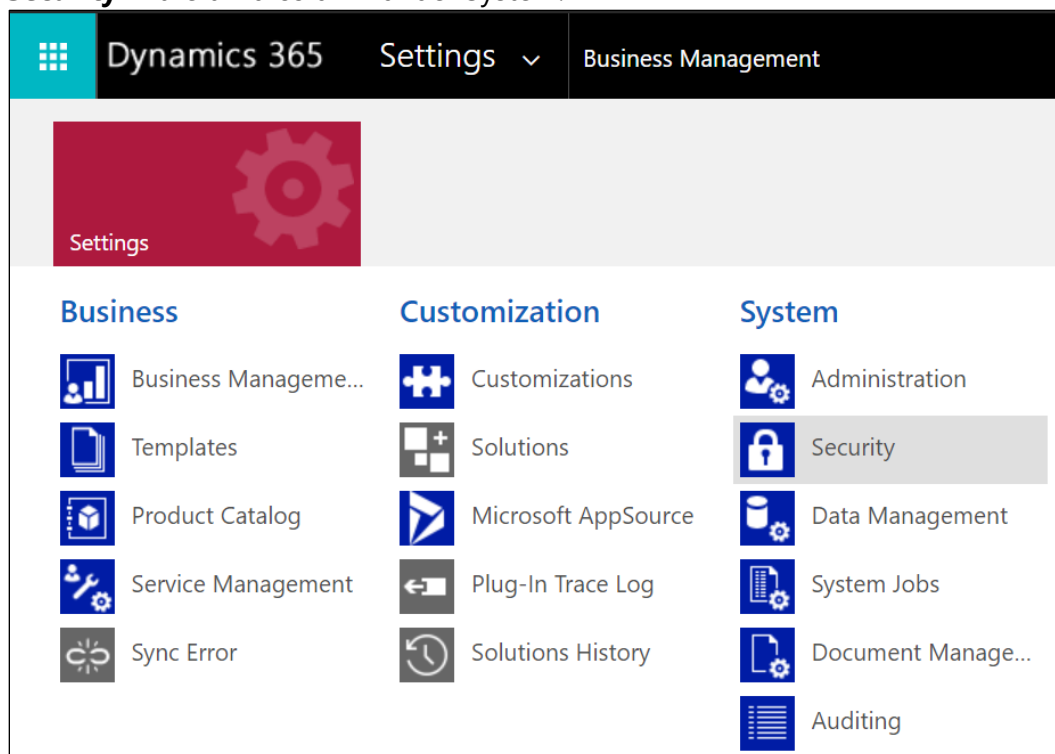
3. Select the **gauge icon** in the upper right corner and navigate to **Advanced Settings**.



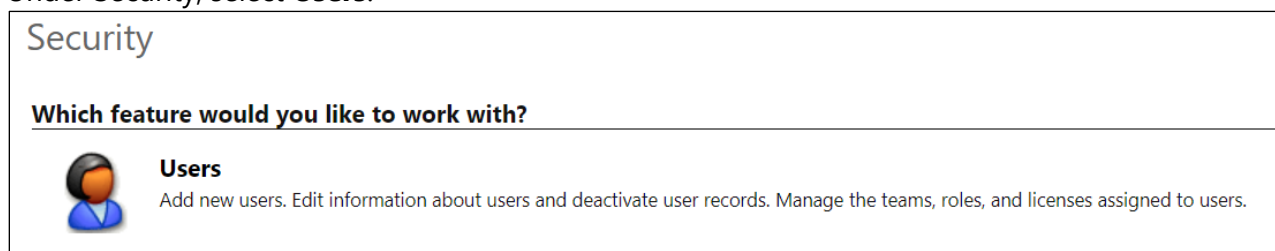
4. A new window should open and navigate to Dynamics 365. It may take a while to load. If it's been longer than a minute, stop and reload the page. It should then load faster. It will land you in the Business Management section of Dynamics 365.



5. On the top command bar next to Dynamics 365, select **Settings** to open the drop-down, then select **Security** in the third column under System.

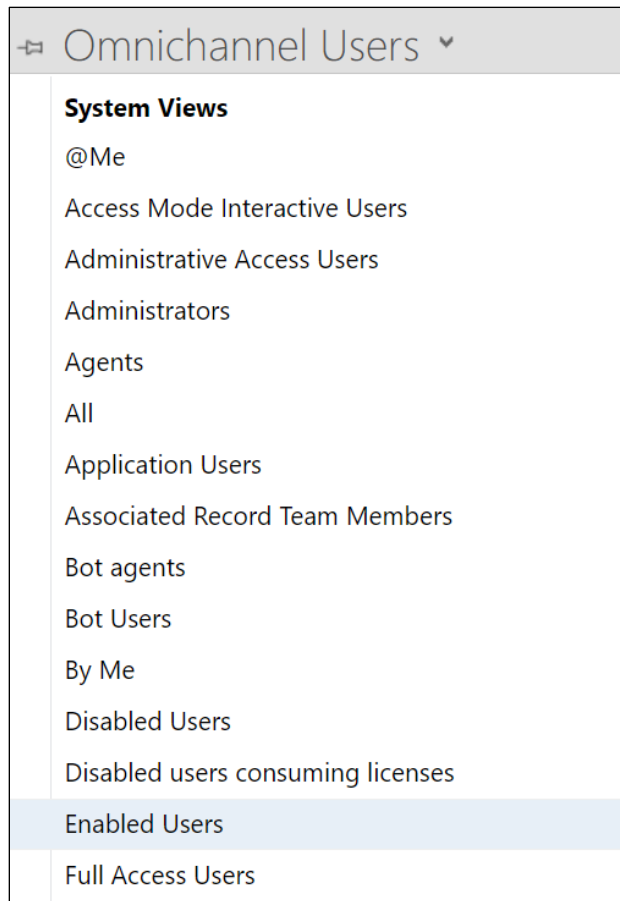


6. Under Security, select **Users**.

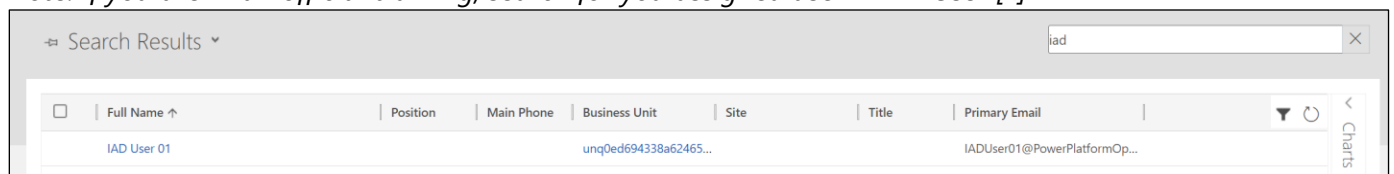




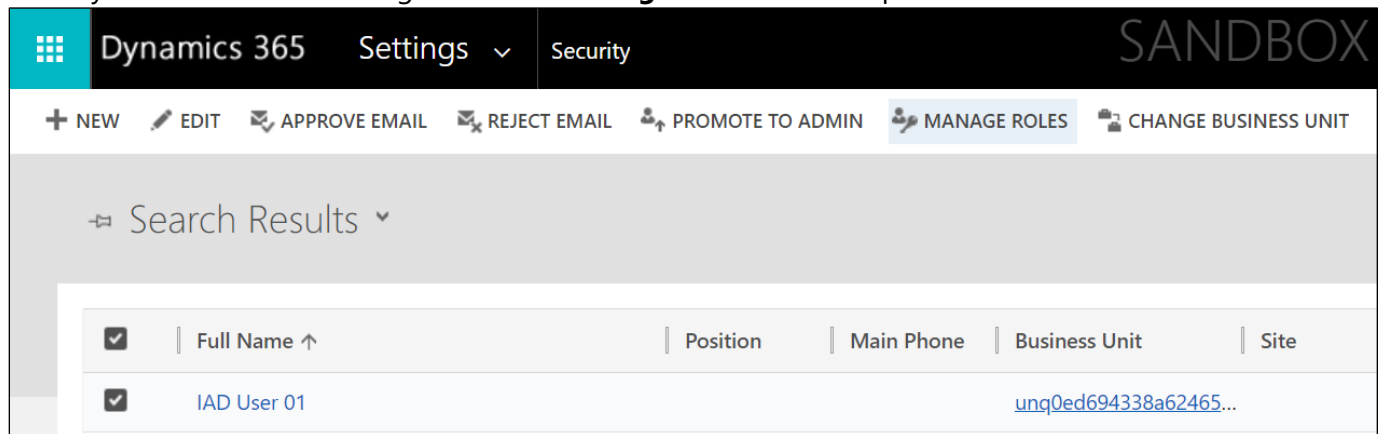
7. Switch the view drop down from Omnichannel Users to **Enabled Users** for the grid view so that your user will show in the list.



8. While in the Enabled User list, scroll to **find your user** or use the **Search** bar.  
*Note: If you are in an official training, search for you assigned user – IAD User [x]*



9. Select your user for the training and select **Manage Roles** on the top command bar.



10. Select the Omnichannel Agent roles to assign to your user and select **OK**.

### Manage User Roles

What roles would you like to apply to the 1 User you have selected?

Role Name	Business Unit
<input type="checkbox"/> Metadata Store Reader	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Metadata Store Updater Service Role	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Omnichannel administrator	unqb7eccfa4b9904c1e94865d5ec922b
<input checked="" type="checkbox"/> Omnichannel agent	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Omnichannel supervisor	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Orchestration Analytics Services User	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Playbook Manager	unqb7eccfa4b9904c1e94865d5ec922b

OK

Cancel

**Congratulations!** You assigned the proper omnichannel agent role to your user to allow you to be a live agent in omnichannel.

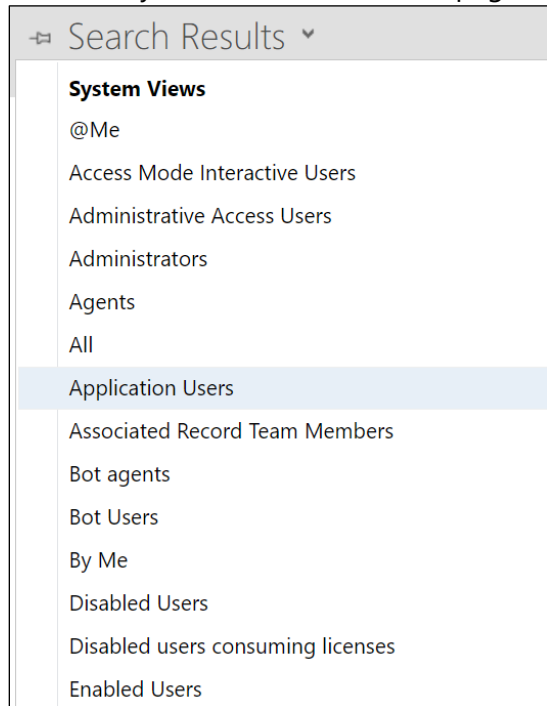
## Task 2: Create Health Bot User in Dynamics 365 Customer Service

We need two users to configure in Omnichannel for Dynamics 365 Customer Service:

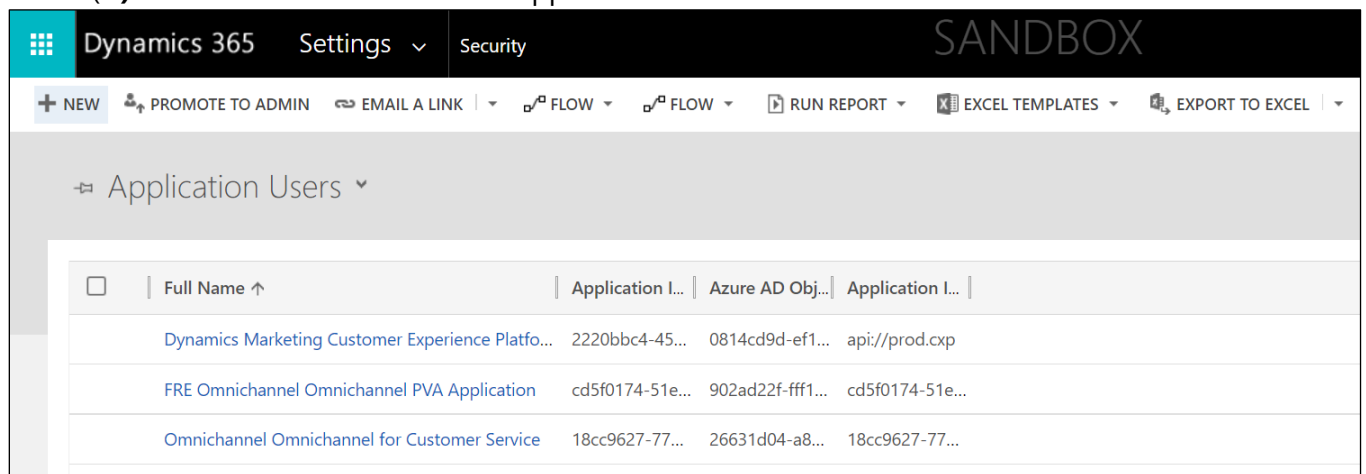
- **Health Bot User** – This is the Azure Health Bot user we created in the previous exercise.
- **Omnichannel Agent User** – This is your current user whom you are logged into Dynamics 365. This will allow you to be a live agent in Customer Service who receives messages from portal users through Azure Bot escalations. *Note: For internal trainings, this is your assigned user, iaduser[x]*

In this task, you will create a **Bot User** which helps connect **Azure Health Bot** with **Omnichannel live Chat**.

1. While in Dynamics 365 in the User page, switch the view to **Application Users**.



2. Select **(+) New** button to create a new Application User.



3. Change the **form type** from User to **Application User** above the New User name.

Dynamics 365 Settings Security New User

SAVE SAVE & CLOSE FLOW FLOW FORM EDITOR

USER

- User
- Application User
- User form – Business
- User Information For...
- Information

The information provided in this form is viewable by the entire organization.

Summary

Account Information

User Name \*

4. You will see a new form appear that aligns to an Application User.

USER : APPLICATION USER New User

The information provided in this form is viewable by the entire organization.

Summary

Account Information

User Name

Application ID \*

Application ID URI

Azure AD Object ID

User Information

Full Name \*

Primary Email

User type Application user

5. On the **New User** record, enter or select the following information:
- Application ID:** This is the Application (client) ID you obtained in the Azure Portal for the supplied MCH Application ID.
  - User type:** Select **Bot application user**. This will *display a new field* to store the Bot application Id.
  - Bot application ID:** This is the Azure Health BotId you copied when enabling the Teams channel. This field is displayed once the User Type is selected to be Bot application user.

USER : APPLICATION USER  
New User

The information provided in this form is viewable by the entire organization.

Summary

Account Information

User Name

Application ID \*

Application ID URI

Azure AD Object ID

User Information

Full Name \*

Primary Email

User type: Bot application user

Bot application ID \*: ef9a0771-20b2-4ba3-ab6b-f120e486c880

6. Click **Save**. It will auto populate the other values in the record.

USER : APPLICATION USER  
# MCH Application Id

The information provided in this form is viewable by the entire organization.

Summary

Account Information

User Name: MCHApplicationId\_dfda9044-cb98-4b0f-8086-cd651dbe4af4@b7eccfa4-h990-4c1e-9486-5d5ec922bhf4.com

Application ID \*

Application ID URI: dfda9044-cb98-4b0f-8086-cd651dbe4af4

Azure AD Object ID: d3358209-40fd-4592-beb6-d888ef2954a2

User Information

Full Name \*: # MCH Application Id

Primary Email: MCHApplicationId\_dfda9044-cb98-4b0f-8086-cd651dbe4af4@b7eccfa4-h990-4c1e-9486-5d5ec922bhf4.com

User type: Bot application user

Bot application ID \*: ef9a0771-20b2-4ba3-ab6b-f120e486c880

7. Select **Manage Roles** on the command bar.

The screenshot shows the top navigation bar of the Microsoft Dynamics 365 interface. The command bar contains several buttons: CONNECT, DELETE, PROCESS, APPROVE EMAIL, REJECT EMAIL, REASSIGN RECORDS, **MANAGE ROLES** (highlighted), and JOIN TEAMS. Below the command bar, the user profile section shows 'USER : APPLICATION USER' and '# MCH Application Id'. A yellow warning banner states: 'The information provided in this form is viewable by the entire organization.' The 'Summary' section is expanded, showing 'Account Information' with the 'User Name' field containing a long alphanumeric string.

8. Assign the **Omnichannel Agent** role to the Bot User as you did for your own user in the previous task. This will allow the bot to act as an omnichannel agent like your user.

The screenshot shows the 'Manage User Roles' dialog box. The title is 'Manage User Roles' with a close button (X). The subtitle is 'What roles would you like to apply to the 1 User you have selected?'. Below the subtitle is a table with two columns: 'Role Name' and 'Business Unit'. The table lists several roles, with 'Omnichannel agent' selected (checked). The 'Business Unit' for all roles is 'unqb7eccfa4b9904c1e94865d5ec922b'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

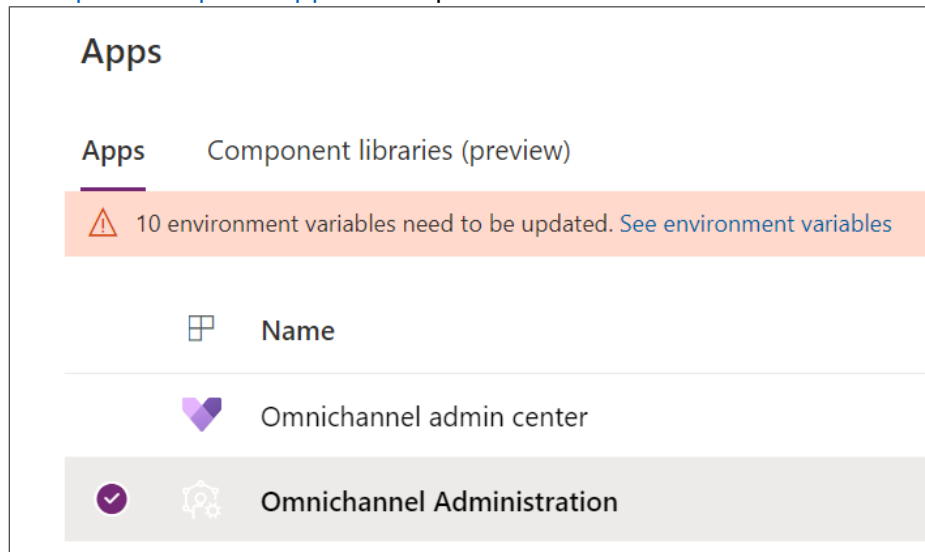
Role Name	Business Unit
<input type="checkbox"/> Metadata Store Reader	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Metadata Store Updater Service Role	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Omnichannel administrator	unqb7eccfa4b9904c1e94865d5ec922b
<input checked="" type="checkbox"/> Omnichannel agent	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Omnichannel supervisor	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Orchestration Analytics Services User	unqb7eccfa4b9904c1e94865d5ec922b
<input type="checkbox"/> Playbook Manager	unqb7eccfa4b9904c1e94865d5ec922b

**Congratulations!** You successfully created a Bot User and assigned to it the Omnichannel Agent role.

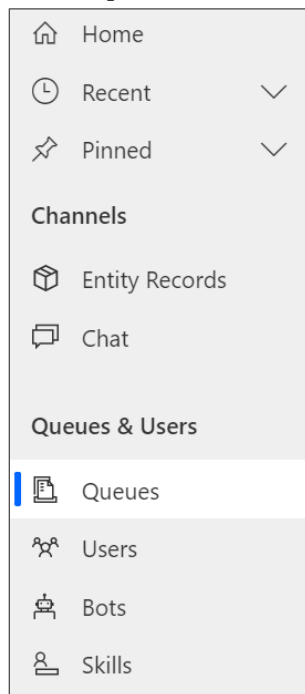
### Task 3: Create and Configure Omnichannel Queues

In this task, you will create and configure the omnichannel queues necessary to communicate with the correct bot or agent depending on the situation.

1. In <http://make.powerapps.com>, open the **Omnichannel Administration** app.



2. Select **Queues** on the left navigation bar.



3. Open **Default Messaging Queue**.

Omnichannel queues			
✓ Name ↑	Queue type	Created On	
Default entity queue	Entity	8/19/2021 6:26 PM	
✓ Default messaging queue	Messaging	8/19/2021 6:26 PM	

4. We will now associate the Default messaging queue with the Bot User so it will respond to incoming messages from customers without agent (human) intervention.

Select **Add Existing User** on the **User (Agents)** subgrid to add the Bot user you previously created.

**Default messaging queue**  
Queue

**Summary** Related

**SUMMARY**

Name \* **Default messaging queue**

Priority \* **2,147,483,647**

Queue type \* **Messaging**

Owner \*

Operating Hours ---

By using this feature, you acknowledge that this feature is in preview and you agree to the [Preview Terms](#). [Learn more](#)

**Users (Agents)** Add Existing User

Full Name Capacity Business Unit

No data available.

5. In the Lookup Records pane, search for your **Bot User** (MCHApplicationId) created in the earlier task.

**Lookup Records** X

Select record

MCH

All Users

# MCH Application Id  
MCHApplicationId\_dfda9044-cb98-4b0f-8086-cd651dbe4af4@b7eccfa4-b990-4c1e-9486-5d5ec922bbf4.com

Change View

Add Cancel

6. **Select the record** from the list and click **Add**.

**Lookup Records** X

Select record

# MCH Application Id

Add more records

All Users

No records found.

Change View

Add Cancel



7. You should now see the Bot User (MCH Application Id) in the Users (Agents) list.

*Note: If your user does not populate after adding, make sure you have assigned the bot user the correct omnichannel agent security role (it may take up to 15 minutes for changes to take effect)*

Default messaging queue

Queue

Summary

Related

SUMMARY

Name

\*

Default messaging queue

Priority

\*

2,147,483,647


Queue type

\*

Messaging

Owner

\*




By using this feature, you acknowledge that this feature is in preview and you agree to the [Preview Terms](#). [Learn more](#)

Operating Hours

---

Users (Agents)

 Add Existing User

Full Name

Capacity








Business Unit

# MCH Application Id

---

unqb7eccfa4b9904c1e94865d5ec922b..

8. Go back to the **Omnichannel queues** grid. Click **+ New** to create a new Queue.

	 Show Chart	 New	 Delete	 Refresh	 Email a Link	 Flow
Omnichannel queues						
<div><div>Full Name</div><div>Queue type</div></div>						
<div>Default entity queue</div> <div>Entity</div>						
<div>Default messaging queue</div> <div>Messaging</div>						

9. Give the new Queue the following details:
- Name:** "Escalate To Human"
  - Priority:** 1 (lower than default queue)
  - Click **Save**.

Save

Save & Close

New

Flow

New Queue

Summary

SUMMARY

Name

\*

Escalate To Human

Priority

\*

1


Queue type

\*

Messaging

Owner

\*

 IAD User 99

By using this feature, you acknowledge that this feature is in preview and you agree to the [Preview Terms](#). [Learn more](#)

Operating Hours

---

10. A Users (Agents) **subgrid should appear** on the right and your **user should be automatically added** to the list. If your user account is not on the list, add it through the Add Existing User button now.

The queue **Escalate To Human** is created to manage and redirect the incoming messages from a user to a Customer Service (human) Agent when Bot sends the user through to a live agent.

Escalate To Human

Queue

Summary Related

SUMMARY

Name

\*

Escalate To Human

Priority

\*

1


Queue type


\*

Messaging

Owner

\*



 IAD User 99

 By using this feature, you acknowledge that this feature is in preview and you agree to the [Preview Terms](#). [Learn more](#)

Operating Hours

---

Users (Agents)

 Add Existing User 

✓

Full Name

↑

↓

Capacity

↓

Business Unit

↓

IAD User 99

---

unqb7eccfa4b9904c1e94865d5ec922b..

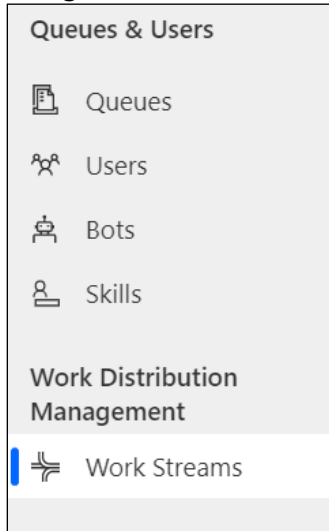
**Congratulations!** You have created the necessary queue to escalate to human agent and added the appropriate users to each messaging queue.

## Task 4: Update Live Work Stream with Context Variables and Routing Rules

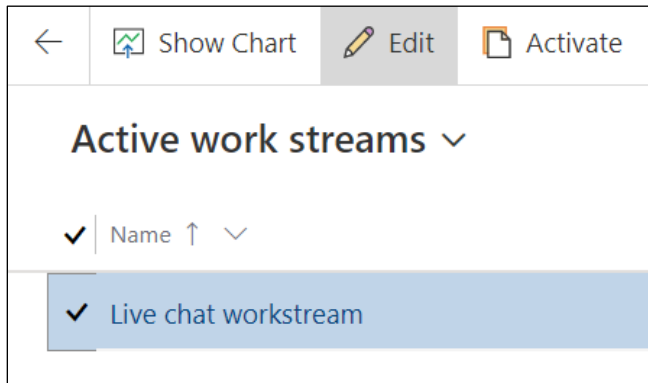
In this task, we will set up basic chat routing. This will allow for users to chat with a bot user in certain cases and a live human agent in other scenarios. The routing rules will allow chat to behave as follows:

- **Route to Bot:** Initial customer conversation is through Health Bot in the default messaging queue. When the chat bot is first opened, route to Default queue which only contains the bot user (agent).
- **Human Routing Rule:** When context variable **EscalateToAgent** is present and set to 1, we route to the queue that has only human users (agents) who can take over conversation.

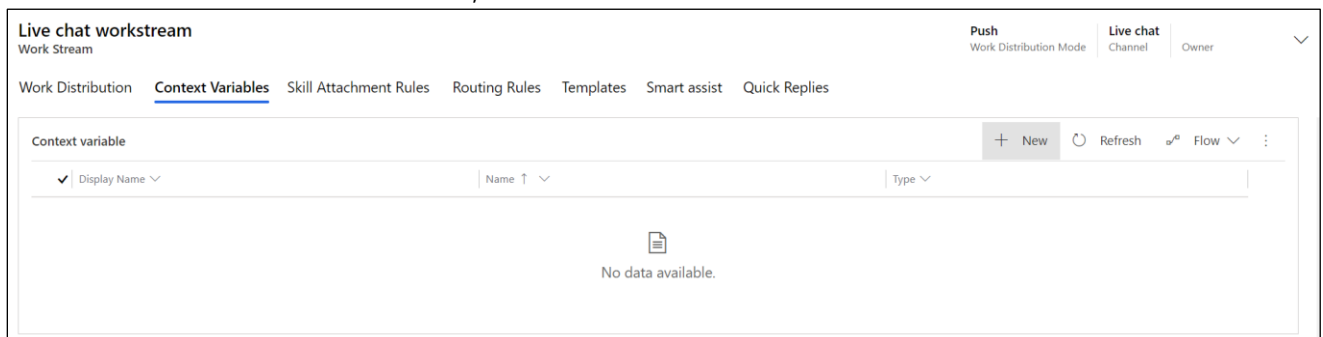
### 1. Navigate to **Work Streams**.



### 2. Select and edit the **Live chat workflow**.



### 3. In the **Live chat workflow** record, select the **Context Variables** tab. Select **+ New**.



4. Create the new Context Variable with the following details:
  - a. **DisplayName:** EscalateToAgent
  - b. **Name:** EscalateToAgent
  - c. **Type:** Number

Quick Create: Context variable

Display Name

EscalateToAgent


Name

\*

EscalateToAgent

Owner

\*

 IAD User 99

Type

\*

Number

Save and Close

Cancel

5. Click **Save and Close**.

6. You should now see the new Context Variable in the Live chat workstream.

Live chat workstream

Work Stream

Push

Work Distribution Mode

Live chat

Channel

Owner

Work Distribution

Context Variables

Skill Attachment Rules

Routing Rules

Templates

Smart assist

Quick Replies

Context variable

+ New

Refresh

Flow

✓

Display Name

✓

Name

✓

Type

EscalateToAgent

EscalateToAgent

Number

7. Select the **Routing Rules** tab. Click **+ Add** to create a new routing rule.

Live chat workstream

Work Stream

Push

Work Distribution Mode

Live chat

Channel

Owner

Work Distribution

Context Variables

Skill Attachment Rules

Routing Rules

Templates

Smart assist

Quick Replies

Rule items

+ Add

Flow

Run Report

✓

Name

✓

Description

✓

Modified On

No data available.

8. Create the new Health Bot routing rule with the following details:
  - a. **Name:** ToHealthcareBot
  - b. **Queue:** Default messaging queue
  - c. No Conditions.

**New Rule Item** Live chat workstream  
Work stream ---  
Modified On

**General**

General Information

Name \* **ToHealthcareBot**

Owner \* **IAD User 99**

Work stream \* **Live chat workstream**

Queue \* **Default messaging queue**

Description ---

Condition

AND OR Ungroup Delete Reset

+ Condition

9. Select **Save & Close**. On the Live chat workstream, click **+ Add** to add another new Routing Rule.

**Live chat workstream** Push  
Work Distribution Mode Live chat  
Channel Owner

Work Distribution Context Variables Skill Attachment Rules **Routing Rules** Templates Smart assist Quick Replies

Rule items + Add Flow Run Report

Name	Description	Modified On
ToHealthcareBot	---	9/16/2021 12:39 AM

10. Create the new Omnichannel Agent routing rule with the following details:
  - a. **Name:** ToAgent
  - b. **Queue:** EscalateToHuman
  - c. **Add Condition:** Context Variable "**EscalateToAgent = 1**"

**New Rule Item** Live chat workstream  
Work stream ---  
Modified On

**General**

General Information

Name \* **ToAgent**

Owner \* **IAD User 99**

Work stream \* **Live chat workstream**

Queue \* **Escalate To Human**

Description ---

Condition

AND OR Ungroup Delete Reset

☐ Context variable EscalateToAgent Equals 1

+ Condition



**Condition**

AND OR Ungroup Delete Reset

☐ Context variable EscalateToAgent Equals 1

11. Select **Save & Close**.

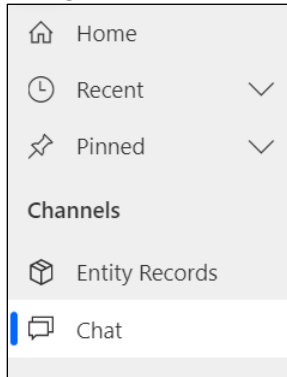
12. On the Live chat workstream, you should now see the two **Routing Rules** we created for **Bot** (ToHealthcareBot) and **Agent** (ToAgent).

Live chat workstream			Push	Live chat	▼
Work Stream			Work Distribution Mode	Channel	
Work Distribution	Context Variables	Skill Attachment Rules	Routing Rules	Templates	Smart assist
Quick Replies					
Rule items			+ Add  Flow ▼  Run Report ▼ ⋮		
✓	Name ▼	Description ▼	Modified On ▼		
	ToHealthcareBot	---	9/16/2021 12:39 AM		
	ToAgent	---	9/16/2021 12:47 AM		

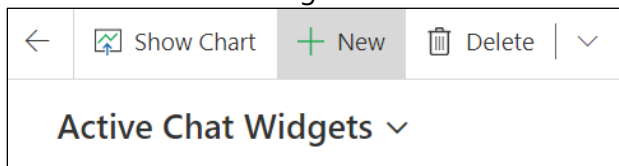
**Congratulations!** You have created the proper context variable and routing rules that will allow customers to begin conversation with a health bot and escalate to a human agent.

## Task 5: Create Chat Widget for Health Bot

1. Navigate to Chat.



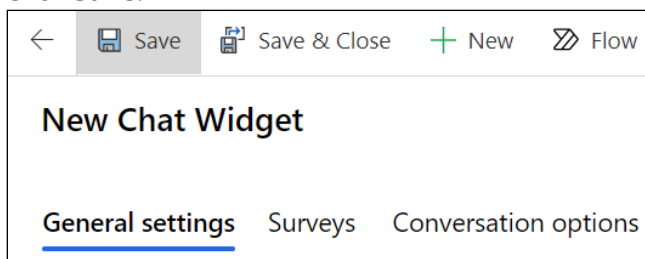
2. Select **+New** Chat Widget.



3. Give the Chat Widget a **Name** (ex: Patient Portal Chat Widget).

A screenshot of the 'New Chat Widget' configuration page. The page has a top bar with 'Created On' and 'Owner' (IAD User 99). Below the top bar are tabs for 'General settings', 'Surveys', 'Conversation options', 'Design', and 'Location'. The 'General settings' tab is active. It contains several sections: 'General information' with fields for Name (Patient Portal Chat Widget), Language (English - United States), Agent display name (Full name), and Authentication settings (---); 'Conversation Mode' with a 'Select mode' dropdown set to 'Live Chat'; 'Work distribution' with a 'Work stream' dropdown set to 'Live chat workstream'; 'File attachments' with two 'Enable file attachments' options (for customers and agents) both set to 'No'; 'Chat Transcripts' with a warning about data flow and two options 'Allow download of transcript' and 'Allow email of transcript' both set to 'No'; and 'Customer waiting' with options for 'Show position in queue' and 'Show average wait time' both set to 'No'.

4. Click **Save**.



1. After the record is saved, a **Widget Code Snippet** will be generated. **Copy** the code snippet and store it for later use.

Patient Portal Chat Widget

Chat Widget

9/16/2021 1:02 AM  
Created On

IAD User 99  
Owner

General settings

Automated messages

Surveys

Conversation options

Design

Location

General information

Name \* Patient Portal Chat Widget

Language \* English - United States

Agent display name Full name

Authentication settings ---

Conversation Mode

Select mode Live Chat

Live chat conversations happen in real time. When the chat ends, the session ends and the chat history is not maintained.

Work distribution

Work stream \* Live chat workstream

File attachments

Enable file attachments for customers No

Enable file attachments for agents No

Chat Transcripts

By enabling this feature, you acknowledge that your data may flow outside your organization's compliance and geo boundaries. This includes Government Cloud environments. Learn more [here](#) and in the [Microsoft Privacy Statement](#).

Allow download of transcript \* No

Allow email of transcript \* No

Customer waiting

These options will be visible to a customer when waiting for an agent.

Show position in queue No

Show average wait time No

Code snippet

Widget snippet

```
<script
id="Microsoft_Omnichannel_LCWid
get" src="https://oc-cdn-
ocprod.azureedge.net/livechatwidg
et/scripts/LiveChatBootstrapper.js"
data-app-id="cfaa18bc-49f2-4223-
a353-f4010b932ec7" data-lcw-
version="prod" data-org-
id="b7eccfa4-b990-4c1e-9486-
5d5ec922bbf4" data-org-
url="https://unqb7eccfa4b9904c1e9
4865d5ec922b-
crm.omnichannelengagementhub.c
om"> </script>
```

**Congratulations!** In this exercise, you have successfully configured Customer Service Omnichannel Live chat by creating the necessary Users, Queues, Work Streams, Context Variables, Routing Rules, and Chat Widget. These all work together and allow patients to chat with a virtual health bot with the option to escalate up to a human agent if needed.



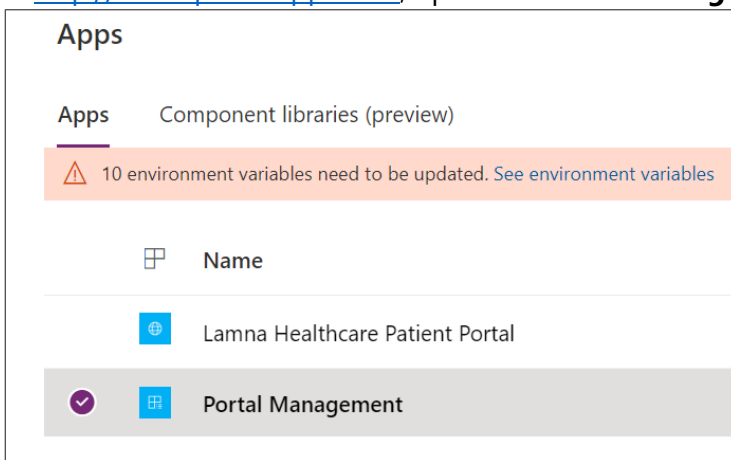
## Exercise 3: Embed Health Bot in Power Apps Portal

In this exercise, you will be embedding the **Omnichannel Chat Widget** into the Power Apps Customer self-service portal using Portal Management configuration. In your environment, we created a Lamna Healthcare Company Portal using the **Customer self-service portal** template before deploying Microsoft Cloud for Healthcare. Now we will configure the chat widget to show on the customer website.

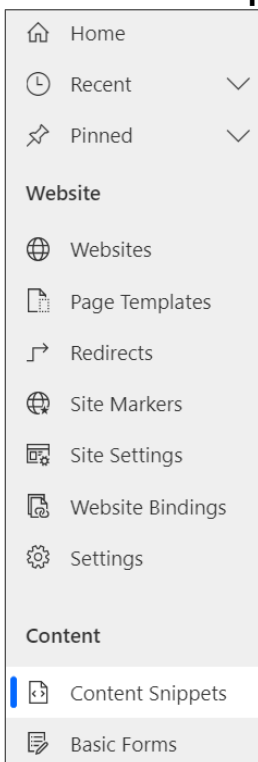
**Customer self-service portal:** A customer self-service portal enables customers to access self-service knowledge, support resources, view the progress of their cases, and provide feedback.

**Portal Management:** Application to help you get started with the advanced portal configuration. In this walk-through, you will learn how to configure Chat widget in **Portal Management** app.

1. In <http://make.powerapps.com>, open the **Portal Management** app.



2. Select **Content Snippets** in the left navigation pane



1. In **Active Content Snippets**, type "**Chat**" in the **Search** box and press enter.

Active Content Snippets ▾				
chat				
✓ Name ↑ ▾	Website ▾	Content Snippet Language ▾	Type ▾	Value ▾
Chat Widget Code	Customer Self-Service	---	HTML	---
Chat Widget Code	Healthcare Patient Portal	---	HTML	<script id="Microsoft_Omnichannel_LCWidget" src...

2. You will see two **Chat Widget Code** records retrieved in the list.  
Click to open the Chat Widget Code record related to **Customer Self-service**.

Active Content Snippets ▾	
✓ Name ↑ ▾	Website ▾
✓ Chat Widget Code	Customer Self-Service
Chat Widget Code	Healthcare Patient Portal

3. In the **Chat Widget Code** record associated with Customer self-service, select **Value (HTML)** > **Html** Tab and then paste the **Chat Widget Code snippet** that you copied and stored in the previous task.

**Chat Widget Code**  
Content Snippet

**General** Administration Related

Name \* Chat Widget Code

Website \* Customer Self-Service

Display Name Chat Widget Code

Type HTML

Content Snippet Language ---

Value (HTML)

Designer | **HTML**

1 rsion="prod" data-org-id="b7eccfa4-b990-4c1e-9486-5d5ec922bbf4" data-org-url="https://unqib7eccfa4b9904c1e94865d5ec922b-crm.omnichannelengagementhub.com"></script>

4. Click **Save & Close**.

Save Save & Close

**Chat Widget Code**  
Content Snippet

5. Now open the other **Chat Widget Code** associated with the **Healthcare Patient Portal** website.

Active Content Snippets ▾	
✓   Name ↑ ▾	Website ▾
Chat Widget Code	Customer Self-Service
✓ Chat Widget Code	Healthcare Patient Portal

6. In the **Chat Widget Code** record associated with the Healthcare Patient Portal, paste in **Value** (HTML) the same **Chat Widget Code snippet** that you copied and stored previously and added to the customer self-service chat widget code. Replace any value that may have already populated the field.

**Chat Widget Code**  
Content Snippet

**General** Administration Related

Name \* Chat Widget Code

Website \* Healthcare Patient Portal

Display Name Chat Widget Code

Type HTML

Content Snippet Language ---

Value (HTML)  
Designer | **HTML**

1 rsion="prod" data-org-id="b7eccfa4-b990-4c1e-9486-5d5ec922bbf4" data-org-url="https://unqb7eccfa4b9904c1e94865d5ec922b-crm.omnichannelengagementhub.com"></script>

7. Select **Save and Close**.

**Congratulations!** In this exercise you have successfully updated the chat widget in the Power App Portal Content Snippets. With this configuration, the Health Bot will be visible on the Power Apps portal, for both the customer self-service template and the healthcare patient portal template.



**Thank you** for joining us on Day 1 of Microsoft Cloud for Healthcare Industry Labs!

We will continue **Lab 04: Azure Health Bot** on Day 2, extending the bot with custom scenarios.