

Microsoft Teams Phone – Inbound Business Calls

Out-Of-Box Capabilities & Beyond



Agenda

Overview of Microsoft inbound call answering solutions

- Shared Lines
 - Demo - Shared Lines (Group call & Boss Admin (Delegate))
- Call Queues and Auto Attendants
 - Demo Call Queue Agents
- Prerequisites (Resource Accounts + Licensing)
- Planning and design
- Reporting
- Enhancing Call Queues

Options to manage business communications with Teams



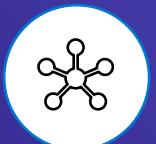
Customer connections with Teams Phone

Streamline internal and external customer call management experiences with built-in auto attendants, call queues, and voice enabled channels



Certified contact center solutions

Maintain your existing contact center solution with one of the 18 solutions that have been certified to integrate with Teams



Microsoft Digital Contact Center Platform

Deliver personalized experiences with an open platform, built on best-in-class AI to deliver consistent, connected support across channels



Azure Communication Services

Build custom standalone applications that integrate audio, video, and telephony for Teams users

Options to manage customer communications with Teams

Light weight

- **Shared Line**
 - Call Group
 - Delegate



Native

This 45 min

Our scope, today!

Medium weight

- **Call Queues**

Heavy weight

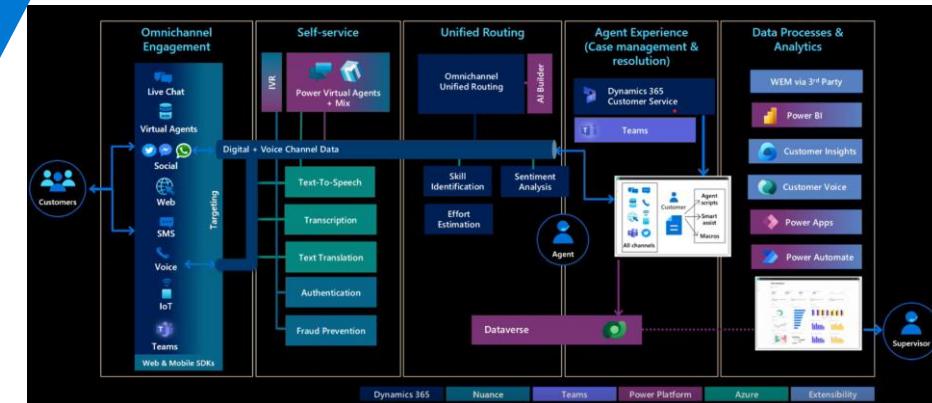
- **Contact Center**

Ultra weight

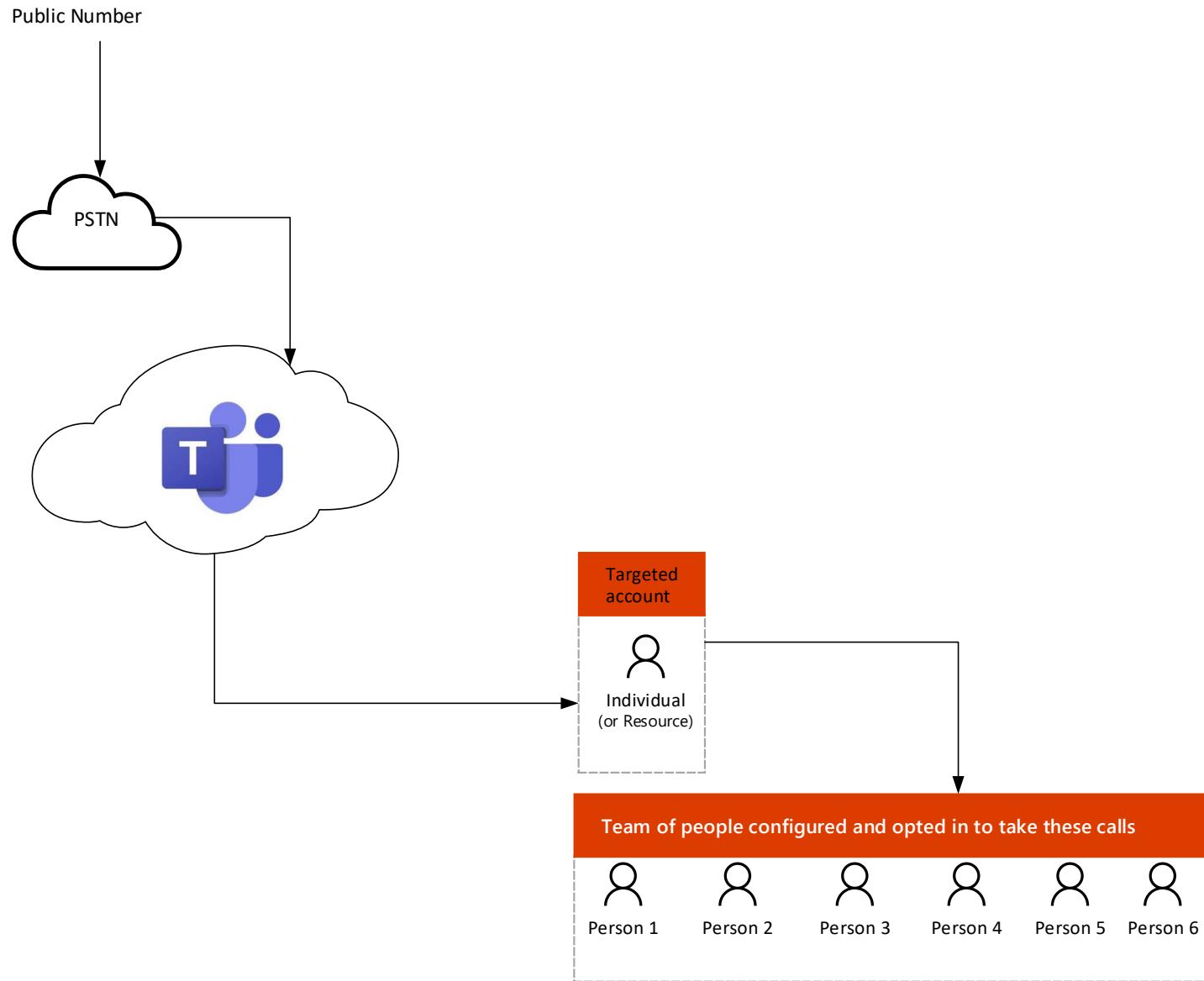
- **Digital Contact Center Platform**
 - Nuance
 - Azure Communications Services



Solution certified for
Microsoft Teams



Inbound calls to your organization



Shared Lines

Overview + Demo



Shared Line: CALL GROUP

Enables user to Forward calls to a GROUP

Ring in sequence or simultaneously

Recipient able to turn off notifications for forwarded calls

Recipient able to change ring for Group Call

Self-service through Settings

IT Pros can administer in Teams Admin Center

IT Pros

[Call sharing and group call pickup - Microsoft Teams | Microsoft Learn](#)

Users

[Call forwarding, call groups, and simultaneous ring in Teams - Microsoft Support](#)

Megan Bowen

The screenshot shows the 'Settings' page for 'Calls'. Under 'Call answering rules', it says 'Choose how you want to handle incoming calls.' There are two options: 'Calls ring me' (selected) and 'Forward my calls'. Below this, 'Also ring' is set to 'No one else'. A dropdown menu 'If unanswered' is highlighted with a blue box and set to 'Call group'. A yellow box highlights the 'Calls' tab at the bottom left. On the right, there's a 'Call group' section showing three members and a pencil icon. Another yellow box highlights the 'Call group' button. To the right, a 'Forwarding' dialog box is open, also highlighted with a blue box, showing options like 'Forward to voicemail' and 'Forwarding to call group' (which is checked). A yellow arrow points from the 'Forwarding' box towards the 'Inbound' label in the next section.

Any Member of Megan's
"Call Group"

The screenshot shows the Microsoft Teams calling interface. At the top, it says 'Type a name or number' with a numeric keypad. Below it, a call log shows a recent call from 'Freebird' with a status of '-356'. The main area shows an incoming call from 'Megan Bowen'. A blue box highlights the 'Forwarded by Megan Bowen' text. A yellow box highlights the 'In 1 call group' dropdown menu. A large blue arrow labeled 'Inbound' points from the 'Forwarding' box in the previous screenshot towards this incoming call screen.

Shared line: DELEGATION

Enables people to share their phone line with their delegates [Share a phone line with a delegate - Microsoft Support](#)

The screenshot shows the Microsoft Teams settings interface. On the left, under the 'General' tab, there's a 'Delegation' section with a 'Manage delegates' button. A blue box highlights this button. In the center, the 'Delegate settings' page shows a list of delegates: Alex Wilber (Marketing Assistant), Joni Sherman (Paralegal), and Megan Bowen (Marketing Manager). A blue box highlights the 'Your delegates' tab. To the right, the 'Select permissions' section allows setting what delegates can do on behalf of the user, with options like 'Make calls', 'Receive calls', and 'Change call and delegate settings'. Another blue box highlights this section. On the far right, the 'Call answering rules' page is shown, featuring a large yellow box highlighting the top-level settings area.

The screenshot shows the Microsoft Teams settings interface. On the left, under the 'Calls' tab, there's a 'Voicemail' section with a 'Configure voicemail' button. In the center, the 'Ringtones' section allows choosing a ringtone for incoming calls, with options for 'Calls for you' (Default), 'Forwarded calls' (Bubbles), and 'Delegated calls' (Remix). A blue box highlights the 'Delegated calls' dropdown. On the far right, a large yellow box highlights the top-level settings area.

Shared line: DELEGATION

Full call management delegation

User initiates to share/delegate

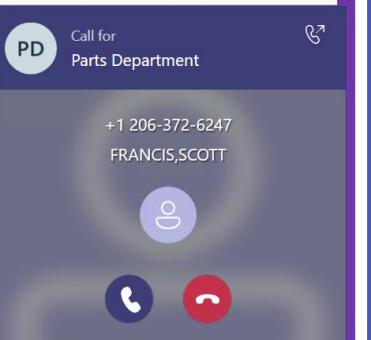
Delegated user makes/receives shared line calls

See shared line's busy status and active call information

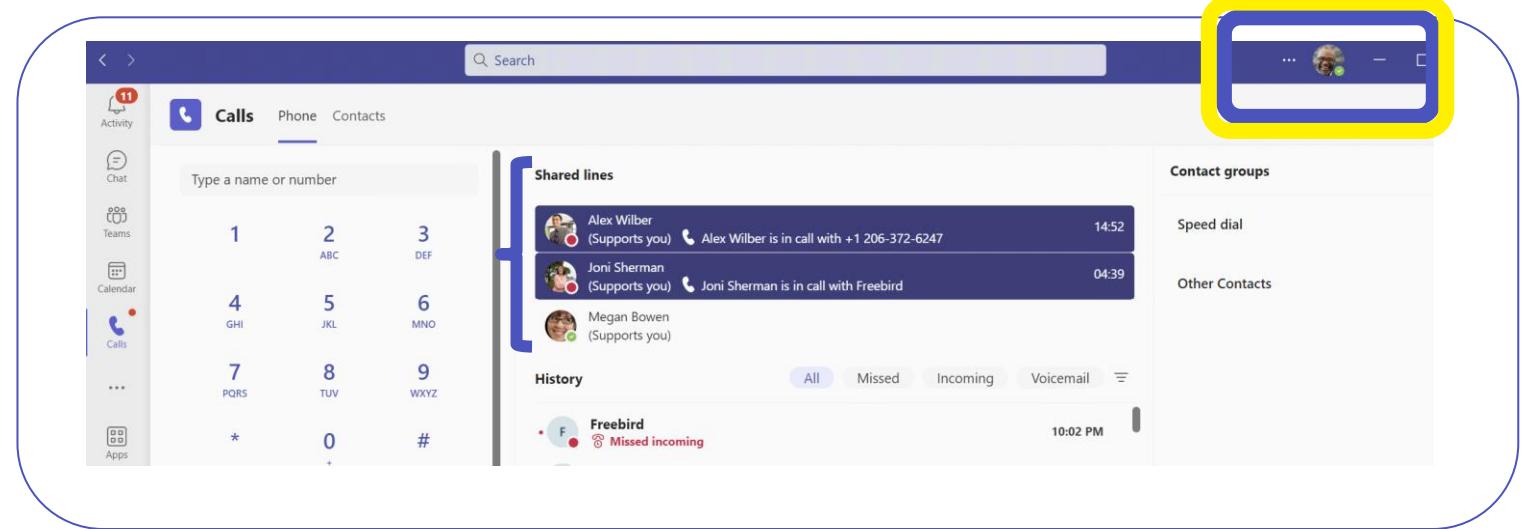
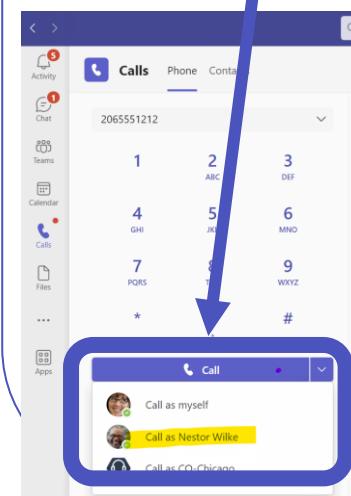
Resume Shared Line call placed on hold

IT Pro can administer

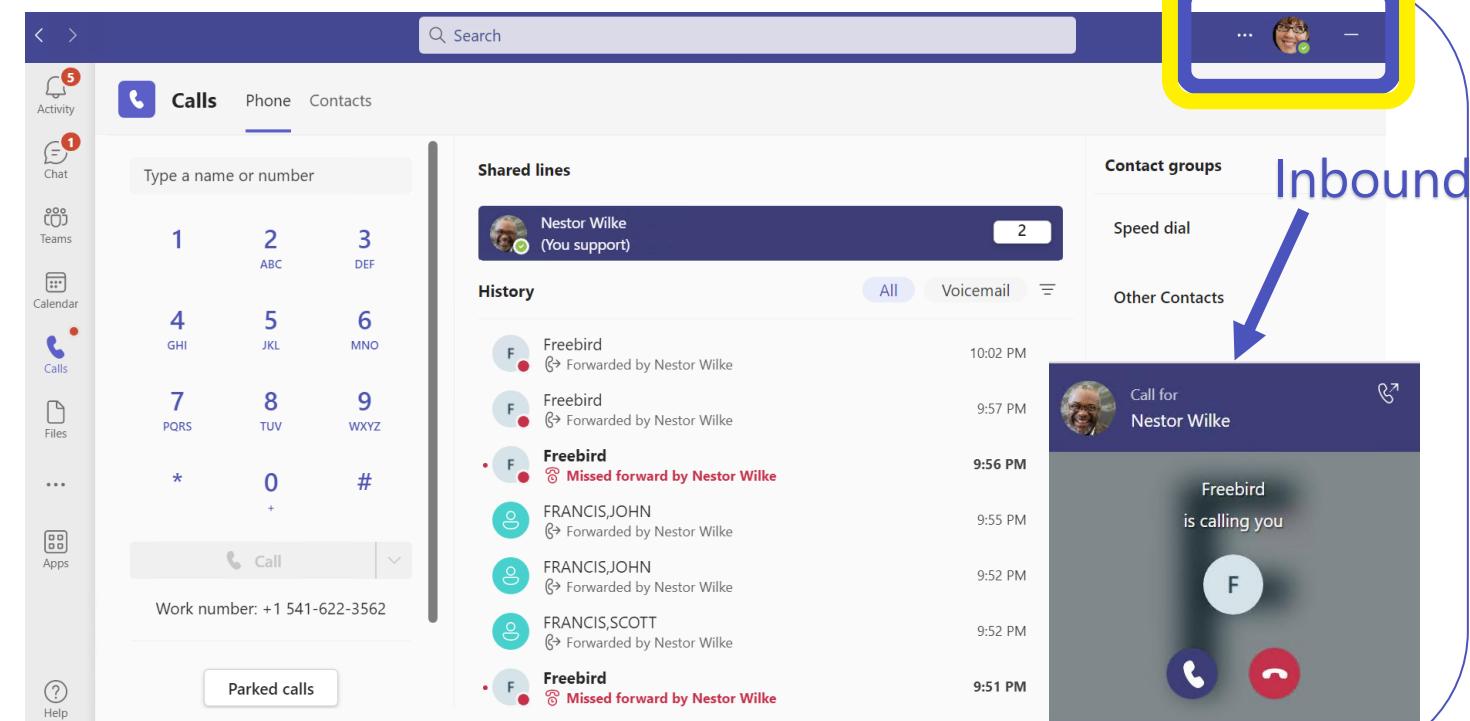
Possibility; E.g.,
Shared Device with
Delegation



Outbound



Inbound



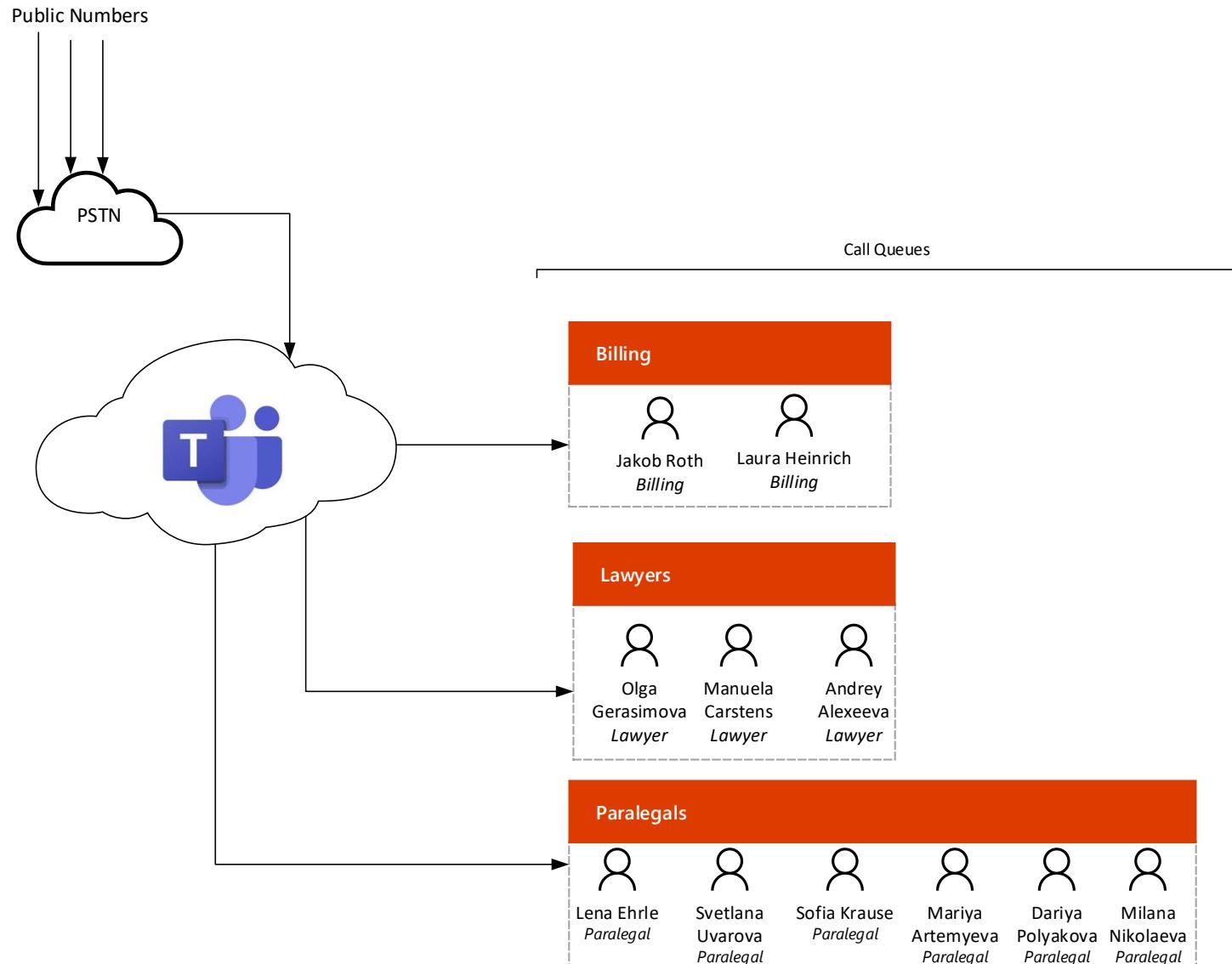
Call Queues

Overview + Demo



Call queues

Call queues provide more options for getting inbound callers to people in your organization.



Call queues



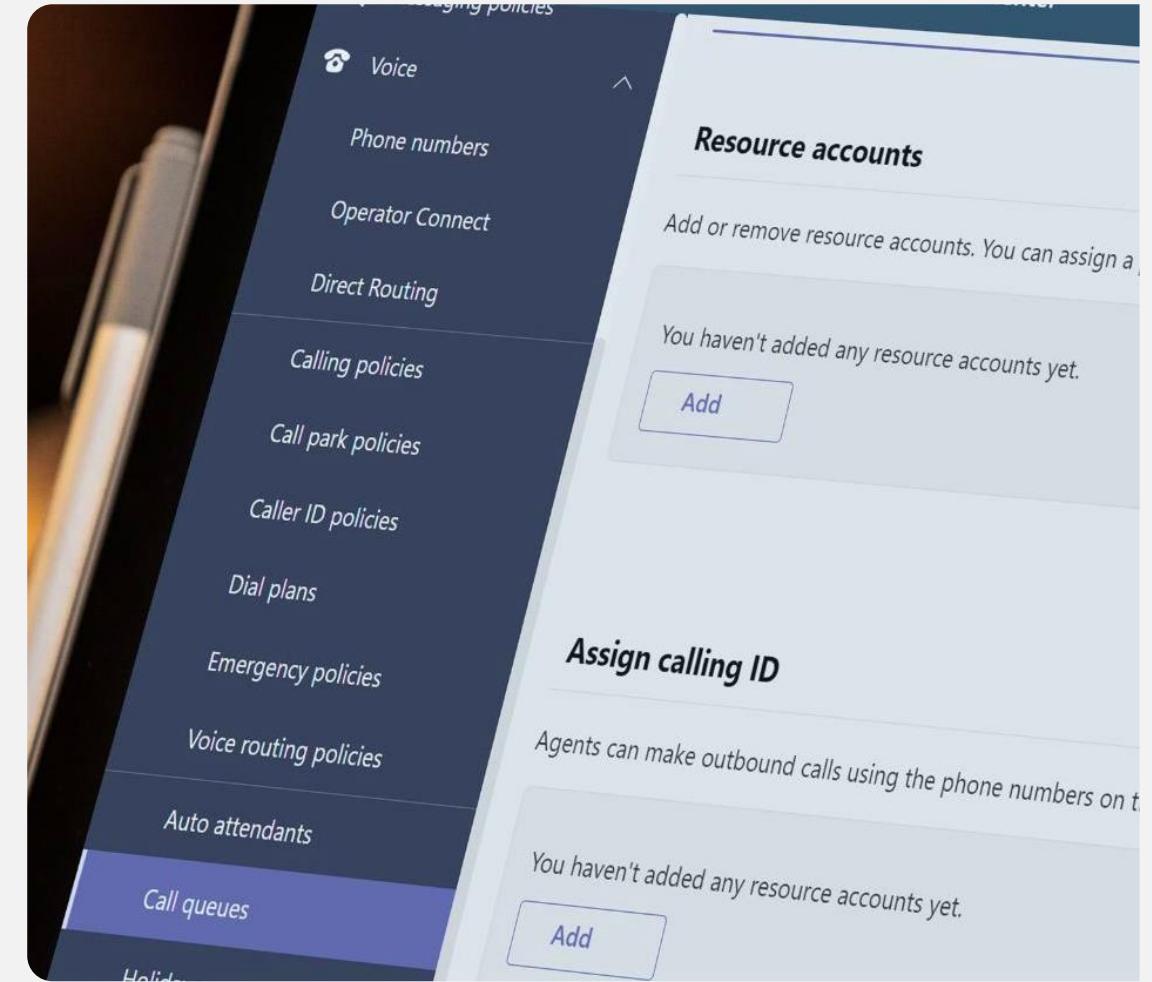
Connect callers to a group of agents in your organization who can assist them



Many customizable settings such as a greeting, music on hold, call overflow, timeout options, and shared voicemail

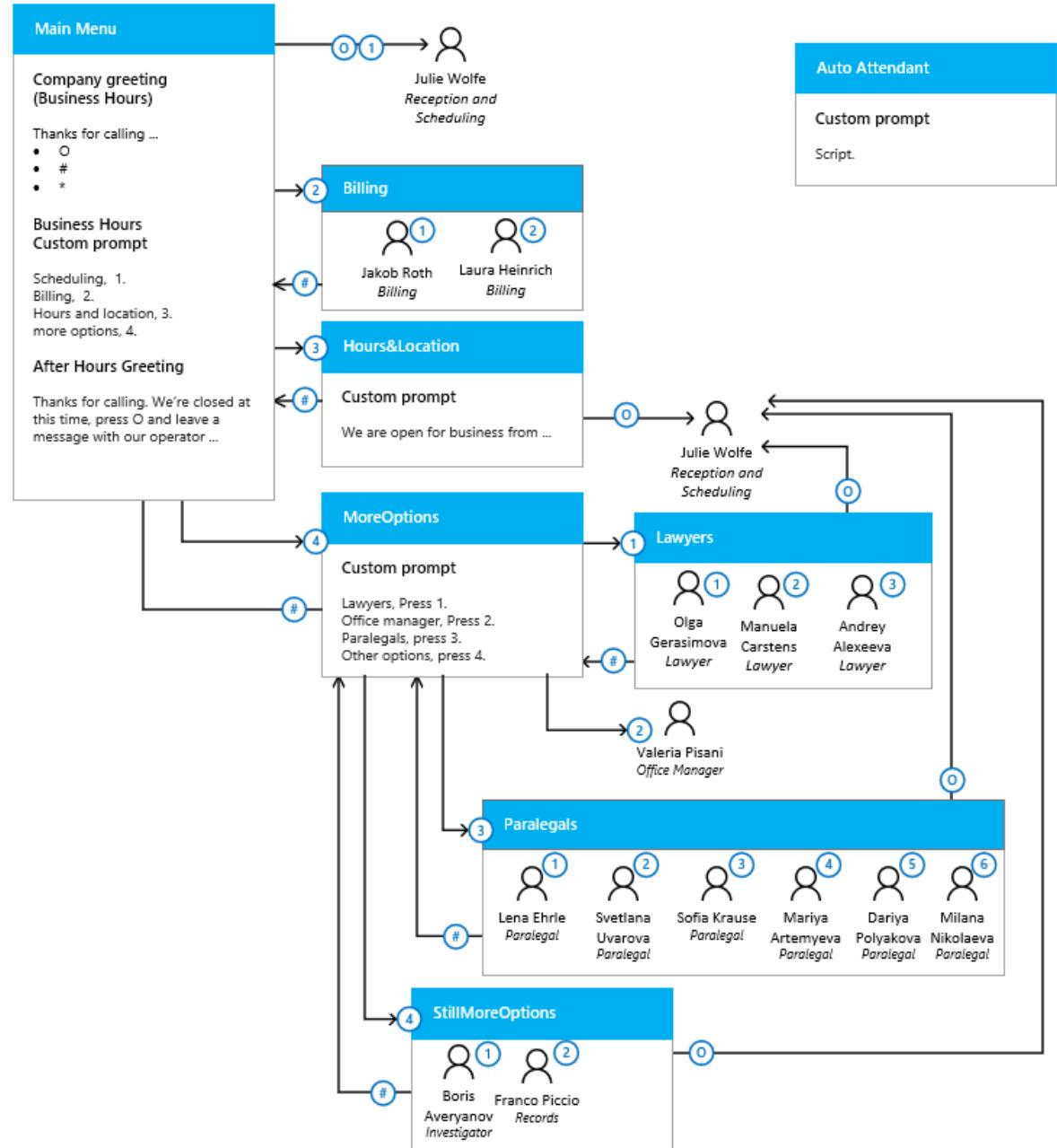


Easily manage call queues through the Teams admin center. Agents may be allowed to opt in or opt out

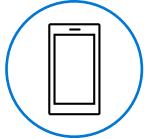


Auto attendants

Auto attendants let people call your organization and navigate a menu system to engage with the right resource.



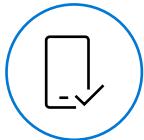
Auto attendants



Set up menu options to route calls based on caller's choices, using speech recognition or number-pad



Choose from the option to upload a custom audio greeting message or use built-in text-to-speech functionality



Create advanced and complex call routing menus or add a dial-by-name or extension option with just a few clicks



Voice enabled channels

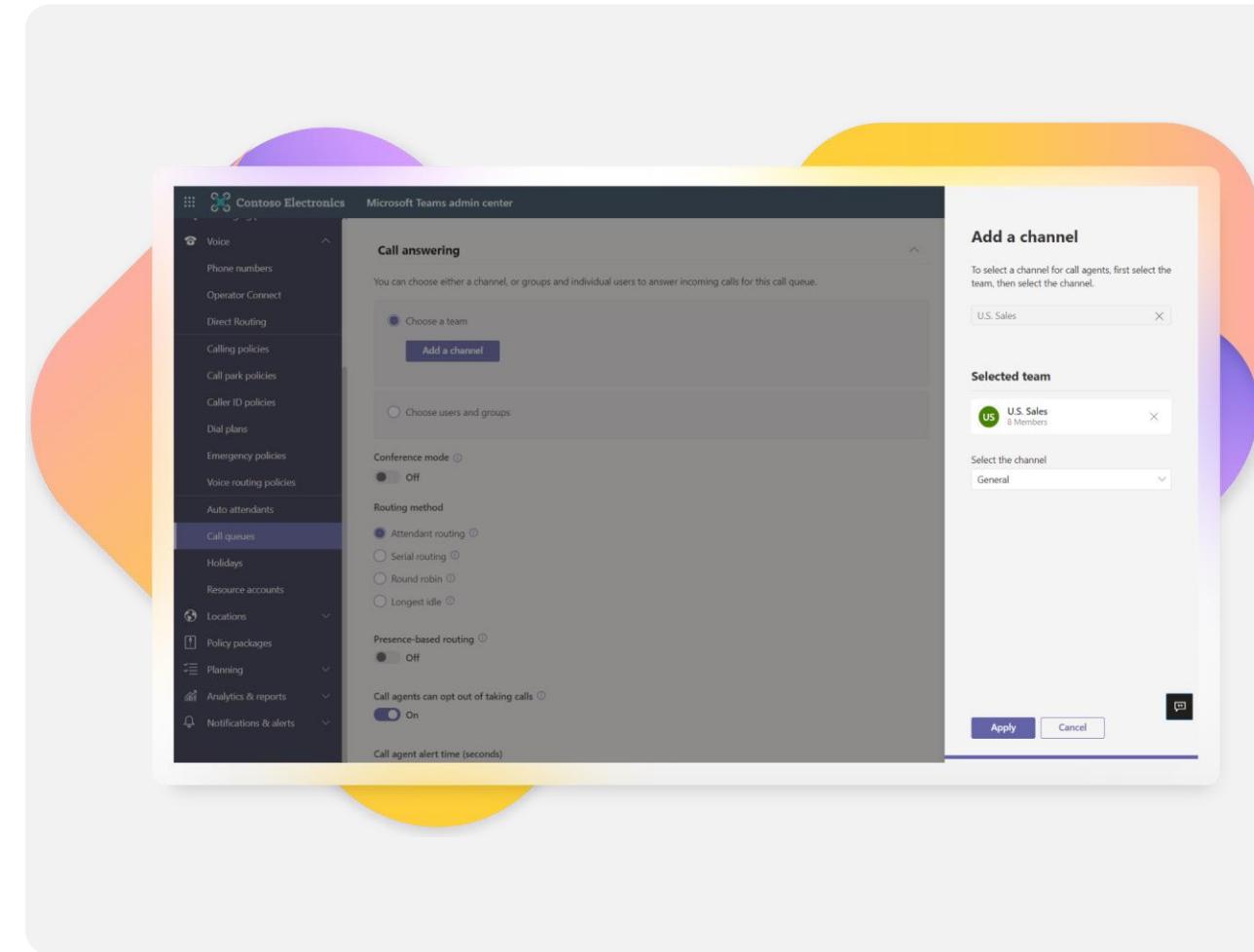


Connect a call queue to a channel in Microsoft Teams



Agents can collaborate and share information within the channel while taking calls in the queue

Manage your support call queue in Teams - Microsoft Support



<Demo>

Roadmap Highlight | Authorized Users + Dynamic Queue Caller ID

The screenshot shows the Microsoft Teams admin center interface. On the left, the navigation menu is open, with the 'Voice applications policies...' option highlighted by a green box. The main content area shows the 'Call queues \ Edit a call queue: CL Test CQ 01' page. A blue callout box highlights the 'Authorized users' section, which lists Charlie as an authorized user. Below this, a larger blue callout box contains the following information:

Microsoft Teams: Change call queue and auto attendant greetings and announcements by authorized users

To adapt to changing environments, Teams users need to make adjustments to their call queue/auto attendant greetings and announcements. This is required more frequently than what the IT helpdesk can typically handle. Introducing user managed CQ/AA greetings for Teams end users. Now, authorized users, as identified by Teams tenant admins, can change greetings and announcements for their respective call queues and auto attendant without leaving Teams.

Feature ID: 116739

Preview Available: April 2023
Rollout Start: May 2023

[Microsoft 365 Roadmap | Microsoft 365](#)

Summary

Cloud call queues

Allow for definition of a pre-defined set of agents for answering calls

Callers are placed into the queue and await the next available agent

Cloud auto attendants

Provide a menu system for callers to locate/place/transfer calls to company users/departments

Provide interaction through phone keypad (DTMF) or speech recognition



Pre-requisites

Resource accounts and Licensing



Call queues and auto attendant prerequisites

To configure auto attendants and call queues for inbound calling, you need the following resources:

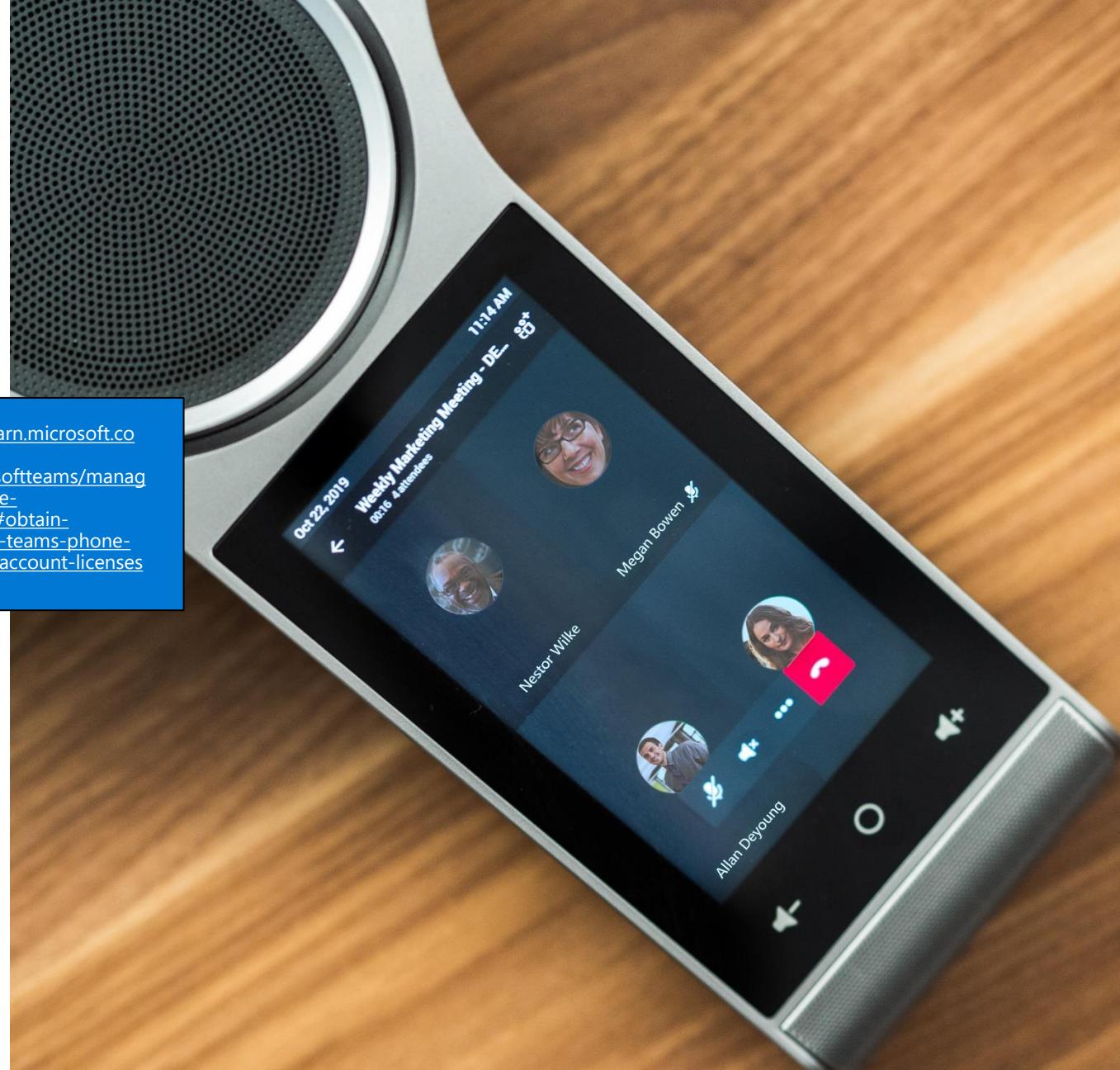
Teams Resource Account for each auto attendant and each call queue

"Microsoft Teams Phone Resource Account" license for each resource account

<https://learn.microsoft.com/en-us/microsoftteams/manage-resource-accounts#obtain-microsoft-teams-phone-resource-account-licenses>

Microsoft Calling Plan service number, an Operator Connect, or a Direct Routing number (with voice routing policy) for each resource account that must be directly dialable. The service number may be a toll or toll-free number.

The above requirements not only allow inbound calls, but also allow an Auto Attendant transfer option or a Call Queue redirect option to direct a call to an external number, and also allows an Agent to dial out with the caller ID of the Call Queue number.



Agent prerequisites

Agents who receive calls from the call queues must be Enterprise Voice enabled online or on-premise users (E5, or E3 + Phone Add-on)

In addition, if the call queues are using Direct Routing numbers, agents who need to conference or transfer calls also require:

1. An online voice routing policy assigned if the call queue uses transfer mode
2. An Audio Conferencing license or online voice routing policy assigned if the call queue uses conference mode

If your agents are using the Microsoft Teams app for call queue calls, they need to be in Teams Only mode



Supported clients for Call Queues in Teams Channels

The following clients are supported when using a Microsoft Teams *channel* for call queues:

1. Microsoft Teams Windows client
2. Microsoft Teams Mac client

For call queues using conference mode, agents in the call queue must use one of the following clients:

1. The latest version of the Microsoft Teams desktop client, Android app, or iOS app
2. Microsoft Teams phone version 1449/1.0.94.2020051601 or later



Resources: Setting up Call Queues

[Create a call queue in Microsoft Teams - Microsoft Teams | Microsoft Learn](#)



Worthwhile matrix reference for Call Queue feature compatibility:

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue?tabs=general-info#resources-for-complex-scenarios>

Use Diag tool in M365 Admin Center to run diagnostics on your Call Queue

<https://aka.ms/TeamsCallQueueDiag>



Planning and design

Considerations + Resources



Call queues and auto attendants | Planning and design

Capturing the flow



Plan for Business
Needs



Write them out
(Visualize)



Goal: connect caller
to a live person as
efficiently as possible



Consider
professional
recordings



Check out the dos
and don'ts in the
tutorial above

Planning and design |

Business needs

From the existing solution, will any changes be required?

Will the call center be active 24 hours a day, or have business hours?

Is it desired to have distinct initial greetings for the following:

1. Business hours
2. After hours
3. Weekends
4. Holidays

How many calls typically queue in the existing solution? How should overflow calls be handled?

Is there preferences for proprietary on-hold music?

What languages are needed?

Is it allowable for agents in the call queue to opt out of taking calls?

How should agents become a member of the queue? By which method should calls be presented to them?



Planning and design |

Technical decisions

Agents can be added to call queues in the following ways or a combination of these

1. Individual users
2. Distribution lists
3. Security groups, including mail-enabled security groups
4. Microsoft 365 Groups or Microsoft Teams

If you have an existing auto attendant and call queue infrastructure and you're migrating to Microsoft Teams, you'll need to plan to transfer your existing phone numbers to the new auto attendants and call queues.

We recommend enabling conference mode for your call queues if your agents are all using compatible clients.



Planning and design |

Plan your call routing flow

As part of the planning process, we recommend that you work out the call routing for your organization in a diagram.

The diagram helps determine the most efficient routing for people calling in to your organization.

You can also use the diagram to determine the auto attendants and call queues that you need to create, along with related requirements such as service numbers, licenses, and resource accounts.

<https://aka.ms/CQSetupVisio>
<https://aka.ms/AASetupVisio>



Auto attendants | Call routing flow

Auto attendants route all calls in one of the following ways:

1. **Redirect immediately:** Calls can be redirected to one of the call routing destinations immediately upon answering or after an initial greeting.
2. **Redirect based on dial options:** Callers can be directed to choose between options that are assigned to the numbers on their telephone keypad, 0-9. Each dial key can be assigned a call routing destinations.
3. **Dial people by name or extension:** Callers can be directed to dial the extension number of the person they're trying to reach in your organization's directory, or by spelling the person's name.
4. **Disconnect:** An auto attendant can hang up the call.



Call queues | Call routing flow

Call queues place the caller on hold until an agent assigned to the queue is available to take their call.

There are two situations where a caller might be directed out of the queue:

1. **Call overflow:** If the number of calls in the queue exceeds the limit that you set, then new callers are redirected out of the queue.
2. **Call timeout:** If a caller has been in the queue longer than the configured timeout setting, they're redirected out of the queue.



Call queues | Call routing methods

The Routing Method determines the order in which agents receive calls from the queue.

Attendant routing rings all agents in the queue at the same time. The first call agent to pick up the call gets the call.

Serial routing rings all call agents one by one in the order specified in the **Call agents** list. If an agent dismisses or does not pick up a call, the call will ring the next agent and will try all agents until it is picked up or times out.

Round robin balances the routing of incoming calls so that each call agent gets the same number of calls from the queue. This may be desirable in an inbound sales environment to assure equal opportunity among all the call agents.

Longest idle routes each call to the agent who has been idle the longest time. An agent is considered idle if their presence state is Available or if their presence state has been Away for less than 10 minutes. Agents whose presence state has been Away for more than 10 minutes are not considered idle and will not be eligible to receive calls until they change their presence to Available.



Call routing destinations

When calls are redirected by an auto attendant or call queue, you can choose from the following call routing destinations:

1. **Person in the organization:** A person in your organization who can receive voice calls. This can be an online user or a user hosted on-premises using Skype for Business Server.
2. **Voice app:** Another auto attendant or a call queue. Choose the resource account associated with the destination.
3. **External phone number:** Any phone number. (See external transfer technical details).
4. **Voicemail:** The voice mailbox associated with a Microsoft 365 group that you specify. You can choose if you want voicemail transcriptions and the "Please leave a message after the tone." system prompt.
5. **Operator** (auto attendant only): The operator defined for the auto attendant. Defining an operator is optional. An operator can be any of the other destinations in this list.

Auto attendants offer separate call routing options for calls received outside of business hours and on holidays. After hours call routing allows all the options listed above, while holiday call routing allows only redirecting or disconnecting a call, but no dial key options.



Planning and design |

General guidelines

Phone number assignment - directly to the queue,
or have callers connect to an auto attendant first

Initial greeting needed as part of the call queue
(could be provided by auto attendant)

What hold music to use

How to distribute calls among the available agents

The keys * (Repeat) and # (Back) are reserved and
can't be reassigned; if speech recognition is
enabled, can use "Repeat" and "Back"

<https://aka.ms/CQSetupTutorial>

[Create a call queue in Microsoft Teams - Microsoft Teams | Microsoft Learn](#)



Planning and design | Single vs Multiple Holiday Set

What is a Holiday Set?

- Defines the date and time of a holiday.
- Gets assigned to an Auto Attendant or Call Queue
- Can contain a maximum of 10 date ranges

Single Holiday Set can be used if a generic holiday message is acceptable to use. Assign a single holiday set to an auto attendant and that auto attendant is aware of all holidays within the calendar year. Auto Attendant needs to be updated multiple times annually to maintain the upcoming holidays.

Single Holiday Set Greeting Example: "Thank you for calling. Our offices are closed."

Multiple Holiday Set: Can utilize a unique holiday greeting message. Each holiday must be assigned to each auto attendant. By using a holiday set for each holiday, an organization could set an auto attendant for a given holiday for up to 10 years, reducing the need for annual maintenance.

Multiple Holiday Set Greeting Example: "Thank you for calling, our office is closed for the Christmas holiday. Please call back another day."

Single Holiday Set

Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Eve
Christmas Day
New Years Eve
New Years Day

vs.

Multiple Holiday Sets

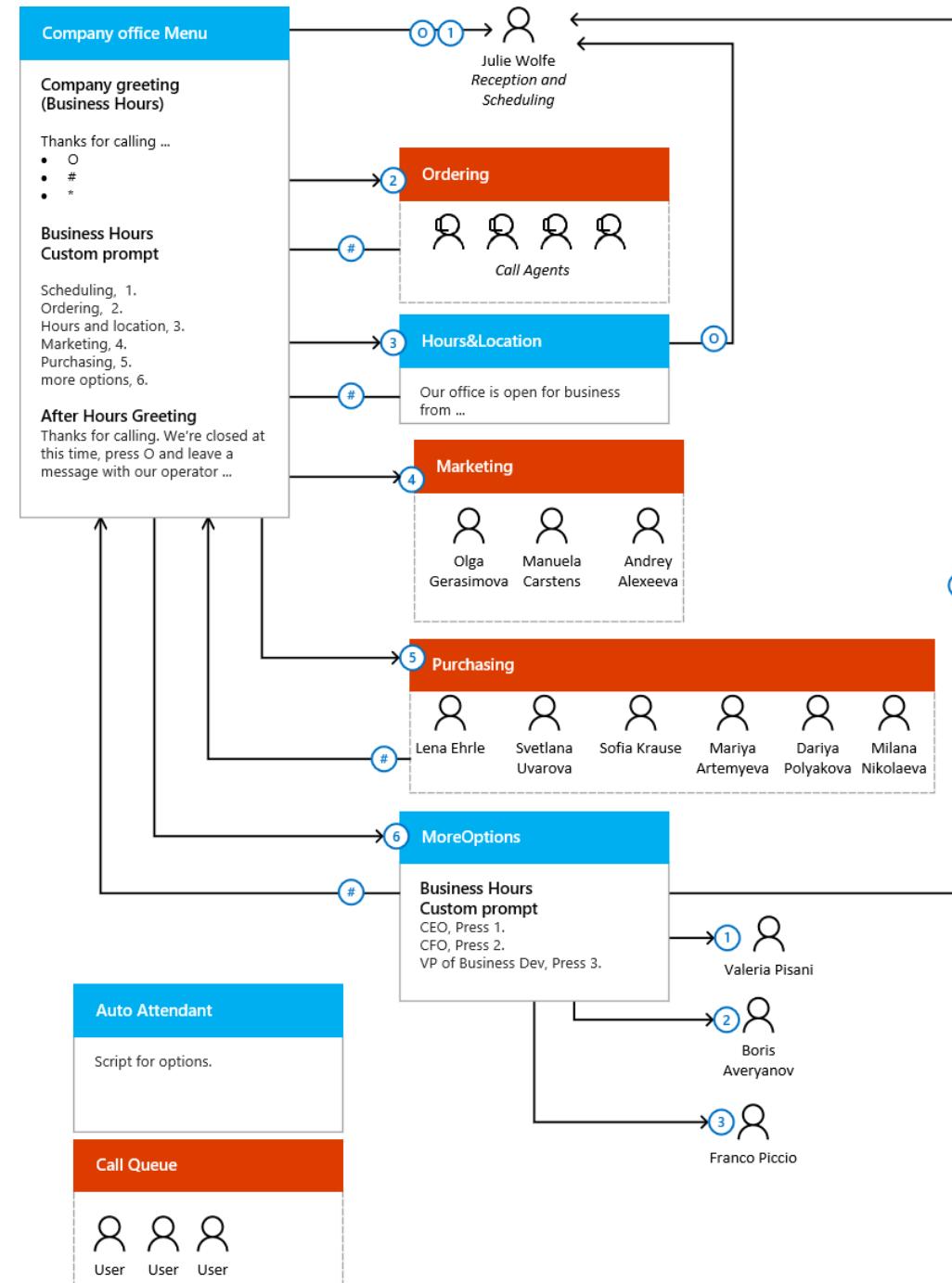
Memorial Day
Independence Day
Labor Day
Thanksgiving Day
Christmas Eve
Christmas Day
New Years Eve
New Years Day

Planning and design | Call routing flow

Deeper example – leverage the Call Queue tutorial

<https://aka.ms/CQSetupTutorial>

<https://aka.ms/CQSetupVisio>

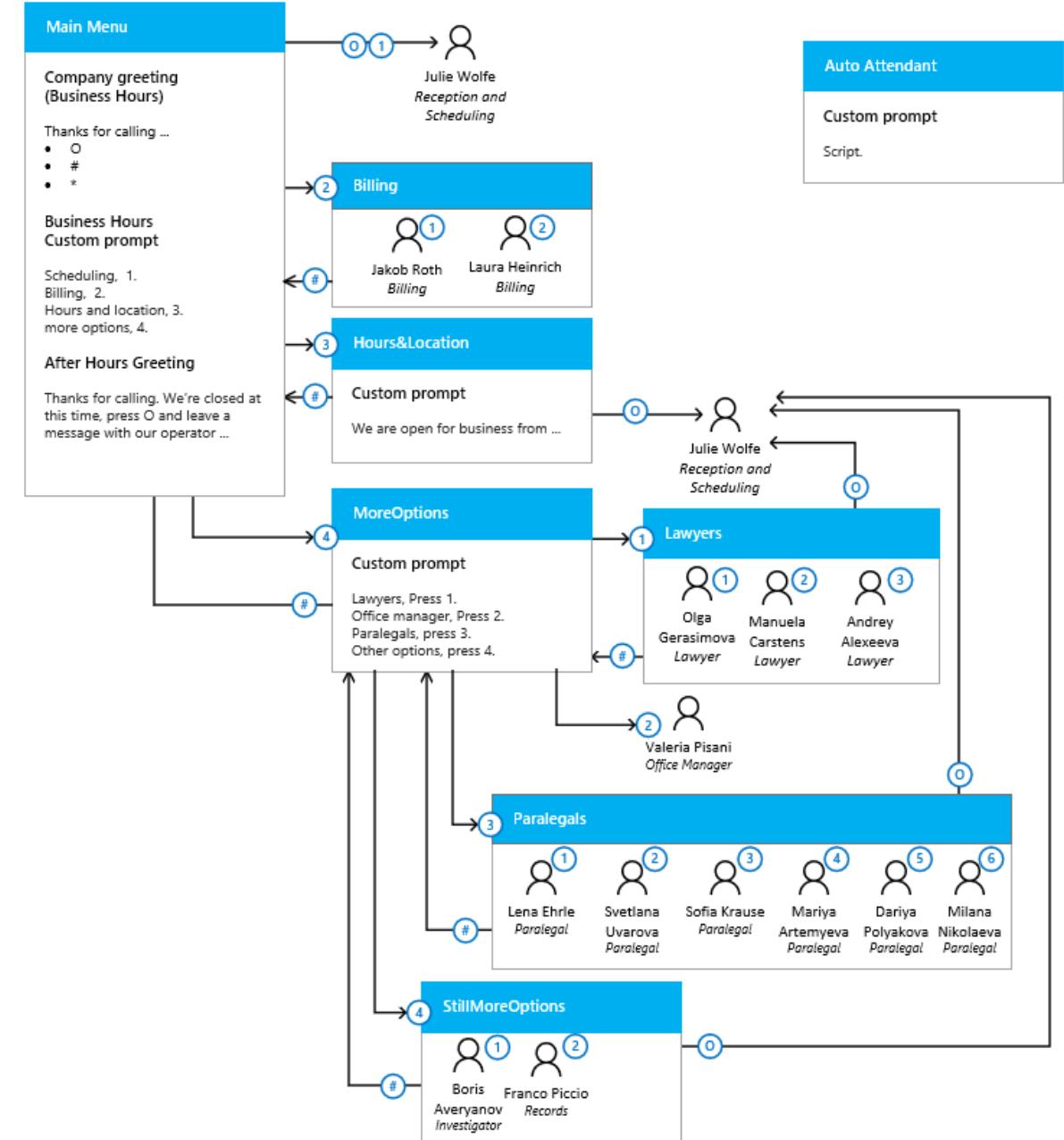


Auto attendants | Call routing flow

Deeper example – leverage the Auto Attendant tutorial

<https://aka.ms/AASetupTutorial>

<https://aka.ms/AASetupVisio>



Reporting

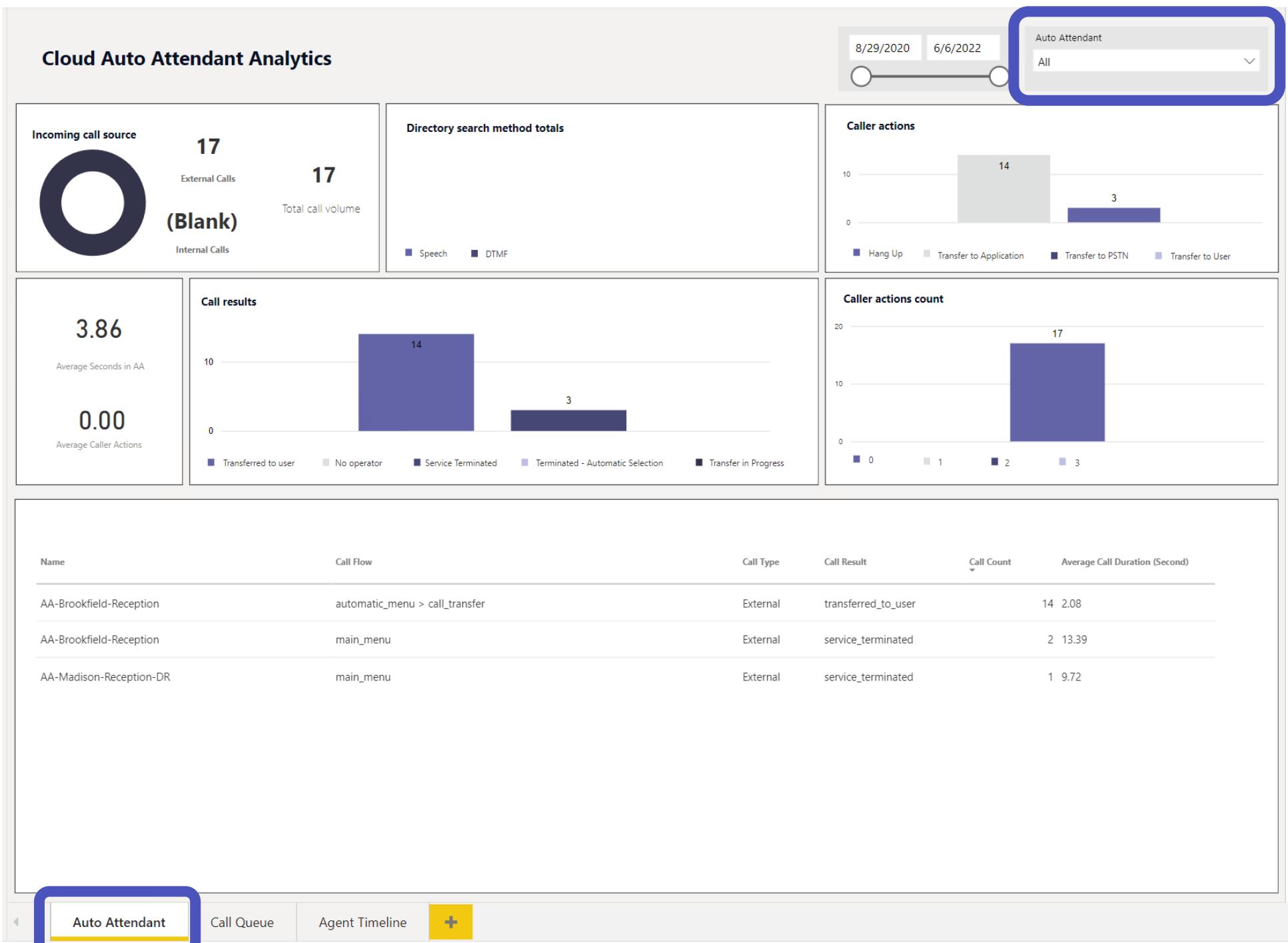


Auto Attendant and Call Queue Historical Reports

- 1) User account with Administrative (RBAC) Role granting access to CQD Reports
- 2) Power BI Desktop – application for rendering data (no license required when *viewing* reports only)
- 3) Power BI Templates for Auto Attendant and Call Queue reports
 - 1) [Download Power BI Query Template For Teams Voice Applications \(Auto Attendant and Call Queue\) from Official Microsoft Download Center](#)
- 4) <https://learn.microsoft.com/en-us/microsoftteams/aa-cq-cqd-historical-reports#v3xx-installation>

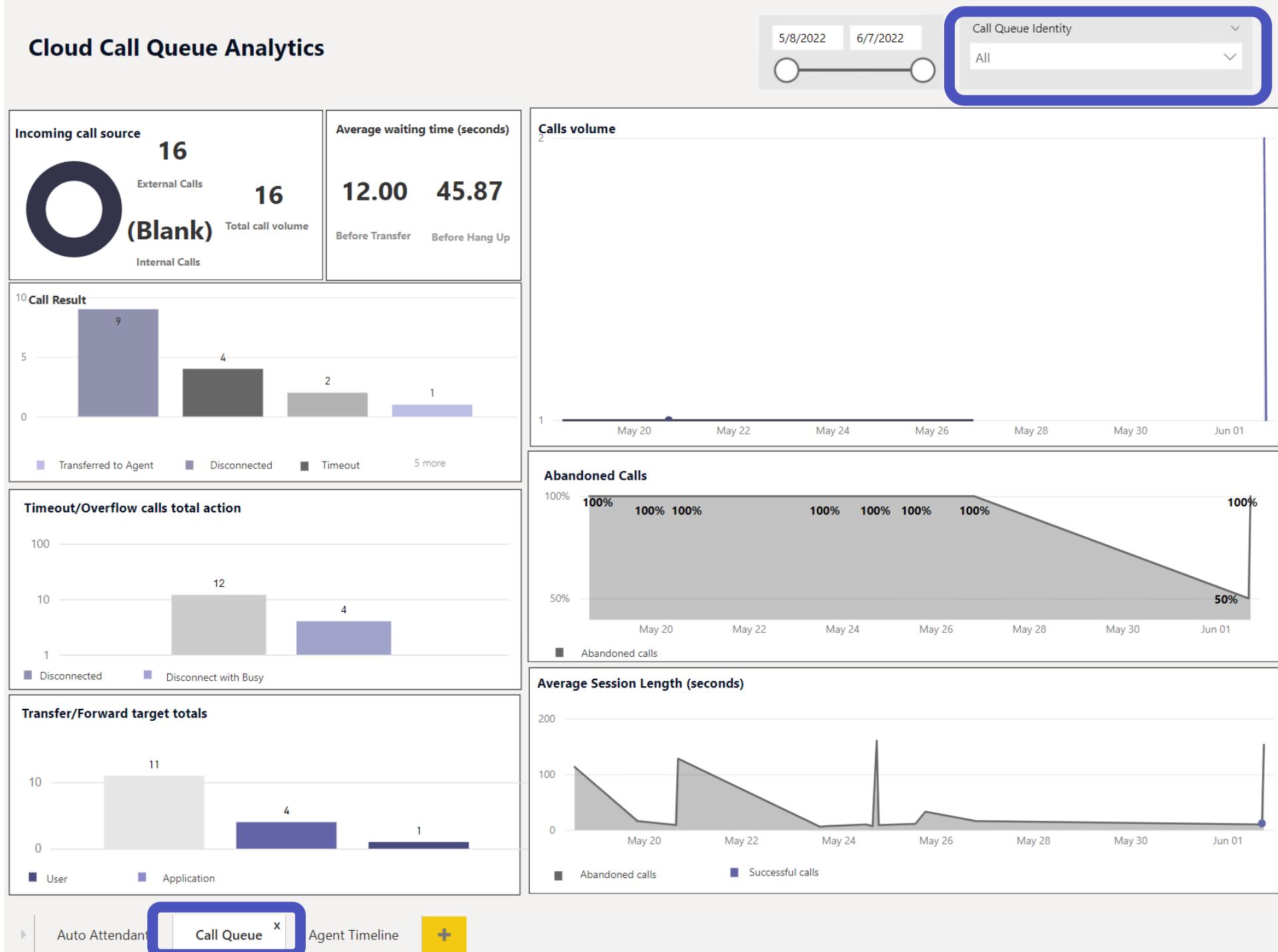
Auto Attendant Reporting

Shows analytics for calls coming into your Auto Attendants (all or individual).



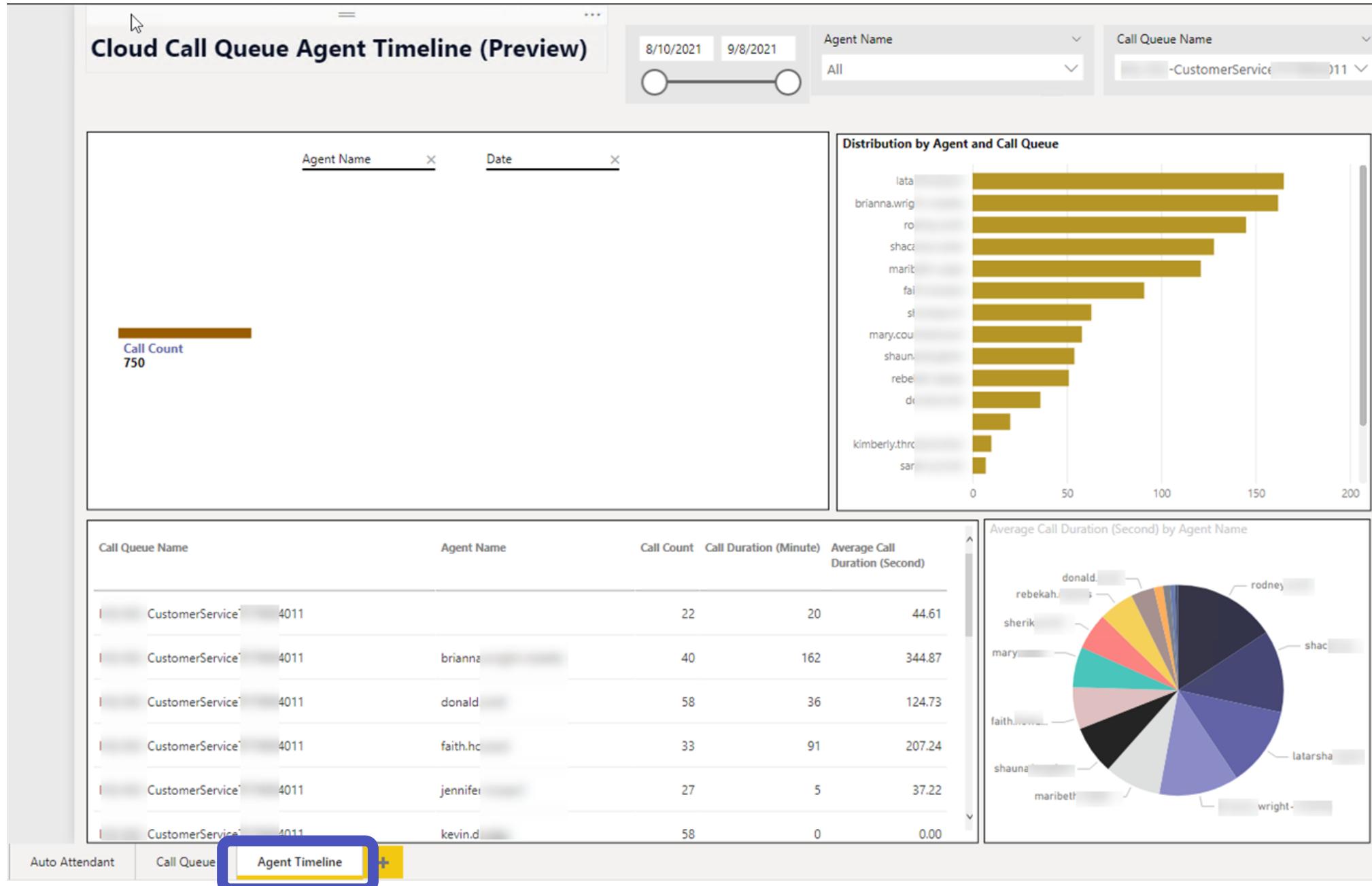
Call Queue Reporting

Shows analytics for calls coming into your Call Queues (all or individual).



Agent | Reporting

Shows a timeline view of agents being active in Call Queue calls.



Enhancing Call Queues

Two Examples of Community-
Developed Enhancements



Teams AA/CQ Orchestrator

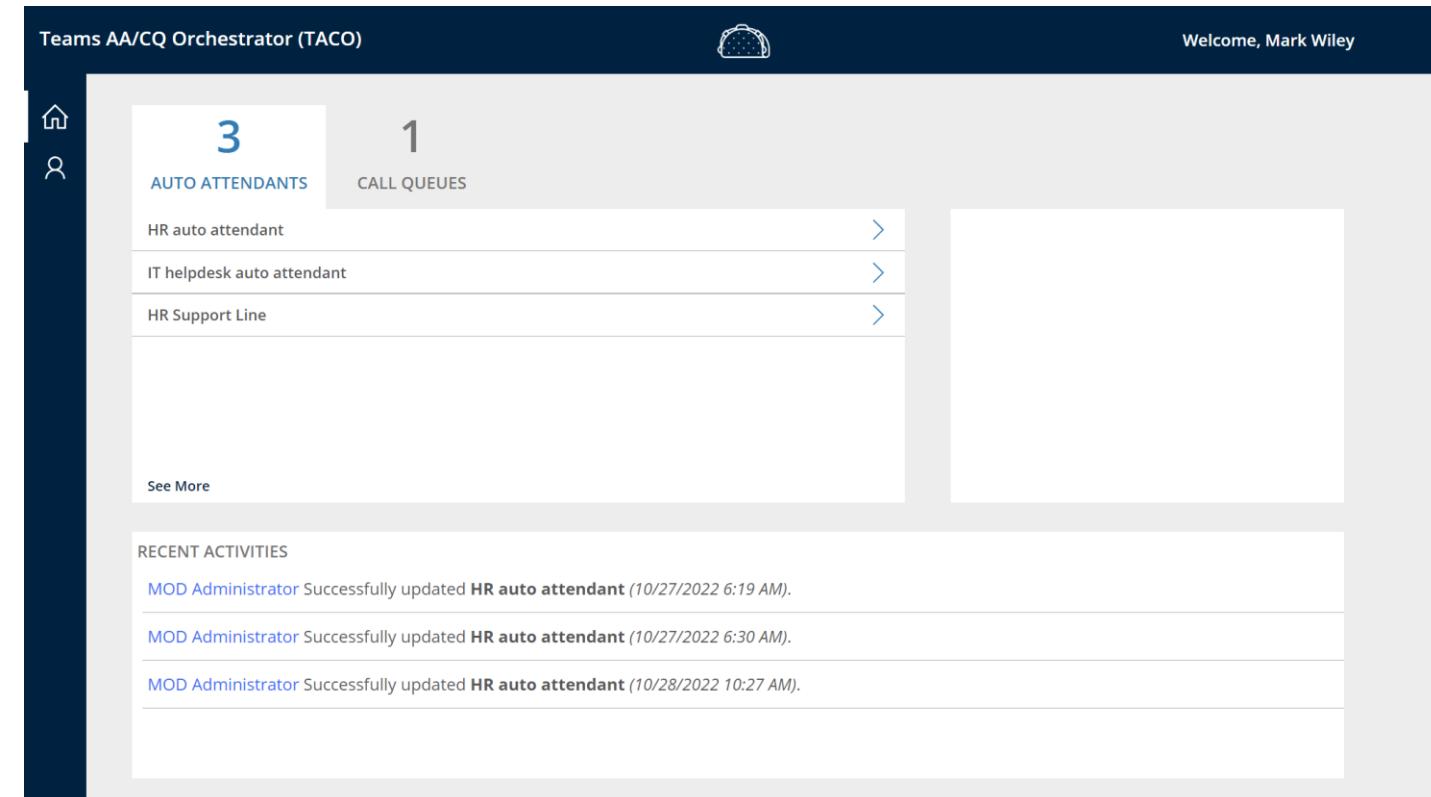
Provide the ability to delegate Teams Administrator access to the owners of auto attendants – so they can make updates to the **properties of an existing Auto Attendant and/or Call Queue**:

Auto Attendant properties:

- Change greeting
- Call routing options (not menu options)
- Set business hours
- Change holiday call settings

Call Queue properties:

- Change greeting
- Change music on hold
- Change call overflow handling
- Change call timeout handling



[GitHub - OfficeDev/TACO: Microsoft Teams AA/CQ Orchestrator \(TACO\) App](#)

Teams Call Queue Scheduler

Provide the ability to delegate Teams Administrator access to the owners of auto attendants – so they can make updates to the **agents for a given Call Queue and schedule agents for shifts in the future**:

Call Queue:

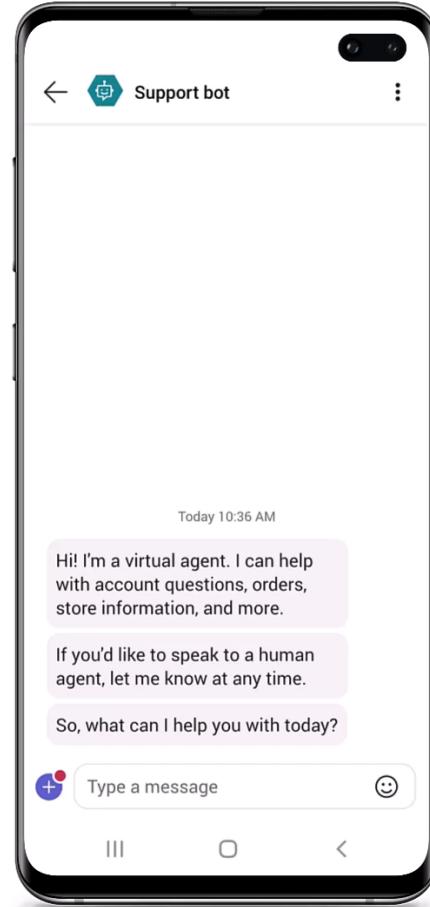
- View the list of named agents that are currently active
- Make real-time changes to the list of named agents
- Schedule agents in shifts
 - In advance by uploading a CSV file
 - Modify existing shift schedule
 - Add agent to existing schedule
 - Remove agent from existing schedule
 - Modify shift of scheduled agent

The screenshot shows the 'Teams AA/CQ Orchestrator (TACO)' application interface. At the top, there's a dark header bar with the app name, a user icon, and a 'Welcome, Mark Wiley' message. Below the header, the main area has two large numbers: '3' under 'AUTO ATTENDANTS' and '1' under 'CALL QUEUES'. Under 'AUTO ATTENDANTS', there are three entries: 'HR auto attendant', 'IT helpdesk auto attendant', and 'HR Support Line', each with a right-pointing arrow. A 'See More' button is located below this section. Under 'RECENT ACTIVITIES', there are three log entries from 'MOD Administrator': 'Successfully updated HR auto attendant (10/27/2022 6:19 AM)', 'Successfully updated HR auto attendant (10/27/2022 6:30 AM)', and 'Successfully updated HR auto attendant (10/28/2022 10:27 AM)'. The bottom of the screen features a solid orange horizontal bar.

<https://aka.ms/CallQueueScheduler>



Teams Phone and Power Virtual Agents





Screen pop for Teams Phone

Contoso Electronics Microsoft Teams admin center Search - Preview

Calling policies

Calling policies are used to control what calling features are available to people in Teams. You can use the Global (Org-wide default) policy and customize it or create one or more custom calling policies for people that have phone numbers in your organization. Learn more

Calling policies summary

3 Default policies 1 Custom policy

Manage policies Group policy assignment

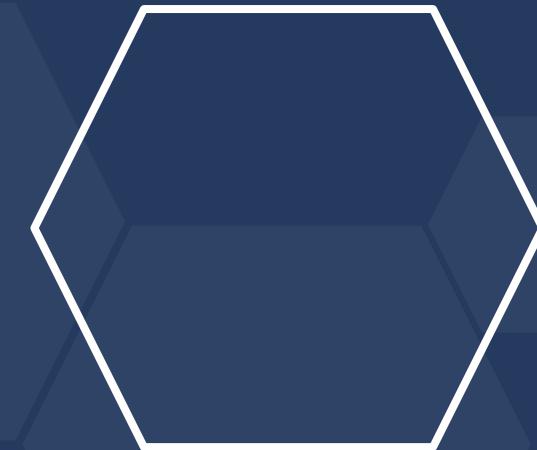
+ Add Edit Duplicate Delete Reset Global policy Manage users 4 items

Name ↑	Custom policy	Assigned to users
Global (Org-wide default)	No	
Browser app policy	Yes	View users
AllowCalling	No	View users
DisallowCalling	No	View users

Search by name

MA

Code Software - Demo



Augmenting Teams Phone

Partner Contact Center Integrations



Why contact centers?

Connect with customers where they are

Multi-channel interactions

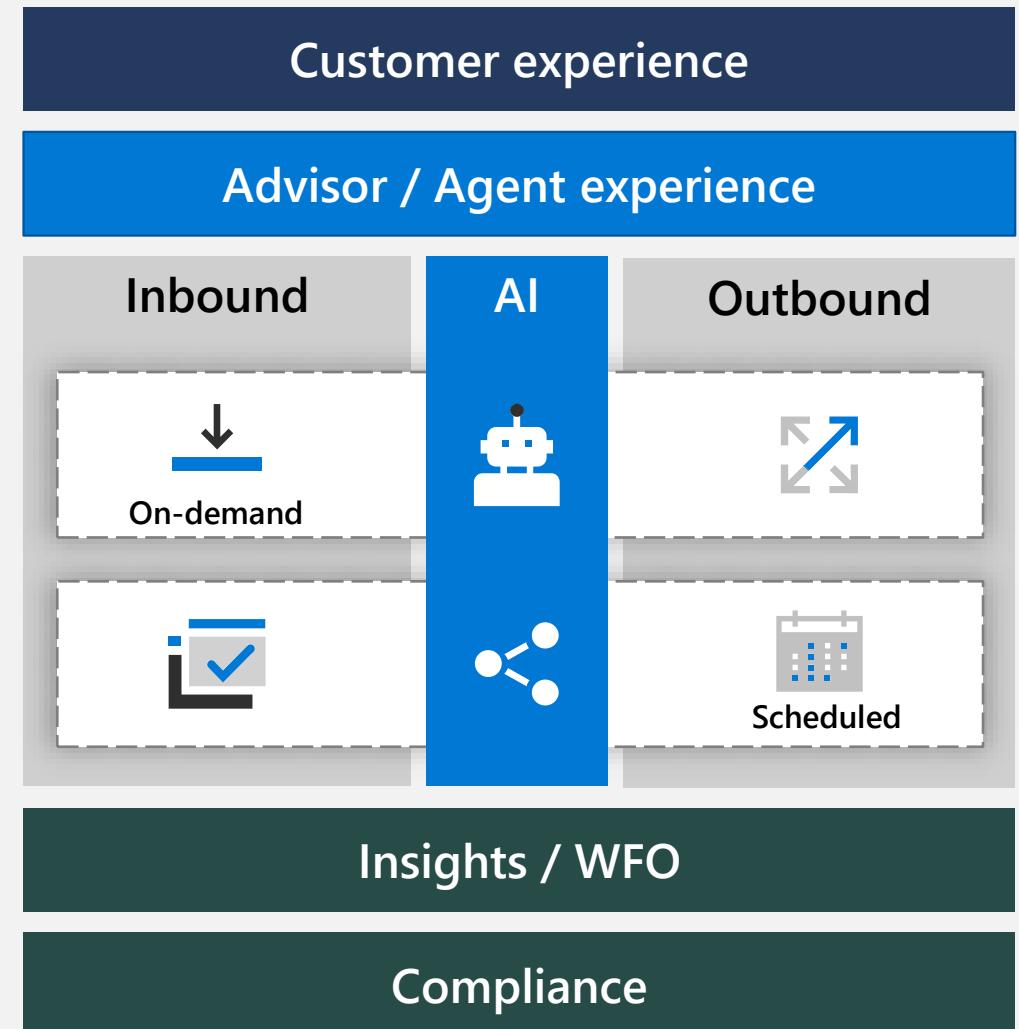
Route interactions to the right people

Leverage intelligent tools to scale

Capture and record interactions

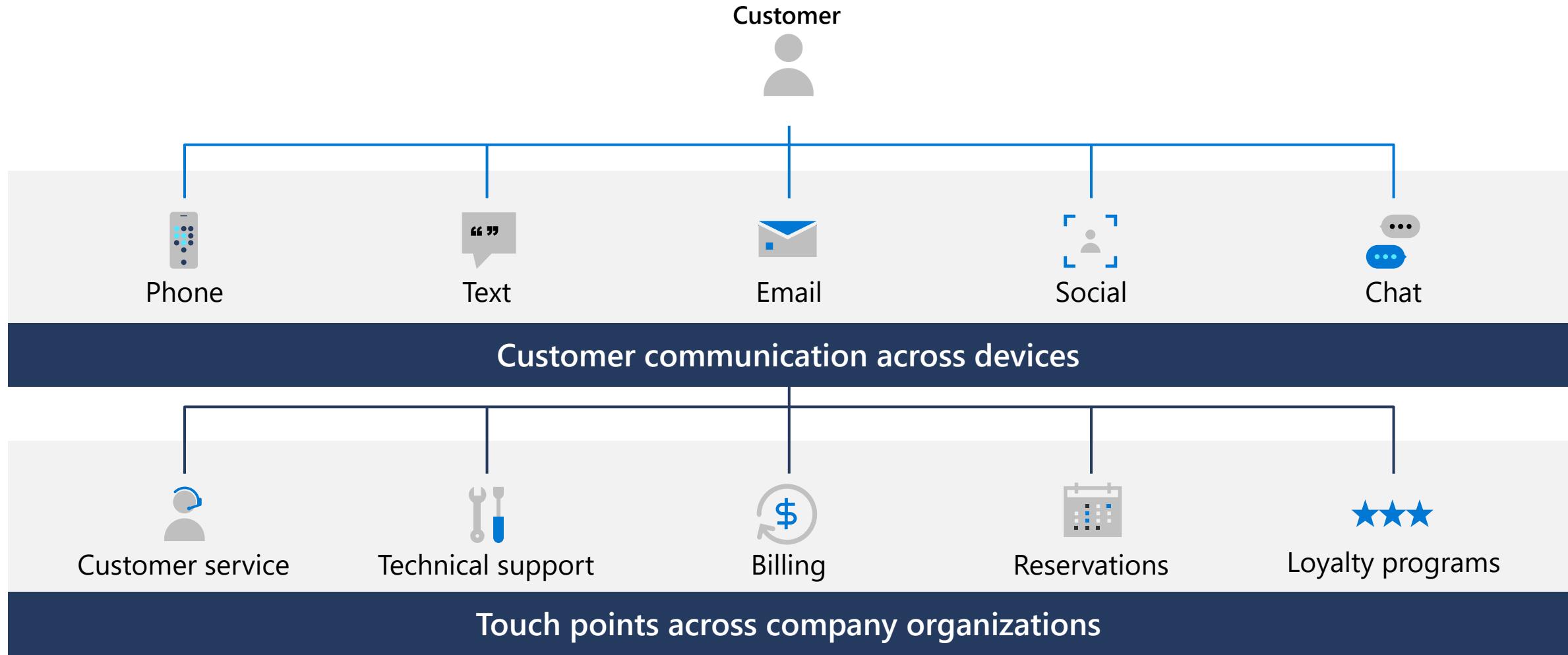
Drive improvements with insights

Support interaction regulations responsibly



Contact centers are no longer siloed call rooms

The best organizations get the whole company involved in customer support



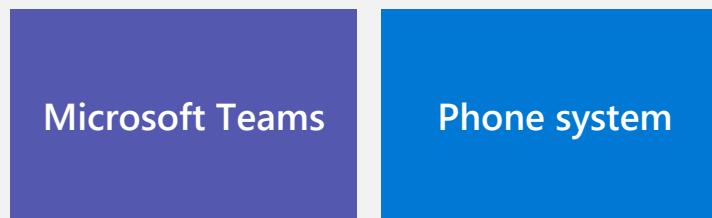
Blending Microsoft Teams and Contact Center

Teams as the hub for internal and external customer connection, integrated with partner solutions

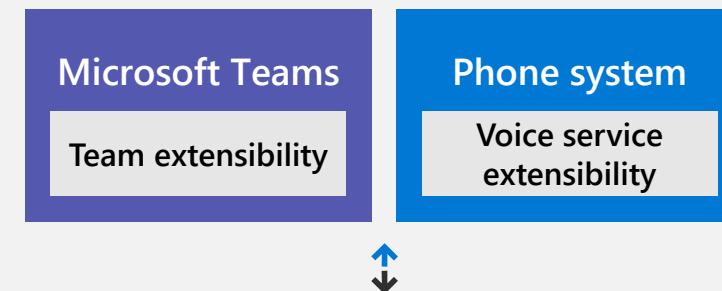
Combine capabilities based on your needs and tailored for each team

Continue to evolve your customer journeys as Microsoft and partner solutions innovate

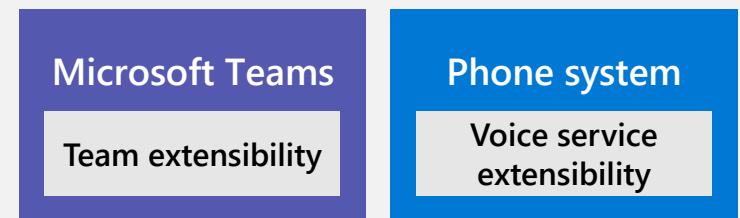
Connect



Extend



Power



Partner solution

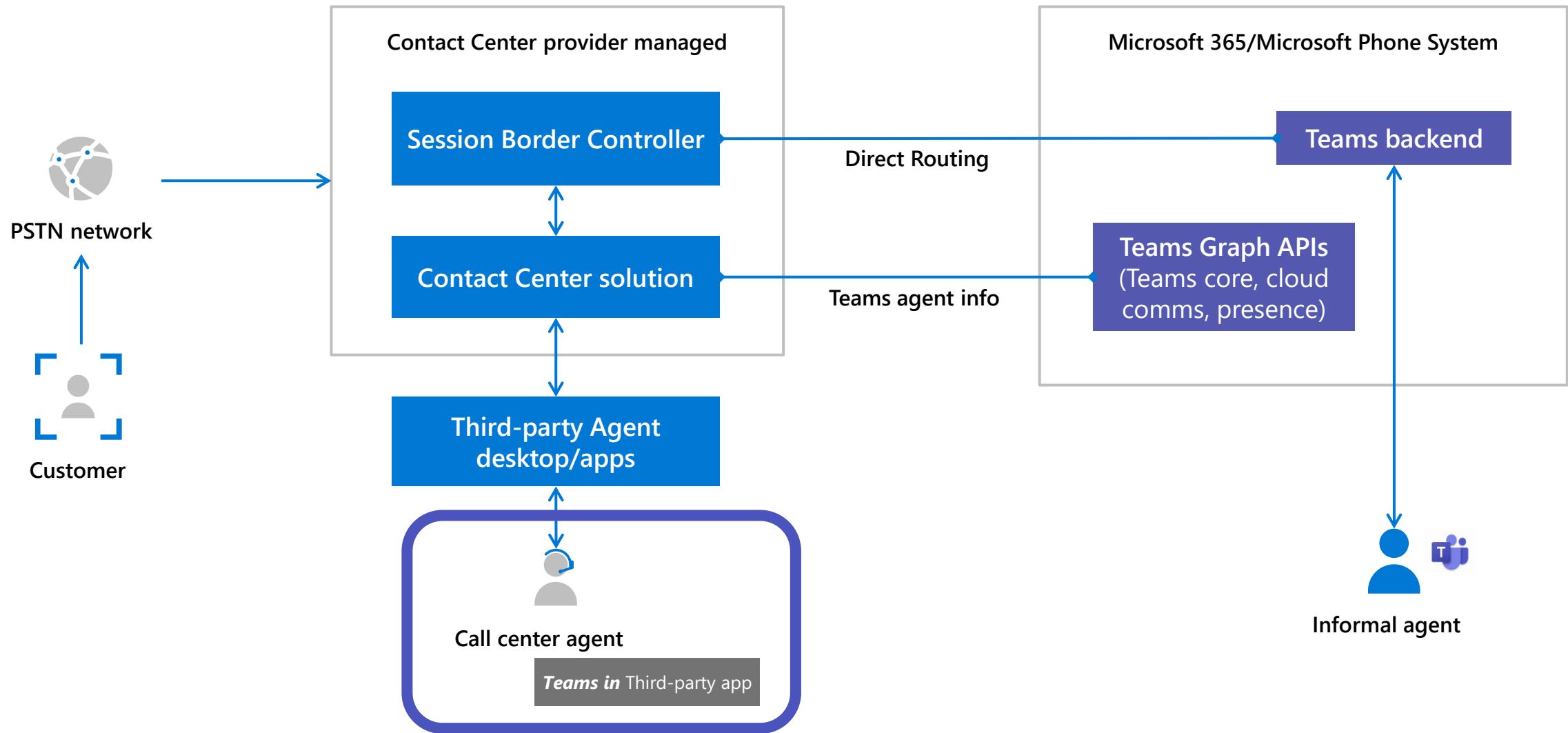
Partner solution

Partner solution

Partner agent

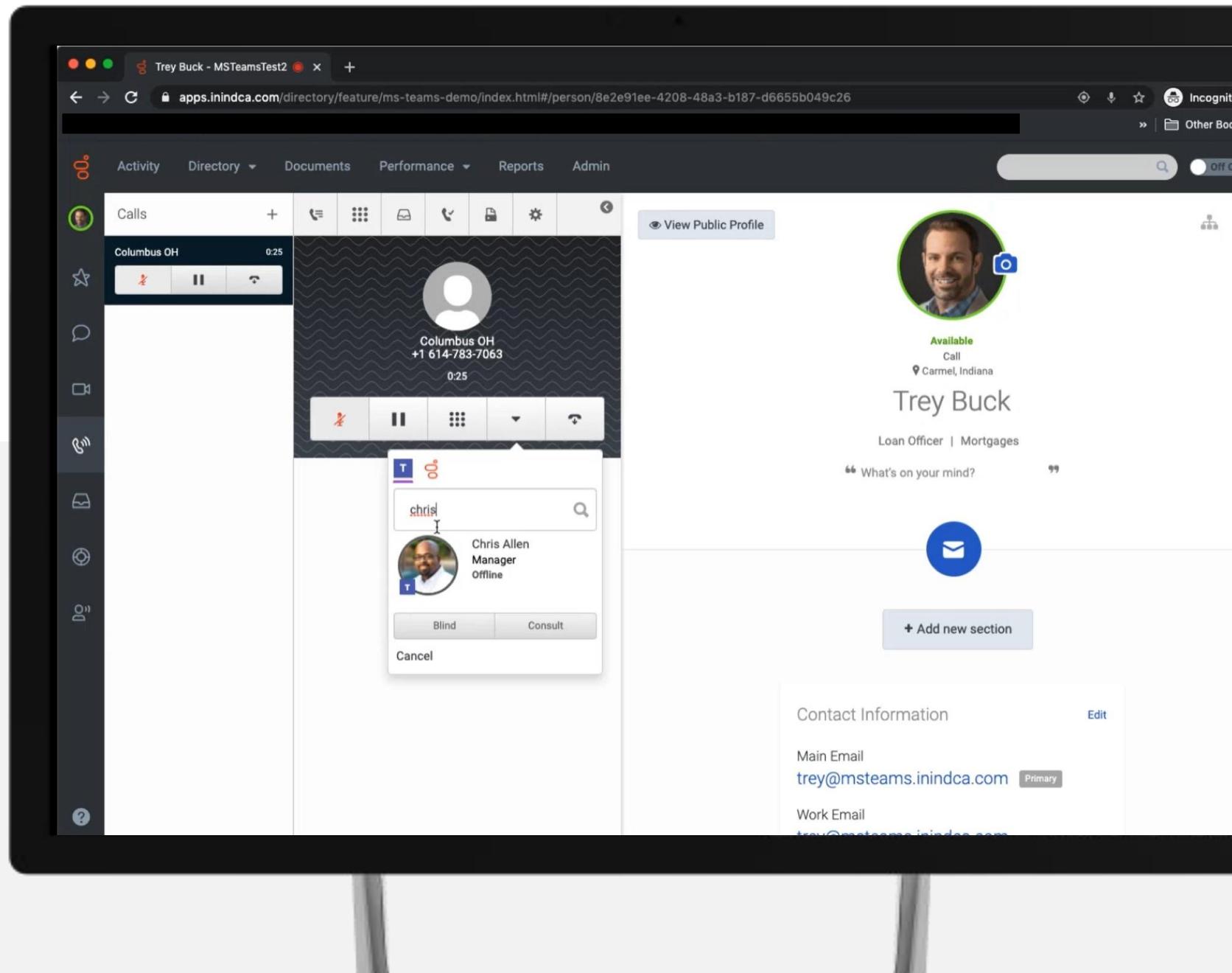
Calling SDK

CONNECT—high level—flow

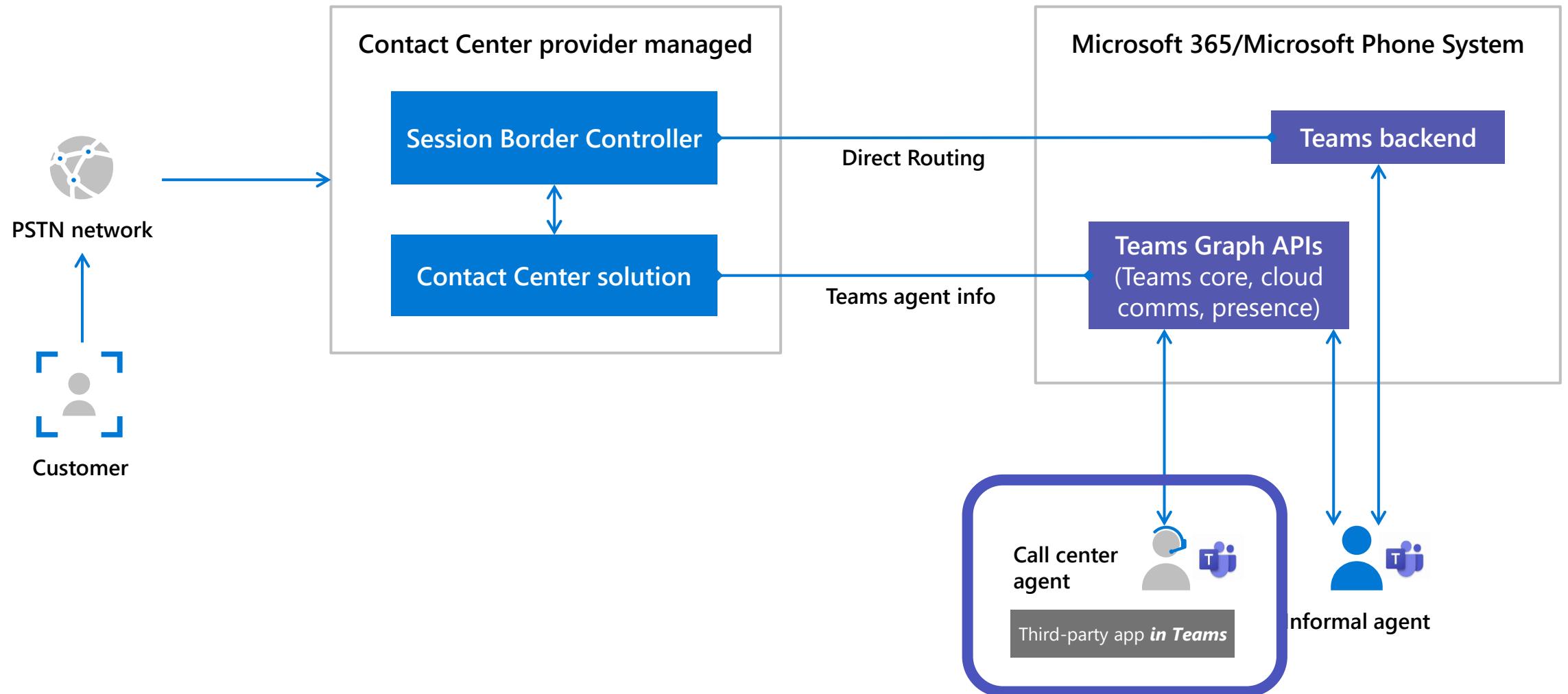


Connect model solution - Example

Genesys Cloud



EXTEND—high level—flow



Extend model solution - Example

Luware Nimbus

The screenshot shows the Microsoft Teams application interface with the Luware Nimbus extension installed. The extension adds several features to the Teams environment:

- In Queue:** Displays 0 tasks and 00:00 as the longest waiting time.
- Service Line:** Shows the service line as IT Support.
- Conversation Active:** Shows a conversation active at 02:55.
- Queue (0):** A list of queued contacts including Scientist Albert Einstein, Anonymous, Scientist Niels Bohr, and Bill Night.
- Incoming (0):** A list of incoming contacts.
- Active (1):** A list of active contacts, currently showing Scientist Leonardo da Vinci.
- Contact Search:** A search bar with the query "scien".
- Map:** A map showing the location of Scientist Leonardo da Vinci in Vinci, Italy.
- ACTIONS:** A row of icons for managing contacts.
- Bottom Bar:** Includes icons for microphone, speaker, video, and other communication options.

The extension also includes a sidebar with various service icons and a help section.

Contact Center



If you're an organization looking for an integrated contact center solution, see [Certified Microsoft Teams solutions for contact centers](#) for a list of certified solution providers, and see [Connected Contact Center solutions](#) for a list of providers in the process of certification

[Learn more about Contact Center](#)

Microsoft Teams supports customer interaction work streams by acting as the hub for internal and external customer connection across its modes of communication including chat, video meetings, and calling



Providing your customers with the same experience across all touchpoints in the customer journey



Employees can work from around the world in any time zone, allowing for 24/7 customer support



Enabling direct conversation control and interaction with customers and support agents during Teams conversations



Customizable to a company's specific needs to create a seamless experience for individual customers

Enhance your integration with a certified partner

Accredited via rigorous Microsoft 365 App Compliance Program

Tested and verified for quality, compatibility, and reliability

Additional integration services and add-ons (vary by partner)

We recommend viewing each of our partners solutions in order to find the best fit for your needs.



Reach out to a contact center integration partner

1/2

We recommend viewing each of our partners solutions in order to find the best fit for your needs.

Partner	Solution website
Anywhere365	https://anywhere365.io/direct-routing-contact-center-for-microsoft-teams/
8x8	https://www.8x8.com/8/8x8-contact-center-for-microsoft-teams
Competella	https://www.competella.com/microsoft-teams-skype-for-business
ComputerTalk	https://www.computer-talk.com/product/enterprise-contact-center/ice-contact-center-for-teams
Enghouse Interactive	http://www.englishouseteams.com/
Five9	https://www.five9.com/products/application-integration/uc-integration
Genesys	https://www.genesys.com/microsoft
Content Guru	https://www.contentguru.com/microsoft-teams-integration/
Landis Technologies	https://landistechologies.com/microsoft-teams-contact-center/

Reach out to a contact center integration partner [continued]

2/2

We recommend viewing each of our partners solutions in order to find the best fit for your needs.

Partner	Solution website
Mida Solutions	 https://www.midasolutions.com/c3-cloud-contact-center-for-teams/
Luware	 https://luware.com/en/solutions/
NICE inContact	 https://www.niceincontact.com/microsoft-teams
Puzzel	 https://www.puzzel.com/microsoft-teams
Tendfor	 https://www.tendfor.com/en/
Talkdesk	 https://www.talkdesk.com/cloud-contact-center/integrations/microsoft-teams/

Compliance Recording Certification Program Participants



The Microsoft Teams certification program provides customers with the assurance that each participating partner's solution has been tested and verified to provide the quality, compatibility, and reliability they expect from Microsoft solutions



Next steps

1. Learn more about contact center solutions:
aka.ms/teamscontactcenters
2. Explore the differentiated capabilities of Microsoft Teams partners
3. Reach out to your partner/account manager to learn more

Don Donais

Converged Comms CSM – Microsoft
ddonais@microsoft.com



Jeff Baart

Converged Comms CSM – Microsoft
Jeff.baart@microsoft.com



Michael Rinner

Converged Comms CSM – Microsoft
mrinner@microsoft.com



Scott Francis

Converged Comms CSM – Microsoft
scottfrancis@microsoft.com



Teams Contact Cetner Partner Demos

