

Glossary

Microsoft 365 tenant

The boundary that holds Entra ID, licenses, Teams policies, and verified domains for one organization.

Config: Confirm the tenant before you run Connect-MicrosoftTeams.

Fault: Two engineers edit two tenants and each thinks the other broke the trunk.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Verified domain

A domain added and proven in the tenant. Direct Routing SBC FQDNs must live on one of these domains.

Config: Add the domain, including a sip subdomain, before you pair the gateway.

Fault: Pairing fails because sbc.contoso.com was never verified.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

onmicrosoft.com domain

The default tenant domain. It is not a supported domain for a Direct Routing SBC FQDN.

Config: Use a domain you verified, such as contoso.com.

Fault: The gateway object is rejected or never becomes healthy.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Homed online

Direct Routing users must be homed in Microsoft 365, not left on a Skype for Business on-premises registrar.

Config: Check the user's registrar before you assign a voice routing policy.

Fault: The policy is assigned and the call never leaves the legacy system.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Islands mode

A coexistence mode. Direct Routing is not supported for users in Islands mode.

Config: Move the user to a supported mode before you test PSTN.

Fault: PSTN fails only for the Islands users and nowhere else.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Entra ID

The identity directory for the tenant. Teams users, resource accounts, and admin roles are Entra objects.

Config: Create the user or resource account here, then license it, then grant policies.

Fault: A resource account exists in Teams and has no license because nobody looked in Entra.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Resource account

A disabled-for-sign-in Entra account that represents an auto attendant or a call queue. It is not a human login.

Config: Create it with a Teams admin role and the User Administrator role.

Fault: Agents try to sign in as the queue and the sign-in is correctly blocked.

<https://learn.microsoft.com/en-us/microsoftteams/aa-cq-manage-resource-accounts>
accessed 2026-10-14

Cloud Voicemail

The Teams voicemail service. It deposits messages in the user's Exchange mailbox.

Config: Confirm the mailbox and the voicemail policy before you debug the SBC.

Fault: Callers hear a greeting failure and the SBC trace is clean.

Cloud Voicemail — confirm — last checked 2026-10. Did not open when checked.

Teams Phone

The license capability that lets a user use Teams as a phone system. It is not, by itself, a PSTN carrier.

Config: Assign Teams Phone, then add a connectivity option.

Fault: Outbound PSTN fails because only Teams, not Teams Phone, is assigned.

<https://learn.microsoft.com/en-us/microsoftteams/teams-phone-licensing> accessed
2026-10-14

Calling Plan

A Microsoft-operated PSTN option. Domestic, international, and pay-as-you-go are the usual flavors. It is an extra license on top of Teams Phone.

Config: Buy the plan only where Microsoft sells it, and assign it to the user.

Fault: A user in an unsupported country is given a Calling Plan SKU that cannot be used.

<https://learn.microsoft.com/en-us/microsoftteams/calling-plans-for-office-365> accessed
2026-10-14

Audio Conferencing

The license that provides dial-in numbers for meetings. It is not Teams Phone.

Config: Assign it to people who must publish a dial-in number.

Fault: Conference dial-out hits the SBC and the carrier bill surprises finance.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Teams Premium

An add-on for advanced meetings and related features. It does not replace Teams Phone or a Calling Plan.

Config: Buy it only for the meeting features you actually need.

Fault: A design removes Calling Plans because Premium was purchased.

<https://learn.microsoft.com/en-us/microsoftteams/teams-add-on-licensing/microsoft-teams-add-on-licensing> accessed 2026-10-14

Teams Phone Resource Account license

The license each auto attendant or call queue resource account needs, even when the account has no phone number. Subscriptions with Teams Phone include a zero-cost allotment you still have to acquire.

Config: Assign this license. If you swap off Teams Phone Standard, remove and add in the same license change.

Fault: Queues die after a two-step license swap.

<https://learn.microsoft.com/en-us/microsoftteams/teams-add-on-licensing/virtual-user> accessed 2026-10-14

Pay-as-you-go Calling Plan

A Calling Plan billed on use. Also the funding pattern, with communications credits, for some voice-app outbound calls.

Config: Fund the resource account when the attendant or queue sends calls to an external number, uses callback, or places on-behalf calls.

Fault: Overflow to a mobile number fails and the user Calling Plan is blamed.

<https://learn.microsoft.com/en-us/microsoftteams/aa-cq-reference-prerequisites-licensing> accessed 2026-10-14

Communications credits

A balance used when a call is not covered by a Calling Plan minute. Voice apps use it for some outbound cases.

Config: Fund the balance and assign it where the prerequisite article requires it.

Fault: The queue worked in the pilot week and stopped when the credit ran out.

<https://learn.microsoft.com/en-us/microsoftteams/aa-cq-reference-prerequisites-licensing> accessed 2026-10-14

Shared Calling

A pattern where users place outbound PSTN calls through a resource account's number instead of each having a number.

Config: Read the current shared-calling prerequisites before you promise it to a site.

Fault: Every user was left numberless and the resource account was never funded.

<https://learn.microsoft.com/en-us/microsoftteams/teams-phone-licensing> accessed 2026-10-14

Common area phone

A shared handset. On Direct Routing it does not need a Calling Plan license.

Config: License the device for Teams and the phone scenario you chose, then assign the number.

Fault: A Calling Plan was purchased for every corridor phone on a Direct Routing design.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Teams Rooms license

Rooms use their own SKU family, not a borrowed user Calling Plan. Names such as Basic and Pro change. Check the current name.

Config: Assign the current room license to the room account and keep Conditional Access from blocking the device.

Fault: The room account has a user E5 stack and still fails sign-in policy.

<https://learn.microsoft.com/en-us/microsoftteams/teams-phone-licensing> accessed 2026-10-14

Conditional Access

Entra policy that can block a phone or a room that is not in the trusted device set.

Config: Exclude or scope device sign-in on purpose. Do not turn Conditional Access off as a test you leave in place.

Fault: Rooms fail on Monday after a security change nobody told voice about.

<https://learn.microsoft.com/en-us/credentials/certifications/security-compliance-and-identity-fundamentals/> accessed 2026-10-14

Shortest media path

Microsoft's network guidance prefers a short path to the Microsoft network, without a proxy in the media path.

Config: Egress Teams media locally. Do not hairpin a branch through a distant data center unless you mean to.

Fault: One city's CQD is poor and the firewall team finds a proxy.

<https://learn.microsoft.com/en-us/microsoftteams/prepare-network> accessed 2026-10-14

VPN and real-time media

Microsoft recommends that you avoid sending real-time Teams media through a VPN. QoS on the VPN does not fix the extra delay.

Config: Test a call on the VPN and off it before you blame the carrier.

Fault: Every remote user shows high RTT and the office does not.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

ExpressRoute is optional

Teams does not require ExpressRoute. Local internet egress is the usual design. If you do use ExpressRoute, follow the current network article rather than assuming media is happier there.

Config: Decide the path, then mark DSCP on the path you actually use.

Fault: Media was forced onto a long private path and RTT jumped.

<https://learn.microsoft.com/en-us/microsoftteams/prepare-network> accessed 2026-10-14

QoS markers enabled

The Teams admin center setting that allows clients to insert DSCP. Without it, a correct ACL still sees unmarked client traffic from managed endpoints that honor the policy.

Config: Turn the insert-markers setting on, then verify at the WAN edge.

Fault: The network is marked and the clients were never told to mark.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Three to five hops

Microsoft's planning note: keep the client-to-network-edge path short, on the order of three to five hops, and the ISP-to-Microsoft edge short as well.

Config: Draw the path before you buy bandwidth.

Fault: A branch hairpins through HQ and then out, adding hops and delay.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Layer-3 G.711

G.711 at 20 ms is 160 bytes of payload plus 40 bytes of IP, UDP, and RTP. That is 80 kbit/s per direction.

Config: Multiply by concurrent calls and by two directions when both ways are busy.

Fault: Thirty calls were planned at 64 kbit/s and the link saturated.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Ethernet G.711

Add an 18-byte Ethernet header to the G.711 20 ms packet and the figure is 87.2 kbit/s per direction.

Config: Use 87.2 kbit/s when the policer sees Ethernet.

Fault: The policer drops the header you forgot.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Operator Connect

A certified carrier manages PSTN for you inside the tenant. You need Teams Phone. You do not need a Microsoft Calling Plan or your own SBC.

Config: Enable the operator in the admin center and assign the numbers they provide.

Fault: Someone also builds a Direct Routing SBC for the same numbers and the routes fight.

<https://learn.microsoft.com/en-us/microsoftteams/operator-connect-plan> accessed 2026-10-14

Operator Connect for India

The India-specific operator model. It exists because India PSTN rules are not the same as a generic Operator Connect deployment.

Config: Use the current India plan article and the licensed operator there.

Fault: A UK SBC was proposed as the egress for an India office.

<https://learn.microsoft.com/en-us/microsoftteams/operator-connect-plan> accessed 2026-10-14

Teams Phone Mobile

The user's mobile SIM number is also their Teams number, through a certified mobile operator. Teams Phone is required.

Config: Assign the operator number to the user. Do not also treat it as a spare Calling Plan.

Fault: One human has two different caller IDs and the CRM matches neither.

Plan Teams Phone Mobile — confirm — last checked 2026-10. Did not open when checked.

Direct Routing

You connect a certified SBC to Teams and bring your own carrier. Users need Teams and Teams Phone. They must be homed online. Islands mode is not supported.

Config: Pair the FQDN, open 5061, allow media ranges, assign a voice route.

Fault: The SBC is up and the user has no voice routing policy.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Mixing PSTN options

One tenant may use Calling Plans, Operator Connect, Teams Phone Mobile, and Direct Routing at the same time for different users.

Config: Give each population a policy that matches its carrier.

Fault: A mobile user matches a Direct Routing route and hairpins.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

SIP proxies

For commercial Microsoft 365, signal to sip.pstnhub.microsoft.com, then sip2, then sip3, on TCP 5061. GCC High and DoD use different names.

Config: Checked 15 October 2026. Direct Routing SBC signaling and media on the plan page: 52.112.0.0/14 and 52.120.0.0/14. Teams client optimize on the Office 365 URLs page and the worldwide endpoints feed: 52.112.0.0/14 and 52.122.0.0/15. Those lists are not interchangeable.

Fault: A lockdown allows only today's DNS answer and the trunk fails next week.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Media ports for Direct Routing

UDP 3478–3481 and 49152–53247 between the SBC and the media processors, unless media bypass keeps the media off that path.

Config: Budget at least two media ports per concurrent call on the SBC.

Fault: Calls connect and both sides hear silence.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Media re-targeting

Microsoft does not support changing the media target in the middle of an active Direct Routing call.

Config: Negotiate media at setup and leave it.

Fault: Audio dies when a transfer tries to move the RTP peer.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Two media ports per call

Microsoft's planning tip: allocate at least two media ports on the SBC for each concurrent call.

Config: Size the SBC media range from the busy-hour call count.

Fault: The 51st call connects with no audio.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Normalization

The dial plan rewrites what a person dialed into a number the routes can match, usually E.164. The first matching rule wins.

Config: Put the specific rules above the general ones.

Fault: A catch-all rule is first, so the emergency rule never runs.

<https://learn.microsoft.com/en-us/microsoftteams/create-and-manage-dial-plans> accessed 2026-10-14

Tenant dial plan

A set of normalization rules you assign to users. A user can have a more specific plan than the tenant default.

Config: Grant the plan to the user and test from that user.

Fault: You edit the global plan and a branch with its own plan does not change.

<https://learn.microsoft.com/en-us/microsoftteams/create-and-manage-dial-plans> accessed 2026-10-14

PSTN usage

A name that links a voice routing policy to one or more voice routes. The policy's ordered list of usages is the permission to place those calls.

Config: Create the usage, attach routes, then put the usage on the policy in the right order.

Fault: International works because the international usage was left on a branch policy.

<https://learn.microsoft.com/en-us/microsoftteams/manage-voice-routing-policies>

accessed 2026-10-14

Voice route

A number pattern plus an ordered list of SBC gateways. It does nothing until a PSTN usage on the user's policy points at it.

Config: Anchor the pattern. Test with the normalized number, not the raw digits.

Fault: The route expects 10 digits and the dial plan already added +1.

<https://learn.microsoft.com/en-us/microsoftteams/manage-voice-routing-policies>

accessed 2026-10-14

Voice routing policy

The per-user list of PSTN usages, in order. Teams walks that order when it looks for a route.

Config: Grant it to a test user and read it back with Get-CsOnlineUser.

Fault: The pilot user is still on the global policy, which has no usages.

<https://learn.microsoft.com/en-us/microsoftteams/manage-voice-routing-policies>

accessed 2026-10-14

Gateway priority

Each voice route lists SBCs with a priority. Lower priority number is tried first in this campus's teaching model. Confirm the current article before you depend on a tie.

Config: Put the local SBC first and a remote SBC second, then pull the cable in a maintenance window.

Fault: Both gateways are priority 1 and nobody knows which one took the call.

<https://learn.microsoft.com/en-us/microsoftteams/manage-voice-routing-policies>

accessed 2026-10-14

Emergency short code

999, 112, and 911 must be normalized on purpose. A general rule that runs first can swallow them.

Config: Put emergency rules above catch-alls, and give them a route that is always present.

Fault: A user dials 999 and the dial plan turns it into an extension.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Auto attendant

A voice app that answers, plays a greeting, and routes by schedule, menu, directory, or operator.

Config: Create the attendant, attach a licensed resource account, then assign a number only if the PSTN must reach it.

Fault: The menu option points at a queue that has no agents and no overflow.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant> accessed 2026-10-14

Call queue

A voice app that holds callers and offers them to agents by attendant, serial, round robin, or longest idle routing.

Config: Set timeout and overflow before you publish the number.

Fault: The timeout is 3 seconds and callers always overflow.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue> accessed 2026-10-14

Conference mode

A queue behavior where the caller stays in the conference while agents are tried, so the transfer is faster and the greeting is not replayed the same way.

Config: Test both modes with a real agent client before you argue about delay.

Fault: Callers hear silence while the queue hunts, and someone disables the queue.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>
accessed 2026-10-14

Overflow

Where the call goes when the queue is full or the timeout expires. It can be a person, another voice app, voicemail, or an external number.

Config: Name the overflow in the design, then test it by making every agent busy.

Fault: Overflow to a mobile fails and the queue itself is blamed.

<https://learn.microsoft.com/en-us/microsoftteams/aa-cq-reference-prerequisites-licensing> accessed 2026-10-14

Directory search

An attendant feature that lets a caller reach a person by name or extension.

Config: Scope who can be found. Do not leave the default if the tenant has privileged accounts.

Fault: A caller reaches an executive because directory search was on.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant> accessed 2026-10-14

Holiday schedule

A calendar the attendant uses to play the closed greeting. It is not the same object as business hours.

Config: Load the next year's holidays when you build the attendant.

Fault: The office is closed and the attendant still hunts the queue.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant> accessed 2026-10-14

Dynamic emergency calling

Teams picks a civic address from the network location it can see: trusted IP, site, and subnet in the usual design.

Config: Build the topology, assign addresses, and test from a known subnet.

Fault: A laptop on the VPN reports the HQ floor.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Civic address

The street address you validate for emergency calling. A dispatchable location is specific enough for responders.

Config: Validate the address and tie subnets to places inside it.

Fault: The PSAP gets a city and no building.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Trusted IP

An address that means 'this client is inside our network.' It is how Teams decides the client is on a site you mapped.

Config: List the real internet egress addresses, not the VPN pool, unless you mean to.

Fault: Remote users inherit a building.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Emergency calling policy

Controls notification and how the client looks up location. It is not the PSTN route.

Config: Pair the policy with a routing policy and a tested number from the carrier.

Fault: Security is notified for a test call and the route still left the country.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Direct Routing emergency

You, the SBC, and the carrier deliver the emergency call. Microsoft does not become the emergency carrier because Teams is the client.

Config: Build an emergency voice route that prefers the local SBC.

Fault: 999 matches an international route via another country.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Calling Plan emergency

With Microsoft Calling Plans in supported countries, Microsoft's emergency calling service is part of the plan. You still configure locations.

Config: Assign the Calling Plan and the emergency addresses for those users.

Fault: A Calling Plan user is sent to your SBC for 911 by a copied route.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Location-based routing

Stops a user in a regulated site from placing a PSTN call through a gateway in another site. It is a toll-bypass control.

Config: Enable it per site with the network topology and the gateways that belong there.

Fault: A traveler's laptop in one country egresses through another country's SBC.

<https://learn.microsoft.com/en-us/microsoftteams/location-based-routing-plan>

accessed 2026-10-14

Survivable Branch Appliance

A Direct Routing appliance that can keep local PSTN calling when the branch cannot reach Microsoft 365.

Config: Deploy a supported appliance, point the local clients at it, and test a WAN cut.

Fault: The office loses the WAN and nobody can call emergency services.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-survivable-branch-appliance> accessed 2026-10-14

Media bypass

Media can flow between the Teams client and the SBC, skipping Microsoft's media processors. Signaling still goes through Teams.

Config: Enable it on the gateway only when the client can reach the SBC and LBR does not forbid the path.

Fault: Bypass is on for a VPN user and audio is worse than the processor path.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Local media optimization

A Direct Routing pattern with internal and external SBC interfaces so a branch user stays on the local media path.

Config: Use the current media optimization article and the SBC vendor's build.

Fault: Internal users hairpin out to the internet and back to the SBC on the same LAN.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

SIP Gateway

Microsoft's front end for certain compatible analog and SIP devices that are not Teams phones.

Config: Check the current supported device list before you buy handsets.

Fault: A generic analog adapter is plugged in and never registers.

<https://learn.microsoft.com/en-us/microsoftteams/sip-gateway-plan> accessed 2026-10-14

Teams-certified phone

A handset in Microsoft's certified device program, signing in as a Teams user.

Config: Buy from the current certified list and assign Teams Phone plus a number.

Fault: A bargain SIP phone is forced through SIP Gateway and the feature list is wrong.

<https://learn.microsoft.com/en-us/microsoftteams/sip-gateway-plan> accessed 2026-10-14

SRTP

The media encryption Direct Routing uses. Signaling is TLS. A successful INVITE with plaintext RTP is not the design.

Config: Allow the UDP media range. Do not strip SRTP on the SBC.

Fault: The SBC offers RTP/AVP only and the call fails or is unsupported.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

TLS 1.2

Direct Routing signaling expects modern TLS. TLS 1.0 is not a compatible offer.

Config: Upgrade firmware and offer TLS 1.2 or newer toward the proxies.

Fault: The handshake dies before OPTIONS.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Certificate SAN

The name on the SBC certificate must match the FQDN you paired. Wildcards are allowed when they follow RFC 2818.

Config: Issue the certificate for the paired name. Include the chain.

Fault: TLS fails with a name mismatch and someone restarts the SBC.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Microsoft trusted root

The SBC certificate must come from a CA in Microsoft's trusted root program. A private lab CA is not enough for production pairing.

Config: Use a public CA for the production FQDN.

Fault: The trunk works in the lab and fails the morning you point it at sip.pstnhub.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Server Authentication EKU

The certificate should include the server authentication extended key usage.

Config: Request the certificate from the SBC's CSR so the name and the EKU are right.

Fault: The chain is trusted and the EKU is still wrong.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Call Analytics

The per-user, per-call quality view in the Teams admin center. Use it when one person had one bad call.

Config: Open the user's call and read jitter, loss, and RTT on each stream.

Fault: A site problem is hunted one user at a time.

<https://learn.microsoft.com/en-us/microsoftteams/use-call-analytics-to-troubleshoot-poor-call-quality> accessed 2026-10-14

Call Quality Dashboard

The aggregate quality report. Use it for subnets, buildings, and trends.

Config: Confirm the subnet-to-building map before you trust a building chart.

Fault: HQ looks terrible because the VPN pool was labeled HQ.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard> accessed 2026-10-14

Poor stream clues

Teach yourself to look at jitter, packet loss, and round-trip time separately. A mark of DSCP 0 plus high jitter is a different fault from 12% loss with EF still set.

Config: Capture at the egress and compare with CQD.

Fault: The ticket says 'Teams is down' and loss is 0.2% with a 600 ms RTT.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard> accessed 2026-10-14

SIP ladder

A time-ordered picture of requests and responses between client, proxy, SBC, and carrier, joined by Call-ID.

Config: Capture on the SBC, filter the Call-ID, and read the first non-success code.

Fault: Two captures are compared and they are different calls.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

One hypothesis

Change one thing, then collect the same evidence again. A reboot plus a dial-plan edit plus a firewall change teaches nothing.

Config: Write the hypothesis, the change, and the capture you expect.

Fault: Three vendors change three boxes and the call starts working for an unknown reason.

<https://learn.microsoft.com/en-us/microsoftteams/use-call-analytics-to-troubleshoot-poor-call-quality> accessed 2026-10-14

Dynamics 365 Contact Center

Microsoft's contact-center product. It can stand alone or sit with Customer Service. Voice uses Azure Communication Services under the covers.

Config: Deploy the environment, the channels, and unified routing before you demo Copilot.

Fault: A pilot turns on Copilot and never defines a queue.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Customer Service workspace

The representative experience in Dynamics. Contact Center can embed there or run as its own product surface.

Config: Confirm embedded versus standalone in the current implementation guide.

Fault: Agents look for the queue in the wrong app.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Workstream

The intake pipe in unified routing. It classifies work and sends it to a queue.

Config: Create the workstream, then the rules, then the queues.

Fault: Chat and voice land in the same queue with no skill rules.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Work classification

Rules that set skills, intent, or priority on a work item before assignment.

Config: Test with two items that should land in different queues.

Fault: French callers reach the English queue.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Capacity profile

How many items of each type a representative can hold. A voice call usually consumes more than a chat message.

Config: Set capacity, then watch a test item get stuck when the number is zero.

Fault: The queue has agents and every item overflows.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Representative

The human on the contact-center side. AB-250 calls the console the representative experience.

Config: Give them a security role, a capacity profile, and a queue membership.

Fault: The user can open the app and is not a member of any queue.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Copilot in the contact center

Assistive summaries, suggested replies, and knowledge inside the representative experience. It is not the PSTN route.

Config: Connect knowledge sources and test on a known case.

Fault: Copilot answers from a stale article and the agent sends it.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

AB-250 channels weight

The published AB-250 study guide weights channel implementation at about 30–35 percent, the largest slice.

Config: Spend the study time on channel setup and routing.

Fault: An exam candidate can describe Copilot and cannot trace a voice channel.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Connect model

A certified contact center attaches to Teams through certified SBCs and Direct Routing.

Config: Confirm the vendor's current certification, then design the SBC and the transfer target's license.

Fault: Transfers to experts fail because the expert has no Teams Phone number.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Extend model

The contact center uses the Teams client, Graph, and Cloud Communications APIs. Teams Phone is the calling system and the agent works in Teams.

Config: Read the Extend section of the contact-center article before you license agents.

Fault: The design buys a Connect SBC for an Extend product.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Unify model

The model Microsoft Learn names, as of 14 October 2026, for a native experience. Partner material describes it as ACS-based applications on Teams calling infrastructure. Older decks say Power. Ask which current model a vendor holds.

Config: Get the vendor's certification letter and match it to Connect, Extend, or Unify.

Fault: A proposal says Power and nobody can find the media path.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Teams Phone extensibility

A way for a contact center, including Dynamics 365 Contact Center, to use a customer's existing Teams Phone for the agent's telephony.

Config: Use a solution that has finished the certification if you want the supported experience. The API existing is not the same as a finished certification.

Fault: Two phone systems ring the same person.

<https://learn.microsoft.com/en-us/azure/communication-services/concepts/interop/tpe/teams-phone-extensibility-overview> accessed 2026-10-14

CUBE as a bridge

Cisco Unified Border Element can be the certified SBC between Teams and CUCM or a carrier. The IOS-XE release you run has its own guide.

Config: TLS to the three proxies, a certificate whose name matches the paired FQDN, and dial-peers toward CUCM.

Fault: Early offer and codec preferences are left at a lab default and calls 488.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

One normalization owner

During coexistence, either Teams or CUCM should transform numbers, not both.

Config: Write the owner on the design and test a call in each direction.

Fault: CUCM adds a prefix and the Teams dial plan adds it again.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Tromboning

A call from a user who stayed on CUCM to a user who moved to Teams hairpins through the SBC. It is normal during dual-running and expensive as a steady state.

Config: Move groups that call each other in the same wave.

Fault: The carrier bill rises and nobody left the building.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

Webex calling bridge

A SIP trunk through a local gateway or CUBE can carry calls between Webex Calling users and Teams users during a split estate.

Config: Treat it as coexistence with one numbering plan, not as a merger.

Fault: Two dial plans both own the same range.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

UCCE coexistence

Contact-center agents can stay on CVP and Finesse while knowledge workers move to Teams. The SBC sends contact-center numbers one way and user numbers another.

Config: Split the dial plan by number range and test a transfer to an expert on Teams.

Fault: Agents move first and the IVR script can no longer see them.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

Genesys and Teams

Genesys sells contact-center integrations with Teams. The certification model, Connect, Extend, or Unify, decides the media path and the licenses.

Config: Ask for the current Microsoft certification and design to that model.

Fault: The statement of work says certified and does not name the model.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Amazon Connect and Teams

A customer pattern uses an SBC between Teams Direct Routing and Amazon Connect or a SIP voice connector. It is a bridge you design, not a Microsoft Calling Plan feature.

Config: Draw the SIP path and the identifier you will store.

Fault: Both platforms record and neither capture has the Call-ID.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Call Automation

The ACS server-side calling API. Your app answers, plays, recognizes DTMF or speech, and transfers. You receive events. You do not drive a desktop click.

Config: Subscribe to the events and time out the recognize step.

Fault: The app never answers, so the caller hears ringing until the platform gives up.

<https://learn.microsoft.com/en-us/azure/communication-services/concepts/call-automation/call-automation> accessed 2026-10-14

Calling SDK

The ACS client SDK for a human in a browser or a mobile app. Different from Call Automation, which is the server.

Config: Pick the SDK if a person is on the page. Pick automation if a bot answers.

Fault: A web page uses the calling SDK and nobody handles the server events.

<https://learn.microsoft.com/en-us/azure/communication-services/concepts/call-automation/call-automation> accessed 2026-10-14

Recognize step

The Call Automation action that collects DTMF or speech. It needs a timeout and a path for 'none of the above.'

Config: Map 0 to a human queue and test it.

Fault: The bot repeats the prompt until the caller hangs up.

<https://learn.microsoft.com/en-us/azure/communication-services/concepts/call-automation/call-automation> accessed 2026-10-14

Azure AI Speech

Microsoft's speech-to-text and text-to-speech service. Copilot Studio and custom IVRs can use it. It is not emergency calling.

Config: Choose a voice you are allowed to use and log the recognition result.

Fault: The prompt language does not match the caller and every intent is unknown.

<https://learn.microsoft.com/en-us/azure/ai-services/speech-service/overview> accessed 2026-10-14

Copilot Studio voice agent

A bot built in Copilot Studio that can front a voice channel, including Dynamics contact-center voice, using topics or generative orchestration.

Config: Publish the agent, attach it to the channel, and test the escape digit.

Fault: The agent is the only target of the public number, including emergencies.

<https://learn.microsoft.com/en-us/microsoft-copilot-studio/fundamentals-what-is-copilot-studio> accessed 2026-10-14

Azure AI Foundry

The Azure portal family for models, agents, and evaluations. The earlier name was Azure AI Studio. It does not route PSTN.

Config: Evaluate a prompt against a test set before you put it on a phone number.

Fault: A model change ships to the IVR with no eval.

<https://learn.microsoft.com/en-us/azure/ai-foundry/> accessed 2026-10-14

Teams interop with ACS

ACS can be set up to call Teams users and to join Teams meetings when the interop prerequisites are met.

Config: Follow the current interop article for the resource you created.

Fault: The bot can call the PSTN and cannot transfer to a Teams expert.

<https://learn.microsoft.com/en-us/azure/communication-services/concepts/call-automation/call-automation> accessed 2026-10-14

MS-700

MS-700 is still live, with a skills update on Oct 27 2026; it is NOT retired and has no replacement. It is the exam for Microsoft 365 Certified: Teams Administrator Associate.

Config: Study the current guide, including network and call-quality objectives. There is no replacement exam.

Fault: A candidate skips networking because they think the exam is only meetings.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ms-700> accessed 2026-10-14

MB-280 retired

MB-280 retired Jul 31 2026, with AB-210 as its successor; AB-210 is in beta. It covered Sales and Customer Insights, not the contact-center product.

Config: Do not book MB-280. AB-210 is its successor and is in beta. AB-250 is the contact-center exam.

Fault: A job post requires MB-280 after the retirement date.

<https://learn.microsoft.com/en-us/credentials/support/retired-certification-exams> accessed 2026-10-14

AB-210

Dynamics 365 Sales AI Consultant Associate. AB-210 is the successor to MB-280 and is in beta. It is not a replacement for MS-700.

Config: Use AB-250 when the job is Dynamics 365 Contact Center. Use AB-210 only for a sales role, and remember it is in beta.

Fault: Study time goes to sales Copilot for a queue-routing role.

<https://learn.microsoft.com/en-us/partner-center/announcements/2026-july> accessed 2026-10-14

AB-250

Transforming Contact Center Experiences with AI in Dynamics 365. It earns Dynamics 365 Contact Center AI Engineer Associate. Pass mark is 700. The public page allows 120 minutes.

Config: Study deploy, channels, agents, work distribution, the representative experience, and analytics.

Fault: A candidate revises MB-280 practice tests for this exam.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

AZ-900

Azure Fundamentals. It was not on the retirement list reviewed on 14 October 2026.

Config: Take it if you need Azure vocabulary, not instead of MS-700.

Fault: A voice design is approved because someone passed AZ-900.

<https://learn.microsoft.com/en-us/credentials/certifications/azure-fundamentals/> accessed 2026-10-14

SC-900

Security, Compliance, and Identity Fundamentals. The English certification is scheduled to update on 21 October 2026.

Config: Read the current study guide after the 21 October update if you sit it later.

Fault: Conditional Access is treated as out of scope for a voice project.

<https://learn.microsoft.com/en-us/credentials/certifications/security-compliance-and-identity-fundamentals/> accessed 2026-10-14

MS-900 retired

Microsoft 365 Fundamentals retired on 31 March 2026.

Config: Use role exams and the product docs.

Fault: A learning path still tells a new hire to book MS-900.

<https://learn.microsoft.com/en-us/credentials/support/retired-certification-exams>

accessed 2026-10-14

AI-900 retired

Azure AI Fundamentals retired on 30 June 2026.

Config: Do not use a retired fundamentals exam as the AI plan.

Fault: The study plan lists AI-900 beside AB-250.

<https://learn.microsoft.com/en-us/credentials/support/retired-certification-exams>

accessed 2026-10-14

Passing score 700

Microsoft role-based exams, including MS-700 and AB-250, require 700 out of 1000.

Config: Use the official practice assessment when one exists.

Fault: Someone stops studying at a 70 percent practice score on a different scale.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ms-700> accessed 2026-10-14

Convenience recording

A user starts a recording of a call, meeting, or event. Policy can allow it. The user can stop it. Storage follows meeting rules.

Config: Set the meeting, calling, and events policies on purpose.

Fault: A regulated desk is told to 'just hit record.'

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Compliance recording

A third-party recorder is invited by policy into new calls, meetings, and events. The user does not start it and participant consent is not the control. Notification is enforced.

Config: Create the application instance, enable the policy, grant it, and test a new call.

Fault: The policy is granted and nothing records because the bot instance was never created.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Compliance recording application

The bot instance of a certified recorder. The policy references it. Without it, granting the policy does not record.

Config: New-CsTeamsComplianceRecordingApplication attaches it to the policy.

Fault: Recording works in the vendor's cloud and never joins the Teams call.

<https://learn.microsoft.com/en-us/microsoftteams/teams-compliance-recording-setup> accessed 2026-10-14

Existing calls are unaffected

When you grant a compliance recording policy, calls and meetings already up are not swept in. Test with a new call.

Config: Place a fresh call after the grant and confirm the bot joined.

Fault: The pilot says recording failed because they watched an old meeting.

<https://learn.microsoft.com/en-us/powershell/module/teams/new-csteamscompliancerecordingpolicy?view=teams-ps> accessed 2026-10-14

Quality management

Listening to and scoring recorded interactions. Often the same vendor as compliance recording, sometimes a separate one.

Config: Define the form, the sample, and who may listen.

Fault: Supervisors export recordings to a laptop share.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Workforce management

Scheduling and adherence for a queue. It eats interval stats, handle time, and shrinkage. It is not a feature of a Teams user policy.

Config: Feed offered, answered, abandoned, and handle time from the queue or the CCaaS.

Fault: WFM says you were overstaffed while the queue overflowed, because overflow removed the calls from the count.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Shrinkage

The fraction of paid time that is not available for contacts: leave, training, meetings, breaks.

Config: Publish the assumption. A 30 percent guess should be labeled as a guess.

Fault: The schedule staffs the Erlang number and half the team is in training.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Occupancy

Handle time divided by handle time plus available time. High occupancy feels efficient and burns people out.

Config: Watch it beside service level, not instead of service level.

Fault: A site celebrates 95 percent occupancy and abandonment climbs.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Service level

The fraction of contacts answered inside a target, for example 80 percent in 20 seconds. Erlang C is one teaching model of it.

Config: Write the target, the interval, and the abandonment rule.

Fault: Two vendors compute abandoned calls differently and both claim the target.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Power BI and CQD

Power BI can sit on top of Call Quality Dashboard data. It does not replace Call Analytics for one call, and it inherits a bad subnet map.

Config: Fix the building and subnet dimensions before you publish a dashboard.

Fault: Leadership sees a red HQ that is actually the VPN pool.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard>

accessed 2026-10-14

Screen pop

The CRM opens the contact that matches the caller. Teams does not do this by itself for an ordinary PSTN call.

Config: Normalize before the lookup. Store the Call-ID on the timeline.

Fault: The pop shows the wrong person because the trunk prefix was still on the number.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

E.164

The international form of a number, starting with + and a country code. Routes and CRM lookups should use it after normalization.

Config: Normalize first, then route, then look up.

Fault: The CRM stores 0207... and the SBC stores +44207... and they never join.

<https://learn.microsoft.com/en-us/microsoftteams/create-and-manage-dial-plans>

accessed 2026-10-14

Call-ID

The SIP header that identifies one dialog. It is the join key between an SBC capture, a carrier ticket, and a CRM note.

Config: Write the Call-ID into the system you will have open during an incident.

Fault: Support has a CRM case and an SBC log and cannot prove they are the same call.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Integration seam

A named place where another system is allowed to attach: a policy, a queue overflow, a subnet list, an event, an identifier.

Config: Document the seam in the same change as the feature.

Fault: Recording is added a year later and the number plan has to change.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Human escape

A digit or intent that always reaches a person. Voice agents need one. Emergency numbers need a real route, not a bot.

Config: Test the escape on every prompt change.

Fault: The prompt says 'say agent' and the recognize step has no such intent.

<https://learn.microsoft.com/en-us/microsoft-copilot-studio/fundamentals-what-is-copilot-studio> accessed 2026-10-14

Certificate expiry seam

The date the SBC certificate stops being valid. It is an integration hook because every carrier and every proxy will notice it on the same morning.

Config: Monitor the date and renew before the TLS handshake fails.

Fault: OPTIONS fail on a Saturday and the dial plan is blamed.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Subnet as a shared list

The same subnet definitions should feed emergency location, location-based routing, and the CQD building report.

Config: Give one team the edit right and publish the list.

Fault: E911 says London, CQD says VPN, LBR says Manchester.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Queue interval

A 15-minute or 30-minute bucket of offered, answered, and abandoned contacts. WFM and Erlang C both assume you know the bucket.

Config: Export the same interval the schedule uses.

Fault: The forecast is ten times too high because the interval was a day.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Abandon

A caller who hangs up before an agent answers. Whether short abandons count is a business rule.

Config: Write the rule down and use it in WFM and in the service-level report.

Fault: Service level is met only because abandons under five seconds were deleted.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Average handle time

Talk time plus after-call work, unless your definition says otherwise. Erlang traffic is calls times handle time divided by the interval.

Config: Measure it from the contact center, not from a stopwatch on one call.

Fault: The Erlang sheet uses talk time only and the agents never finish wrap-up.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

PIDF-LO

A location object that can be carried in a SIP INVITE for an emergency call so the far end sees where the caller is.

Config: Confirm the SBC passes it and the carrier reads it.

Fault: The location is stripped at the SBC and the PSAP gets the trunk's address only.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

On-site notification

An emergency calling policy can notify people on site when an emergency call is placed.

Config: Test the notification with the carrier's test process, not with a real emergency call.

Fault: The test notifies nobody because the policy was never assigned.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

GCC High SIP

Office 365 GCC High uses sip.pstnhub.gov.teams.microsoft.us. Do not copy the commercial three-proxy list into a government tenant.

Config: Read the plan page for the cloud you are actually in.

Fault: A commercial runbook is pasted into GCC High.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

DoD SIP

Office 365 DoD uses sip.pstnhub.dod.teams.microsoft.us.

Config: Use the DoD name from the current plan page.

Fault: The SBC peers with sip.pstnhub.microsoft.com from a DoD tenant.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

IPv6 SIP proxies

The plan page also lists sip.ipv6.pstnhub.microsoft.com and the sip2 and sip3 IPv6 names, resolving into 2603:1063:400::/40.

Config: Match the address family you actually route.

Fault: Firewall objects exist only for IPv4.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Early offer

Teams Direct Routing presents media in the INVITE. An SBC or CUBE that waits for a delayed offer will negotiate badly.

Config: Set the vendor profile for early offer toward Teams.

Fault: CUCM sends delayed offer all the way to Teams.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

AudioCodes

A certified SBC family. Mediant devices and their management tools are common in Direct Routing designs. The Microsoft certified list is the support boundary, the vendor guide is the config.

Config: Follow AudioCodes' current Teams document for the firmware you run.

Fault: A forum config from 2019 is pasted onto new firmware.

AudioCodes session border controllers — confirm — last checked 2026-10. Did not open when checked.

Ribbon SBC

Ribbon's certified session border controllers are a Direct Routing option. Core and software editions differ.

Config: Use Ribbon's current Teams guide and a public certificate.

Fault: OPTIONS are answered on the wrong interface.

<https://ribboncommunications.com/> accessed 2026-10-14

Oracle SBC

Oracle Communications Session Border Controller can be certified for Direct Routing on specific releases. Check the Microsoft list for the release, not the logo.

Config: Match the certified software version and the certificate name.

Fault: The beautiful config is one release below the certified list.

Oracle Session Border Controller — confirm — last checked 2026-10. Did not open when checked.

Cisco CUBE

Cisco Unified Border Element on IOS-XE, when the release is certified, is a normal Direct Routing SBC and the usual bridge to CUCM.

Config: Use Cisco's current CUBE for Teams guide. Trust the signaling ranges. Present the paired name.

Fault: A voice engineer applies a SIP trunk to CUCM and never peers with the pstnhub names.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

Vendor-first support

Microsoft's Direct Routing support boundary: you call the SBC vendor, they escalate to Microsoft if they must. Non-certified SBCs can be refused.

Config: Keep the certified-list screenshot with the firmware version.

Fault: A ticket is opened with no SBC logs and no firmware.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-border-controllers>
accessed 2026-10-14

Analog via Direct Routing

Fax, door phones, and elevators usually stay on an SBC or SIP Gateway, not on a Teams client.

Config: Put analog on the SBC design and test the emergency path from that device.

Fault: The elevator is moved to Teams as a user and cannot dial during a WAN cut.

<https://learn.microsoft.com/en-us/microsoftteams/sip-gateway-plan> accessed 2026-10-14

Presence-based routing

A queue can skip agents whose Teams presence says they are busy or in a meeting.

Config: Decide the presence rule and test with one agent in a meeting.

Fault: Agents set themselves to Do Not Disturb to leave the queue, and nobody notices for a week.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>

accessed 2026-10-14

Opt out of a queue

Agents can be allowed to leave a queue. If you forbid it, staffing math must include breaks or they will dodge in other ways.

Config: Pick one policy and tell the supervisors.

Fault: The schedule says five agents and three have opted out.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>

accessed 2026-10-14

Callback

A queue feature that calls the customer back. The prerequisite article treats callback as a case that needs funding on the resource account.

Config: Fund pay-as-you-go or credits, then test one callback.

Fault: The option is on and every callback fails.

<https://learn.microsoft.com/en-us/microsoftteams/aa-cq-reference-prerequisites-licensing> accessed 2026-10-14

Graph communications

Microsoft Graph APIs used by Extend and by recording and presence integrations. They are not a SIP trunk.

Config: Use Graph for the app, and Calling Plans, Operator Connect, or Direct Routing for the telephone network.

Fault: Presence is synced and audio is not connected.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Policy recording bot join

The recorder joins as an application because the user's policy names it. If the bot fails to join, you have a policy, an ID, or a media problem, in that order.

Config: Check Enabled, the application instance, and the grant, then the vendor's join log.

Fault: The carrier is asked for a recording they never made.

<https://learn.microsoft.com/en-us/microsoftteams/teams-compliance-recording-setup> accessed 2026-10-14

Retention of recordings

Compliance recordings are retained by the partner's system, not by Teams meeting storage. Convenience recordings follow meeting storage.

Config: Write the retention in the partner contract and test a restore.

Fault: A regulator asks for a call and the partner's bucket expired.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Evaluation form

The QM scorecard. It should cite behaviors you can hear, not vibes.

Config: Publish the form before you score people.

Fault: Agents are coached on a form they have never seen.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Screen recording

Often a QM vendor feature on the agent desktop. Teams compliance recording's documented media list is voice, video, and screen share inside the Teams session, which is not the same as a silent desktop recorder.

Config: If you need the desktop, buy and disclose that recorder.

Fault: A privacy review finds a desktop recorder nobody mentioned.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Building map

The table that says which subnet is which building in CQD. It is only as good as the subnets you typed.

Config: Reconcile it with the emergency subnet list.

Fault: Facilities rebuilds a floor and both maps stay old.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard> accessed 2026-10-14

Admin roles for CQD

CQD is an admin report, not a personal call history. The people who can open it are the roles you grant, not every user.

Config: Grant the smallest role that can see the report.

Fault: CQD credentials are shared.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard> accessed 2026-10-14

After-call work

Time the agent spends in the CRM after the caller hangs up. Include it in handle time if your WFM definition says so.

Config: Define it and measure it from the contact-center state, not from memory.

Fault: Agents are 'available' in Teams while still writing the case.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Skill-based routing

Assignment that prefers a representative who has the skill the classification step wrote on the work item.

Config: Attach skills to people and to the classification rules, then test a miss.

Fault: Every item requires a skill nobody has, so the queue never assigns.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Intent-based routing

Classification that uses an intent, often from a bot or a model, to pick a queue.

Config: Map unknown to a human, not to a retry loop.

Fault: The model returns unknown and the caller is played the same prompt.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Proactive outbound

Contact-center campaigns that place calls outward. They need a number, a consent story, and a capacity plan.

Config: Follow the current channel article for outbound, and fund the numbers.

Fault: A campaign uses a user's caller ID and the CRM trust collapses.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Real-time translation

A channel feature that can translate a conversation. It is not a substitute for a language queue when the policy says a human must speak the language.

Config: Decide where translation is allowed and where a skilled human is required.

Fault: A billing dispute is translated badly and the case notes disagree.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Knowledge source

The documents a Copilot or a generative agent is allowed to quote. If the source is wrong, the answer is wrong with confidence.

Config: Limit the sources and test questions whose answers you already know.

Fault: The agent quotes a retired price list.

<https://learn.microsoft.com/en-us/microsoft-copilot-studio/fundamentals-what-is-copilot-studio> accessed 2026-10-14

Generative orchestration

The Copilot Studio mode that chooses topics and tools from the conversation, as opposed to a rigid topic tree.

Config: Keep the human escape outside the model's mood.

Fault: The agent talks a caller out of the escape phrase.

<https://learn.microsoft.com/en-us/microsoft-copilot-studio/fundamentals-what-is-copilot-studio> accessed 2026-10-14

Classic topics

The menu-like Copilot Studio design. Predictable and easier to test. Weaker on paraphrase.

Config: Write the topics, the entities, and the fallback.

Fault: Fallback is empty and the caller hears silence.

<https://learn.microsoft.com/en-us/microsoft-copilot-studio/fundamentals-what-is-copilot-studio> accessed 2026-10-14

Event Grid

One way ACS delivers call events to your app. If the subscription is wrong, your IVR never sees RecognizeCompleted.

Config: Log the event type and the call id.

Fault: The app polls a database and the events expired.

<https://learn.microsoft.com/en-us/azure/communication-services/concepts/call-automation/call-automation> accessed 2026-10-14

DTMF relay

Digits in the audio path or as telephone-events. IVRs fail when the SBC strips them.

Config: Test digits through every SBC, not only Teams-to-Teams.

Fault: The queue escape works in the lab and fails through the carrier.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Comfort noise and SID

Silence suppression changes the average bitrate. Do not size a link only from a G.711 average that assumed comfort noise you did not enable.

Config: Size for the codec you offer, per direction, at the packetization you set.

Fault: The link was sized for silence and the all-hands call filled it.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Packetization 20 ms

The usual voice packet interval in these bandwidth figures. A 10 ms interval doubles the header tax.

Config: Lock ptime in the design.

Fault: One SBC uses 10 ms and the policer drops packets.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Jitter buffer

The client waits a little so late packets can still be played. Too small and you hear gaps. Too large and you talk over each other.

Config: Fix the network before you hunt a hidden buffer setting.

Fault: A WAN with 40 ms jitter is 'fixed' by a slide that says buffer.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard>
accessed 2026-10-14

Round-trip time

How long a packet takes to go and come back. Long RTT with low loss means distance or hairpin, not a dirty cable.

Config: Look at the path. Bypass or local egress may beat a fatter pipe.

Fault: A branch backhauls media across a continent.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard>
accessed 2026-10-14

DSCP rewrite

A router or VPN that sets the mark back to 0. The client did its job and the path undid it.

Config: Capture outside the VPN.

Fault: The laptop shows EF and the WAN sees 0.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Browser join ports

People who join meetings in a browser do not use the fixed 50000-range client ports. An ACL that only matches those ports misses them.

Config: Say so in the design if many people join from browsers.

Fault: Guests sound worse and the ACL is declared complete.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Mac and mobile DSCP

Mac, iOS, and Android use hard-coded audio EF and a hard-coded video and sharing mark. They are not the Windows policy object.

Config: Still enable QoS in the admin center, and mark at the network for devices that will not cooperate.

Fault: Mobile executives are the poor-quality population.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

ms-teams.exe

The current Teams client process name used when you bind a Windows QoS policy. An old policy aimed at the classic client marks nothing.

Config: Update the policy object and verify with a capture.

Fault: QoS policy still names the previous client.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Busy hour

The hour you actually size. Average day divided by eight is not a busy hour.

Config: Take the busy interval from the contact center, not from a yearly average.

Fault: The link is fine at 11:00 and dead at 09:15.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Dual running

Both PBX and Teams carry live numbers during a move. Rollback needs the old route left intact.

Config: Move a range, keep the old path, and write the backout.

Fault: The old trunk is deleted on Friday.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

Number porting

Moving a public number from one carrier to another. It has a date and a letter of authority. It is not a PowerShell metaphor.

Config: Confirm who owns the number before you promise a weekend cut.

Fault: Two carriers route the same number on Monday.

<https://learn.microsoft.com/en-us/microsoftteams/pstn-connectivity> accessed 2026-10-14

Caller ID policy

What outbound calls present. Resource-account outbound and user outbound are different policies.

Config: Set the calling identity on the voice app on purpose.

Fault: Customers return a call and reach an employee's personal desk.

<https://learn.microsoft.com/en-us/microsoftteams/manage-voice-routing-policies> accessed 2026-10-14

Music on hold

The audio a queue plays while a caller waits. Licensing and the file both matter, and silence is a choice you should make on purpose.

Config: Upload a file you have rights to, and test the timeout.

Fault: A licensed song is uploaded.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>

accessed 2026-10-14

Voicemail overflow

A respectable overflow target when nobody is left to answer. It depends on Cloud Voicemail and a mailbox for the account that owns it.

Config: Test the overflow, then check that the message arrived.

Fault: Callers are offered voicemail and the message is never deposited.

Cloud Voicemail — confirm — last checked 2026-10. Did not open when checked.

Pilot number

The public number on the first voice app. Everything else can be an internal target.

Config: One number, many targets, overflow included.

Fault: Each menu option is a ported number and the carrier lead time runs the project.

[https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-](https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant)

[attendant](https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant) accessed 2026-10-14

Security group policy assign

Compliance recording and many Teams policies can be assigned to a group. A user in the wrong group is recorded, or not, as a consequence.

Config: Use a group you can explain, and read the effective policy.

Fault: A contractor group inherits recording and a privacy review fails.

<https://learn.microsoft.com/en-us/microsoftteams/teams-compliance-recording-setup>

accessed 2026-10-14

Effective policy

The policy the user actually has after direct assignment and group assignment are resolved. The one you edited may not be it.

Config: Read the effective value before and after the change.

Fault: You update a policy that is not assigned.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Lab tenant

A tenant that is not production. Pair a lab SBC there. Do not discover certificate behavior on the company trunk.

Config: Keep lab domains and lab certificates obvious.

Fault: A lab FQDN is the production FQDN.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Get-Help before Set

Cmdlet parameters move between MicrosoftTeams module versions. Read help in the version you are about to run.

Config: Get-Help cmdlet -Parameter * in the lab.

Fault: A script from last year removes a number.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Least privilege

Use the telephony or communications role that can do the task. Global Administrator is not a voice habit.

Config: Named admin accounts, voice roles, and Conditional Access for admins.

Fault: The SBC password and the global admin password are the same sticky note.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Service number

A number assigned to a resource account or conferencing, as opposed to a user's personal number. The inventory and the license follow the connectivity option.

Config: Take service numbers from the carrier or Calling Plan inventory you actually have.

Fault: The receptionist leaves and the main number leaves with them.

<https://learn.microsoft.com/en-us/microsoftteams/setting-up-your-phone-system> accessed 2026-10-14

Unassigned number treatment

What Teams does with a number you own that is not assigned. Routing it to an attendant is a product choice you should make.

Config: Point unknown numbers at an attendant or a message.

Fault: A ported block has fifty silent numbers.

<https://learn.microsoft.com/en-us/microsoftteams/manage-voice-routing-policies> accessed 2026-10-14

SIP options timer teaching model

This campus treats repeated missed OPTIONS as a reason to pull a trunk. It does not publish Microsoft's internal counter as if it were a documented integer.

Config: Watch the admin-center SBC status and the SBC's own OPTIONS log together.

Fault: Someone sets a script to fail over after one missed packet and flaps the trunk.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Failover rehearsal

Pull the primary proxy or the primary SBC in a window and prove the next one takes calls.

Config: Rehearse, then put the result in the runbook.

Fault: The outage is the first test.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Codec intersection empty

If the SBC and Teams offer no codec in common, the call fails, often with 488.

Config: Offer G.711 at minimum unless you have a measured reason not to.

Fault: The SBC allows only G.729 and the far end does not.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

G.711 law

A-law and μ -law are both G.711. A trunk that offers the wrong one still often interoperates, and sometimes does not. Offer both if the carrier is vague.

Config: Capture SDP and compare.

Fault: A new country is added and audio sounds like noise.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Comfort message

The words the queue plays about position or wait. A lie ('your call is important') is still a design choice you can decline.

Config: Say something true: whether you record, and whether you call back.

Fault: The message promises a callback the queue cannot place.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>
accessed 2026-10-14

Recording disclosure

Both convenience and compliance recording require participant notification. Compliance does not ask the participant for consent in the comparison Microsoft publishes.

Config: Confirm the partner's announcement and test it.

Fault: Notification is off because it 'hurt the experience.'

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed
2026-10-14

Do not record emergency

Know whether your recorder and your policy include emergency calls, and follow the rule you were given. Do not route emergency calls into a bot so they can be 'handled.'

Config: Keep the emergency voice route boring and local.

Fault: 999 matches the IVR workstream.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

CRM timeline

The case note should carry the Call-ID, the number in E.164, the queue, and the agent. Then a later complaint can be found.

Config: Make the screen pop write those fields.

Fault: The case exists and the recording cannot be found.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Future hook

A seam left on purpose for a system you might add later, using a product that already exists. It is not a promise that Microsoft will ship a feature.

Config: Name the hook, the identifier, and the failure if you skip it.

Fault: A design depends on an unannounced SBC feature.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Power model wording

Older conversation says Power for the third contact-center model. The Learn article maintained on 14 October 2026 says Unify, Extend, and Connect.

Config: Ask the vendor which of the three current models they hold.

Fault: The contract says Power and the network team opens no ports.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Certified list changes

The list of SBCs and contact-center solutions changes. A campus page is not the list.

Config: Link the design to the current Microsoft page and the firmware.

Fault: A purchase order cites a 2022 PDF.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-border-controllers> accessed 2026-10-14

User transfer license

In the Connect model, Microsoft's documentation says the contact-center side does not need a phone-system license, and the Teams user who receives a transferred call does need Teams Phone and a number.

Config: License the humans who receive transfers.

Fault: The agent transfers and the expert's client will not take the PSTN call.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Trial is not a design

A Dynamics or Teams trial proves a click path. It does not prove emergency calling, recording retention, or a busy hour.

Config: Write the gates: 911, recording, overflow, certificate, rollback.

Fault: The pilot is declared production on Friday.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Rollback

The numbers go back to the old route if the new path fails. If you deleted the old route, you do not have a rollback.

Config: Keep the old trunk until the new path has a quiet week.

Fault: The maintenance window ends with no public numbers.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

Evidence pack

Call-ID, the policy you read, the ladder, and the CQD or Call Analytics row. One pack per hypothesis.

Config: Store the pack with the change ticket.

Fault: The same outage is debugged from scratch next month.

<https://learn.microsoft.com/en-us/microsoftteams/use-call-analytics-to-troubleshoot-poor-call-quality> accessed 2026-10-14

Contoso sample

A fictional tenant name used in Microsoft samples and in this campus. It is not a customer.

Config: Keep lab names obviously fake.

Fault: A lab script is aimed at a real tenant by find-and-replace.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Exam sandbox

Microsoft's practice UI for what an exam looks like. It is not the product lab.

Config: Open the sandbox once before the appointment.

Fault: The first time someone sees a lab item is during the exam.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ms-700> accessed 2026-10-14

Renewal assessment

Role-based certifications expire unless you pass the free renewal on Learn. Retirement is a different event from expiry.

Config: Calendar the renewal. Re-read what changed.

Fault: MS-700 lapses and the holder thinks the exam was retired.

<https://learn.microsoft.com/en-us/credentials/certifications/m365-teams-administrator-associate/> accessed 2026-10-14

Study guide wins

When this campus and a study guide disagree, the study guide accessed the week you sit the exam wins.

Config: Re-open the guide before you book.

Fault: A candidate memorizes a third-party brain dump.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ms-700> accessed 2026-10-14

Session border controller

The device that speaks SIP to Teams and SIP or another protocol to the carrier or PBX, and enforces the edge.

Config: Pair the FQDN, not a nickname.

Fault: A router with SIP ALG is described as the SBC.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-border-controllers> accessed 2026-10-14

SIP ALG

A firewall feature that rewrites SIP. It breaks Direct Routing more often than it helps.

Config: Turn SIP ALG off on the path to the proxies.

Fault: INVITEs are rewritten and the contact header points at a private address.

<https://learn.microsoft.com/en-us/microsoftteams/prepare-network> accessed 2026-10-14

Public IP on the SBC

Teams must be able to reach the SBC. A purely private address with no public path will not pair.

Config: Publish the signaling address you documented.

Fault: The SBC is only reachable on a VPN Microsoft is not on.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

DNS TTL and proxies

Proxy addresses change inside the published ranges. A firewall object built from one lookup goes stale.

Config: Re-read the plan page when you edit the firewall.

Fault: The trunk fails after a resolver change and the certificate is blamed.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Mutual TLS option

The plan page says that if you enable mutual TLS, install the Microsoft trusted roots on the SBC.

Config: Match the SBC setting to what you intended.

Fault: The SBC demands a client certificate Teams is not presenting in the mode you chose.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Media bypass flag

The gateway setting that allows media to skip Microsoft's processors. It is not implied by a short ping.

Config: Set it on the paired gateway, then test from the real subnet.

Fault: It is enabled tenant-wide in someone's notes and only one site can route to the SBC.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Processor path

The default media path through Microsoft media processors in the region closest to the call.

Config: Allow the documented UDP ranges.

Fault: Bypass is off and those ranges are still closed, so audio never starts.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Region of media

Media processors exist in multiple regions. Calls prefer a close one. You do not pick a street address for the processor.

Config: Keep egress local.

Fault: European users egress in another continent and RTT follows.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Voice user disable

A user can be licensed and still not be enabled for Enterprise Voice in the way the tenant expects. Read the user before you test.

Config: Read the voice attributes and the license together.

Fault: The dial pad is missing and the SBC is rebooted.

<https://learn.microsoft.com/en-us/microsoftteams/setting-up-your-phone-system> accessed 2026-10-14

Calling policy

A Teams calling policy controls client calling features. It is not the voice routing policy that selects an SBC.

Config: Grant the routing policy and the calling policy on purpose.

Fault: Outbound PSTN is blocked by a calling policy and the route is blamed.

<https://learn.microsoft.com/en-us/microsoftteams/manage-voice-routing-policies> accessed 2026-10-14

Caller ID substitution

Presenting a service number instead of a personal mobile. It is a policy, not a hope.

Config: Set it on the user or the resource account you mean.

Fault: Customers call back a personal mobile that was never the company number.

<https://learn.microsoft.com/en-us/microsoftteams/manage-voice-routing-policies>

accessed 2026-10-14

Normalization translation tokens

Teams translations use tokens such as \$1 for a capture group. The first matching rule applies the translation and stops.

Config: Test the rule with the raw digit string.

Fault: The translation says +1\$1 and the pattern never captured a group.

<https://learn.microsoft.com/en-us/microsoftteams/create-and-manage-dial-plans>

accessed 2026-10-14

Extension dialing

A short rule can turn a 4-digit extension into E.164. It must not run before emergency codes.

Config: Order the rules and test 112, 999, 911, and an extension.

Fault: 112 becomes an extension and leaves via the wrong trunk.

<https://learn.microsoft.com/en-us/microsoftteams/create-and-manage-dial-plans>

accessed 2026-10-14

Holiday call flow

The attendant's holiday set replaces business hours for those dates.

Config: Load them when you build the attendant.

Fault: The office is closed and the queue still rings.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant> accessed 2026-10-14

Operator zero

The attendant's operator is where zero, and many failures, should land.

Config: Name a person or a queue.

Fault: Callers who press nothing are disconnected.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant> accessed 2026-10-14

Dial by name scope

Directory search should list only the people you intend callers to reach.

Config: Scope it.

Fault: A caller reaches an executive because search was unrestricted.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant> accessed 2026-10-14

Agent list order

Serial routing uses the order of the agent list. Round robin does not.

Config: Pick the method that matches the promise to the team.

Fault: One agent receives every call and the others look idle.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue> accessed 2026-10-14

Queue timeout seconds

How long the caller waits before overflow. Too short and overflow is the product. Too long and they abandon.

Config: Set it in the queue and call it.

Fault: Timeout is a few seconds and nobody is ever answered.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>

accessed 2026-10-14

Greeting rights

The audio file must be one you have the right to play. A popular song is not a free hold track.

Config: Use a file you own or have licensed.

Fault: A commercial track is uploaded as hold music.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>

accessed 2026-10-14

After hours target

Where calls go when the attendant is closed. Voicemail, another number, or a message.

Config: Set it and call after hours, or fake the schedule in a lab.

Fault: Night calls ring the daytime queue.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant> accessed 2026-10-14

Network site object

A named place in the Teams network topology. Subnets attach to it. Emergency addresses and LBR attach to that story.

Config: Create the site, then the subnets, then the address.

Fault: The address exists and no subnet points at it.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Emergency address validation

Civic addresses are validated. An unvalidated string is not a location you can trust.

Config: Validate, then test from a known subnet.

Fault: The address was typed and never validated.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Wireless location caution

Wi-Fi clients can roam across subnets that do not match the building you think. The subnet you mapped is the location you will send.

Config: Map only networks you control.

Fault: Guest Wi-Fi is inside the HQ subnet.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

SBA registration

Clients must be able to use the appliance when the cloud path is gone. An appliance with no client configuration is a spare server.

Config: Test with the WAN blocked, from a phone on that site.

Fault: The appliance is powered on and no client knows it.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-survivable-branch-appliance> accessed 2026-10-14

Local SBC during survival

The SBA still needs a PSTN path. That is the local SBC and carrier, not a cloud media processor you cannot reach.

Config: Prove a PSTN call with the WAN down.

Fault: The WAN test blocks Microsoft 365 and the only carrier path was through that same WAN.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-survivable-branch-appliance> accessed 2026-10-14

Teams Rooms QoS

Rooms need the same DSCP plan as PCs, using the rooms guidance for Windows and Android.

Config: Include the room subnet in the ACL.

Fault: Only user PCs were marked.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Common area identity

The phone signs in as its own account. Voicemail and caller ID follow that account.

Config: Create the device account and the number.

Fault: The hallway phone opens a person's mailbox.

<https://learn.microsoft.com/en-us/microsoftteams/teams-phone-licensing> accessed 2026-10-14

Device conditional access

A policy that requires a compliant interactive PC will block a phone or a room.

Config: Scope a device path you can explain.

Fault: Rooms fail on Monday after a security baseline.

<https://learn.microsoft.com/en-us/credentials/certifications/security-compliance-and-identity-fundamentals/> accessed 2026-10-14

Firmware on the list

Certification is specific about software. 'We own AudioCodes' is not a version.

Config: Record the version next to the list date.

Fault: The SBC was upgraded on Friday off the certified train.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-border-controllers>
accessed 2026-10-14

SRTP profile mismatch

Both sides must agree the media is SRTP. A gateway forced to RTP/AVP will not complete a normal Direct Routing call.

Config: Capture SDP and read the profile.

Fault: The carrier leg is SRTP and the Teams leg was stripped.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Telephone-event

The SDP way digits are carried so an IVR can see them even when the audio codec would hide tones.

Config: Offer telephone-event and test a digit.

Fault: The bot never hears 1 and the talk path is fine.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Call-ID header

The header that stays with a SIP dialog so two logs can be proved to be one call.

Config: Copy it into the ticket and the CRM.

Fault: Two engineers compare two different INVITEs.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

From and To headers

Who the request claims to be, and who it is for. A normalization bug shows up here as a duplicated country code.

Config: Compare them to the dialed E.164.

Fault: The To header contains +4444... and the carrier rejects it.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

SDP offer

The media description inside the INVITE when early offer is used. Codecs, ports, and SRTP live here.

Config: Read the offer and the answer.

Fault: The offer lists a codec the other side rejected.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Jitter over 30 ms teaching clue

A commonly taught CQD clue is to treat sustained jitter around 30 ms as painful. Confirm the current data dictionary before you quote a threshold as policy.

Config: Pair the number with DSCP and the path.

Fault: A ticket cites a threshold and nobody captured the packets.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard> accessed 2026-10-14

Loss around 10 percent

Packet loss near 10 percent is a widely used teaching line for a poor stream. Verify the current CQD definition before you automate an alert on it.

Config: Look at loss separately from RTT.

Fault: Bandwidth is added for a path whose loss is near zero and whose RTT is 600 ms.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard>
accessed 2026-10-14

Subnet dimension

CQD's subnet field is only useful if you built the building map from real subnets.

Config: Reconcile with the emergency list.

Fault: 10.8.0.0/16 is named Headquarters.

<https://learn.microsoft.com/en-us/microsoftteams/cqd-what-is-call-quality-dashboard>
accessed 2026-10-14

Work item

The unit unified routing assigns: a call, a chat, a case. It is not a Teams message.

Config: Watch one test item cross classification.

Fault: Items vanish because no queue will accept them.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Queue membership

Representatives receive work only from queues they belong to.

Config: Add the person to the queue and set capacity above zero.

Fault: The queue has users and still overflows.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Security role in Dynamics

The Dataverse role that lets a representative open the app and touch the rows they should.

Config: Assign the contact-center role the current guide names.

Fault: The user sees a blank console.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Embedded versus standalone

Contact Center can sit inside Customer Service or stand as its own app. Agents must be told which one they open.

Config: Write the URL and the mode in the design.

Fault: Agents look in the wrong app and report an outage.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Intent unknown bucket

The classification result you get when the model or the rules do not know. It needs a queue.

Config: Route unknown to humans.

Fault: Unknown replays the same prompt.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Copilot summary

A draft of the conversation for the representative. It can be wrong. The representative still owns what is sent.

Config: Test on a known case.

Fault: The summary names the wrong product and is saved.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Knowledge article freshness

The date on the source the bot is allowed to quote. Retired prices stay retired only if you remove them.

Config: Review sources on a schedule.

Fault: The bot quotes last year's fee.

<https://learn.microsoft.com/en-us/microsoft-copilot-studio/fundamentals-what-is-copilot-studio> accessed 2026-10-14

Fallback topic

The classic-topic path when nothing else matches. Empty fallback is silence.

Config: Test an utterance you did not train.

Fault: The caller hears nothing after a novel sentence.

<https://learn.microsoft.com/en-us/microsoft-copilot-studio/fundamentals-what-is-copilot-studio> accessed 2026-10-14

DTMF zero

The usual human escape. It has to be implemented, not merely printed on a slide.

Config: Press 0 in the lab and in production pilot.

Fault: The prompt mentions zero and the recognize step ignores it.

<https://learn.microsoft.com/en-us/azure/communication-services/concepts/call-automation/call-automation> accessed 2026-10-14

Transfer target license

The Teams user who receives a PSTN transfer needs Teams Phone and a number in the Connect model's description.

Config: License the humans on the transfer list.

Fault: Finance is chat-only and every transfer fails.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Multitenant SBC caution

Some Connect providers share SBC infrastructure across customers. Your routing must still isolate your numbers.

Config: Confirm the provider's isolation story.

Fault: A test number lands in another customer's tenant.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Letter of authority

The carrier document that allows a number to move. Porting without it does not happen.

Config: Confirm the port date in writing.

Fault: Both carriers route the number on Monday.

<https://learn.microsoft.com/en-us/microsoftteams/pstn-connectivity> accessed 2026-10-14

Rollback route

The old path left in place so numbers can return. Deleting it is not a cleanup. It is the removal of the safety.

Config: Write the backout steps.

Fault: The maintenance window ends with no public route.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

Group policy assignment

Many Teams policies, including compliance recording, can target a group. Membership changes the effective policy without a click on the user.

Config: Read the effective policy after group changes.

Fault: Recording starts for people who were only added to a mail group.

<https://learn.microsoft.com/en-us/microsoftteams/teams-compliance-recording-setup>
accessed 2026-10-14

Zero-cost allotment

Teams Phone subscriptions include a number of free resource-account licenses you still have to acquire in the admin center.

Config: Buy the zero-price SKU and assign it.

Fault: Queues are built before any resource-account license exists in the tenant.

<https://learn.microsoft.com/en-us/microsoftteams/teams-add-on-licensing/virtual-user>
accessed 2026-10-14

At least one Teams Phone

The prerequisite article says the tenant needs Teams Phone licensing for the voice-app services to exist.

Config: Confirm a real Teams Phone license exists.

Fault: The first queue is created in an empty tenant and never answers.

<https://learn.microsoft.com/en-us/microsoftteams/aa-cq-reference-prerequisites-licensing>
accessed 2026-10-14

Do not share global admin

A shared Global Administrator account erases the audit of who changed a route.

Config: Remove shared admin use from the voice runbook.

Fault: The SBC password and the global admin password are the same note.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Sample 555 numbers

Use 555 numbers and example domains in labs. They are not a customer directory.

Config: Keep lab names obvious.

Fault: A practice script targets production.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Renewal versus retirement

A certification you forget to renew expires for you. A retirement means Microsoft withdrew the exam. They are different calendars.

Config: Renew on Learn. Check the retirement list separately.

Fault: Someone says MS-700 is retired because theirs expired.

<https://learn.microsoft.com/en-us/credentials/certifications/m365-teams-administrator-associate/> accessed 2026-10-14

Official practice assessment

Microsoft's practice questions, when published, match the exam more honestly than a random PDF.

Config: Use it if it exists, and still read the study guide.

Fault: A third-party dump is the only study tool.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ab-250> accessed 2026-10-14

Busy-hour interval

The half hour you staff, not the daily average divided into imaginary hours.

Config: Export that interval.

Fault: The link is fine at noon and dead at 09:15.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Adherence

Whether the agent was in the state the schedule promised. It needs a real state feed from the contact center.

Config: Feed the contact-center state to WFM.

Fault: Agents look available in Teams during after-call work.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Service level target

A pair: a percent and a number of seconds, plus the abandon rule. 'Eighty twenty' means nothing until both are defined.

Config: Use the same definition in the report and in Erlang.

Fault: Two dashboards disagree and both claim victory.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Hold music licensing

The hold file is a copyrighted work unless you made it or licensed it.

Config: Use a track you can defend.

Fault: A famous song plays to every caller.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>
accessed 2026-10-14

Notification group

The people the emergency policy emails or messages when an emergency call starts.

Config: Put facilities or security in it and test.

Fault: Responders arrive and nobody inside knows which floor.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Dispatchable location

A location specific enough for a responder to find the caller. A city name is not enough for a campus.

Config: Validate the civic detail you can defend.

Fault: The PSAP receives only the city.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Carrier test number

The number or process the carrier gave you for emergency tests. It is not the public emergency number.

Config: Use the test process and write down the result.

Fault: A lab dials the real emergency number.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Split tunnel

VPN configuration that sends only corporate apps through the tunnel and lets Teams media go direct.

Config: Test a call both ways.

Fault: Media stays in the tunnel and RTT doubles.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Port mirroring

A switch copy of packets so you can see DSCP at the egress without standing on the user's keyboard.

Config: Mirror the egress and filter the audio ports.

Fault: QoS is declared done from a screenshot of a policy object.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

ACL mark

A router rule that sets DSCP based on the port range, useful for devices that will not mark for themselves.

Config: Match 50000–50059 and the signaling range you cannot move.

Fault: The ACL matches a range from an old design guide.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Two directions

A call has media each way. Sizing one direction and forgetting the other undersizes a symmetric policer.

Config: Multiply by concurrent calls and say per direction.

Fault: The policer is symmetric and the plan was one way only.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

G.722 header tax

G.722 at 160 bytes every 20 ms pays the same header tax as G.711. Wideband does not remove IP headers.

Config: Use the same 80 and 87.2 figures when the payload size matches.

Fault: A wideband design is sized at 64 kbit/s.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Comfort noise sizing

Silence suppression lowers the average and not the peak. Size the peak.

Config: Use the busy codec rate.

Fault: The link was sized for silence.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Pilot rollback week

A quiet week on the new path before you delete the old trunk.

Config: Calendar the deletion separately from the cut.

Fault: The old trunk is removed in the same change window.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

Expert wave

Move people who call each other in the same migration wave so they do not trombone for a year.

Config: Group the move by community.

Fault: Every call between a moved user and a stayed user hairpins all year.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

IVR range split

Contact-center numbers stay on UCCE. User numbers go to Teams. The SBC enforces the split.

Config: List the ranges.

Fault: The IVR DN is sent to a Teams user who does not exist.

Cisco Unified Border Element — confirm — last checked 2026-10. Did not open when checked.

Whisper and barge caution

Supervisor features such as whisper and barge belong to the contact-center product, not to a Teams peer call.

Config: Read the CCaaS guide.

Fault: Supervisors expect Teams to whisper on a Calling Plan user.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Recording both sides

If the contact center and Teams both record, you still need one Call-ID to know it is the same conversation.

Config: Store the key in both systems.

Fault: Compliance cannot find the file that matches the case.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Privacy review

Recording, desktop capture, and directory search all need a privacy decision before go-live.

Config: Write what is captured and who can play it.

Fault: A desktop recorder is discovered by the privacy team after launch.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Restore test

A retention setting you have never restored is a hope. Ask the recording partner for one file back.

Config: Restore a test call.

Fault: A regulator asks and the bucket policy already deleted the audio.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Form the agent saw

Quality scores should use a form published to the people being scored.

Config: Publish the form first.

Fault: Agents are coached on a form they have never seen.

<https://learn.microsoft.com/en-us/microsoftteams/teams-recording-policy> accessed 2026-10-14

Export for WFM

Queue totals have to be able to leave the contact center on a schedule the WFM tool can read.

Config: Automate the interval export.

Fault: Staffing is retyped from a dashboard every Monday.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Shrinkage labeled

If shrinkage is a guess, say it is a guess. Thirty percent is not a law of nature.

Config: Print the assumption on the staffing sheet.

Fault: The roster is tight because shrinkage was silently zero.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Occupancy watch

High occupancy next to rising abandons means the service level is being spent to look efficient.

Config: Put occupancy beside service level.

Fault: A site celebrates 95 percent occupancy while callers hang up.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Case timeline fields

E.164, Call-ID, queue, agent. Four fields make a case auditable.

Config: Make the pop write them.

Fault: The case says 'called customer' and the recording cannot be found.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/> accessed 2026-10-14

Bot eval set

A list of utterances whose correct intent you already know. Run it before you publish a prompt change.

Config: Keep the set in the project.

Fault: Friday's prompt change has no test utterances.

<https://learn.microsoft.com/en-us/azure/ai-foundry/> accessed 2026-10-14

Unannounced feature risk

A design that needs a product Microsoft has not shipped is not a hook. It is a bet.

Config: Delete the rumor from the design.

Fault: Go-live depends on a feature from a keynote that is not in the docs.

<https://learn.microsoft.com/en-us/microsoftteams/teams-contact-center> accessed 2026-10-14

Admin center SBC status

The Direct Routing page that shows whether Teams considers the SBC healthy.

Config: Read it beside the SBC log.

Fault: The page says unhealthy and the dial plan is edited anyway.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Test call both ways

Inbound and outbound are different routes. A successful outbound call does not prove the carrier can deliver inbound.

Config: Place one of each and keep the Call-IDs.

Fault: Outbound works and the published number is silent.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Emergency both ways

You care that the emergency call leaves, and that the location and notification are correct. Inbound to the queue is a different test.

Config: Use the carrier test process.

Fault: A normal inbound call is filed as the emergency test.

<https://learn.microsoft.com/en-us/microsoftteams/what-are-emergency-locations-addresses-and-call-routing> accessed 2026-10-14

Holiday and certificate calendar

Two dates that take companies down: the holiday the attendant does not know, and the certificate that expires.

Config: Review them quarterly.

Fault: The office is closed and the certificate expires the same weekend.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-auto-attendant> accessed 2026-10-14

Contoso is fictional

Contoso, Fabrikam, and 555 numbers in this campus are samples. They are not your tenant.

Config: Use them only as shapes for a design.

Fault: A runbook still says contoso.com in production.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Checked date

14 October 2026 is when this campus was compared with Learn. It is not a promise the page stays still.

Config: Re-open Learn before you book or you change production.

Fault: A 2024 screenshot is treated as current.

<https://learn.microsoft.com/en-us/credentials/certifications/resources/study-guides/ms-700> accessed 2026-10-14

Computer telephony integration

Wikipedia's opened page says computer-telephony integration, also computer–telephone integration or CTI, is a general term for technologies that coordinate interactions between telephones and computers.

Config: Use the vendor page for the product you are configuring. Keep Wikipedia as the name only.

Fault: A design calls every CRM screen a CTI product.

https://en.wikipedia.org/wiki/Computer_telephony_integration accessed 2026-10-14

Dynamics 365 voice channel

The voice-channel page says it applies to Dynamics 365 Contact Center embedded, Contact Center standalone, and Customer Service. It provides native PSTN calling in Dynamics and says the channel is built on Azure Communication Services.

Config: Read the capabilities table on that page. Do not copy the marketing section above it.

Fault: Someone expects the Teams client because the number was bought in Teams.

<https://learn.microsoft.com/en-us/dynamics365/customer-service/administer/voice-channel> accessed 2026-10-14

Teams Phone in the voice channel

The configure-Teams-Phone page says PSTN connectivity can be a Teams Calling Plan (service numbers only), Operator Connect, or Direct Routing, and that a Teams resource account is required for every number used with Dynamics 365 Contact Center.

Config: Sync from Teams in Copilot Service admin center after the resource account and the number exist. Copy the application ID from the current page.

Fault: Sync is run before TeamsResourceAccount.Read.All has admin consent.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/administer/configure-teams-phone-in-voice-channel> accessed 2026-10-14

Salesforce Voice

The implementation guide says Service Cloud Voice is now Salesforce Voice. It says the guide applies mostly to Salesforce Voice with Amazon Connect and Salesforce Voice for Partner Telephony with Amazon Connect.

Config: Set the product up before using that guide. The page says so.

Fault: A runbook still says only Service Cloud Voice and never opens the current title.

https://developer.salesforce.com/docs/atlas.en-us.voice_developer_guide.meta/voice_developer_guide/voice_intro.htm accessed 2026-10-14

Partner Contact Center

The Salesforce help page titled Connect Voice from a Partner Contact Center says Salesforce Voice with Telephony Providers, formerly Service Cloud Voice, is now part of Partner Contact Center.

Config: Use the learning map on that page for setup, bring-your-own Amazon Connect, and linking calls with customer contact records.

Fault: A project assumes one telephony model because the product was renamed.

https://help.salesforce.com/s/articleView?id=service.voice_about.htm&language=en_US&type=5 accessed 2026-10-14

Amazon Connect Customer

Amazon's opened guide says Amazon Connect Customer is the current name for the product previously called Amazon Connect, and that this guide covers Amazon Connect Customer.

Config: Read the personas and the pricing sentence on that page. Do not invent a price.

Fault: A comparison quotes the old name as if the guide still used it as the title.

<https://docs.aws.amazon.com/connect/latest/adminguide/what-is-amazon-connect.html> accessed 2026-10-14

CCAI Platform

The opened Google Cloud page is titled Contact Center AI Platform. It says CCAI Platform is a contact-center service built natively on Google Cloud, uses other Gemini Enterprise for Customer Experience products, and is purpose-built to work alongside CRMs.

Config: Read the locations page it links before you promise a country. This lab does not copy that list.

Fault: A slide says the docs page no longer uses the name Contact Center AI Platform.

<https://docs.cloud.google.com/contact-center/ccai-platform/docs> accessed 2026-10-14

Gemini Enterprise for Customer Experience

Google's legal change log records this line: Updated name of Customer Engagement Suite and Contact Center AI to Gemini Enterprise for Customer Experience (GECX).

Config: Quote the change-log line you mean. Then open the product docs page and use the name printed there.

Fault: The change log and the docs title are treated as one rename.

<https://cloud.google.com/legal-change-log> accessed 2026-10-14

Least active assignment

The assignment-methods page says least active is available for voice and messaging only, and is the default selection when you create a voice or messaging queue.

Config: The page says the last-capacity-release data is in msdyn_agentchannelstate. It also says not to use the feature for employment decisions.

Fault: Least active is promised on a record queue.

<https://learn.microsoft.com/en-us/dynamics365/customer-service/administer/assignment-methods> accessed 2026-10-14

Quality evaluation plan

The quality and coaching page, which applies to Dynamics 365 Contact Center only, says an evaluation plan sets the criteria, the conversations, the timing, and the actions.

Config: The page names the Omnichannel Administrator role, plus consumption-based billing and capacity. It says not to use the feature for employment decisions.

Fault: A plan is activated before any indicator exists in the quality library.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/administer/configure-quality-coach> accessed 2026-10-14

Quality guardrail

On the quality and coaching page, a guardrail defines a required or prohibited behavior. Guardrails are evaluated for violations rather than assigned numeric scores, and each has a priority.

Config: Set priority and optional nudge text, then activate the guardrail before you add it to a plan.

Fault: A prohibited behavior is given a numeric score because the indicator form was copied.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/administer/configure-quality-coach> accessed 2026-10-14

Short-term forecast

The forecasting overview says a short-term scenario predicts volume and average handle time in 15-minute intervals for a horizon of up to six weeks (42 days), using a linear trend on internal or external data.

Config: The same page says a long-term scenario is daily, up to three years (1,096 days). Weighted average is marked preview.

Fault: A six-week forecast is read as a daily three-year plan.

<https://learn.microsoft.com/en-us/dynamics365/contact-center/use/workforce-management-forecast-overview> accessed 2026-10-14

Audio DSCP 46

Microsoft's QoS article recommends DSCP 46 (EF, Expedited Forwarding) for Teams audio, with initial client source ports 50000–50019.

Config: Enable QoS markers in the Teams admin center and match the port range on the network. Signaling ports are not configurable.

Fault: Audio packets in the documented port range arrive at the WAN edge marked 0.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Audio port range 50000–50019

The recommended initial client source ports for audio are 50000–50019. Browser joins do not use these fixed ranges.

Config: Keep the ranges adjacent and non-overlapping if you resize them. Do not resize the signaling range.

Fault: An ACL matches the wrong range, so video is queued as audio or as best effort.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Video DSCP 34

Microsoft's QoS article recommends DSCP 34 (AF41, Assured Forwarding 41) for Teams video, with initial client source ports 50020–50039.

Config: Enable QoS markers in the Teams admin center and match the port range on the network. Signaling ports are not configurable.

Fault: Video packets in the documented port range arrive at the WAN edge marked 0.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Video port range 50020–50039

The recommended initial client source ports for video are 50020–50039. Browser joins do not use these fixed ranges.

Config: Keep the ranges adjacent and non-overlapping if you resize them. Do not resize the signaling range.

Fault: An ACL matches the wrong range, so video is queued as audio or as best effort.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Application sharing DSCP 18

Microsoft's QoS article recommends DSCP 18 (AF21, Assured Forwarding 21) for Teams application sharing, with initial client source ports 50040–50059.

Config: Enable QoS markers in the Teams admin center and match the port range on the network. Signaling ports are not configurable.

Fault: Application sharing packets in the documented port range arrive at the WAN edge marked 0.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Application sharing port range 50040–50059

The recommended initial client source ports for application sharing are 50040–50059. Browser joins do not use these fixed ranges.

Config: Keep the ranges adjacent and non-overlapping if you resize them. Do not resize the signaling range.

Fault: An ACL matches the wrong range, so video is queued as audio or as best effort.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Calling and meetings signaling DSCP 40

Microsoft's QoS article recommends DSCP 40 (CS5, Class Selector 5) for Teams calling and meetings signaling, with initial client source ports 50070–50089.

Config: Enable QoS markers in the Teams admin center and match the port range on the network. Signaling ports are not configurable.

Fault: Calling and meetings signaling packets in the documented port range arrive at the WAN edge marked 0.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Calling and meetings signaling port range 50070–50089

The recommended initial client source ports for calling and meetings signaling are 50070–50089. Browser joins do not use these fixed ranges.

Config: Keep the ranges adjacent and non-overlapping if you resize them. Do not resize the signaling range.

Fault: An ACL matches the wrong range, so video is queued as audio or as best effort.

<https://learn.microsoft.com/en-us/microsoftteams/qos-in-teams> accessed 2026-10-14

Connect-MicrosoftTeams

Opens a PowerShell session against the tenant that holds the voice configuration. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Get-CsOnlineUser

Reads the online user, including voice policy and number fields you should inspect before a change. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsOnlinePSTNGateway

Pairs a Direct Routing SBC by the FQDN you will present on the certificate. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Set-CsOnlinePSTNGateway

Changes settings on a paired SBC, including media bypass and SIP signaling options documented for that cmdlet. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Get-CsOnlinePSTNGateway

Shows the paired gateways and the status fields the module returns. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Set-CsOnlinePstnUsage

Maintains the tenant's list of PSTN usage names. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsOnlineVoiceRoute

Creates a voice route with a number pattern and one or more gateways. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsOnlineVoiceRoutingPolicy

Creates a policy whose ordered PSTN usages a user is allowed to match. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Grant-CsOnlineVoiceRoutingPolicy

Assigns a voice routing policy to a user. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsTenantDialPlan

Creates a tenant dial plan that holds normalization rules. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Grant-CsTenantDialPlan

Assigns a tenant dial plan to a user. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Set-CsPhoneNumberAssignment

Assigns or removes a phone number from a user or resource account. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsAutoAttendant

Creates an auto attendant voice app. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsCallQueue

Creates a call queue voice app. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsOnlineApplicationInstance

Creates an application instance. Resource accounts and compliance-recording bots both use this family. Confirm the parameters for the object you mean. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsTeamsComplianceRecordingPolicy

Creates the policy that invites a recording application into new calls and meetings. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsTeamsComplianceRecordingApplication

Attaches a recording application instance to a compliance recording policy. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Grant-CsTeamsComplianceRecordingPolicy

Assigns the compliance recording policy to a user. Assignment alone is not enough without the application instance. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Get-CsTeamsComplianceRecordingPolicy

Reads the compliance recording policies in the tenant. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

New-CsOnlineLisCivicAddress

Starts an emergency civic address. Confirm the current CsOnlineLis noun before you run it. Confirm the parameter set with Get-Help in the module version you have.

Config: Run it first in a lab tenant. Read with Get- before Set- or Grant-.

Fault: The portal shows a success toast and the shell shows the old policy still assigned.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

100 Trying

The next hop received the INVITE and is working on it. Dialog is not up.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

180 Ringing

The far end is alerting. You may not have media yet.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

183 Session Progress

Early media may be present. Do not treat it as an answer.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

200 OK

The INVITE succeeded. ACK completes the dialog. BYE ends it later.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

ACK

Completes the INVITE transaction after 200 OK.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

BYE

Ends an established dialog. The other side answers 200 OK.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

CANCEL

Gives up an INVITE that has not been answered yet.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

OPTIONS

A health check. Teams uses it to see whether the SBC is answering.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

403 Forbidden

The request was understood and refused. Often policy, identity, or a route the trunk will not accept.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

404 Not Found

The user or number is not known at that hop.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

408 Request Timeout

No final response in time. Look at firewalls and the next hop, not at the greeting.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

480 Temporarily Unavailable

The target exists and cannot take the call right now.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

486 Busy Here

The target is busy.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

487 Request Terminated

The INVITE ended because of CANCEL or a similar abort.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

488 Not Acceptable Here

Codecs or SDP could not be agreed. A classic empty codec intersection.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

503 Service Unavailable

The hop is overloaded or deliberately out of service. Fail over if you have another gateway.

Config: Capture the Call-ID and read the code on the hop that generated it.

Fault: Someone restarts the SBC because a 180 looked slow, while the 488 was the real fault.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

G.711

64 kbit/s payload. At 20 ms, layer 3 is 80 kbit/s and Ethernet with an 18-byte header is 87.2 kbit/s.

Config: Order codecs on the SBC deliberately. Do not leave a lab default in production.

Fault: Bypass is on and AMR-WB was the only common codec, so the call fails.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

G.722

Wideband payload at 64 kbit/s. The header math matches G.711 when the packet is 160 bytes every 20 ms.

Config: Order codecs on the SBC deliberately. Do not leave a lab default in production.

Fault: Bypass is on and AMR-WB was the only common codec, so the call fails.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

G.729

8 kbit/s payload, 20 bytes at 20 ms. Layer 3 is 24 kbit/s. Direct Routing can offer it. Confirm the SBC allows it.

Config: Order codecs on the SBC deliberately. Do not leave a lab default in production.

Fault: Bypass is on and AMR-WB was the only common codec, so the call fails.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

SILK

A Teams codec on the Direct Routing list. Bitrate varies, so do not quote a single G.711-style figure for it.

Config: Order codecs on the SBC deliberately. Do not leave a lab default in production.

Fault: Bypass is on and AMR-WB was the only common codec, so the call fails.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

AMR-WB

On the Direct Routing codec list for non-bypass calls only. Do not expect it on a media-bypass path.

Config: Order codecs on the SBC deliberately. Do not leave a lab default in production.

Fault: Bypass is on and AMR-WB was the only common codec, so the call fails.

<https://learn.microsoft.com/en-us/microsoftteams/direct-routing-plan> accessed 2026-10-14

Teams Administrator

Broad Teams administration, including many voice settings. Check the current role article before you grant Global Administrator out of habit.

Config: Assign the smallest role that can do the change.

Fault: A project uses one global admin account for every SBC change, and nobody can see who did what.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Teams Telephony Administrator

Voice-focused administration of calling and phone numbers. Check the current role article before you grant Global Administrator out of habit.

Config: Assign the smallest role that can do the change.

Fault: A project uses one global admin account for every SBC change, and nobody can see who did what.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Teams Communications Administrator

Meetings and voice communications configuration, without the full Teams admin scope. Check the current role article before you grant Global Administrator out of habit.

Config: Assign the smallest role that can do the change.

Fault: A project uses one global admin account for every SBC change, and nobody can see who did what.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Teams Communications Support Engineer

Troubleshooting access, including call analytics for users. Check the current role article before you grant Global Administrator out of habit.

Config: Assign the smallest role that can do the change.

Fault: A project uses one global admin account for every SBC change, and nobody can see who did what.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Teams Communications Support Specialist

Narrower troubleshooting access than the engineer role. Check the current role article before you grant Global Administrator out of habit.

Config: Assign the smallest role that can do the change.

Fault: A project uses one global admin account for every SBC change, and nobody can see who did what.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

User Administrator

Required together with a Teams admin role when you create and license resource accounts. Check the current role article before you grant Global Administrator out of habit.

Config: Assign the smallest role that can do the change.

Fault: A project uses one global admin account for every SBC change, and nobody can see who did what.

<https://learn.microsoft.com/en-us/microsoftteams/using-admin-roles> accessed 2026-10-14

Attendant routing

Rings the agents who are available at the same time, within the queue's limits. Presence-based routing can skip an agent who is already in a call or a meeting.

Config: Set it on the call queue and test with two agents, one busy and one free.

Fault: Every call hits the same person because the method is serial and the list never rotates.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue> accessed 2026-10-14

Serial routing

Rings agents in the order you listed, one after another. Presence-based routing can skip an agent who is already in a call or a meeting.

Config: Set it on the call queue and test with two agents, one busy and one free.

Fault: Every call hits the same person because the method is serial and the list never rotates.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>

accessed 2026-10-14

Round robin

Remembers who took the last call and starts after them. Presence-based routing can skip an agent who is already in a call or a meeting.

Config: Set it on the call queue and test with two agents, one busy and one free.

Fault: Every call hits the same person because the method is serial and the list never rotates.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>

accessed 2026-10-14

Longest idle

Offers the call to the agent who has been idle longest. Presence-based routing can skip an agent who is already in a call or a meeting.

Config: Set it on the call queue and test with two agents, one busy and one free.

Fault: Every call hits the same person because the method is serial and the list never rotates.

<https://learn.microsoft.com/en-us/microsoftteams/create-a-phone-system-call-queue>

accessed 2026-10-14

A note from the student behind this lab

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