

Dynamics 365 Customer Service Implementation Resources

Presenters:

Michele Mazzucco – FastTrack Solution Architect

Vince Angeloni – FastTrack Solution Architect

Joseph Thomas – FastTrack Solution Architect

Nuno Silva – FastTrack Solution Architect

Josh Wells – FastTrack Solution Architect

Ramanujam Raghunathan – FastTrack Solution Architect

Sourav Das Biswas – FastTrack Solution Architect



TechTalk Series

- *Implementation Resources – introduction ([link](#))*
- *Channel Integration Framework 2.0 ([link](#))*
- **Samples and tools ←**
- Testing for Service
- Analytics for Service

Agenda

- Automate agent tasks with Power Automate
- Monitor Copilot Studio in Application Insights
- Route or deflect cases with AI Builder
- Summarize KB articles with GPT
- Solutions for Copilot Studio
 - Play secure audio file
 - Implement DTMF aggregation
 - Set up multilingual bot

Dynamics 365 Customer Service

Implementation Optimization Resources



aka.ms/d365csresources

Customer Service Implementation Resources

- Are these resources officially supported by Microsoft?
 - ✓ This is community content, offered “as-is” and not part of Microsoft products
 - ✓ Meant to be a starting point for you to implement your project
 - ✓ All code and solutions are starter samples for your implementation, not a final product
 - ✓ All samples, tutorials and guidance are in line with Microsoft’s best practices
- Can I contribute to these resources?
 - ✓ Some of the items will have a corresponding GitHub repo (e.g., code samples)
 - ✓ We’ll evaluate other forms of collaboration
- Can I submit my ideas for new resources?
 - ✓ Submit your suggestions in the [Ideas portal](#)
 - ✓ Leverage any FastTrack engagement you have on your project

Samples and tools

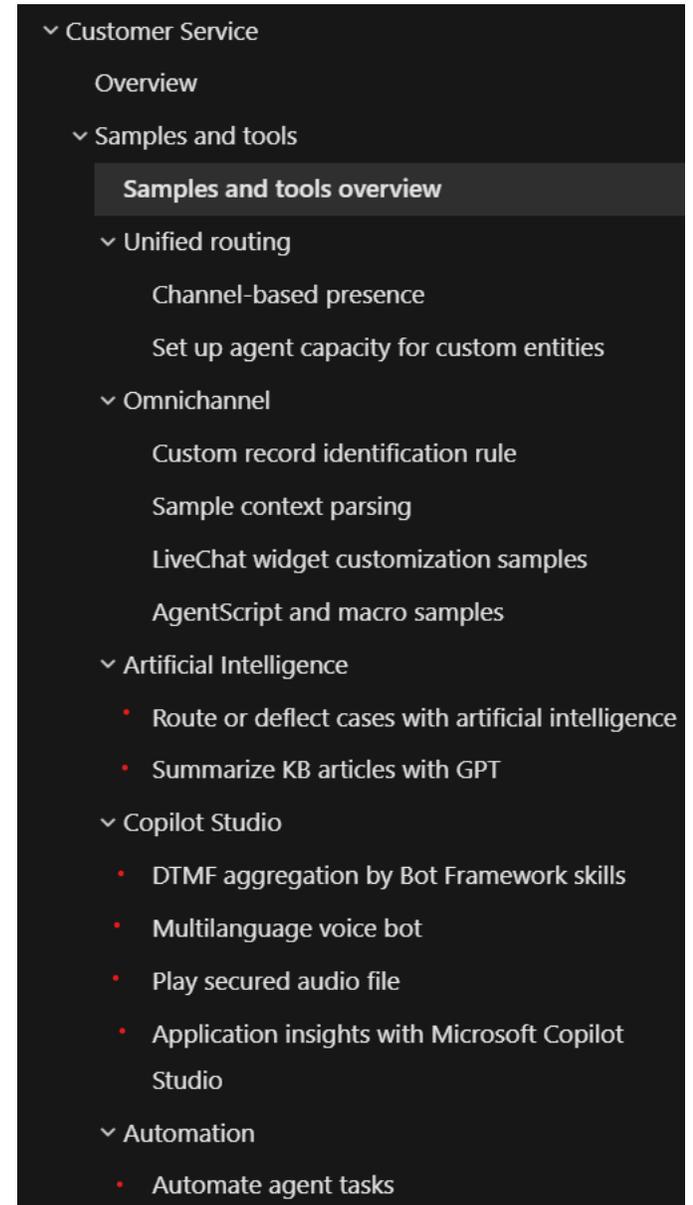
Vince Angeloni



Samples and tools - Overview

Areas:

- Unified Routing
- Omnichannel
- Artificial Intelligence
- Copilot Studio
- Automation



Automate agent tasks with Power Automate Desktop

Josh Wells

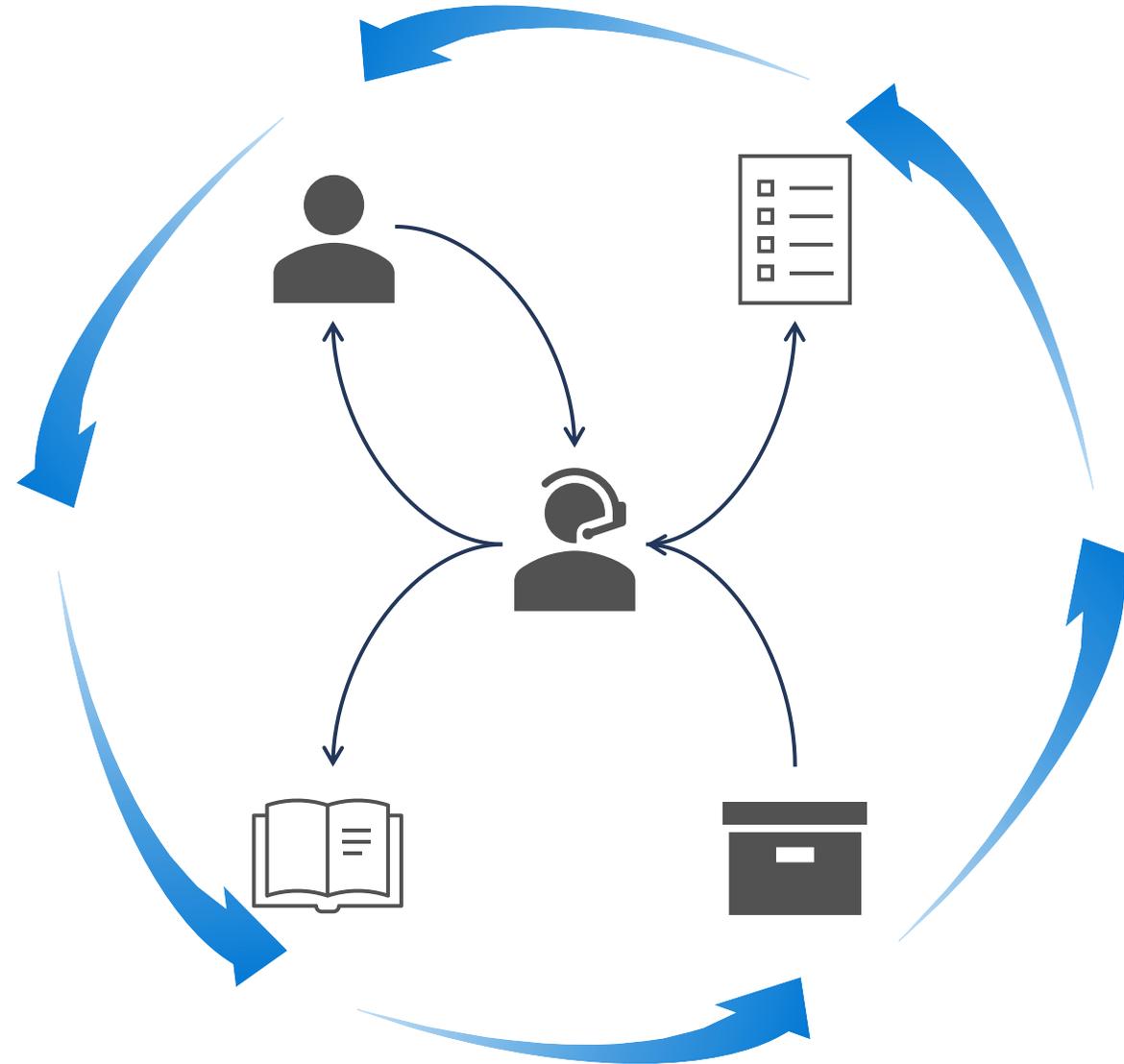


Automate agent tasks with Power Automate Desktop





Automate agent tasks with Power Automate Desktop



Save As | New | Set As Default | Refresh All | Share

Customer Service Agent Dashboard

My Active Cases | New Case | Delete | Refresh | See all records

Case Title	Case Number	Priority	Origin	Customer	Status Reason	Created On
Complete overhaul required (sample)	CAS-01066-G3J4X0	High	Web	Paul Cannon (sample)	In Progress	8/30/2023 1:49 PM

All # A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Rows: 1 - 1 of 1 | Page 1

Cases Available to Work On | Refresh

Title	Entered Que...	Queue	Worked By
-------	----------------	-------	-----------

My Open Activities | Task | Email

Activity	Subject	Regardi...	Priority	Start Date
Email	A case has been opened for your request	Complete...	Normal	
Email	RE: CRM:0114001	Average ...	Normal	



Automate agent tasks with Power Automate Desktop

All the details are available in the MS learn page

[Automate agent tasks with Power Automate - Dynamics 365 | Microsoft Learn](#)

Application insights telemetry with Microsoft Copilot Studio

Ramanujam Raghunathan



AppInsights for Copilot Studio



This article discusses how you can capture telemetry data from your Microsoft Copilot Studio bot for use in Azure Application Insights.



In addition to the native analytics features within Microsoft Copilot Studio, you can send telemetry data to Application Insights. Telemetry offers insights into your bot by tracking:

- Logged messages and events sent to and from your bot
- Topics to be triggered during user conversations
- Custom telemetry events that can be sent from your topics



Resources for Sample Kusto Query [Application insights telemetry with Microsoft Copilot Studio - Dynamics 365 | Microsoft Learn](#)



botappinsights

Application Insights

Search

Application Dashboard Getting started Search Logs Monitor resource group Feedback Favorites Rename Delete

- Overview
- Activity log
- Access control (IAM)
- Tags
- Diagnose and solve problems
- Investigate
- Monitoring
 - Alerts
 - Metrics
 - Diagnostic settings
 - Logs
 - Workbooks
- Usage
 - Users
 - Sessions
 - Events
 - Funnels
 - User Flows
 - Cohorts
 - More

Essentials

JSON View

Resource group (move) : [MA azuremonitortest eastus managed](#) Instrumentation Key : 9b33e393-29a6-4a29-b7b3-89f0a001f2bf

Location : West US 2 Connection String : InstrumentationKey=9b33e393-29a6-4a29-b7b3-89f...

Subscription (move) : [Azure subscription 1](#) Workspace : [12b0e214-a332-49c3-8d58-363557c0f664-MA-azure...](#)

Subscription ID : 12b0e214-a332-49c3-8d58-363557c0f664

Tags (edit) : [Add tags](#)

Show data for last:

- 30 minutes
- 1 hour**
- 6 hours
- 12 hours
- 1 day
- 3 days
- 7 days
- 30 days



DEMO: AppInsights Telemetry Data

Ramanujam Raghunathan



botappinsights | Logs

Application Insights

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 - Funnels
 - User Flows
 - Cohorts
 - More

New... * Ne... *x +
 Feedback Queries Settings Bookmarks

botappinsights Select scope Run Time range: Last 24 hours Save Share New alert rule

Tables Queries Functions ...

Search

Filter Group by: Solution

Collapse all

Favorites

You can add favorites by clicking on the ☆ icon

- Application Insights**
- availabilityResults
 - browserTimings
 - customEvents
 - customMetrics
 - dependencies
 - exceptions
 - pageViews
 - performanceCounters
 - requests
 - traces

```

1 customEvents
2 | where customDimensions["conversationId"] == "Iy1GHYHLIDn8uKURR3nkbj-us"
  
```

Query history

DEMO: Custom Dimensions Telemetry Data

Ramanujam Raghunathan



botappinsights | Logs

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 - More

botappinsights Select scope Run Time range: Last 24 hours Save Share + New alert rule

```

1 let rawData = customEvents
2 | where customDimensions["conversationId"] == "Iy1GHYHL1Dn8uKURR3nkbj-us"
3 | order by timestamp asc, session_Id
4 | extend TimeDifference = iif(row_number() > 1 and session_Id == prev(session_Id), (timestamp - prev(timestamp))/
  1ms, (timestamp-timestamp)/1ms)//1ms
5 | extend Kind=customDimensions["Kind"]
6 | extend TopicName=customDimensions["TopicName"]
7 | extend Text = customDimensions["text"]
8 | extend errorCodeIndex = indexof(customDimensions["text"], "Error code:")
9 | extend conversationIdIndex = indexof(customDimensions["text"], "Conversation ID:")
10 | extend errorCodeText = substring(customDimensions["text"], errorCodeIndex + strlen("Error code:"),
  conversationIdIndex - (errorCodeIndex + strlen("Error code:")))
11 | extend Words = split(customDimensions["TopicName"], ".")// Split the string into an array of words
12 | extend TopicIdWords = split(customDimensions["TopicId"], ".")
13 | extend NumWords = array_length(Words) // Get the number of words in the array
14 | extend Topics = case (array_length(Words) == 1, TopicIdWords[2],Words[2])
15 | extend channelId = tostring(customDimensions['channelId'])
16 | extend fromId = customDimensions['fromId']
17 | extend fromName = customDimensions['fromName']
18 | extend recipientId = customDimensions['recipientId']
19 | extend typetext = tostring(customDimensions['type'])
20 | extend EventGroupcounter = iif(name == "TopicStart", 1, iif(name == "TopicEnd", 0, 0))
21 | extend EventGroup =
22 case(name == "TopicStart", strcat("TopicStart_", Topics),case(name == "TopicEnd", strcat("TopicEnd_", Topics),
  "Other"))
23 | extend RowId = row_cumsum(EventGroupcounter)
24 | project timestamp, name, tostring(Topics),Kind,Text, errorCodeText, session_Id, customDimensions, EventGroup,
  TimeDifference;
25 rawData

```

Schema and Filter

Query history

customEvents | extend isDesignMode = customDimensions['DesignMode'] | where isDesignMode == "False" // Exclude canvas test

Run

DEMO: Error Identification and Gen Answers Telemetry Data

Ramanujam Raghunathan



botappinsights | Logs

Application Insights

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 - Users
 - Sessions
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 - Funnels
 - User Flows
 - Cohorts
 - More

botappinsights Select scope Run Time range: Last 24 hours Save Share + New alert rule

```

2 | where customDimensions["conversationId"] == "Iy1GHYHL1Dn8uKURR3nkbj-us"
3 | order by timestamp asc , session_Id
4 | extend TimeDifference = iif(row_number() > 1 and session_Id == prev(session_Id), (timestamp - prev(timestamp))/
  1ms, (timestamp-timestamp)/1ms)//1ms
5 | extend Kind=customDimensions["Kind"]
6 | extend TopicName=customDimensions["TopicName"]
7 | extend Text = customDimensions["text"]
8 | extend errorCodeIndex = indexof(customDimensions["text"], "Error code:")
9 | extend conversationIdIndex = indexof(customDimensions["text"], "Conversation ID:")
10 | extend errorCodeText = substring(customDimensions["text"], errorCodeIndex + strlen("Error code:"),
  ...

```

Results Chart

session_Id	customDimensions	EventGroup	TimeDifference
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"fromId":"9865a8a8-c9d6-4af2-985c-e47c2b663c07","type"...	Other	0
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"DesignMode":"False","channelId":"directline","conversatio...	TopicStart_tri...	3.8548
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"DesignMode":"False","channelId":"directline","conversatio...	Other	1.4193
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"DesignMode":"False","channelId":"directline","conversatio...	Other	1.4823
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"DesignMode":"False","channelId":"directline","conversatio...	Other	1.8276
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"DesignMode":"False","channelId":"directline","conversatio...	TopicEnd_trig...	0.1293
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"fromId":"9865a8a8-c9d6-4af2-985c-e47c2b663c07","type"...	Other	0.199
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"DesignMode":"False","channelId":"directline","conversatio...	TopicStart_Co...	0.8892
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"DesignMode":"False","channelId":"directline","conversatio...	Other	1.312
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"DesignMode":"False","channelId":"directline","conversatio...	TopicEnd_Co...	0.8996
eKZxo6CQUAYj5GPaFOiEm1afgKFD+aZt5RlyaUIXTEI=	{"recipientId":"9865a8a8-c9d6-4af2-985c-e47c2b663c07","r...	Other	0.1293

Schema and Filter

Columns

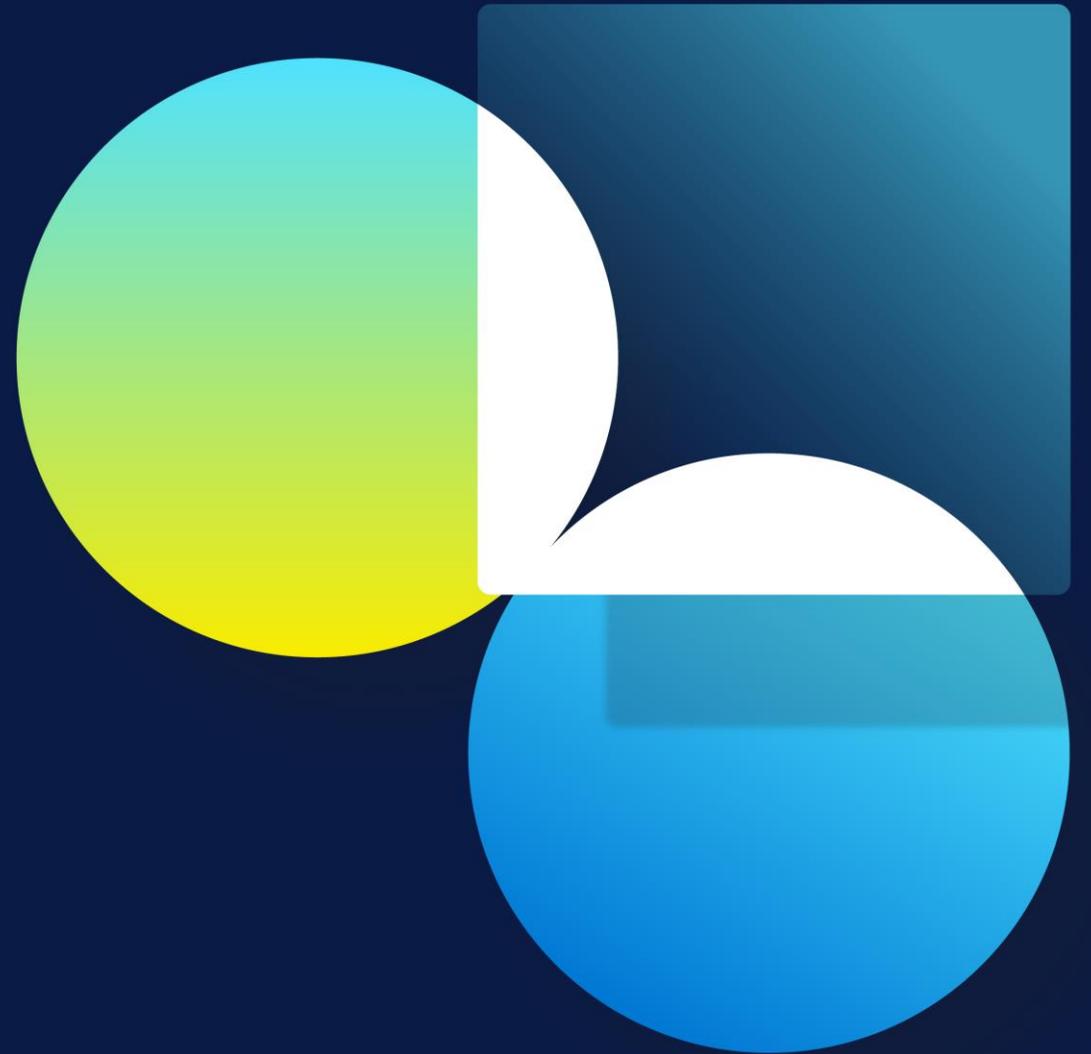
AppInsights for Copilot Studio

All the details are available in the MS learn page

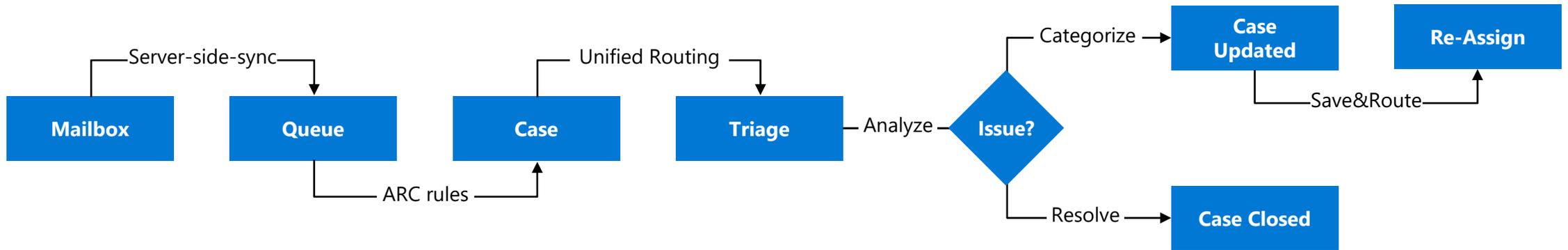
[Application insights telemetry with Microsoft Copilot Studio - Dynamics 365 | Microsoft Learn](#)

Route or deflect cases using AI Builder

Michele Mazzucco



Route or deflect cases using AI Builder



Working with unstructured data, for example emails, may take extra effort when processing incoming customer requests:



Analyze the original message



Define the nature of the request



Re-assigned the case to proper queue

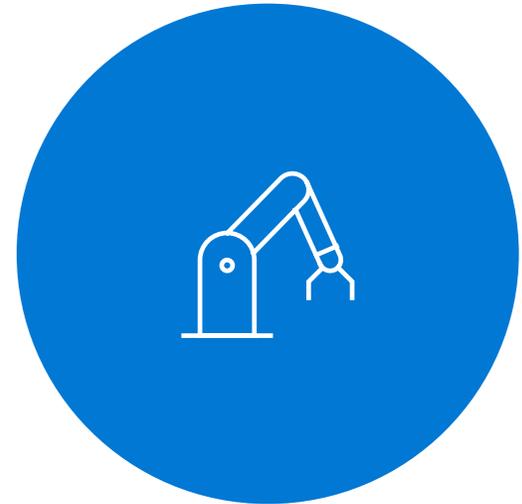
Route or deflect cases using AI Builder



Receive a new email message



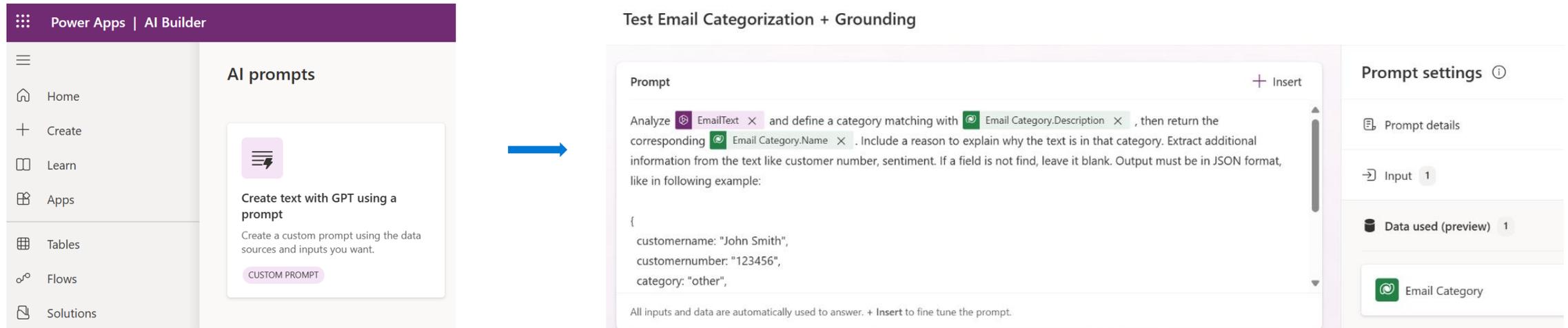
Apply AI to detect intent and extract info



Automate case routing and assignment

Route or deflect cases using AI Builder

Adding a GPT Prompt for your business scenario:



The screenshot displays the Power Apps AI Builder interface. On the left, a navigation pane shows options like Home, Create, Learn, Apps, Tables, Flows, and Solutions. The main area is titled 'AI prompts' and features a card for 'Create text with GPT using a prompt'. A blue arrow points to the right, where a detailed view of a prompt is shown. The prompt is titled 'Test Email Categorization + Grounding' and instructs the model to analyze 'EmailText' and define a category matching with 'Email.Category.Description', returning the corresponding 'Email.Category.Name'. It includes an example JSON output: { customername: "John Smith", customernumber: "123456", category: "other", }. The right sidebar shows 'Prompt settings' with options for 'Prompt details', 'Input 1', and 'Data used (preview) 1', along with a preview of the 'Email Category' output.

Prompts give makers the freedom to instruct the GPT model to behave in a certain way or to perform a specific task. By carefully crafting a prompt, you can generate responses that suit your specific business needs. This transforms the GPT model into a flexible tool to accomplish various tasks.

[Create a prompt | Microsoft Learn](#)

Route or deflect cases using AI Builder

Editing the

1

2

Support Queue - Automatic case creation - Saved
Record Creation and Update Rule Item

Condition builder Related ▾

Condition

Condition name * Support Queue - Automatic case creation

Condition that must pass to continue (pass if blank) * And ▾

- Subject (Email) ▾ Contains data ▾ ...
- Description (Email) ▾ Contains data ▾ ...

+ Add ▾

Actions to take

Record to create Case

Configure in Microsoft Power Automate [Save and open Power Automate](#)

Save and open Power Automate

AI Case ... Power Automate creates a flow based on the action you selected. Please confirm the information within the action that you are creating. You can also add or edit actions in Power Automate [Learn more](#)

AI Re

Route or deflect cases using AI Builder

Conditions

And ▾

Routed record (Case) ▾ Contains data ▾

CASE DETAILS		AI Fields	
Case Title	* account locked	AI Category	complaint
ID	CAS-01073-R0L7T3	AI Reason	this is a complaint because the product was damaged and did not work
Subject	---		

Route to queues

Queue *

Complaints Queue (2 users) ▾

```
"customernumber": "AB00996",  
"category": "complaint",  
"reason": "this is a complaint because the produ  
"sentiment": "negative"
```

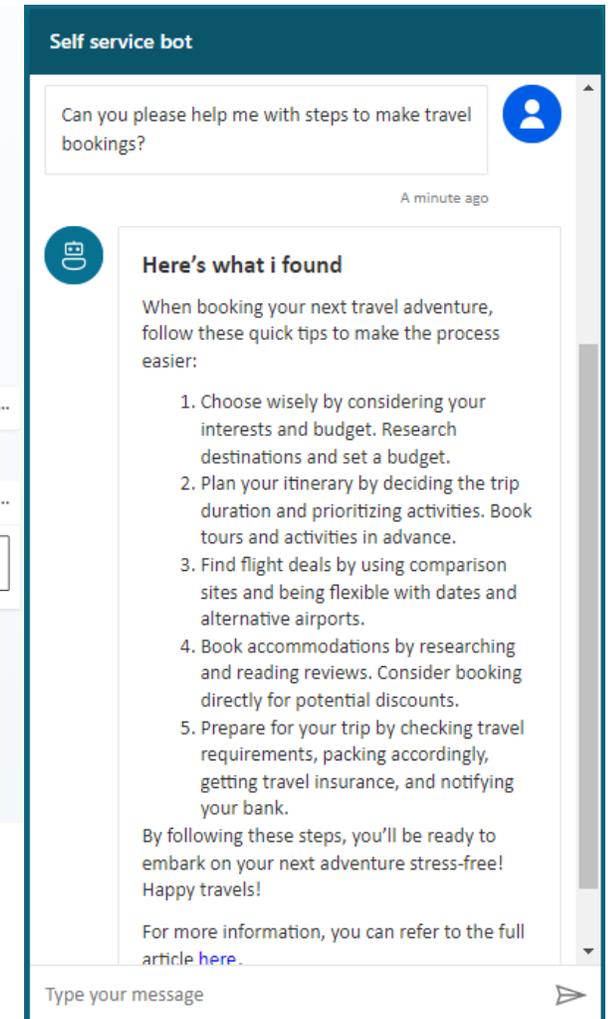
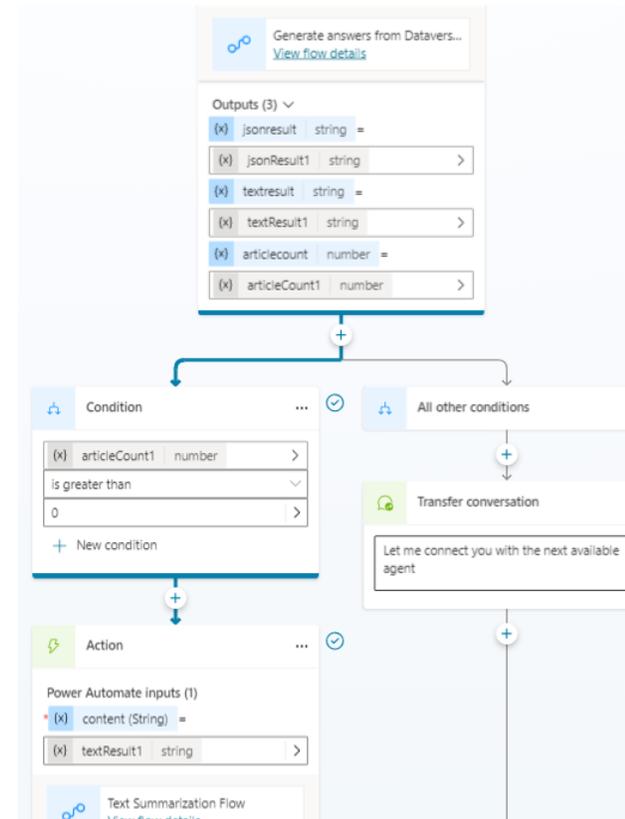
Summarize Knowledge Base articles with GPT

Sourav Das Biswas



Summarize knowledge articles from D365 using GPT

- In this scenario customer facing bot is integrated with knowledge base stored in Dynamics 365
- The AI generated response summarizes the knowledge base articles using custom prompts configured using AI hub
- The custom prompt is integrated with bot's topic flow using Copilot Studio
- Overall, it makes the conversation more accurate and personalized to customer's queries



Try out the chatbot we made!

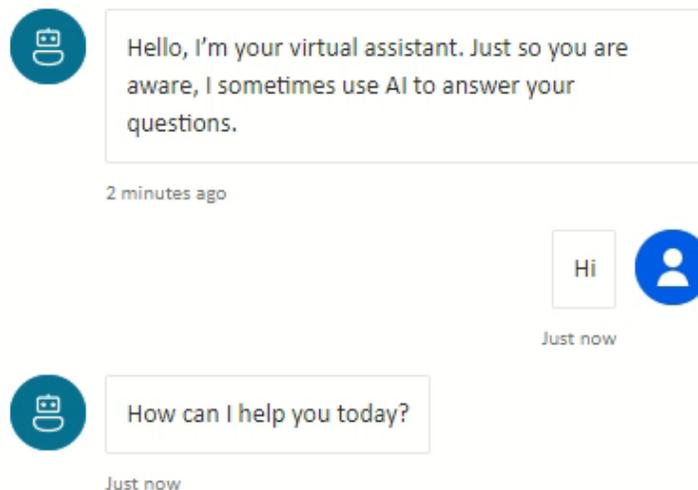
Here are some things my bot can help you with:

Hello

Start over

Talk to a person

Self service bot



The screenshot shows a chat interface with a dark teal header. The chat history includes:

- A bot message (blue circle icon) with the text: "Hello, I'm your virtual assistant. Just so you are aware, I sometimes use AI to answer your questions." Below the message is a timestamp "2 minutes ago".
- A user message (white circle icon) with the text: "Hi". Below the message is a timestamp "Just now".
- A bot message (blue circle icon) with the text: "How can I help you today?". Below the message is a timestamp "Just now".

Type your message



Summarize knowledge articles from D365 using GPT

All the details are available in the MS learn page

[Summarize Dynamics 365 Knowledge Base articles with GPT - Dynamics 365 | Microsoft Learn](#)

The article will be upgraded soon with the migration from OpenAI endpoint to the AI Builder GPT prompt

Play secure audio file from Copilot Studio

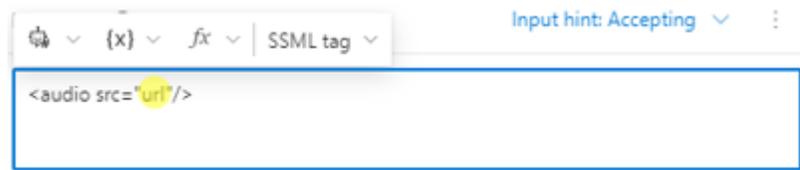
Nuno Silva



Play secure audio file from Copilot Studio classic (PVA)

This article refers to Copilot Studio classic (Power Virtual Agents) for voice support

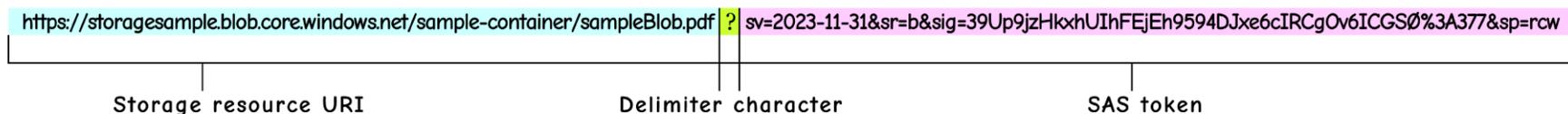
- By using Azure Bot Framework Composer is possible to add Speech components to your bot responses to play audio file, using SSML tags ([Authoring speech experiences in Bot Framework Composer | Microsoft Learn](#))



- The audio file url must be accessible on internet

How to secure the audio file:

- Utilize Azure Blob storage to host audio files for playback through SSML
- Create SAS tokens for your storage containers, [link](#)



[Play secure audio file from Copilot Studio - Dynamics 365 | Microsoft Learn](#)

Using Azure BFC skill to add DTMF aggregation to PVA

Vince Angeloni



Using Bot Framework Composer skill to add DTMF aggregation to Copilot Studio classic for voice support

This article refers to Copilot Studio classic (Power Virtual Agents) for voice support



Scenario:

IVR asks for account number by DTMF (Dual Tone Multi Frequency) input, example "1223457#"

Solution:

Extend MCS classic (PVA) by adding a custom skill that uses [Aggregate DTMF Input](#) included in the Telephony Extensions github package.

Set up a multilingual bot in Copilot Studio classic

Vince Angeloni



Set up a multilingual bot in voice channel

This article refers to Copilot Studio classic (Power Virtual Agents) for voice support

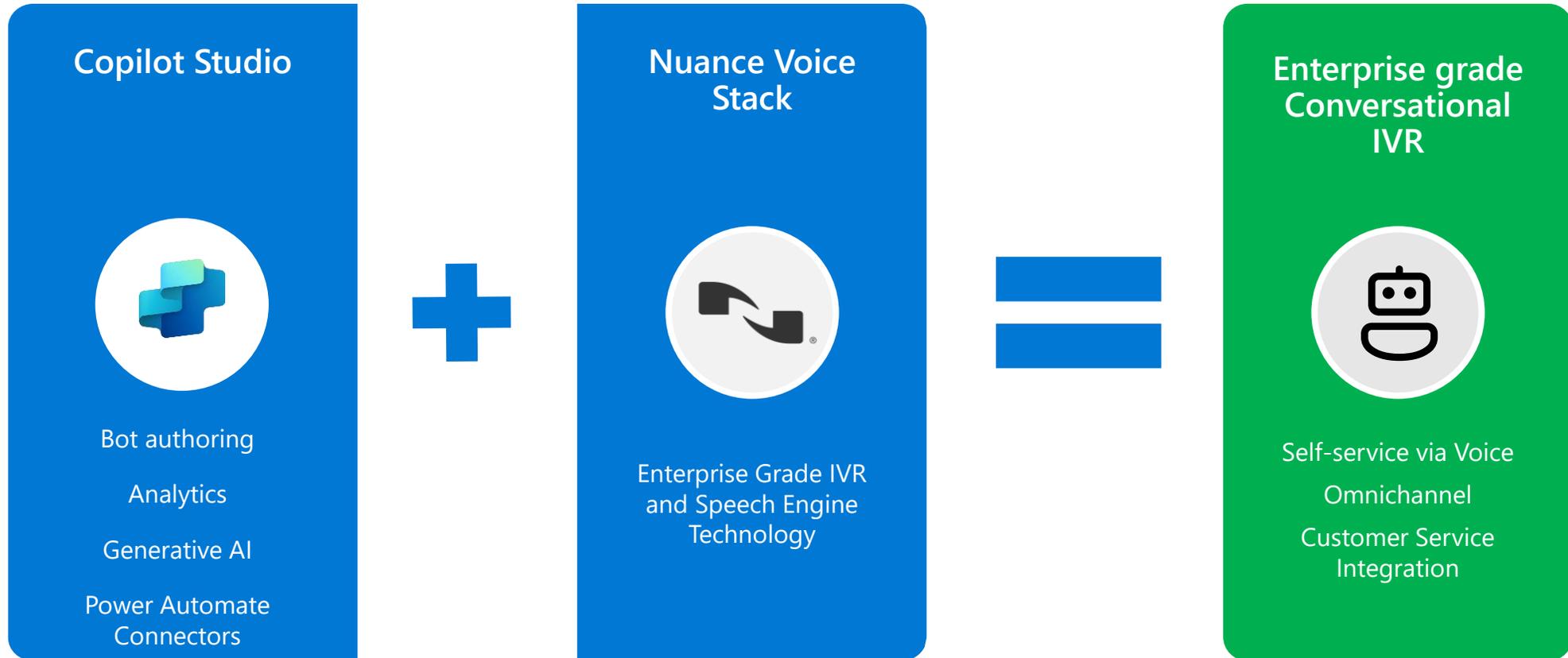
- A multilingual contact center helps you serve global customers who want to interact with your contact center in the language of their choice. You can also set up bots as the first contact who can handle such requests.
- The intent of this article is to provide a sample code of a multilingual bot in *Copilot Studio classic (Power Virtual Agents) for voice support*, by using Azure Bot Framework Composer
- [Set up a multilingual bot to use in voice channel | Microsoft Learn](#)

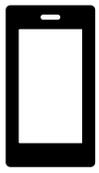
What's next

Vince Angeloni



Contact Center IVR with Copilot Studio as authoring tool





Native DTMF authoring support

Question Speech & DTMF

SSML tags {x} fx

Should I forward this information to your phone?

+ Add

Identify

Multiple choice options

Assign DTMF keys to options

Options for user

Yes 1

No 2

+ New option

Save user response as

{x} Var1 choice

DTMF

Choose how your copilot receives input from a dial pad. [Learn more](#)

Interdigit timeout

3000 ms

Termination timeout

Continue without waiting

Termination timeout

2000 ms

Question Speech & DTMF Credit card number

SSML tags {x} fx

Sure I see an application for loan. In order to verify you can you please tell or type last four digits of your driver license?

+ Add

Identify

User's entire response

Accept multi-digit DTMF input

Number of digits (DTMF only)

4

Termination key

#

Save user response as

{x} UserDriverLicensel... string

Name *

Credit card number

Description

Credit card number that has 13 or 16 digits and starts with a 4.

Pattern *

4[0-9]{12}(?:[0-9]{3})?

Trigger

DTMF received

Message Speech & DTMF

Ok we are escalating you to an agent

+ Add

Transfer conversation

Transfer type

Transfer to agent

Message to agent

Cusotmer pressed 0

DTMF received properties

Triggered when a DTMF key tone is received. Node-level DTMF configurations overrule bot-level DTMF configurations or triggers. [Learn more](#)

DTMF Key *

0

Condition Builder

Select a variable

Condition

Enter or select a value

Priority

Set priority for this trigger against other qualifying triggers with lower numbers indicating higher priority.

Enter number

Run once

Give customers choice

Let customer select between speech and DTMF input

Adjust to your audience

Control interdigit and termination timeouts to ensure your customer has sufficient time to enter the input

Constrain and validate input

Validate that the input matches pattern before next step (or reprompt)

Offer familiar control

Replicate your legacy IVR with DTMF input to give customers time to get used to Conversational experience



Speech output optimization authoring

Message Speech & DTMF

SSML tags {x} fx

Text variation available.

```
<speak>
<voice name="en-US-AriaNeural"> <lang
xml:lang="en-US">
fx If(Global.va_IsNewCustome... How
can I help</lang> </voice>

<voice name="fr-FR-DeniseNeural"> <lang
xml:lang="fr-FR"> Bienvenue chez Conotoso
Bank </lang> </voice>

<voice name="zh-CN-
XiaochenMultilingualNeural"> <lang
xml:lang="ko-KR">
fx If(Global.va_IsNewCustome...
제가 도와드릴 수 있는 일이 있나요? </lang>
</voice> </speak>
```

+ Add

Message Speech & DTMF

SSML tags {x} fx

- Audio
- Break
- Emphasis
- Prosody

Message Speech & DTMF

Welcome to Contoso B

+ Add

- Text
- Speech & DTMF

Fine tune voice to your needs
Use SSML to fine tune speech output

Access to the vNext preview

<https://aka.ms/VoiceVNext>



QUESTIONS

FastTrack for Dynamics 365

Dynamics 365 FastTrack - Upcoming TechTalks

Dynamics 365 Community / Blogs / FastTrack for Dynamics 365 / Dynamics 365 FastTrack - Upcoming TechTalks

Topics FastTrack for Dynamics 365 ▾

Blogs Dynamics 365 FastTrack - Upcoming TechTalks ▾

Featured



20 May 2024

FastTrack for Dynamics 365

[Upcoming TechTalk: Copilot Capabilities in Dynamics 365 Finance and Supply Chain M...](#)

Alejandra Cabrales

♥ (3)



16 May 2024

FastTrack for Dynamics 365

[Upcoming TechTalk: Implementation Optimization resources - D365 Customer Service \(...\)](#)

LutzE

♥ (0)

Most liked

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[Upcoming TechTalk: Copilot Capabilities in Dynamics 365 Finance and Supply Chain Management](#)

Review the Copilot features that are currently available in Dynamics 365 Finance and SCM or will be released with the 10.0.40 Update.
PRESENTERS Beatriz Nebot Garcia, Senior Product Manager Jodi Christiansen, Senior Program Manager Eric Wang,

20 May 2024 Alejandra Cabrales

♥ (3)

[Upcoming TechTalk: Dynamics 365 finance and operations apps UI performance testing with JMeter](#)

Before attending this event, take some time to explore our Performance testing with Jmeter blog series
[https://nam06.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcommunity.dynamics.com%2Fblogs%2Fpost%2F%3Fpostid%3D587b9524-30c9-422c-a5f8-4e37

29 Mar 2024 Alejandra Cabrales

♥ (2)

[TechTalk: Dynamics 365 Automated Regression Testing with Leapwork | August 30 or 31, 2023](#)

Regression testing is an absolute must in the Dynamics 365 ecosystem. It enables teams to accelerate release cycles, increasing testing coverage, improve time and cost efficiency and ensure bugs are detected proactively as early as possible. There ar



Dankie Faleminderit **Shukran** Chnorakaloutioun Hvala Blagodaria
Děkuji **Tak** Dank u **Tānan** Kiitos **Merci** Danke Ευχαριστώ A dank
Mahalo הודות. **Dhanyavād** Köszönöm Takk Terima kasih **Grazie** Grazzi

Thank you!

감사합니다 Paldies Choukrane Aċiū Благодарам ありがとうございます
谢谢 Баярлалаа **Dziękuję** Obrigado Mulțumesc **Спасибо** Ngiyabonga
Ďakujem **Tack** Nandri **Kop khun** Teşekkür ederim Дякую Хвала Diolch