Outbound Business Concepts

This chapter, intended for all audiences, discusses the outbound business concepts you need to know *before* planning and configuring your outbound system. Review this chapter *in its entirety* before moving on to installing and configuring your outbound system.

Overview

This section provides a high-level overview of automatic dialers and the Cisco Outbound Option solution, which includes a description of what it does and why you would want to use it.

Automatic Dialers

Automatic dialers increase contact center efficiency because they eliminate the possibility of reaching a wrong number, save time, and make contact center agents more productive. By automatically dialing and screening for busy signals, no answer, and answering machines, dialers ensure that agents do not waste time on non-value-added mechanical and routine tasks. Only when the dialer reaches a live contact will the solution transfer the call to the next available agent.

Cisco Outbound Solution

Cisco Unified Intelligent Contact Management Enterprise and Cisco Unified Contact Center Enterprise help companies distribute inbound calls to a variety of termination points, including automatic call distributors (ACDs), interactive voice response (IVR) systems, home agents, and network terminations. The *Cisco Outbound*

Option application, with its combination of outbound dialing modes, enables call centers to manage outbound calls. The ability for agents to handle both inbound and outbound contacts offers a way to optimize contact center resources.

High-Level Overview of Cisco Outbound Option

The Cisco Outbound Option application provides outbound dialing functionality along with the existing inbound capabilities of Cisco Unified Contact Center Enterprise (Unified CCE, formerly known as "IPCC Enterprise"). This application enables the contact center to dial customer contacts and direct contacted customers to agents or IVRs.

With the Cisco Outbound Option, you can configure a contact center for automated outbound activities.

Outbound Option Features

Outbound Option features include:

- Unified CCE Compatible Dialer
- Campaign Management
- Unified Contact Center Software Management of Skill Groups
- Outbound Option Dialing Modes
- Outbound Option activity reports
- Callbacks
- Call Progress Analysis (CPA)
- Transfer to IVR
- Sequential Dialing
- Cisco IP Contact Center Agent Re-skilling
- Abandoned and Retry Call Settings
- Campaign Prefix Digits for Dialed Numbers
- Outbound Option Support on Cisco Unified Contact Center Hosted
- Outbound ECC Variables Support in Siebel 7.5.3 and Later

Unified CCE Compatible Dialer

Cisco IP Contact Center can be implemented in a single-site environment or integrated into a multi-site contact center enterprise. Some capabilities of Unified CCE include intelligent call routing, ACD functionality, network-to-desktop computer telephony integration (CTI), IVR integration, call queuing, and consolidated reporting.

With Unified CCE integration, customer calls are placed using the Cisco Voice Gateway, using the Unified CM for call control.

Outbound Option on Unified CCE provides a native multi-site outbound dialing solution.

Campaign Management

Outbound Option supports advanced list management, which provides for the following features:

- Customer records can be assigned to multiple lists, which can be merged into a single campaign.
- Pre-configured rules decide when the various lists are called.
- Agents are assigned to campaigns using skill groups.

Unified Contact Center Software Management of Skill Groups

The Script Editor application controls the outbound mode of every skill group.

Dedicated and Blended Dialing Modes

- Dedicated mode: Designed for agents who will only make outbound calls.
- Blended mode: Allows agents to receive inbound calls and make outbound calls without switching between Inbound/Outbound skill groups. (In Blended mode, inbound calls receive precedence over outbound calls.)

Outbound Option maximizes performance in both pure outbound and blended modes.

Note The skill group mode variable is only a setting and has no impact on how the Router routes calls. If a skill group is set to Dedicated mode, you must also create a corresponding routing script that uses the IF node to enforce the Dedicated mode. In other words, the IF node must state that if the Outbound Control skill group setting is set to Dedicated, inbound calls must not be routed to that skill group.

Outbound Option Dialing Modes

Outbound Option supports the following dialing modes:

- Preview
- Direct Preview
- Progressive
- Predictive

Related Topics

Dialing Modes, on page 10

Outbound Option activity reports

Outbound Option uses Unified CCE software reporting features provided by the Cisco Unified Intelligence Center (Unified Intelligence Center) application, including agent, campaign, dialer, and skill groups report templates created especially for Outbound Option customers.

Related Topics

Administrative/Supervisory Tasks

Callbacks

Depending on the Outbound Option campaign settings, a callback can be scheduled as a *personal callback* or a *regular callback*.

Related Topics

Callbacks, on page 13

Call Progress Analysis (CPA)

Call Progress Analysis (CPA) uses a combination of call signaling and media stream analysis to differentiate various types of calls.

You enable recording of CPA on a per campaign basis on the Dialer itself by setting the Call Progress Analysis option on the Campaign Purpose Tab Page of the Outbound Option Campaign tool.

The Dialer will only record up to 100 simultaneous CPA streams. The streams are stored in CPM format. By default, the system will automatically purge old recording files when it reaches 500 meg. For details about configuring CPA recording, see information on SIP Dialer Recording Parameters Configuration.

Related Topics

Call Progress Analysis (Answering Machine Detection), on page 20
Creating a Campaign

Transfer to IVR

The transfer to IVR feature provides Outbound Option with another outbound mode. This mode causes the Dialer to transfer every customer call associated with a specific skill group to a service control-based IVR instead of an agent. This feature allows a contact center to run unassisted outbound campaigns using pre-recorded messages in the Cisco Unified IP-IVR and Cisco Unified Customer Voice Portal products.

Related Topics

Transfer to IVR Campaigns, on page 15

Sequential Dialing

The sequential dialing feature, accessed through the Campaign Call Target tab, allows you to associate up to ten phone numbers per customer record.

Related Topics

Sequential Dialing, on page 16

Cisco IP Contact Center Agent Re-skilling

Cisco IP Contact Center agent re-skilling is an optional feature that allows IPCC call center supervisors to sign-in and change the skill groups for agents they manage. You can access this feature using the Unified CCE Agent Re-skilling Tool. It lets you change the skill group designations of agents on your team, and quickly view skill group members and details about individual agents. Changes you make to an agent's skill group membership take place immediately without need for the agent to exit and re-enter the system.

Related Topics

Agent Re-skilling

Abandoned and Retry Call Settings

The Campaign component contains fields to support abandoned and retry calls.

For detailed instructions on how to configure abandoned and retry call settings, see the Outbound Option online help.

Campaign Prefix Digits for Dialed Numbers

The **Campaign prefix digits** field, which is available on the Campaign General tab in the Campaign component, allows you to configure prefix digits for dialed numbers in campaigns. If you configure a prefix, it will be inserted before the Dial prefix for all numbers dialed in a campaign. This prefix allows an administrator to create campaign-specific Unified CM translation patterns, which you can use to tailor the Automatic Number Identification (ANI) seen by a customer. For example, all customers dialed from Campaign A will see a caller ID of "1-800-333-4444," while all customers dialed from Campaign B will see a caller ID of "1-800-555-1212."

Related Topics

Creating a Campaign

Outbound Option Support on Cisco Unified Contact Center Hosted

Outbound Option support on Cisco Unified Contact Center Hosted (Unified CCH) Edition is available, but this release still requires Outbound Option to be deployed on a distinct CICM instance platform (meaning that Outbound Option will not be shared among customers—each needs to have their own dialer, and so forth).

See the Unified CCH documentation set for more details.

Outbound ECC Variables Support in Siebel 7.5.3 and Later

Releases 7.5(3) and later of the Cisco Unified CRM Connector for Siebel (formerly called the CTI Driver for Siebel) provide support for Outbound Option.

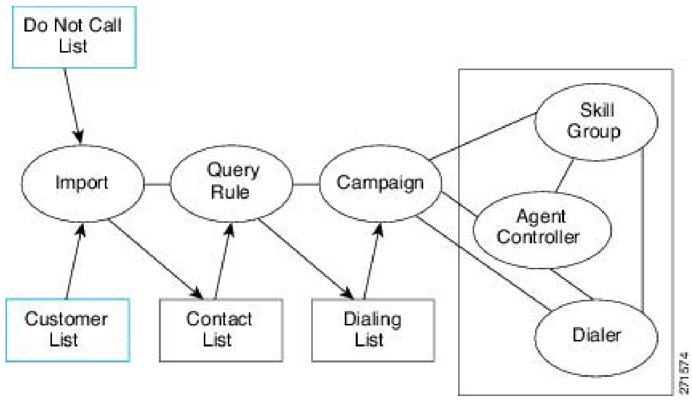
See the *Cisco Unified CRM Connector for Siebel* guide for detailed information about the ECC variables support for Outbound Option.

Relationships Between Outbound Option Components

The following figure shows the component relationships within Outbound Option.

Note The following figure and table only describe Outbound Option Components and concepts; they do not describe the Outbound Option process.

Figure 1: Outbound Option Component Relationships



Note Items outlined in blue in Figure 1 indicate that they are configured by the user.

Table 1: Relationships Between Outbound Option Component Concepts

Concept	Description
Import	Defines when and how Outbound Option reads in a user-generated list of customers to call and customers who should not be called. **Note** See the "Imports" section for more details.
Query Rule	Set of criteria for selecting customer contacts from a customer list. **Note** See the "Query Rules" section for more details.

Concept	Description
Campaign	Defines the collection of query rule-generated dialing lists associated with agent skill groups, and maps the contacts to a call with the agent skill groups. Users create the agent skill groups and associate them with one or more dialing lists by assigning them to a campaign. With Outbound Option, you can configure an agent-based campaign or a transfer to IVR campaign: • Agent-based campaign: This type of campaign uses an outbound mode that causes the Dialer to transfer every customer call associated with a specific skill group to an agent. • Transfer to IVR campaign: This type of campaign uses an outbound mode that causes the Dialer to transfer every customer call associated with a Transfer to IVR Campaign specific skill group to a service control-based IVR instead of an agent. This feature allows a contact center to run unassisted outbound campaigns using pre-recorded messages in the IVR. **Note** See the "Campaigns" section for more details.
Skill Group	Defines a selection of agents to be used in a campaign. Each skill group can only have one campaign assignment, but a campaign can service multiple skill groups. Outbound agents are tied to the campaign by their skill group association. Agents might belong to multiple skill groups and thus be part of multiple campaigns. The campaign associates dialing lists with specific skill groups, but the campaign cannot associate a specific dialing list to a specific skill group unless there is only *one* dialing list and *one* skill group in the campaign. **Note** See the "Campaign Skill Groups" section for more details.
Agent Peripheral Gateway (PG)	A collection of agents and skill groups that are bound to a specific Unified CM. The Dialer is bound to serve the group of agents in a specific call center site. (For experienced Unified CCE users, this document uses the term *agent controller* as another way to convey *agent peripheral*.) **Note** See the "Agent PG" section in Chapter 2, Architectural Overview, for more details.
Dialer	An Outbound Option component that places Outbound Option calls. The Dialer is associated with the agent peripheral at a call center site. Outbound Option sends calls to a Dialer based on the campaign skill group relationship for the agent controller at that site. The Dialer monitors campaign skill groups and is mapped to an agent peripheral. **Note** See the "About Outbound Option Dialer Component" section in Chapter 2, Architectural Overview, for more details.
Customer List	List of contact information that you provide during import.

Concept	Description
Contact List	An internal table, to which an import applies a query rule to determine which records to insert in the dialing list. There is one Contact List for each import. **Note** See the "Contact List Imports" section for more details.
Dialing List	The list of customer contacts that Outbound Option dials to make outbound calls. There is one dialing list for each campaign query rule. Each campaign query rule combination results in a unique dialing list. Only one dialing list is active at a time for a particular campaign. Whenever a dialing list is active, it is distributed to all skill groups in the campaign. A specific dialing list cannot be mapped to a specific skill group in a campaign. **Note** See the "Dialing List" section in Chapter 7, Administrative/Supervisory Tasks, for more details.

Using some of the preceding terms, the following example demonstrates what happens during an Outbound Option import:

1. Outbound Option imports the user's customer list into an internal table of customer contacts.
2. While the import process continues, a query rule filter selects and inserts data from the customer contacts into a dialing list.
3. Outbound Option reads in records from the dialing list for the campaign, and sends the records to be dialed to dialers co-located on peripherals where associated skill groups are configured.

Note See the "Creating a Campaign" section in Chapter 6, "Configuring Campaigns and Imports," for details about the sequence of events that occur during a campaign creation.

Imports

You can import a list of customer contact information and a list of customers who should not be called. You can configure Outbound Option to import both types of lists either by continuously polling or at scheduled intervals. You can also specify that imported lists should replace existing lists or be appended to them.

Do Not Call List Imports

United States federal law requires telephone solicitors to maintain do not call lists. A Do Not Call (DNC) list ensures that those customers who request not to be contacted will not be contacted regardless of the calling list imported into the system.

The Do Not Call list is a list of numbers that are identified as off-limits for outbound calling. This list may include numbers from the federal DNC list, as well as numbers from customers who have specifically requested that they not be contacted. Entries in the Do Not Call list will not be dialed even though they are included in a contact list. The DNC list is shared across all campaigns, and only contains phone numbers. The campaign validates that a number in the dialing list is not in the Do Not Call list before sending it to a Dialer, which the solution checks at the last minute before actually placing the call. You can update a Do Not Call list while a campaign is running, and the update will immediately affect records that have not been sent to a Dialer. Records already sent from the Campaign Manager to the Dialer will not be affected, because those records are beyond the control of the Campaign Manager.

Do Not Call imports are validated for improper formatting and field lengths during the import process. Invalid records are flagged and written to an error file.

Related Topics

Creating a Do Not Call List

Contact List Imports

The contact list import reads in a user-generated text file of customer contacts and associated phone numbers and places it in an internal contact table. Like Do Not Call imports, there is a validation step where improperly formatted records are flagged and written to an error file. The error files are written to the \icm\<instance>\la\logfiles directory on LoggerA. The name of the files are based on the name of the Target Table Name and the date and time the import occurred. Phone numbers without prefix matches are not placed in a file.

You can add additional business-specific attributes to the contact list import file before the import occurs. This allows for segmentation of the campaign using a query rule. In this way, a single import can contain records for multiple dialing lists for the same campaign; however, do not include the campaign customer contacts in multiple dialing lists because this might result in the same customer being dialed twice.

Note See the “Adding Attributes to a Contact List” section in Chapter 7, “Administrative/Supervisory Tasks,” for more details.

The U.S. area code mappings are provided along with the product. International customers must provide their own data and add it to the database.

During the contact list import process, time zone and daylight saving time information is assigned to each contact by matching phone numbers to region prefix strings. If any of the phone numbers for a contact do not match a configured region prefix, the contact list import will use the default time zone data configured for the campaign.

Import Rule Reports

The same import rule reports are used for Do Not Call and Contact List imports. The reports display a historical view of when imports occurred, the number of records imported, and the number of records that were considered invalid due to length constraints or improper formatting.

For contact list imports, the reports also provide insight into the number of contacts that were assigned with the default time zone information for the campaign, as well as the number of contacts that were actually imported into the dialing list after the query rule and format validation was performed.

Related Topics

Administrative/Supervisory Tasks

Query Rules

The query rule determines which customer contacts to use from the import for a campaign. You can associate multiple query rules with a campaign; therefore, you can use them to segment a campaign by query rule for prioritization or other logical groupings. For example, if your campaign requires dialing customers between the hours of 9:00AM and 11:00AM, you could set up a query rule to only dial during those times, then configure the campaign to switch to another query rule after that time when the sequence has ended.

When dialing, only one query rule is active at any time for each campaign.

You can change query rules based on different conditions, including configured time limit, or a number of records attempted (referred to as penetration), time of day, or current hit rate across the query rule. The query rule will also automatically switch to another available query rule if it runs out of numbers that are ready to be dialed now.

Campaigns

A campaign is made up of one or more query rule-generated dialing lists and one or more campaign skill groups. Outbound Option reads in contacts from the dialing list associated with the active query rule for the campaign, and directs Dialers to place calls to customers. The Dialer then directs contacted customers to agents (Agent Campaigns) or IVRs (Transfer to IVR Campaigns) in the campaign skill group for applicable customer treatment.

You can create or modify campaigns using the Outbound Option Campaign component, where you define or modify the settings that apply to a campaign. You can also add or delete a campaign using the Campaign component.

You can define two types of campaigns, agent-based and transfer to IVR; however, only one campaign type can be configured per campaign.

Note See the "Creating a Campaign" section in Chapter 6, "Configuring Campaigns and Imports," for more details.

Dialing Modes

Outbound Option supports the following dialing modes:

- **Preview**: The agent previews the contact information on the desktop before deciding whether this contact should be dialed or not, so the agent can decide to skip to the next contact. After the agent accepts a contact, the Dialer places the call so that the agent gets the benefit of Call Progress Analysis (CPA), but the agent does not hear the ringing.

  Note Agents cannot place calls from their desktop (phone); only the Dialer can place calls. During a personal callback, the Dialer places the call and the assigned agent receives a screen pop on their desktop before the number is dialed, so the agent can decide if the call can be placed at that time.

In Preview mode, if the agent skips or rejects the call, the record is marked “R” for retry and is sent to another agent based on the **No answer** setting in the Campaign configuration. For example, if the No answer parameter is two hours, then the skipped or rejected record is presented to another agent after two hours.

Note The Preview and Direct Preview dialing modes only apply to *agent* campaigns because they require agent interaction, and only dial one line per agent.

- **Direct Preview**: Direct Preview is similar to the Preview mode, except that the call is placed from the agent’s phone after the agent accepts. This dialing mode also avoids the possibility of abandoning calls and answering machine detection false positives. After initiating the call, the agent hears the ringing so that there is no delay when the customer answers, but the agent has to deal with answering machines and other results that the dialer’s CPA would normally handle while in other dialing modes.
- **Progressive**: The campaign is configured to dial a specific number of lines per agent (not based on expected hit rate, which is the percentage of customers that have been successfully contacted); therefore, if you configure the campaign to dial two lines per agent, when an agent is available the Dialer will dial two contacts at the same time expecting only one of them to answer.

Note The Progressive and Predictive dialing modes apply to agent campaigns as well as unattended transfer to IVR campaigns. Progressive and Predictive dialing modes are focused on keeping the agent/IVR resources busy. Also, agents cannot preview the contact information on their desktops while using these dialing modes.

- **Predictive**: The Dialer adjusts the number of customers to dial per available agent (or IVR port for a transfer to IVR campaign).

  As in Progressive mode, when multiple customers answer the calls placed for a single agent, secondary answers can be transferred to another associated agent in the campaign, or sent to the configured IVR for abandon treatment and possible queuing if no agents are available. If no agents or IVR is available, the call will be dropped without treatment.

  A Predictive Dialer is designed to increase agent utilization in a call center. To increase the chances of reaching a customer, a Predictive Dialer dials several phone lines per available agent. The goal is to dial enough lines to keep the agents busy while not exceeding the configured maximum abandoned call rate. An abandoned call occurs when a customer answers the phone, but no agent is available to talk to them. In some cases, the abandoned call rate is limited by government regulations (typically, less than 3% for telemarketing calls). In Predictive mode, the Dialer increases the number of lines used per agent until the Abandon Rate is close to the preconfigured maximum Abandon Rate. At this point, the Dialer stabilizes the Lines Per Agent to keep the Abandon Rate below the preconfigured maximum. If the Abandon Rate goes above the maximum, the Dialer lowers the Lines Per Agent.

  If the hit rate spikes upward very sharply during the campaign, it can cause the Abandon Rate to exceed the daily Abandon Rate target; for example, the hit rate changes from 10% to 30% in a few minutes. It is very difficult for the Predictive Dialer to cope with hit rate changes of this magnitude and still keep the Abandon Rate under the daily Abandon Rate target.

Note Because there is a wide variation in how long each phone call lasts, Predictive mode determines the proper number of customers to call for each agent given the current hit rate and configured abandon limit.

In Predictive and Progressive mode, agents that are reserved remain reserved until there is a successful live call. They are not immediately released if a live call is not available. On campaign completion (when the dialing list for the campaign runs out of records), agents who remain reserved are released. The same action occurs if the skill group mode is switched to "Inbound."

In Predictive or Progressive mode, agents are released under the following conditions:

- A successful live call was transferred to the agent (the reservation call will be dropped).
- There are no more records in the Contact List for the campaign that the agent is working on.
- The agent's skill group mode changes from Predictive/Progressive mode to Inbound mode.

After the reservation call is dropped, the agent goes into wrap-up or available mode depending on the Unified CCE Agent Desk Setting configuration.

In Preview mode, each preview call is associated with the agent who accepted the call. In this mode, agents are released when the following conditions occur:

- The agent rejected the preview call (if the agent decides to skip the call, that agent remains reserved).
- A successful live call was transferred to the agent (the reservation call will be dropped).
- The contact number was busy, was not answered, or an answering machine was detected and answering machine detection was enabled.
- The outbound call could not be successfully transferred to the agent (this might be due to any failure on the switch or to a Unified CCE software problem).

After the reservation call is dropped, the agent might go into wrap-up mode (after call work), if the agent is a manualIN agent. (The Outbound Option Dialer does not automatically set the agent to ready mode.)

As soon as an agent goes into the Ready state, that agent might receive another call if there are more records.

Caller ID Masking by Campaign

Outbound Option allows you to configure up to 15 prefix digits for dialed numbers in a campaign. If you configure a prefix, it will be inserted before the Dial prefix for all numbers dialed in a campaign.

In Outbound Option deployments that use the SCCP Dialer, this prefix allows an administrator to create campaign-specific Unified CM translation patterns, which you can use to tailor the ANI seen by a customer by campaign. For example, all customers dialed from Campaign A will see a caller ID of "1-800-333-4444," while all customers dialed from Campaign B will see a caller ID of "1-800-555-1212." The prefix digits are always prepended to the beginning of the number, so that they can easily be stripped using translation patterns.

Note This translation pattern function is not applicable for the SIP Dialer. In a SIP Dialer deployment, the SIP Dialer uses the SIP message to make outbound calls directly to the gateway. The SIP interface allows the SIP Dialer to set the ANI directly.

Agent Campaigns

In an agent campaign, Outbound Option dials customers and transfers them to agents in targeted skill groups. The Dialer monitors for available agents. When the Dialer determines that an agent is available, the peripheral gateway (PG) places a virtual reservation call to the agent so that the contact center knows that this agent is reserved. The physical phone does not actually ring, but the agent desktop is updated with the data so that the desktop believes that there is a call in progress. After the agent is reserved, the Dialer places outbound calls to customer contacts using the dialing mode that was set for the campaign skill group. After the Dialer identifies a customer, the call is transferred to the agent. The agent is expected to stay on the reservation call until a customer call is reached to avoid the possibility of abandoned calls. Once a customer call is reached, the agent must disconnect the reservation call from the agent desktop.

The agent still has the opportunity to mark the call as a wrong number, wrong party, or to schedule a callback for later which would not close the record out. If more than one line was dialed for the agent, and more than one of those calls are answered by customers, the first call will be assigned to the agent. At this point the Dialer determines what to do with the second answered call. If another agent is reserved in the campaign, the call will be transferred there. Otherwise, the call will be transferred to the IVR or IVRs that are configured in the Abandon to IVR setting for the campaign skill group. If no IVR is configured, then the call is dropped with no treatment. It is strongly recommended that the Abandon to IVR setting be set up to avoid Dialer abandons. Once calls are sent to the IVR, prompts can be played, data collected, and the customer can be redirected to a properly skilled agent anywhere in the enterprise contact center.

Callbacks

When the system contacts a customer and transfers the call to an agent, the customer has the option to request being called back at a later date and time. The agent enters the date and time the customer would like to be called into the agent application, and the call is scheduled for callback.

Note The callback number can be different from the number originally dialed.

If an agent is skilled for a predictive campaign and schedules a callback for that campaign, the callback for that campaign will be handled in Predictive mode as well (callbacks are handled in the same mode as the campaign type).

Depending on the Outbound Option campaign settings, a callback can be scheduled as a regular callback or a personal callback.

- Regular callbacks can be handled by any agent assigned to the campaign, where the customer is called back using the configured campaign mode.
- Personal callbacks allow the customer to receive a callback from the agent they spoke to when they were first contacted. The customer is called back using a similar mode to the Preview dialing mode.

  Callbacks on personal callbacks are handled in the associated campaign mode.

Related Topics

About Regular Callbacks, on page 14
About Personal Callbacks, on page 14

About Regular Callbacks

Regular callbacks can be handled by any agent assigned to the campaign.

The callback time is not constrained by the campaign dialing times. CallbackTimeLimit (15 minutes by default and configurable in the registry) determines the time range when the callback can occur.

The callback time will be rescheduled for a later time if the Dialer is unable to reach the customer, because of a busy signal or ring no answer, for example.

The CallbackTime limit might be exceeded if no agents are available. If the elapsed time exceeds the CallbackTimeLimit, and RescheduleCallback (1 by default and configurable in the registry) is enabled, the record returns to the Pending state at TimeToResetDailyStats (00:30 by default and configurable in the registry).

About Personal Callbacks

The Outbound Option *personal callback* feature allows scheduling customer callbacks for specific agents, so that customers receive callbacks from the same agent who spoke with them initially.

This feature is very similar to Preview mode in that an agent reservation occurs first. When the agent is reserved, they can either accept the customer call or reject it. (The **Skip** option is not available.) Clicking **Close** sets the BAResponse variable to indicate a close operation, which closes out the record so that it is not dialed again.

Note Personal callbacks are not dependent on a particular campaign, and do not require a campaign to be running when the call is placed. This feature allows personal callbacks to work together with active campaigns containing either predictive or preview skill groups. Agents scheduled for a personal callback can be logged in to any inbound, outbound, or blended skill group at the time of the callback. The callback agent must be logged in with the same agent ID that was used to schedule the callback. Be aware that only one Dialer on a particular peripheral is assigned personal callback records.

The personal callback feature supports three callback modes:

- Use the alternate VDN (the call will be routed to the skill group DN for the campaign associated with the callback, if the DN is available).

  If this option is selected and the specified agent is not available at the designated callback time, the call is routed to another agent right away.

- Reschedule the personal callback to the same time the next business day.
- Abandon the personal callback.

The following actions can take place during a personal callback:

- If the customer cannot be reached during the specified callback time, the call is rescheduled or abandoned based on the configuration setup or until the specified maximum number of attempts has been exhausted.

- If the Outbound Option Dialer detects an answering machine response during a personal callback, the call is still transferred to the scheduled agent. This allows the agent to leave a message and/or reschedule the callback for another convenient time.
- When the callback mode is set to Reschedule or Abandon:
  - If the specified agent is not logged in at the designated callback time, but then logs in within the callback time period, Outbound Option reserves the agent and places the callback.
  - If the specified agent is on an existing call and is unavailable during the entire callback time period, the personal callback fails and the call is rescheduled or abandoned based on the configuration setup.
- When the callback mode is set to Alternate VDN:
  - If the specified agent is not available or not logged in, another agent is reserved for the callback using the dialed number of the associated campaign skill group.

Note Customer records can be inserted directly into the Personal Callback List to support scheduling calls between agents and customers for a specific date and time, but this requires special integration with third-party applications to import these records. See Appendix F, "Scheduling Contacts Between Customers and Specific Agents", for detailed information.

Transfer to IVR Campaigns

A transfer to IVR campaign, also known as an unattended or unassisted campaign, can send both live customer and answering machine calls to IVRs for customer treatment. This customer treatment includes playing prompts, collecting data from the customer, and redirecting the call to applicable agents anywhere in the contact center enterprise.

The configuration allocates the maximum number of IVR ports used for transfer to IVR campaigns, and it attempts to keep them all busy within the dialing constraints.

Either Progressive or Predictive modes can be used to dial an unattended campaign. You can play a different prompt for a live customer or for an answering machine.

Note You cannot use the transfer to IVR feature in the Direct Preview mode or the regular Preview modes.

Dialing Order

Outbound Option initiates contacts for a campaign based on the ordering in the imported contact list. This order is not changed during the import.

Each number for the contact is dialed once, in the order it is configured (on the Call Target tab in the Campaign configuration) and imported in the contact list, and before any of the numbers for that contact are retried.

See Chapter 6, "Configuring Campaigns and Imports,"for more information.

Sequential Dialing

The sequential dialing feature, accessed through the Campaign Call Target tab in the Outbound Option Campaign component, allows you to associate up to ten phone numbers per customer record. Two time periods for calling the customers, called "zones," can be configured for each campaign. Each time period (zone) lists which of the ten phone numbers will be called during that time. A phone number can be configured for either zone or for both zones.

Note Customers are dialed based on the time zone of the first phone that is configured on this tab. The time zone is based on the prefix of the phone number and the region prefix configuration. If two phone numbers imported for the same customer have different time zones, both phones will be called during times that are valid for the first phone.

Contact Priority Among Callbacks, Retries, and Pending Contacts

The contact priority order is as follows:

- Top priority is given to customers who have requested *callbacks*. This ensures that the customers are called at the time that they requested.
- *Retries* get second priority. A contact is marked for retry after all the numbers associated with the contact have been tried once, and one or more of those numbers had a call result configured for retry.
- *Pending* contacts get third priority. A customer record is considered to be pending until all of its eligible phone numbers have been tried once.

Note The default priority order can be changed by setting the PendingOverRetryEnabled registry setting to 1 in the Campaign Manager. This setting ensures that all numbers and records are tried once before retries are attempted. See Appendix A, "Registry Settings", for detailed information.

Campaign Reports

The query rule call activity and pending record reports are available as campaign roll-ups for multiple query rules within a campaign.

There are also consolidated reports available, which attempt to blend campaign call activity reporting information with skill group performance reports to give a better overall view of the business activity. Because the consolidated reports mix data from different reporting engines in a single report, there are a few caveats that are described in the reports themselves. These reports provide a rough overview of agent activity, average time between calls, abandon rate, and so on.

Related Topics

Administrative/Supervisory Tasks

Campaign Query Rule Reports

There are two general categories of campaign query rule reports:

- One category of reports indicates the number of records closed, in Pending state, and total records in the query rule's dialing list.
- A second category of reports provides different views into the call result activity. It breaks down call results into approximately a dozen categories.

Transfer to IVR Reports

The campaign and query rule call activity reports display accurate call activity for calls that are not transferred to IVR. Calls transferred to IVR are counted as being transferred to an IVR, but the campaign and query rule activity reports do not display what occurred after the call was sent to the IVR. If calls are queued and transferred back to an agent, they are treated as new inbound calls in the reports.

Call Type Reports

The call type is a Unified CCE concept that maps a route point dialed number to a routing script. It is also a useful reporting object for the enterprise to describe all calls that traversed a specific routing script. The call type applies primarily to inbound traffic in the call center because the Dialer does not use the routing script when placing outbound calls. However, the Outbound Option does use routing scripts to reserve agents and to transfer calls to the IVR, so that it can provide some insight into how calls are being routed.

Campaign Skill Groups

A campaign skill group describes the resource pool for a campaign and provides the necessary information for managing the campaign. For larger enterprise deployments with multiple contact center sites, skill groups are associated with a specific contact center site, which might have different hours of operation and different IVR equipment. Dialing Mode is a skill group attribute, so that contact center skill groups can be opened and closed at different times for shared campaigns using Unified CCE administrative scripts.

The Dialer uses campaign skill groups to monitor resource availability. With agent campaigns, the Dialer looks at the number of available agents. With Transfer to IVR campaigns, the Dialer looks at the number of calls in queue for the associated campaign skill group to make sure it has not reached its quota of configured IVR ports.

Each Dialer is associated with a peripheral (PG). The Dialer monitors skill groups associated with its own peripheral for resource availability and requests records for campaigns associated with those skill groups.

The Dialer only places calls on behalf of agents located on its PG.

Note One campaign could be served by multiple Dialers if one or more skill groups from each peripheral is assigned to the campaign. This assignment allows campaigns to be site-specific or shared across the enterprise depending on the configuration.

Smaller Skill Groups

Predictive mode campaigns are more efficient when there are more resources (more agents for an agent campaign; more IVR ports for a transfer to IVR campaign) in a campaign skill group. The Dialer adjusts its dialing rate based on the number of abandons in a set number of calls. The more frequently calls are placed, the more often it can adjust the dialing rate. It is difficult for the Dialer to make accurate adjustments frequently enough when there are less than 10 agents in the campaign.

Blended Campaigns/Skill Groups

Blended campaigns are campaigns in which agents take inbound calls and outbound calls at the same time. The inbound program can use the same or different skill group as the outbound campaign skill group. The inbound calls generally receive priority in two ways. First, the campaign skill group can be configured to use a percentage of active agents, reserving the rest for inbound calls; and second, if an inbound customer is in queue, blended agents are not reserved for the blended campaign.

An agent on an outbound reservation call will not be interrupted with a routed inbound call. The agent reservation call is not terminated until the agent does so or the campaign is closed out for that skill group, or until the Dialer times out the reservation. An agent on a reservation call may be interrupted by an internal call. This interruption normally results in a dropped reservation call, and because the Dialer is dialing customers for that agent, it may also result in abandoned calls if no agents are available.

Agents Skilled for Multiple Active Campaigns

Agents can be skilled for multiple active campaigns. Because of the way the Dialer reserves agents, one of the campaigns wins the race to find an available agent when agents become available.

For example, assume that you have an agent in three active campaign skill groups. That agent becomes available in all three skill groups at the same time. The Dialer monitoring at the skill group level for the number of available agents sends up three reservation requests, one for each associated campaign skill group. In such a case, the request by the first campaign skill group in the Dialer memory gets priority over the other requests. Over time, this situation results in an imbalance of agents between skill groups

To work around this issue, queue reservation calls in a similar way to what is often done for personal callbacks. This workaround ensures that reservation requests in the second and third campaign skill groups are serviced first the next time an agent in that skill group becomes available. Now, calls can be evenly distributed across each of the active campaigns when agents are skilled for more than one of them.

Related Topics

Configuring Campaigns and Imports

Campaign Skill Group Reports

Skill Group reports provide information about agent activity for outbound and inbound agents.

Blended Campaign Skill Group Reports

If the same skill group is used for both inbound and outbound, then the campaign consolidated reports can provide a consolidated overview of business activity for both inbound and outbound calls.

Related Topics

Administrative/Supervisory Tasks

Customer Time Versus System Time

This section helps identify when the *customer time zone* is used in Outbound Option activities versus when the *system time* is used.

Customer Time

Note Since the Outbound Option uses area code prefixes to determine the time zone, this option might dial customers using wireless phones or VoIP phones in a different time zone according to the configured area code or time zone mapping.

Customers in a specific campaign can be distributed across multiple time zones, as long as they follow the same rules for when daylight saving time changes.

To determine the time zone offset of each contact, the Unified CCE system has a configurable *region prefix database* with phone number prefixes, assigned time zone offsets, and indications as to whether or not they observe daylight saving time. The import uses this database to associate time zone offsets with customers, so that when the campaign searches for records in the active query rule's dialing list, it considers time zone offset when determining which contacts are appropriate to dial now. However, this approach does not account for daylight saving time changes from time zone to time zone. These daylight saving time changes are managed at the campaign level so that campaigns cannot attempt to contact customers in time zones that observe daylight saving time, but switch over on different calendar dates.

For example, the United States is comprised of time zone regions that do not observe daylight saving time, or switch over on the same day. But a campaign that is dialing Houston, Texas and Mexico City, Mexico might have a problem because these locations change over to daylight saving time on different days.

If a contact's number does not match any of the configured region prefixes, then the campaign's default time zone offset is assigned. If all of the customers are in one time zone, then configuring the region prefix information is not necessary.

Outbound Option receives its list of daylight saving zones from the Microsoft Operating System. Make sure that all Outbound Option components have the same version of the MS OS installed for proper handling of any new time zones. Also, make sure that the Logger and AW machines have the latest time zone update for Microsoft Windows operating systems, or have the same time zone patches from Microsoft.

Related Topics

Architectural Overview

System Time

The system time refers to the time used in scheduled imports. It also refers to the query rule *time of day* switching of contact lists, which is based on the time at the Central Controller.

Call Progress Analysis (Answering Machine Detection)

Call Progress Analysis (CPA) uses a combination of call signaling and media stream analysis to differentiate types of calls.

- Fax/modem detection looks for specific tones in the media stream.
- Voice detection looks in the media stream for alternate voice and silence patterns after the call has been connected.
- Answering Machine Detection (AMD) uses media stream analysis to look for a longer voice stream with minimal silence periods. (An option is available that searches for terminating tone detection.)
- Operator Intercept relies on call signaling network identification. It does not analyze the media stream looking for specific tri-tones.

Enable Answering Machine Detection in the Outbound Option Campaign component on a campaign-by-campaign basis, depending upon the requirements of the campaign or the purpose of the call.

Special Information Tones (SIT) and busy tones are detected by the gateway and not by the dialer. The dialer receives skinny messages from Unified CM and handles call classification based on them.

The gateway supports SIT detection only on T1 CAS (FXO loopstart signaling) and FXO ports for calls originated from an SCCP based Unified CM dialer.

Answering machine detection takes into account speech patterns and silence between identified voice patterns, to differentiate live voice from answering machine recording and background noise. There are a few configuration parameters to modify in the Outbound Option Campaign Configuration component to change the amount of silence or the expected time of greeting depending on the business need. Accuracy levels depend on various factors, such as campaign list quality and phone number types called.

SIP Dialer

If you have a SIP dialer, you must enable IP AMD for CPA to properly function. If you do not enable IP AMD, the SIP dialer instructs the gateway to transfer the call to an agent without waiting for detection.

Related Topics

Creating a Campaign