Intreaction Dialer Manager

Printed help

PureConnect powered by Customer Interaction Center® (CIC)

2018 R3

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Abstract

This document explains what an administrator must know to manage Interaction Dialer effectively. It covers Interaction Dialer Manager configuation views and best practices that are beneficial to the effective operation of the system.

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Interaction Dialer Manager Help

Interaction Dialer is a client/server extension that adds automated dialing, manual calling, and campaign management features to CIC servers. Since Interaction Dialer is a CIC application, it utilizes CIC's architecture, feature set, and event processing engine. Campaigns can scale to hundreds of agents at one site or thousands across multiple locations. Campaigns can run simultaneously across multiple CIC sites but are administered centrally.

- Interaction Dialer conducts campaigns by contacting a list of people according to a prescribed list of rules.
- Interaction Dialer places outbound telephone calls for campaigns, plays audio files to answering machines, sends faxes to fax machines, and routes calls answered by a live person to an Interaction Attendant profile or directly to Dialer agents.
- Interaction Dialer's Manual Calling feature provides you with the ability set up a Dialer server to manually call customers when the situation warrants non-automated calls.

As you use this Help system to learn about Interaction Dialer, keep in mind that this product can be configured to operate in two different ways: 1) as an automated dialing system and 2) as a manual-only calling system. For more information, see the Automatic Dialing vs. Manual Calling topic.

Help System Organization

This help system is divided into sections as follows:

Section	Description
Dialer in Interaction Administrator	This section describes the features in the main Interaction Dialer user interface, which is found in the Dialer container in Interaction Administrator. You'll use the information in this section to learn how to create, configure and manage campaigns, scripts and contact lists as well as take advantage of a whole host of configuration features built into the software. In addition, you'll find information of configuring other Dialer related settings that exist in Interaction Administrator.
Dialer in IC Business Manager	This section describes the features that Interaction Dialer adds to IC Business Manager's Interaction Supervisor component. You'll use the information in this section to learn how to monitor every aspect of an active campaign. In addition to the Interaction Supervisor component, IC Business Manager hosts Interaction Dialer Administrator, which provides an identical set of configuration controls as found in Interaction Administrator's Dialer container.
Dialer Administration Concepts	The section explains what an administrator must know to manage Interaction Dialer effectively. Topics are sequenced to introduce concepts while building familiarity with the system.

Revisions	Summary of changes made to this document.

Documentation Conventions

In this document, product titles are shortened for readability. Full titles are always used for clarity when it is necessary to distinguish between similar sounding items.

Full Title	Abbreviations used in this document
Customer Interaction Center	"CIC"
Interaction Dialer	"Dialer"
Outbound Dialer Server	"ODS", "Outbound Dialer", "Dialer Server"
Manual Calling Server	"MCS", "Manual Calling feature", "Dialer Server"
Central Campaign Server	"CCS", "Campaign Server"
Advanced Campaign Management	"ACM"
Interaction Dialer Manager	"IDM", "Dialer Manager"
Interaction Scripter API	"Scripter", "Scripter API"
Interaction Scripter .NET Client	"Scripter Client", "Client", "Interaction Scripter Client", "Interaction Scripter"
Scripter in Interaction Connect	"Interaction Scripter Client","Interaction Scripter"

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Accessing Help

To Open Interaction Dialer Help press **F1** in Interaction Dialer Manager to open a reference topic describing the current view. Reference topics are linked to background information, feature overviews, and procedures where applicable. You can also press help buttons () in the user interface.

Since IDM plugs into application frameworks, pressing F1 in the host framework may open a different help topic than expected. This can occur when the context of a display screen cannot be determined, when a common user interface element (such as a logon dialog for example) has focus. For best results, click help buttons where applicable.

Documentation Updates

Document Revision History summarizes changes made to this document. For overall release information, see *PureConnect Release Notes* in the PureConnect Documentation Library.

Automatic Dialing vs. Manual Calling

The primary function of Interaction Dialer is to provide an efficient automated, predictive dialing system. However, to respond to industry needs, we have added a manual calling feature to Interaction Dialer that in effect disables all of the automatic dialing capabilities. In other words, when using the manual calling feature, the system can *only* make manual calls. You can choose how you want Interaction Dialer to work, either as an automatic dialer or a manual-only calling system, by installing the appropriate license. For more information, see the Dialer Feature License topic.

When it comes to the documentation, the server that handles the calls is referred to as the Outbound Dialer Server or ODS. When you use the manual calling feature, the server that handles the calls is also referred to as a Manual Calling Server or MCS, in order to differentiate it from a fully automated dialing system. (However, other than being limited to only making manual calls, an MCS has the exact same feature set as an ODS.)

The distinction between an ODS and an MCS, means two things:

- First, there are options and functions described in this documentation that do not apply to a Manual Calling Server.
- Second, there are options and functions described in this documentation that apply to both the automatic Outbound Dialer Server and the Manual Calling Server configurations.

To handle the first case, where appropriate we have expressly pointed out some of the differences you will encounter when using a Manual Calling Server as opposed to using an automatic Outbound Dialer Server. In the second case, when we are discussing options and functions that apply to both configurations, we attribute those items to an Outbound Dialer Server or ODS.

Dialer in Interaction Administrator

This section describes the features in the main Interaction Dialer user interface, which is found in the Dialer container in Interaction Administrator. You'll use the information in this section to learn how to create, configure and manage campaigns, scripts and contact lists as well as take advantage of a whole host of configuration features built into the software. In addition, you'll find information of configuring other Dialer related settings that exist in Interaction Administrator.

Recommending Reading

Interaction Dialer Manager

Server Parameters

Access and Security Rights

Dialer Licenses

Interaction Dialer Manager

You can configure Interaction Dialer campaigns and features using **Interaction Dialer Manager** (IDM), a plug-in for Interaction Administrator. You can also configure campaigns and features using Interaction Dialer Administrator, which is a plug-in for IC Business Manager. While the host application (Interaction Administrator or IC Business Manager) is different, the controls and features in Interaction Dialer Manager and Interaction Dialer Administrator are identical. Both provide access to each of the main Interaction Dialer views: Campaigns, Scripts, and Contact Lists. They also provide access to the Advanced Interaction Dialer container, which provides access to a host of specialized Interaction Dialer views. Most of this documentation will focus on configuring Interaction Dialer from within Interaction Administrator.
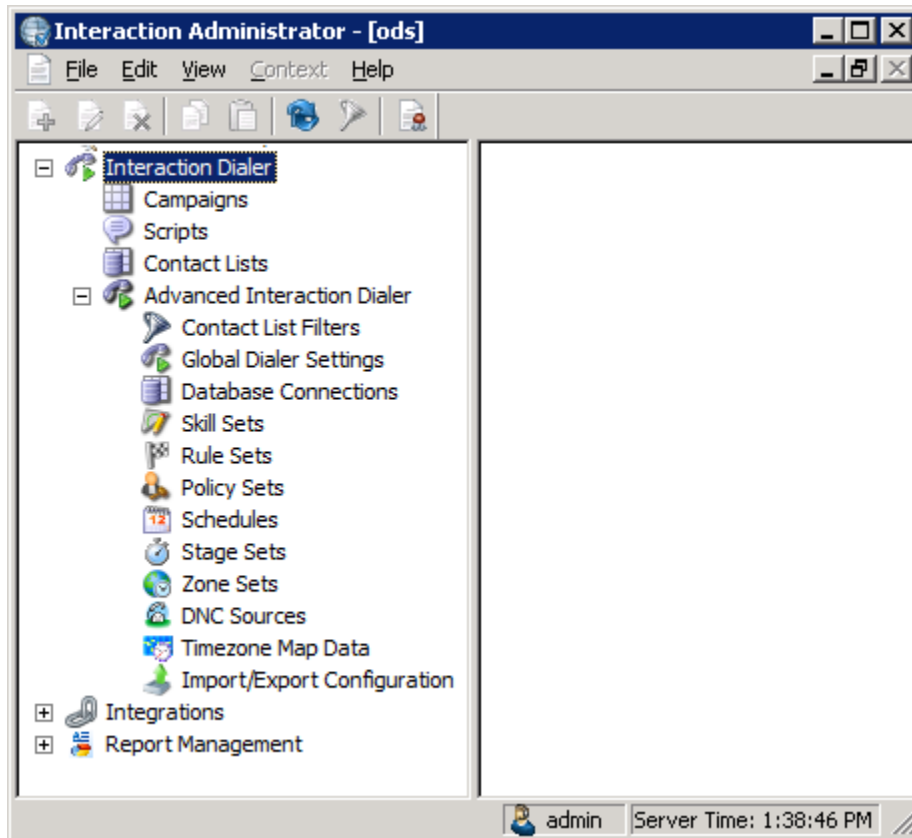
This section describes the options on each Interaction Dialer Manager view. A *view* is a configuration screen that appears when you click a Dialer container in Interaction Administrator. IDM views configure Interaction Dialer objects.

The primary Dialer Manager views are:

Interaction Dialer views	
Campaigns	Manages Campaign entries. Each entry is a collection of properties that tell Interaction Dialer how to process a contact list.

Scripts	Manages the base scripts that pop on agent desktops when calls are routed to agents.
Contact Lists	Manages contact list entries. Each contact list entry is a collection of properties that convey to Interaction Dialer details about the database table where contact phone numbers are stored.

The advanced Dialer Manager views are:

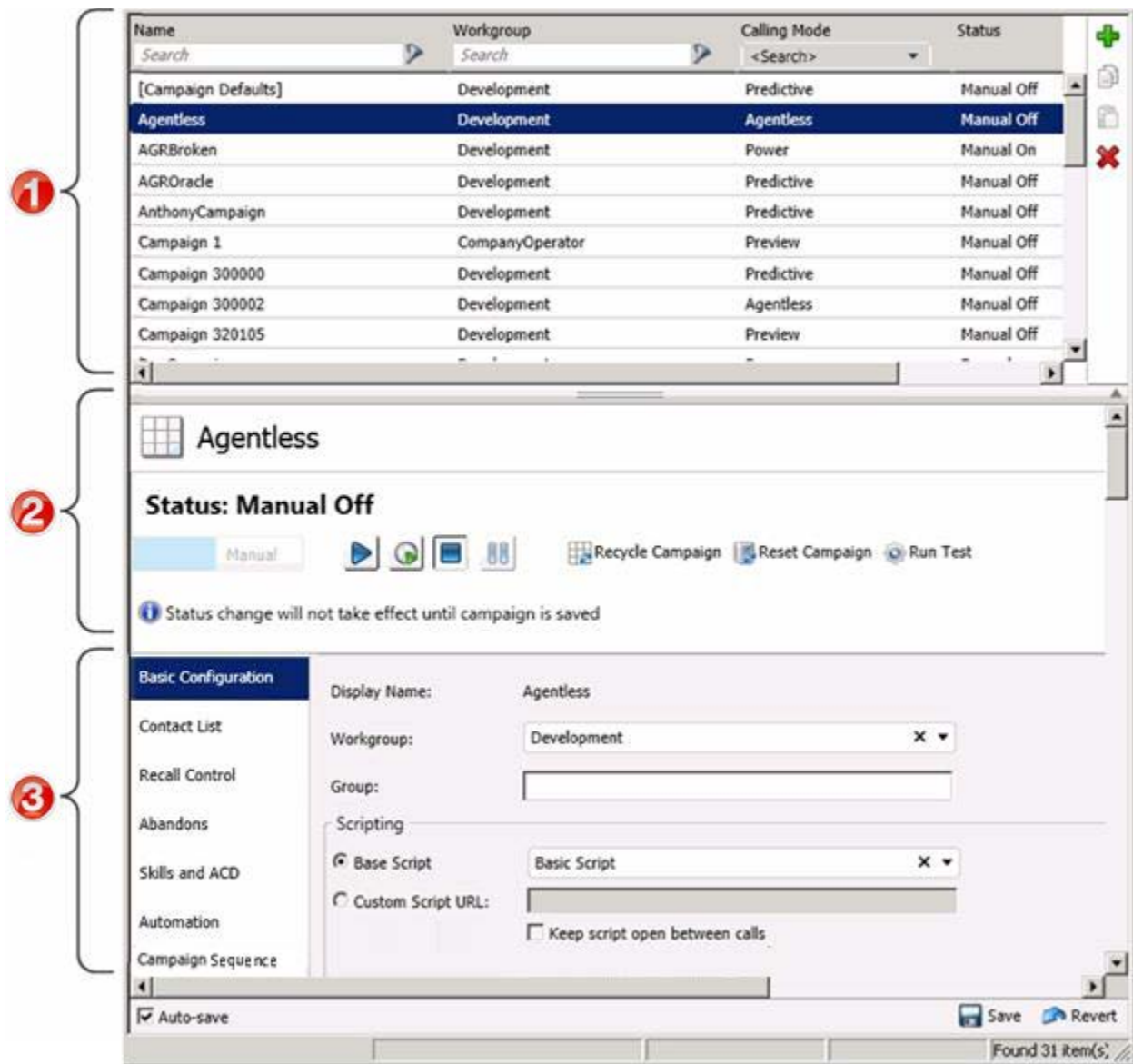| Advanced Interaction Dialer views	
Database Connections	Manages database connections that allow a campaign to specify a contact list, without specifying any details concerning the location of that file.
Contact List Filters	Manages Filter entries. Each entry defines the WHERE clause of a SQL statement that selects a subset of records from a contact list. Filters are optional.
Rule Sets	Manages Rule Sets that automate campaigns. Rules evaluate a statistic, time, or event to determine whether to carry out an Action that affects the processing of a campaign. Rule Sets are optional.
Schedules	This view manages Schedules. A schedule is a collection of time settings that determine when campaigns are running (on), not running (off), or partially on (placing only scheduled calls). Schedules are optional, but in practice they are often used.
Skill Sets	This view manages Skill Sets. Each Skill Set maps a skill column in the Contact List to skills defined in CIC. A Skill Set manages skills from a Campaign's point of view—by identifying which CIC skills will be used to select contacts to dial. See Skills-based Dialing for more details. Skill Sets are optional.
Policy Sets	This view manages Policy Sets, which provide low-level control over the processing of individual contact records. Policies control dialing/routing on a contact-by-contact basis before or after dialing. Business logic in a policy decides whether to place a call, and can set attributes that affect recording and post-call processing. Policies can also send notifications such as email messages. Policy Sets are optional.
Stage Sets	The Stage Sets view manages the stages of a campaign call. Stages identify each segment of a call that statistics can be collected upon. Stage names and other attributes are saved in groups (called Stage Sets) that can be assigned to one or more campaigns. For background information, see Stages and Stage Sets. Stage Sets are optional, but in practice they are often used.
Global Dialer Settings	This view manages settings that apply to all Outbound Dialer Servers known to the Central Campaign Server.
Zone Sets	This view manages Zone Sets. A Zone Set is a collection of zone entries. Each entry specifies when it is appropriate for an Outbound Dialer to call a particular time zone—relative to the local time of the Central Campaign server. Zone Sets are optional, but in practice they are frequently used.
DNC Sources	This view manages DNC Sources. A DNC Source provides a list of telephone numbers that should not be dialed. Interaction Dialer can scrub contact lists

	against Do-Not-Call (DNC) lists to prevent contact numbers from being dialed by a campaign. DNC Scrubbing is optional, but strongly encouraged.
Timezone Map Data	This view manages time zone map data sets for use with Dialer. When a campaign is configured to use a zone set, use of a time zone map dataset can be enabled to enhance time zone blocking, a feature that prevents contacts from being called at undesirable times. See Time Zone Mapping for details. Timezone Map data is optional.
Import/Export Configuration	Exports the Dialer_Config.xml file to a development server or imports sections of Dialer_Config.xml from a development system to a production server.

Campaigns

Campaigns view

The Campaigns view manages Campaign entries. Each campaign entry is a collection of properties that tell Interaction Dialer how to process a contact list. A campaign defines how agents interact with contacts (if at all) and specifies the dialing mode, sort order, and other items. For each entry, you an control campaign settings (such as the whether the campaign is running or not) and edit campaign properties, such as which contact list is dialed, or the script used by the campaign.

The Campaigns view is divided into three panels

1	The Campaign Entries Panel lists campaign entries. Buttons on the right side of the panel add, copy, paste, or remove campaign entries.
2	The Campaign Execution Panel provides control over the running state of a campaign, whether it runs in accordance with a schedule, or in a manually operated state. Here you can recycle the contact list, recycle the campaign, and test to ensure that campaign settings are valid.
3	The Campaign Properties Panel sets the individual options that make campaigns flexible and applicable to specific campaign goals. Related settings are organized on tabs in a scrolling list on the left.

Campaign Entries Panel

The **Campaign Entries panel** displays a list of all the campaigns that are currently in the system as well as their status. Fields in the header allow you to filter the list by any combination of campaign Name,
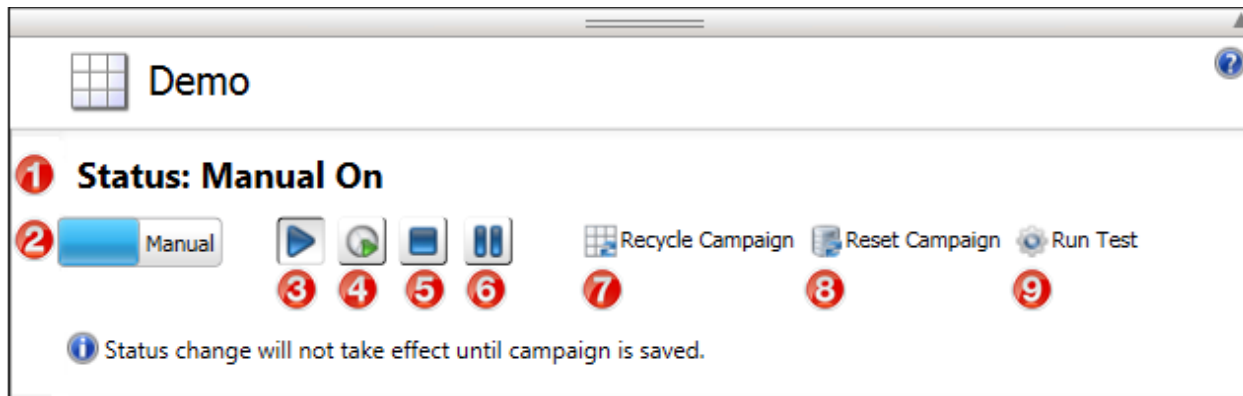
Workgroup name, or Calling (Dialing) Mode. On the right, you'll find a set of buttons that you will use to add, copy, paste, or remove campaign entries.

1	Use the Name field to pare down the list, by specifying all or part of a campaign name, to display only matching entries. Click the funnel icon to specify whether filter text is contained within, starts, or matches campaign entry names.
2	Pares the list by workgroup name. You can click the funnel icon to specify whether filter text is contained within, starts, or matches campaign entry names.
3	Selects campaign entries for a specific dialing mode (agentless, power, predictive, or preview).
4	The toolbar contains four commands working with campaign entries: • Adds a new campaign entry. • Makes a copy of the selected campaign. • Pastes copied campaign as a new entry. • Deletes the selected campaign. (You will be prompted to confirm the delete operation.)
5	Each row in this list corresponds to a campaign. Clicking a row opens that entry for editing. For each entry, four columns of information are listed: • Campaign Name • Name of the Workgroup assigned to the Campaign • Dialing mode used by the Campaign • Status of the Campaign. This indicates whether it is running or not.

Campaign Execution Panel

The **Campaign Execution Panel** displays the name of the campaign entry, followed by options that control the execution of the campaign. Campaigns can be **Off**, **On** and **On with scheduled calls only**. In that last mode, only scheduled and priority calls are generated. The contact list does not get recycled while the campaign is in scheduled only mode.

Campaign Execution Controls		
1	Textual status indicator	This control displays the execution state of the campaign. If a schedule has control over the campaign, status will be On or Off. When a campaign is running under manual control (not in accordance with a schedule) its status will be Manual On, Manual Off, or Pause.
2	Graphical Status indictor	Visually indicates whether or not the Campaign is running under Auto or Manual control or in accordance with a schedule.
3	Start	Turns the campaign on.
4	On for Scheduled Calls Only	Turns the campaign on for scheduled calls only. Places only agent-scheduled calls. Ignores the campaign schedule. • Auto-scheduled calls are not placed. • Priority dials are still made. • No regular calls are placed. • When this campaign state is switched to, any cached contacts that the campaign will no longer call (regular calls, queued precise calls) are flushed from the cache back to the database.
5	Stop	Stops outbound dialing once the cache is empty. Ignores the campaign schedule. If you stop a campaign (by selecting Stop), rather than by clicking Pause, agents must log on when the campaign is restarted by clicking this button again. If you click the Pause button, you can resume the campaign by clicking Pause again, and agents won't need to logon. Outbound calling will resume once agents change to available status.
6	Pause/Resume	Temporarily stops all outbound dialing activity for the campaign. All active calls will complete, but no new calls will be generated. This command is used to temporally halt a campaign without requiring agents to log back in once processing is resumed. When a campaign is Paused, no calls are placed, but the record cache is maintained. To resume the campaign, press Pause again. Agents will not need to logon when the campaign resumes.
7	Recycle Campaign	Recycle refers to the process of restarting the call selection process at the beginning of the contact list. This can happen automatically after all records are processed, or manually in response to a Reset Campaign

		command. A recycle period is the time that Interaction Dialer needs to process all records in a contact list.
8	Reset Campaign	Resets a running campaign, The contact list will be processed from the top to reach parties that were not contacted in a previous pass. If major settings have been changed (DSN, Sorting or Filters, and so on), the campaign is reset and restarted with the new configuration. This command also sets the count of recycles back to zero.
9	Run Test	Campaign Call List Statistics Information about the call list, including: • Total records in the contact list table • Number of callable records after filtering • Number of records blocked by filters • Number of un-callable records • Number of records with no phone numbers • Number of scheduled calls • Number of skill combinations in the contact list that are not dialable. Data Sample A sample of callable record phone numbers, used to validate the phone number column selection. The data sample lists contact, sort, and filter columns to validate sort and filter criteria. The data sample is sorted and filtered exactly as your contact list will be when dialed. However, data for scheduled calls is not returned. Skill Sets Required A list of Skill Sets required by the campaign. This breakdown of callable records by skill makes it easy to verify skill configurations assigned to the campaign.

Campaign Properties Panel

The Campaign Configuration panel provides you with a set of controls and settings that you use to configure the various properties of campaign to meet specific campaign goals. This panel contains a set of tabs that break down all the tasks involved in configuring and managing campaigns. In addition , you'll find that the majority of the tabs contain expandable screen sections that group related settings.
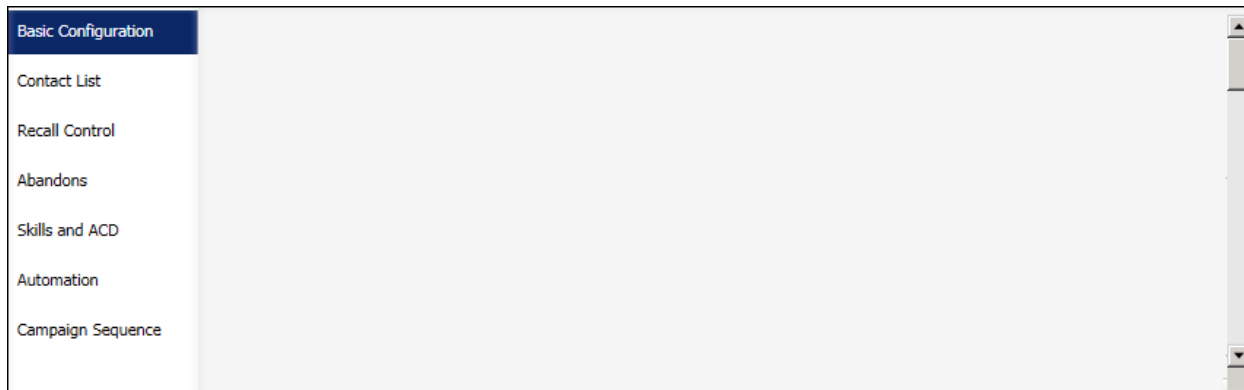
The key properties of a campaign include:

- Contact list used by the campaign
- Script used by the campaign
- Calling Mode (Predictive, Power, Preview, or Agentless)
- Which Outbound Dialer servers participate in the campaign
- How to sort the contact list or filter the selection of records
- Which Zone Set assigned to the campaign, or whether time zone mapping is performed
- How callbacks are scheduled
- How pacing is adjusted for abandoned calls
- Many other settings discussed in subsequent topics.

How properties are organized on this screen

The table below lists the tabs and the sections on each tab, so that you can easily find the campaign properties about which you want to learn.

Tab	Sections on the Tab	Description
Basic Configuration	Campaign Name, Workgroup and Script Settings	Enter the campaign name, choose the workgroup, and specify the agent script.
	Dial Settings	Set campaign's dialing mode, dialing servers, call analysis options, and whether to adhere strictly to CIC's Dial Plan or use one specific line group for campaign calls.
	Timezone Settings	Select zone set to use for Time Zone Blocking and time zone mapping options
Contact List	N/A	Select contact list, sort/filter criteria, DNC source, and whether to enable Priority Dialing, which allows contact list records added on the fly to be dialed immediately.
Recall Control	Attempt Control	Control how many additional times Dialer will traverse the contact list after dialing it an initial time. Set maximum attempt thresholds to limit the number of contact

	Auto-Scheduled Callbacks	attempts after which a contact will no longer be called, or allow unlimited per-number, per-record, and per-day contact attempts and set the status that Dialer will put the agent into when a Dialer call disconnects but has not been dispositioned.
	Agent Callbacks	Configure campaign to automatically schedule callbacks when it is unable to reach a targeted party for some reason.
		Set number of minutes to wait if the agent who owns a callback is unavailable at the scheduled callback time and set options that convert agent-owned callbacks to system-wide callbacks when agents are unavailable.
Abandons	Abandon Rate Pacing Adjustment	Comply with Telemarketing Sales Rule (TSR) or other similar regulations by adjusting the pace of outbound dialing in response to real-time abandon statistics.
	Abandon Call Definition	Specify what this campaign considers an abandoned call to be.
Skills and ACD	Outbound Workgroup Configuration	Configure criteria analyzed by ACD formulas, to optimize ACD scoring and routing for a campaign.
	Inbound Workgroup Configuration	Sets workgroup-specific thresholds that automatically disable and enable prediction in blended environments.
	Skills-based Dialing	Configure a campaign to view skills in contact list records, to dial only those contacts that can be handled by the available agent pool.
	Persistent Connection	Configure a wave audio file to play when remote Scripter client users logon to establish a persistent connection.
Automation	N/A	Configure Schedule, Policy Sets, Rule Set, Stage Set and Call Analysis.
Campaign Sequence †	Campaign Groups	Create and modify Campaign Groups.
	Campaign Sequence	Create and modify a Campaign Sequence.

If you have installed the Advanced Campaign Management Feature License in Dialer, you'll see the Campaign Sequence tab in the Campaign Properties Panel.

Basic Configuration Tab

Basic Configuration Tab

Options on the Basic Configuration tab configure essential campaign settings. This tab contains the following three sections:

Campaign Name, Workgroup and Script Settings

> Enter the campaign name, choose the workgroup, and specify the agent script.
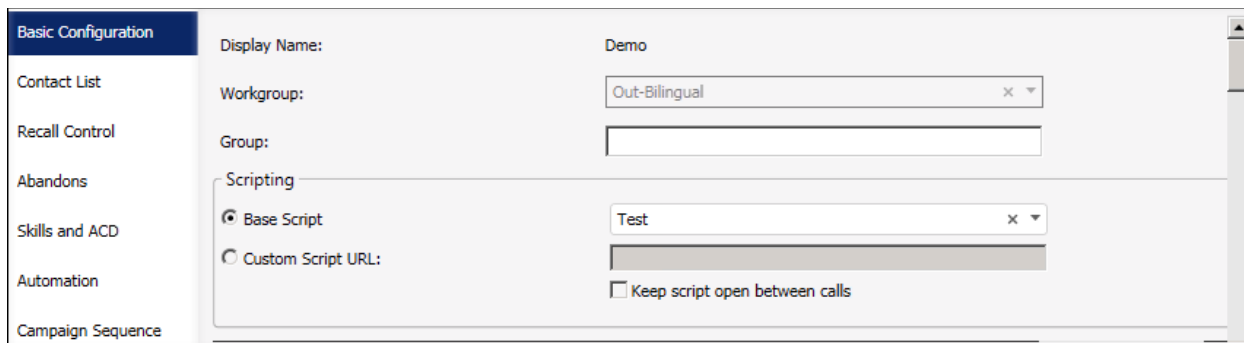
Dial Settings

> Set the campaign's dialing mode, dialing servers, call analysis options, and whether to adhere strictly to CIC's Dial Plan or use one specific line group for campaign calls.

Timezone Settings

> Configure Time Zone Blocking and Mapping features.

Campaign Name, Workgroup and Script Settings

Options in this section set the campaign name, the workgroup, and specify the agent script.

Display Name

> The display name of the campaign. This field is read-only unless you are composing a new campaign entry. Type a unique descriptive name that reflects the purpose of the campaign. This name becomes the name of the campaign entry, and will appear later in Supervisor views and reports.

Workgroup

> Selects the ACD workgroup that participating agents belong to. This workgroup must exist on each Outbound Dialer server if the campaign runs across multiple ODS servers.

Group

Optional. Group is a descriptive string that describes the customer or campaign. This field is optional, since Interaction Dialer does not use this information internally. However, a Group designation is useful when several campaigns are related in some way. For example, if your call center conducts several campaigns for the same client, you might store the name of the client in the Group field. If you run several campaigns for Globe Newspaper, you might type "Globe" into this field.

Scripting

Options in the *Scripting* frame select a base or custom script for the campaign to use. Every campaign (except agentless campaigns) has a script that displays contact information to an agent. Scripts prompt for data entry, tell agents what to say, and provide navigation options that agents use to transition between calls or stages of a call.

Base Script

To use a previously defined base script, click *Base Script*. If the adjacent drop list is empty, you need to define a base script using the Scripts view in Interaction Dialer Manager, and then assign that script to your campaign. Only campaigns with a base script appear in the list of campaigns for Interaction Connect.

Base Scripts display columns from the contact list for agents to fill in. Contact columns can appear as text, numeric fields, radio buttons or drop down lists. No knowledge of HTML or scripting is required to create a base script. Base scripts are easy to customize, but are more limited than custom scripts.

Custom Script URL

Advanced Interaction Scripter is a licensable API that web developers use to create custom scripts using HTML and JavaScript language extensions. Custom scripts of this type can meet virtually any campaign requirement. Select *Custom Script* if a script was developed for the campaign using the *Interaction Scripter API*. Then enter the URL of the first HTML page displayed by the script in the text box that is adjacent to the Custom Script radio button. Starting with PureConnect 2018 R3, Dialer agents can use Interaction Connect or Interaction Scripter .NET to process outbound calls that use custom scripts. As before, both clients support base scripts. However, Scripter .NET and Connect process JavaScript statements differently–either synchronously or asynchronously. This requires developers to implement different coding techniques. The resulting custom script is compatible with one client or the other. A custom script cannot be compatible with both clients. For more information, see *Writing custom scripts for Interaction Connect or Scripter .NET* in the Interaction Scripter Developer Guide.

URLs for Scripter .NET

- Custom scripts for Scripter .NET client can be hosted by a web server, or a network file server. We recommend that you store scripts on a network file server. Regardless of location, the specified path must be accessible from any Interaction Scripter workstation that will run the campaign script. Accordingly, this path is specified using UNC notation

or using a network file-mapping scheme that all workstations that run this campaign will recognize.

- To specify the location of scripts hosted on a web server, use standard web notation. For example: `http://www.servername.com/path/filename.htm`.
- To specify the location of files on a network file server using UNC notation, place two backslashes in front of the server name. For example: `\\servername\path\filespec.htm`.

> **WARNING:** Don't use the file:// prefix or specify a local path. That notation is not supported and will result in a non-functioning script.

URLs for Interaction Connect

- For architectural reasons, scripts that run in Connect must be hosted on the same domain as the HTTP server running Interaction Connect.
- As a best practice, drop the domain prefix (and port number) when entering the *Custom Script URL* for a Connect script. For a script located at `http://www.mydomain.com:7000/campaign_scripts/connect/script.html` you would enter `campaign_scripts/connect/script.html` in the *Custom Script URL* box. At runtime, Dialer will prepend the domain of the Interaction Connect client to obtain the full path to the custom script file.

    Entering the domain portion of the URL for a Connect script is optional. Administrators can still enter a full URL that includes the domain and port, but this is not required.

URLs for PureConnect Cloud

- Genesys Professional Services writes scripts for PureConnect Cloud customers. Cloud-hosted custom scripts, whether for Connect or Scriper .NET, are subject to CORS browser restrictions and security considerations. These scripts must be hosted on the same domain as the server currently hosting Interaction Connect.
- In a cloud environment, switchover between servers in different locations can occur. Accordingly, the URL of script hosted in PureConnect Cloud should not specify the domain or port--only the path portion. At runtime, Dialer will prepend the domain of the server that is currently hosting Interaction Connect in order to derive the full path to the custom script.

> **NOTE:** Drop the domain and port when specifying the URL of a script hosted by PureConnect Cloud. For example: `campaign_scripts/connect/script.html`.

After a switchover, agents will need to reload the current page.

Keep script open between calls

When checked, does not unload the script between calls.

Dial Settings

Options on the Dial Settings section set the campaign's dialing mode, dialing servers, call analysis options, and whether to adhere strictly to CIC's Dial Plan or use one specific line group for campaign calls.

Calling Mode

Sets the mode used to conduct outbound dialing. The table below describes available dialing modes. Select the mode that is appropriate for the needs of your campaign. The terms "dialing mode" and "calling mode" are interchangeable.

Mode	Description
Predictive	Predicts agent availability and places calls based on internal statistics. Predicts the number of calls that must be made in order to provide each agent with a connected party at the moment the agent becomes available.

	Uses an advanced statistical pacing algorithm tuned over many years of real-world use. This mode takes advantages of another patented staging algorithm to optimize predictions.
Power	Dials from the campaign list only when an agent is available to process the call. Waits for an agent to become available before placing outbound calls. Calculates the number of calls to place in order to reach a live party.
Preview	Presents the agent with information about the targeted party before the call is actually placed. When ready, the agent manually starts the call by clicking a button in the predictive client application. If configured, the agent has the option to reschedule the call, or skip to the next data pop. Preview mode is not in the list of calling modes assigned to a campaign. Preview mode is always set using policies.
Agentless	Mixed media agentless campaigns can play a .wav file to answering machines, send faxes to fax machines, and route calls answered by live recipients to an Interaction Attendant profile. Interaction Attendant is an easy-to-use graphical interface used for inbound IVR and auto-attendant menus and for outbound IVR and messaging applications. Using an Interaction Attendant profile allows in-house development of simple messaging applications or more complex outbound IVR menus, giving called parties the option to talk to an agent, remove their name from a list, and so on. Interaction Dialer Manager does not allow a campaign's calling mode to be changed from agentless to another mode, while the campaign is active.

NOTE: If you are running Interaction Dialer using the Manual Calling feature license, then the only calling mode that will actually function is the Preview Calling Mode. However, the Preview Countdown feature is not supported on a Manual Calling Server.

Enable preview countdown

This option is available in Preview mode only. When checked, it forces a preview call to be placed automatically if the agent does not dial the contact within a configurable number of seconds. If this option is not enabled, an agent on preview call can remain idle in preview pop for an infinite amount of time.

This feature makes it possible to limit preview time without having to code preview time limits in a custom script.

- A countdown timer is visible to agents using base scripts.
- A Policy behavior can override the timeout value. For example, a contact might be so important, a Policy might give the agent extra time to review account details. See Preview Dialing behavior type.
- A rule allows the timeout value to be changed during the course of a day, if required by business needs.

- Agents cannot stop a countdown, but they can skip preview calls as before, if Preview Skip is allowed by the campaign.

Seconds

Sets a timeout value that determines how long agents can remain idle before a call is automatically placed to the contact being previewed. This value can be dynamically changed by rules and policies assigned to the campaign.

Campaign Priority

When a single agent is active in (logged into) multiple campaigns, each campaign will generate interactions for the agent. Therefore, campaigns can be assigned a configurable priority number—an integer between 1 and 100, inclusive, that Dialer uses to decide how many calls to place for each campaign for each agent.

Over time, more calls per agent are placed for higher priority campaigns, proportionally to each campaign's priority number. To make this determination, Dialer divides each agent into partial agents based on which campaigns the agent is active in and the priority of each campaign.

Campaign priority works much like the dialing ratios for skills. Therefore campaign 1 would have 90/350, then 80/350, then 70/350, and so on, in terms of percentages. For example, if 100 agents are all signed into 4 campaigns, and the campaigns have priority settings of 50, 25. 100, and 10, Dialer will distribute calls as follows:

	CampaignA (Priority 50)	CampaignB (Priority 25)	CampaignC (Priority 100)	CampaignD (Priority 10)
User1	Yes (50/185 of an agent)	Yes (25/185 of an agent)	Yes (100/185 of an agent)	Yes (10/185 of an agent)
User2		Yes (25/35 of an agent)		Yes (10/35 of an agent)
User3				Yes (10/10 of an agent)
User4	Yes (50/75 of an agent)	Yes (25/75 of an agent)		
Total Agents on Campaign	0.9369 Agents logged on	1.182754 Agents logged on	.5405 Agents logged on	1.339768 Agents logged on

Even though CampaignC had the highest priority, the agent distribution in the campaigns were such that it actually ended up with the fewest amount of agents logged on. Similarly, CampaignD ended up with the highest number of agents, despite being the lowest priority. In the end, there are a total of 4 agents logged onto the campaigns, but the Priority determines the distribution that the agents have when they are logged onto multiple campaigns.

Max Lines per Campaign

This control sets the maximum number of lines that each Outbound Dialer server can use to conduct the campaign. Each Outbound Dialer will strive to maintain this many calls concurrently to utilize the maximum number of lines. The maximum value is the sum of the "Maximum Calls" value for all Outbound Dialing Servers, as specified in Global Dialer Settings.

Initial Calls per Agent

This setting affects the number of calls that will be placed when an agent goes idle. Dialer uses this value when a campaign is started or reset to determine the number of calls to place on a prediction or agent idle request until contact rate information becomes available. The valid range of values is any integer between 1 and 100. The default is 3.

Statistics sample period

Sets the amount of time the system should wait (in seconds) between inserts to the Campaign statistics table, if any statistics changed since the last insert. The default is 60 seconds.

Dialer Line Information

Options in the *Dial Line Information* frame configure Dialer to adhere strictly to CIC's Dial Plan, or to use one specific line group for campaign calls.

Dial Plan

If *Dial Plan* is selected, Dialer uses a different "make call" method that evaluates the Dial Plan for line and line group selection.

Location

Selects a Dial Plan location that was previously defined outside of Dialer Manager, using the Regionization > Locations container in Interaction Administrator. The location setting refers to CIC's regionalization concept, which consists of defining multiple physical locations where CIC users have SIP devices. Each location defines endpoints (lines, stations and server) and the codec mappings that enable the endpoints at these various locations to communicate. These locations then, tie in to the regionalized dial plan configuration, which enables CIC administrators to filter and define local dialing plans for each location while retaining the most economical dialing between all sites. A location allows incoming calls to be routed to stations and perform dial plan operations on remote gateways for emergency calls and/or toll bypass.

Each Location defines a set of physical endpoints (SIP endpoints and lines) that share common Dial Plan characteristics. A Location also specifies the codec map between the endpoints (i.e., SIP stations, SIP lines, and the CIC server). It may further define a home-site CIC server, a peer-site CIC server, or an Interaction Media Server for processing voice (RTP) traffic instead of the CIC server.

Common examples of a Location include:

- A small satellite office (in the same town or another city or state) with all SIP phones serviced by the CIC server at headquarters
- A group of remote employees that use SIP phones over the corporate VPN
- A remote peer-site office with its own CIC server in a multi-site configuration
- A gateway in an obsolete (closed) office with no phones, but used to redirect incoming phone calls to an old number.

The [Default Location] is used in all cases where no location is specified (e.g., for all SIP devices that are not assigned to any location). The [Default Location] is set in the Locations container. It is not set in Dialer manager.

> **NOTE:** For more on locations and regionalization, see *CIC Regionalization and Dial Plan Technical Reference*, in the Technical Reference Documents section of the PureConnect Documentation Library.

Line Group

Selects one specific line group to use for this campaign's calls.

Use All Dialing Servers

Configures the campaign to dial on all outbound dialing servers instead of those in the list of selected dialing servers.

Dialing Servers

Use this part of the form to specify which Outbound Dialing Servers will participate in the campaign.

1. Select a server in the *Available Servers* list on the left.
2. Click *Add*. The server name will move to the *Selected Servers* list. These servers will dial when the campaign is running.

Bulk Call API

This option configures Dialer to use a high performance bulk call placement API that provides higher call throughput while using less system resources. See Bulk Call API for background information and these related procedures: Enable Bulk Call API for a Campaign and Adjust Dialer Maximum Call Rate.

Call Analysis

Call Analysis is a CIC process that analyzes a connection to determine if the call reached a live person, a Fax machine, or an Answering Machine, and whether or not an agent is available to process the call. This option determines whether Call Analysis is performed for the overall campaign (independently of any policies that use Call Analysis).

Detect Answering Machine

This check box determines whether Call Analysis should detect Answering Machines for the overall campaign, independently of any policies that use Call Analysis.

No Answer Timeout

No Answer Timeout is the length of time (in seconds) that a contact's phone should ring before the call is disconnected. By default the system waits 20 seconds for the contact to answer. Setting this value controls how long a call in a Ringing state (not connected or answered) will stay active before Telephony Services disconnects the call.

Call Timeout

Call Timeout is the length of time (in seconds) that an outbound call will stay in the waiting queue (waiting for an agent to become available) before the Outbound Dialer server disconnects it, plays the no available agent wave file, or transfers the call to the no available agent attendant profile.

For example, a campaign with a call in the waiting queue and a Call Timeout of 3 will wait three seconds before disconnecting the call. If this setting is too low, contacts who answer calls will be hung up on.

Calling Party Name

This field sets the name that contacts will see as Caller ID information. Call Centers with multiple clients can set this property to identify the company for whom they are conducting a campaign.

Calling Party Number

This field sets the telephone number that contacts see as Caller ID information. Call Centers with multiple clients can set this property to associate a telephone number with a campaign. The Number field can accept the E.164 number format for international telephone numbers. (i.e. the number can be prefixed with a + (plus sign) to indicate that the number includes an international country calling code.)

Disable Non-Dialer statistics

To decrease idle times for blended sites, check the *Enable* box next to *Disable NonDialerStats*. This tells Dialer not to reserve any agents for non-Dialer calls. By default, this feature is not in effect, which allows more idle time between outbound calls, freeing agents to take inbound interactions.

Copy Dialer Attributes to Call Attributes

Copies all Dialer attributes (database columns about the contact) to interaction attributes. This allows other programs, such as Interaction Attendant, to access all database fields from the

contact list, as well as extra attributes such as IS_Attr_CampaignID. Be sure to check this box if the call will be transferred to an Attendant profile, so that Attendant will have the contact data available for its use. This setting has no effect on Dialer calls unless they are transferred to an Outbound Attendant profile, and only those transferred interactions have Dialer attributes assigned to them.

> **IMPORTANT:** Checking this function does not copy dialer attributes to interaction attributes following the format of column names in the database. The `is_attr_<column name>` syntax is applied to all Dialer attributes copied to call attributes by this function. For example, a column named CAMPAIGNID becomes is_attr_CampaignID. The resulting call attribute has an "is_attr_" prefix.

Timezone Settings

Settings on this expander configure Time Zone Blocking features: Time Zone Blocking, and Time Zone Mapping.

Zone Set

> If your contact list stores each contact's time zone, you can use Interaction Dialer's Time Zone Blocking feature to prevent calls to those contacts from being placed at inappropriate times. This drop list selects a Zone Set for the campaign to use.
>
> A Zone Set contains multiple zone entries which are matched to the time zone of your contact. For each zone entry in the set, time intervals specify when it is appropriate for the server to dial this zone.
>
> For Time Zone Blocking to occur, the name of the zone in the contact record must match the name of a zone entry in the Zone Set, and the Zone Set must be assigned to the campaign. No blocking occurs when a campaign is not associated with a Zone Set. A single Zone Set can be shared by multiple campaigns. The use of Zone Sets is optional, however.
>
> If this drop list is empty, you can create a zone set using the Zone Sets view.

Consider Zone column in Contact Record

Once you select a Zone Set, the Consider Zone column in Contact Record toggle is activated. By default, this toggle is set to No.

When the toggle is set to No, Dialer will only use time zone data that it finds in the Phone Number Detail table to determine whether or not to select the contact record for dialing.

When the toggle is set to Yes, Dialer will use data that it finds in the Zone column of the contact record and in the Phone Number Detail table to determine whether or not to select the contact record for dialing.

Use Default Zone if Contact Record is missing

Once you set the Consider Zone column in Contact Record toggle to Yes, the Use Default Zone if Contact Record is missing toggle is activated. By default, this toggle is set to No.

When set to No, Dialer will only use time zone data that it finds in the Phone Number Detail table to determine whether or not to select the contact record for dialing.

When set to Yes, Dialer will refer to the Default Zone if finds that the Zone column of the Contact List record is blank. Dialer will then use data from the Default Zone, which is setup as a part of the Zone Set that you have selected, and the Phone Number Detail table to determine whether or not to select the contact record for dialing.

Automatically map time zones

This check box enables Time Zone Mapping for the campaign. This feature ensures that contacts are only called at appropriate times, by mapping telephone numbers to time zones in real-time, based on initial digits in the contact telephone number (e.g. area code and exchange in North America), instead of using the zone column of each contact record to identify the contact's time zone. To determine the zone, the initial digits of the contact number are matched to a time zone map data source.

When automatic mapping is enabled, Dialer provides three options that set how broadly automatic mapping is applied to this campaign. The options are:

Map phone numbers not set to a zone—restricts time zone mapping to telephone numbers that have no zone information. Only phone numbers not associated with a zone will be mapped.

Map phone numbers not set to a zone or set—maps phone numbers that have no zone information and numbers that had previously been automatically mapped. If the time zone map data set has been updated, the latest zone from the data set will be used in place of the zone entry that was previously written to the campaign's PND table. The PND table will be updated with the latest zone for this telephone number.

Since time zone data sets are often updated quarterly, this option ensures accuracy by automatically updating zone information in PND tables. When automatic mapping is performed,

zone data in PND tables is updated if the zone field in the PND table is empty, or if the zone entry does not match the result of the lookup operation.

If lookup against a time zone map data set returns a different zone from the zone in the PND table, the zone in the data set is presumed to be newer and is used instead. When zone entries match the lookup value, zone data in the PND table is not updated. Zone data is updated only when values change.

Map all phone numbers—maps all phone numbers, regardless of their current zone settings. Please use this option with caution, since it will cause all phone numbers to be remapped every recycle, which can take a long time.

Map phone numbers to time zones now

Time zone mapping is performed automatically when the call list recycles. Since the initial mapping of a call list and PND table data can take a while, customers can press this button to manually initiate time zone mapping. It manually initiates time zone mapping without waiting for a recycle. This reduces the amount of time that time zone mapping will require when the next recycle occurs. When time zone mapping is manually invoked, further activity in Dialer Manager is blocked until the mapping finishes.

Configure Caller ID for a Campaign

To configure Outbound Caller Name and ID for a campaign:

1. At the **Home** screen in Dialer Manager, click **Campaigns.**
2. Select a campaign in the **Campaign Entries** panel.
3. Select the **Basic Configuration** tab.
4. If necessary, expand the **Dial Settings** expander.
5. Scroll down to **Calling Party Name**. Type the name you want contacts to see.
6. In the **Calling Party Number** box, type the telephone number you want contacts to see.
7. Click **Save**.

Contact List Tab

Options on this tab select a contact list, contact columns to dial, set sort order, filter criteria, priority dialing, and DNC options.

Contact List

This drop list selects the table containing phone numbers to call during the course of the campaign. This table can include additional data items that are presented to agents when a call is received. When the call ends, the campaign script can forward database updates to this table.

The list displays only contact tables that are owned by the user specified in the UDL file or ODBC configuration. This ensures that Dialer's DialerTranU subsystem has the capability to alter tables and create new tables when necessary. Tables that Dialer generates (CallHistory, AgentStats, Recycle, CallRecordSchedule, etc.) do not appear in this list.

Customize Contact Columns

Use this check box to determine whether the campaign uses its associated contact list's contact columns as they are defined on the contact list or a customized list of contact columns (a partial list or changed order of columns).

When the check box is unchecked, as it is by default, the columns defined on the contact list are used.

When the check box is selected the controls in the Contact Columns section are enabled, thus allowing contact columns to be selected and reordered. The Campaign will use a customized list of contact columns.

> **NOTE:** If the **Customize Contact Columns** box is checked, you cannot update or change the Contact List Table. If you attempt to do so while the check box is selected, you will encounter Validation Errors. If you need to need to change the Contact List Table, you must first clear the Customize Contact Columns check box.

Contact Columns

This section is enabled when the Customize Contact Columns check box is selected. You'll use the controls in this section to optionally apply filters, select columns in the Available items list, and move them over to the Selected items list. Once there, you can reorder fields to change the sort order. The contact list will be sorted by topmost fields first when a campaign starts or is recycled.

Sort Criteria

The controls in this section allow you to sort the contact list. The new sort order will take effect when the campaign is recycled or stopped and restarted. You'll use the controls in this section to optionally apply filters, select columns in the Available items list, sort the selected fields in ascending or descending order, and move them over to the Selected items list. Once there, you can reorder fields to change the sort order.

Filters

Filters are predefined SQL statements that select a subset of records to process from a contact list. A filter selects records to dial in the next cycle of calling. A campaign can use multiple Filters.

The record selection code in each Filter is surrounded by parenthesis and ANDed together in the SQL WHERE clause for the recycle. For more information, see the Filters feature overview.

If the list of available filters is empty, no filters were previously defined using the Contact List Filters view. Since filters require SQL expertise to create and knowledge of columns in the contact list, call center administrators may need assistance from the database administrator who manages the DBMS server and contact lists used by Interaction Dialer.

Filters are optional. A filter is not used by a campaign until it is added to the *Selected Filters* list in this section of the campaign configuration. To configure a campaign to use filters, select filter names in the list on the left, optionally using the *Filter Filters* field to narrow down long lists of names.

Filters that appear in the Selected Filters list will be applied to the selection of records when the campaign is recycled.

You can remove selections from the *Selected Filters* list by clicking the *Remove* button. You can change the order in which filters are evaluated using the Move Up and Move Down buttons. Records for topmost filters are evaluated first, followed by subsequent filters in the list.

Phone Number Filters

Phone Number Filters allow the record selection query to use columns from the PND table as well as the contact list table.

Filter Callbacks

The *Agent Scheduled* and *Auto-Scheduled* check boxes apply Filter criteria to the selection of callback records. By default, filters are not used when the system selects scheduled callback records. These check boxes optionally force scheduled calls to adhere to an active filter.

- Agent Scheduled—check to apply filter criteria to the selection of callbacks scheduled by agents.
- Auto-Scheduled—check to apply filter criteria to the selection of auto-scheduled callbacks. Auto-scheduled callbacks are created up by the system when it is unable to reach a targeted party for one of the following reasons:
- Call was abandoned
- No answer
- Remote Hang Up
- Line was busy
- Answering Machine detected
- System Hang Up
- Fax Machine Detected

Priority Dialing

Use the controls in this section to enable *Priority Dialing* for the campaign and the configure the settings in the Priority Dialing frame to be edited. See Priority Dialing for background information about this feature.

Query Frequency

Determines how often (in seconds) that Interaction Dialer should check the contact list for newly inserted priority contact records (records that have a "J" status). The query frequency is configurable from 5 seconds up to 5 minutes (300 seconds). You can override this setting using the Dialer JIT Query Frequency Override server parameter.

Sort Criteria

These sort options establish a sort order for Priority Dialing records. Priority Dialing records can have a separate sort that orders them independently of the overall sort order applied to the contact list. The configured sort will determine the order of records cached for dialing.

If you do not apply sort criteria, Priority contacts are not in any particular order. They will be dialed in an order that resembles last-in-first-out, because each contact query inserts priority records at the front of the dialing queue. If you set up a sort, the new sort order will take effect when the "J" records are queried for immediate dialing.

To set up a sort, select one or more columns in the list on the left, optionally using the *Filter Columns* field to narrow down column names. You can select multiple contiguous items by shift-clicking the list. Non-contiguous items can be selected by holding down the Windows and Control keys while clicking.

Select ASC or DESC to denote whether to sort the selected fields in ascending or descending order. Then click *Add*.

Next, use the *Move up/Move down* buttons to reorder fields in the Selected Columns list. Topmost fields in the list are sorted first, followed by subsequent sort fields. You can remove selections from the *Selected Columns* list by pressing the *Remove* button.

DNC Sources

You can now configure multiple DNC sources per campaign. More specifically, you can choose to use both a DNC.Com source and a custom source at the same time. For more information on configuring DNC.Com Sources and Custom DNC Sources, see the DNC Sources topic.

DNC.Com Source

Use this drop down to select a previously-configured DNC.Com source to scrub this Campaign's contact list against.

Options

If you are using DNC.com and have the appropriate package plan, you can take advantage of these options which basically allow you to configure your scrub operation to react to special conditions in the metadata provided by DNC.com.

Option	Description
Apply Calling Time Restrictions	If there are any calling time restrictions at the State or Federal level at the time of the scrub, apply them. **NOTE:** To use this setting, a GeoScrub subscription from DNC.com is required.
Apply Callable Zone Override	If you have a zone set applied to your campaign and a number is zone blocked, Dialer will not check the number against DNC.com's Calling Window. As such, the number will not be called. However, if you enable the Callable Zone Override setting, Dialer will check zone blocked numbers against DNC.com's Calling Window. And, if the current time (based on the CCS time) is inside the Calling Window for the number, then the number will be marked as callable.. **NOTE:** To use this setting, a GeoScrub subscription from DNC.com is required. This setting uses the DNC.com Calling Window.
Apply Do Not Call Today	If the State where the phone number exists has a State holiday or a state of emergency declaration, block the number at the time of the scrub.
Apply Permission EBR Override (Express Written Consent required)	If the phone number has an EBR (Established Business Relationship) permission associated with it, apply an override at the time of the scrub, thus unblocking the number. You must have written consent from your client indicating that is okay for a predictive dialer to call them.

Custom DNC Source

Use this drop down to select a previously-configured custom DNC source to scrub this Campaign's contact list against.

See DNC Scrubbing of Contact Numbers for background information about this feature.

Perform Bulk DNC Scrub button

Initiates a bulk scrub. See Bulk scrub a Campaign's Contact List.

DNC Excluded Column Identifier

Selects a column from the call list database to use as the basis to exclude a call from being dialed. Usually this is an *account number* column, imported from a CRM database. The DNC Exclusion Column type must match the Campaign DNC Exclusion column in the database.

> **NOTE:** Do not set the DNC Excluded Column Identifier to a phone number column. Doing so will prevent a campaign from dialing.

Recall Control Tab

Recall Control Tab

By default, Dialer will work through the call list attempting to reach each callable contact in turn. Those contacts that are reached are then marked as uncallable whereas the remainder is left marked as callable. When a Recycle occurs, Dialer will recall those contacts still marks as uncallable. The options on the Recall Control tab are designed to allow you to configure how you want Dialer to continue in its attempts to reach a contact .

The Recall tab offers these expanders:

Attempt Control

> Limits the number of contact list iterations allowed before a campaign ends, or the number of times a contact can be called.

Auto-Scheduled Callbacks

> Configures a campaign to automatically schedule callbacks when it is unable to reach a targeted party for some reason.

Agent Callbacks

> Sets number of minutes to wait if the agent who owns a callback is unavailable at the scheduled callback time, whether to convert agent-owned callbacks to campaign-wide callbacks, and whether to use auto-schedule settings for agent callbacks

Attempt Control

Options in the Attempt Control section allow you to control how many times Dialer will traverse the contact list after its initial attempt. You can also set thresholds that limit the number of contact

attempts allowed, after which a contact will no longer be called—or allow unlimited per-number, per-record, and per-day contact attempts. You can also set the status that Dialer will put the agent into when a Dialer call disconnects but has not been dispositioned.
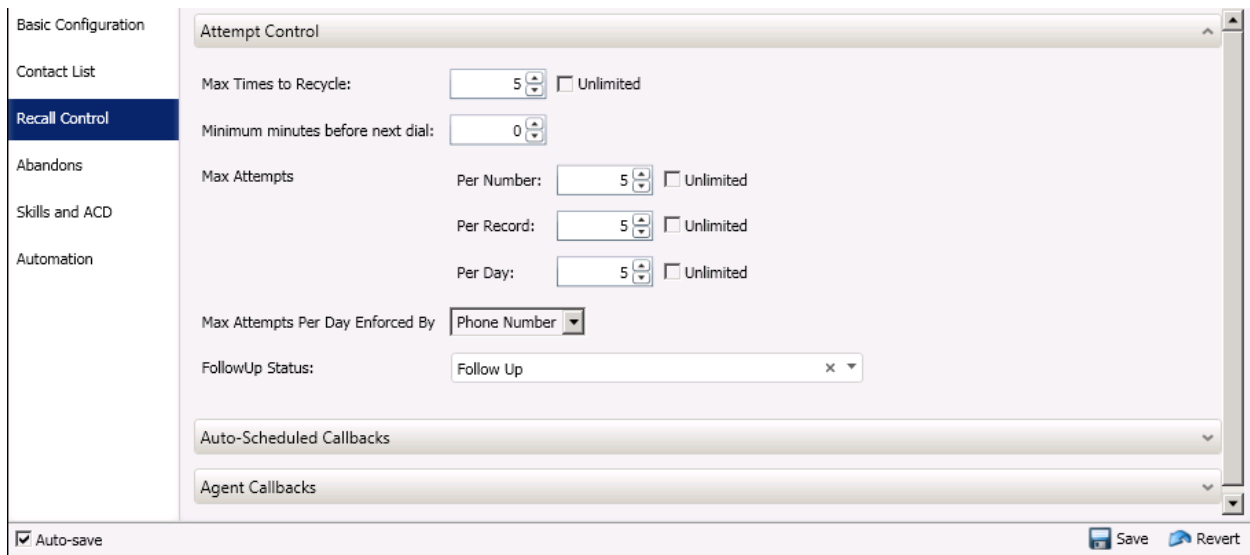
Max Times to Recycle

> This setting determines the number of additional times that Dialer will go through the contact list after dialing it an initial time.
>
> Use the spin control to set the maximum number of times the Outbound Dialer Server should cycle through the contact list before ending the campaign. This number sets the maximum number of times (plus 1) that this campaign should cycle through the contact list in an effort to reach contacts that could not be reached before. When this threshold is reached, the Outbound Dialer server will end the campaign after one more recycle.
>
> Selecting the Unlimited check box allows an infinite number of recycles.
>
> **NOTE:** A recycle operation is the act of starting over at the beginning of the list and going through it again, so restarting the contact list 4 times results in 5 total times through the list since the first time through the list doesn't require a recycle operation. For example, a campaign with Max times to recycle = 4 will cycle through its contact list no more than five times. The campaign terminates when the campaign achieves call connect with everyone on the contact list, or after the campaign has been recycled five times, whichever comes first.

Minimum minutes before next dial

> This setting establishes a minimum amount of time that must pass before Dialer may attempt to dial the same contact. It can be used to conform to regulatory requirements. The number of minutes sets the minimum period of time between dials to the same record. All Contact Columns will be called when this record is attempted. This setting applies to regular outbound calls. It does not apply to scheduled calls. This setting is enforced on campaign recycle by excluding the record from the recycle table. This setting only applies when a Contact has been

reached, after first checking the "Interaction Connected to an Actual Person" check box in Recall Control.

NOTE: When using this setting and Max attempts per day, customers should ensure that campaigns running concurrently do not have filters whose record selections overlap.

Max Attempts

The Max attempt thresholds allow you to set the number of contact attempts after which a contact is no longer called. You can conversely allow unlimited per-number, per-record, and per-day contact attempts. You can also specify how you want to implement the Max Attempts count.

Per Number limits the number of times that each individual telephone number within a contact record will be dialed. Contact attempts that exceed the configured limit are marked as do-not-call records in the Phone Number Detail (PND) table used by the campaign. The status for the number is set to "A" in the PND table to prevent the number from being attempted again. "A" indicates that maximum retry attempts for busy, answering machine, no answer etc. have been reached for a telephone number. It will never be called again. You can check Unlimited to allow any number of dials.

Per Record limits the total number of times that a contact record will be dialed. Contact attempts that exceed this limit are marked as do-not-call records in the contact list table used by the campaign. The status for the record is set to "A" to prevent the record from being dialed again. You can check Unlimited to allow any number of dials.

Per Day restricts the number of contact attempts that can be performed in a day. The value you specify sets the maximum number of times a contact will be attempted in a day. You can check Unlimited to allow any number of contact attempts.

NOTE: You can specify exactly how you want to define a *day* by using the Max Attempts daily call list queries reset setting which you'll find on the General tab in Global Dialer Settings.

Max Attempts Per Day Enforced By

This setting permits you to specify how you want to implement the Max Attempts count on a per day basis by selecting either Record or Phone Number.

By selecting **Record**, you can specify that the daily max attempts setting applies per record regardless of how many phone numbers the record contains. For example, if there are 3 phone number fields in a record and the campaign attempted all 3 in a single recycle, that would count as an attempt of 1.

By selecting **Phone Number**, you can specify that the daily max attempts setting applies per phone number regardless of how many phone numbers the record contains. For example, if

there are 3 phone number fields in a record and the campaign attempted all 3 in a single recycle, that would count as an attempt of 3.

Follow Up Status

Selects the status that Dialer will put the agent into when a Dialer call disconnects but has not been dispositioned yet. A typical selection might be "Follow Up". The list allows selection of any agent status defined in CIC. Furthermore, this setting interacts with the wrap-up settings on the workgroup. For example, when the workgroup associated with a Dialer campaign has wrap-up settings defined, those settings will only be used for inbound interactions. Outbound interactions will always use this *Follow Up Status* setting.

Auto-Scheduled Callbacks

The options on this expander configure a campaign to automatically schedule callbacks when it is unable to reach a targeted party for some reason. By default, no callbacks are scheduled.

Enable

Check this box to enable scheduling of callbacks for specific reason results. For example, to automatically call back contacts whose line was busy, check the Enable box for "Busy".

Disposition

This column lists wrap up categories that can be auto-scheduled. For each category, you can control how long the system waits before contacting a party again, and the maximum number of retries.

Time in Minutes

Sets number of minutes that the system should wait before calling the party again. The range of values for each row is 0 to 10080 minutes.

Number of Calls

Sets maximum number of attempts that a telephone number will be called for a particular wrap up category before the number is flagged in the PND table not to be called again. Once this limit has been reached, the number will be given a status of "A" in the PND table so that it is not called again. "A" indicates that maximum retry attempts for busy, answering machine, no answer etc. have been reached for the phone number. Dialer will never call this number again.

Ignore recycles for Auto-Scheduled calls

Check this box to prevent auto-scheduled callbacks from occurring when the contact list recycles. When checked, auto-scheduled calls are only placed after the specified wait time expires, even if the contact list recycles.

The auto-scheduled call record is flagged with a status of "O" (auto-scheduled call) to ensure that future recycles of the contact list do not dial this entry. If the setting is not checked then auto-scheduled calls will be placed during the next recycle, possibly before the scheduled time comes due.

A call scheduled after the last recycle has completed will still be called back, as will agent-owned and campaign wide callbacks as long as agents are logged in. Auto-scheduled calls made after campaign completion will be rescheduled until the max attempts threshold is reached for one of the attempt types, or until the call is connected to a logged in agent.

How do multiple contact columns work in conjunction with the Auto-Reschedule feature?

When Dialer attempts to dial a record with multiple phone numbers, the system will only reschedule the last phone number dialed, regardless of how each individual call was dispositioned. This happens because of the way that Dialer calls multiple records, and how it stores scheduled calls. There is no way to individually schedule each phone number.

Agent Callbacks

Options on this expander set number of minutes to wait if the agent who owns a callback is unavailable at the scheduled callback time. You can optionally set convert agent-owned callbacks to system-wide callbacks when agents are unavailable.

Reschedule Delay

Sets number of minutes to wait if the agent who owns a callback is unavailable at the scheduled callback time. The default is 60 minutes. You can set any value from 0 to 10080 minutes.

Connected parties may ask an agent to call back at a particular time. When this happens, the agent uses Interaction Scripter to schedule a callback. This is known as an agent-owned callback, since the agent owns the task of contacting the party again.

For example, if Reschedule Delay is set to 15minutes and the agent is not available, then the system waits for 15 minutes. At the end of the delay period, the system checks to see if the agent is available:

- If the agent is available at the appointed time, the contact is called again.
- If the agent is unavailable at the appointed time, the system again waits for the number of minutes specified in the Reschedule Delay field.
- If the agent is available but is busy with another call, Dialer will queue the callback.
- If the agent is available, but the party cannot be reached, the call may be rescheduled using the Auto-Scheduled Callbacks settings, if any are in effect.
- If the agent is still not available, the delay process is repeated until a maximum attempts threshold is reached.

> **NOTE:** When the max attempts per day value has been reached, Dialer will automatically reschedule the call according to the amount of time specified in Reschedule Delay setting. Dialer will continue rescheduling the call until it is no longer the same day and the agent is logged in.

Convert to campaign-wide callback if agent unavailable after __ attempts

When checked, you can convert an agent-owned callback to a system wide callback, if the agent who owns the callback is unavailable after a configurable number of attempts. The callback will be assigned to the first available agent participating in this campaign once the attempts threshold is reached. This ensures that the contact will be called back, should agents become unexpectedly unavailable for long periods.

Use Auto-Schedule settings for agent callbacks

Check this box to control whether or not the campaign's auto-Schedule settings are applied to agent-owned callbacks. The table below indicates how callbacks will be rescheduled under different conditions, based on reschedule delay (described above) or in accordance with the Auto-Scheduled Callbacks settings.

Condition	When this setting is **checked**, the callback will be rescheduled based on:	When this setting is **un-checked**, callback will be rescheduled based on:
Agent-owned callback is abandoned	auto-schedule settings	reschedule delay
Agent-owned callback returns busy, no answer, machine, or fax	auto-schedule settings	reschedule delay
Agent-owned callback fails due to no-lines condition	reschedule delay	reschedule delay
The required agent is not logged in	reschedule delay	reschedule delay

If the box for *Use Auto-Schedule settings for agent callbacks* is checked, and none of the Auto-Scheduled Callbacks settings are enabled, the call will be rescheduled according to the Reschedule Delay setting. There is currently no way to stop rescheduling agent-owned callbacks.

Remove from Dialer cache if not called within __ minutes

This setting removes agent-owned callbacks from the cache of records to be dialed, if the agent is unavailable or logs out while the callback is in cache. A scheduled agent-owned callback could sit in cache for an extended period of time if the agent is busy taking inbound calls, is on break, or is busy with other scheduled callbacks.

When this box is checked, the agent is permitted a configurable amount of time to reach the intended contact. If the callback can't be placed within that time period, then the agent-own callback is converted to a campaign-wide callback, meaning that any available agent could receive the call.

Abandons Tab

Abandons Tab

The Abandons tab offers these expanders:

Abandon Rate Pacing Adjustment

Comply with Telemarketing Sales Rule (TSR) or other similar regulations by adjusting the pace of outbound dialing in response to real-time abandon statistics.

Abandon Call Definition

Specify what this campaign considers an abandoned call to be.

Abandon Rate Pacing Adjustment

Options on this expander affect the pace of outbound dialing in response to real-time abandon statistics. This helps customers to maintain compliance with Telemarketing Sales Rule (TSR) or other similar regulations.

Type

Selects the type of pacing adjustment to apply, in response to real-time abandonment statistics for the campaign:

No Adjustment	When this option is selected, the Outbound Dialer server will place outbound calls at the frequency determined by its predictive algorithm, ignoring the maximum abandon rate percentage. In this mode, Pace most directly affects the Abandon Rate.
Strict Max Rate	This option provides an optional measure of control over Abandon Rate calculation, by forcing Dialer to adhere to the maximum Abandon Rate Percentage. When this option is selected, Abandon Rate is analyzed for the whole day (from midnight to midnight), and abandon rate is recalculated after every call. If the current abandon rate exceeds the Max Abandon threshold, the campaign stops making predictions and drops into Power calling mode. Predictive dialing resumes automatically when Abandon Rate for the day falls below the Max Abandon rate. The campaign will transition back into predictive mode if it was configured as predictive in the first place. The calculation of strict abandon rate is reset to 0 each day at midnight.

	Target abandon rate is not as strict. Interaction Dialer does not use a fixed interval to adjust abandon rate pacing. Dialer will adjust the pace up or down to try to hit the target abandon rate. It uses both recent and past abandon rate numbers to determine when and how much to adjust the pace.
Target Rate	

Abandon Rate percentage

This percentage sets a **maximum abandon rate** for the campaign. This is the maximum percentage of abandoned calls that the Outbound Dialer will allow before it automatically lowers the pacing. Pacing is lowered automatically if the percentage of abandoned calls exceeds this threshold. If the abandonment rate drops well below the target rate, pacing is increased automatically.

This control allows decimal point values to be specified, for greater precision when entering a target abandon rate. This can help customers to better comply with TSR rulings by leaving less margin for error in their dialing. For example, Max. Abandon Rate can be set to 2.5 instead of 3.

Calculation method drop list

Selects the method used to calculate abandon rate—based on calls placed, total contacts reached, or a ratio of call analysis detections:

Based on Calls	Abandonment rate is calculated by dividing the number of abandons by the total number of calls placed.
Based on Contacts	A more restrictive industry standard, wherein the abandonment calculation is total abandons divided by total contacts made.
Based on Detections	An abandon rate calculation mode that is based on whether call analysis detected a live party or not. It works by comparing the total number of system-calculated abandons to the number of system-detected live people. This calculation can reduce agent idle time while speeding up dialing. For more details, see Calculating Abandon Rate Based on Call Analysis Detections.

Auto Pace Limit

Sets the maximum threshold for Pace auto-adjustments—how high Dialer can adjust the pace.

Abandon Call Definition

Options on this expander specify what this campaign considers an abandoned call to be.
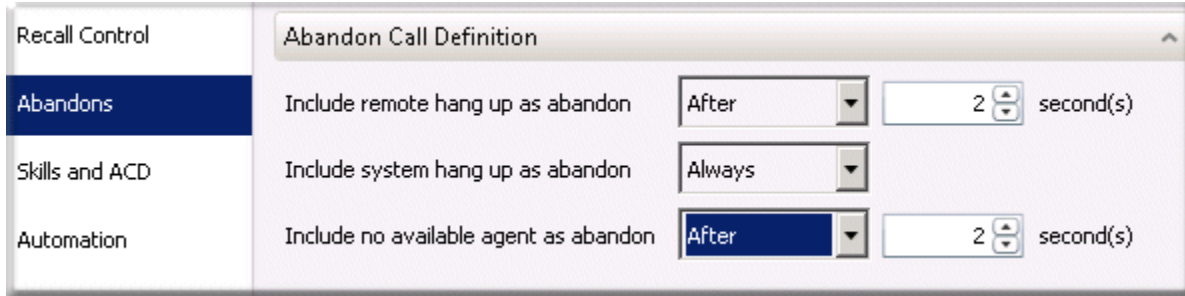
Include remote hang up as abandon After | Always | Never __ seconds

Decide whether calls disconnected by the contact are evaluated as abandoned calls by selecting:

Never	No remotely disconnected calls are considered as Abandoned.
Always	All calls disconnected by a remote party are abandoned calls.
After	Tells Dialer to classify as abandons, all calls disconnected by a remote party *after a specified number of seconds*. When this option is selected, you must specify a time interval.

Note that these settings apply only to calls that are remotely disconnected prior to getting to an agent. Once the call is routed to an agent, the "No Available Agent" determines whether or not the call is marked abandoned. Additionally, if a call is marked abandoned for any reason, it is set and cannot be undone by another setting.

If no agents are available to take a call, the "Remote Hang Ups" and "System Hang Ups" settings are applied to calls that never go to an agent and the "No Available Agent" setting affects calls that do go to agents.

Include system hang up as abandon Always | Never

Always or *Never* determine whether or not this campaign will interpret system-disconnected calls as abandoned calls.

Include no available agent as abandon After | Never

Specifies whether calls abandoned due to "No Available Agents" are considered by the pacing algorithm as abandoned calls, if at all:

Never	Tells Dialer not to consider disconnects due to agent unavailability as abandons.
After	Tells Dialer to wait to see if an agent will enter an available status. If you select *After*, you must also set an interval in seconds to wait for an Agent to enter an available status. If no Agent becomes available during this interval, the call is considered to be abandoned.

A "No Available Agent" configuration only affects if and when a record is marked as an abandoned call. It has nothing to do with actions taken against the call object itself (disconnecting it, routing it, etc.)

The Call Timeout setting determines how long the call is left on hold before taking action on it. When that time expires, the action taken is the action defined for "If no available agent, then" on the Automation tab of the campaign configuration, which can be to hang up, play a wave file, or transfer it to an Attendant profile.

Calculating Abandon Rate Based on Call Analysis Detections

Here is more information about the "Based on Detections" calculation method you can use to adjust the pace of outbound dialing based on abandonment rate.

The method used to calculate Abandon Rate can directly affect agent idle time and the speed of outbound dialing. The *Detections* option calculates abandon rate in a way that plans for less-than-perfect Call Analysis. The best way to understand this option is to consider a real-world scenario.

Suppose that 250 numbers are dialed, and that 150 of those calls are auto-dispositioned. The remaining 100 calls are classified as live people by Call Analysis. Dialer routes those 100 calls to agents, but 3 of those 100 calls are abandoned because there are no available agents to take the call. Of those 3 abandoned calls, 2 were actually live people and 1 was really an answering machine.

The other 97 calls are dispositioned by agents. Of the 97 dispositioned by agents, 78 calls were actually live people and 19 are not live people and are marked as such by agents (17 answering machines, 2 SITs). Agents almost always correctly identify a live person versus an answering machine, so their "call analysis" is very accurate.

Using the standard mapping of what is a contact and what is not (as configured in Interaction Administrator), the number of contacts is 81 (78 plus the 3 abandoned calls, since System HangUp is a wrap up category code). In this case the abandoned rate as calculated by Dialer is (3 / 81) * 100 = 3.7%.

This is not the actual abandon rate, since Call Analysis is not perfect. If it were perfect, no answering machines would go to agents or get abandoned. So, the actual abandon rate is (actual live people abandoned / actual live people detected) or (2 / 78) * 100 = 2.6%.

Poor call analysis at a Dialer site affects abandon rate, since the number of contacts decreases while the possibility of an abandoned call from calls routed stays the same. This can cause contact rate to decrease and abandon rate to increase, leading to slower dialing and more agent idle time.

To alleviate this situation, use the "Based on Detections" option to make the "best effort" calculation possible with current technology. This approach considers that the system thought that 100 calls were live people, and 3 of those system-detected live people were abandoned. It recognizes that the system has no way to know that 1 of those 3 system-detected live people that were abandoned was really an answering machine. Therefore, due to a computer's less-than-perfect ability to detect live people, the best calculation of abandon rate in Dialer would be:

```
(system-calculated abandons / system-detected live people) * 100
```

or

```
(3 / 100) * 100 = 3%.
```

The *Detections* calculation returns a value (3%) that is lower than the abandon rate that would normally be calculated by Dialer (3.7%), and which is closer to a perfectly calculated abandon rate (2.6%) which cannot be determined, due to less-than-perfect ability to detect live people.

Call Types and Routes diagram

"Detections" includes everything that Call Analysis decided was a Live Person as this is the "best effort" that our technology is able to perform. Abandons might include mistakenly detected Machines, but Machines that go to Agents are not included in Contacts (due to accurate analysis). Contacts include Abandons, so it is inconsistent to include Machines. Live People that Call Analysis detects as Machine will not be included in either calculation, but this falls within "best effort" of our Call Analysis technology.
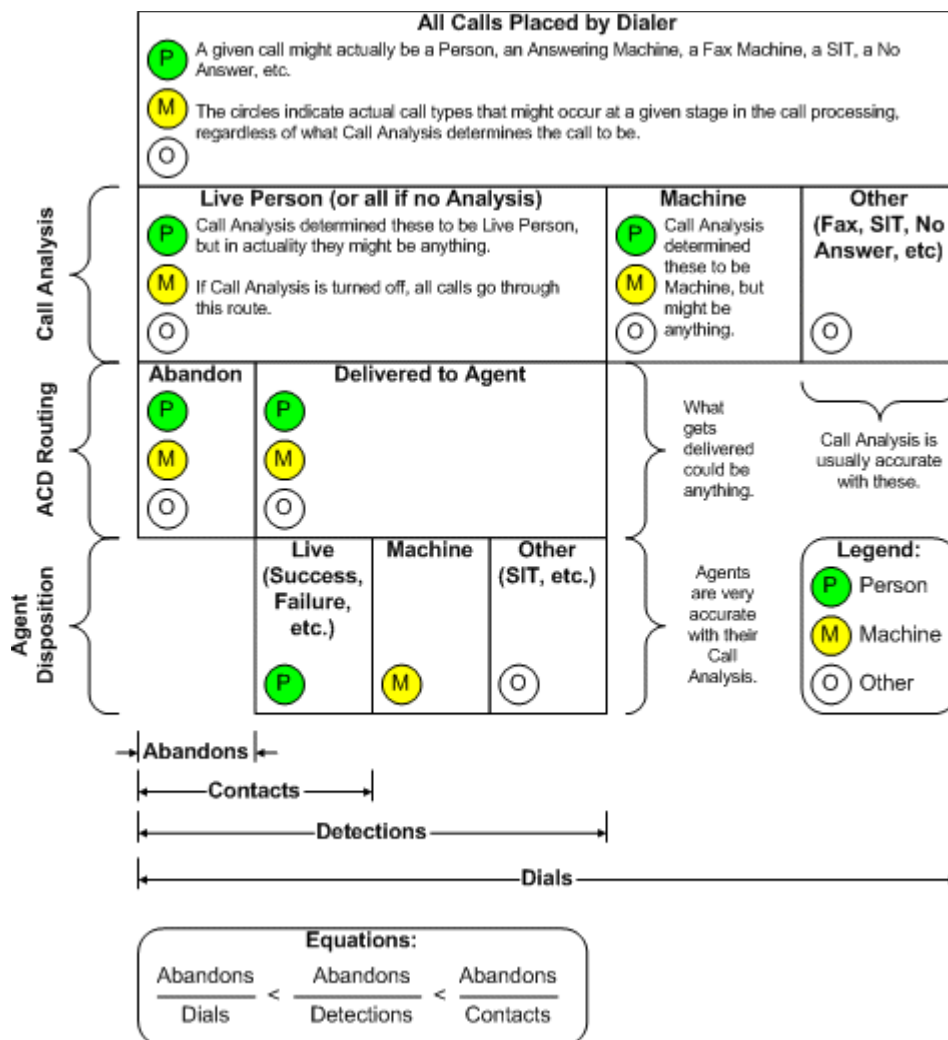
Related Topics

Calculation Method

Abandon Rate Pacing Adjustment expander

Abandons Tab

Skills and ACD Tab

Skills and ACD Tab

The Skills and ACD tab offers these expanders:

Outbound Workgroup Configuration

> Configures ACD weighting for a campaign.

Inbound Workgroup Configuration

> Sets workgroup-specific thresholds that automatically disable and enable prediction in blended environments.

Skills Based Dialing

> Configures campaign to look at skills in contact records, to dial only those contacts that can be handled by the available agent pool. Skills-based dialing is available for preview, power, and predictive campaigns.

Persistent Connection

> Configures a wave file for the campaign to play when remote agents establish persistent connections.

Outbound ACD Routing Controls

Settings on this expander configure criteria analyzed by ACD formulas, to optimize ACD scoring and routing for a campaign. These numeric values (called "weights") can significantly customize ACD routing. For feature overview information, see ACD Weighting by Campaign.

Available Time Interval

Increase this value to route interactions to agents who have been available the longest. This value (in seconds) increments the Agent Available value by one every time this interval passes. When an agent becomes available, the time is measured. The longer an agent is available, the higher his or her agent score will be.

When an agent's score is calculated, the amount of time the agent has been available (in seconds) is divided by the Available Time Interval. Any resulting fraction is discarded. The higher the value that results from this division, the higher the agent's score will be.

The value you set in the Available Time Interval is the interval at which an agent's Available Time is increased by one. For example, an agent who has been available 2 minutes in a system where the Agent Available Time Interval is 30 would have an Agent Available Time value of four (2 minutes = 120 seconds; 120 / 30 = 4).

At three minutes, the agent would have an Agent Available Time value of six (3 minutes = 180 seconds; 180 / 30 = 6). If you calculate an agent's score entirely on Agent Available Time, the agents who are off the phone longest will have higher scores.

Availability is only reset when an agent disconnects from an ACD interaction, or when follow-up time expires. Available time is not reset when an agent is off-hook for non-ACD purposes such as using their headset to record a new prompt.

Priority Level field

This setting assigns a priority value to each outbound interaction. If you are concerned with matching calls with the highest priority to agents, then increase the weight for *Priority Level* more than the weights for *Skills*, *Time in Queue,* or *Time in System*.

Weight Settings

Weight settings apply to the workgroup used by the campaign.

Skills

If you are concerned with matching calls to agents with the best skill for that call, then increase the weight for Skills more than the weights for *Priority*, *Time in Queue,* or *Time in System*.

Agent Skill Level

This setting establishes the level of importance for Agent Skill in the agent score formula. Agent skill levels are assigned in Interaction Administrator on a User or Workgroup level. If Agent Skill is more important for you than Agent Cost, Agent Available Time, or some other custom attribute, weight this parameter more than the other weight parameters.

Priority

The priority level assigned to this call. If you want priority taken into account when calculating interaction scores, you should also increase the weight for Priority.

Agent Cost

The level of importance for Agent Cost in the agent score formula. Agent Cost is an attribute assigned to an agent in Interaction Administrator. Use a positive value in this parameter to assign the call to the agent with the highest cost. Use a negative value in this parameter to assign the call to the agent with the lowest cost.

Time in Queue

If you are concerned with matching calls that have been holding in this queue the longest to agents, then increase the Weight for Time in Queue more than the weights for *Skills*, *Priority*, or *Time in System*.

Agent Available Time

The level of importance for Agent Available Time in the agent score formula. If you want to assign this call to the agent who has been off the phone the longest, weight this parameter more heavily than Weight for Agent Skill and Weight for Agent Cost.

Time in System

The amount of time (in seconds) before increasing the Time in System by value by one. This increases a call's score and the likelihood that it will be assigned to an agent.

Inbound Workgroup Configuration

Options on this expander set overall low- and high-level threshold settings for inbound workgroups. These thresholds automatically disable and enable prediction in blended environments.

The Plus button allows a selection of ACD workgroups to be specified. Afterward you can optionally set low or high threshold values on a workgroup-specific basis. Workgroups with these names must exist on each Outbound Dialer server that is participating in the campaign.

> **NOTE:** Interaction Dialer evaluates both low- and high-level thresholds for inbound workgroups and overall low- and high-level thresholds. If either set of thresholds is exceeded, predictive dialing will be enabled or disabled accordingly.

Low Level

Sets a *low level threshold* for inbound calls, for all inbound workgroups in the campaign. This threshold re-enables predictive dialing in blended environments. If the number of inbound waiting calls for the specified ACD workgroup is less than this value, then the server will resume making predictions. This control allows values in the range 0-1000.

High Level

Sets a *high level threshold* for inbound calls, for all inbound workgroups in the campaign. This threshold disables prediction in blended environments. If the number of incoming waiting calls for the specified ACD workgroup is greater than this value, then the server will stop making predictions. This control allows values in the range 0-1000.

Set Limits

Check this box when you want to define threshold limits for a specific workgroup. This will enable Low and High spin controls.

Low

This control sets *Incoming Low Threshold* for this workgroup. This threshold re-enables prediction in blended environments. If the number of inbound waiting calls for the specified ACD workgroup is less than this value then the server will start making predictions.

High

This control sets *Incoming High Threshold* for this workgroup. This disables prediction in blended environments. If the number of incoming waiting calls for the specified ACD workgroup is greater than this value, the server will stop making predictions, so that agents can catch up.

Skills-based Dialing

Options on the this expander configure a campaign to look at skills in contact list records, to dial only those contacts that can be handled by the available agent pool. Skills-based dialing is available for preview, power, and predictive campaigns. These options are disabled when *Agentless* dialing mode is selected. See also Skills Based Dialing feature overview.
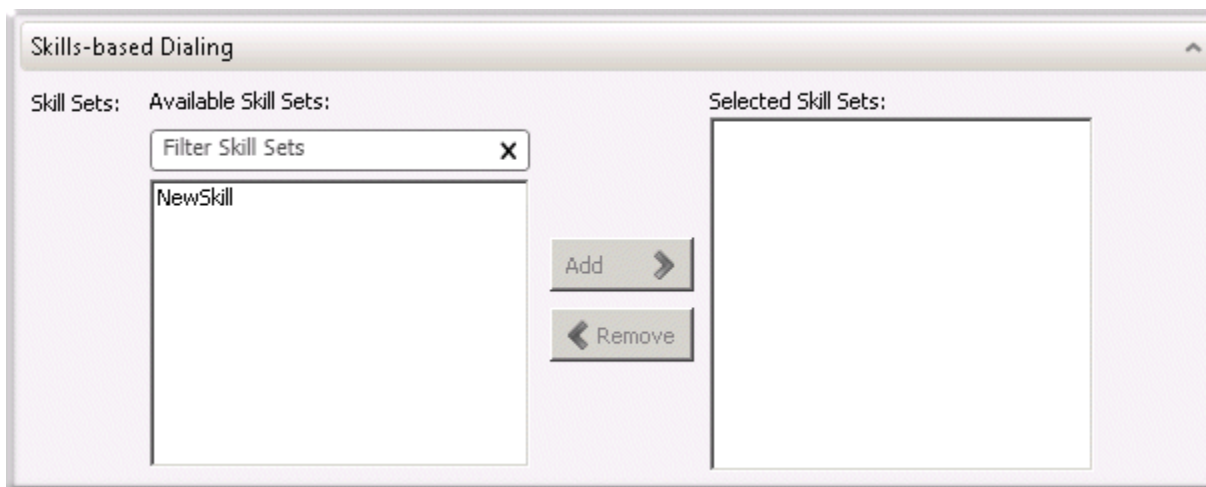
The user interface assigns Skill Sets to the Campaign object, so that skills-based dialing will occur. In order for two skills sets to be compatible and used together, they must use different column names and different ACD skills. The database values do not have to be different.

Available Skill Sets

This list contains the names of Skill Sets that you defined using the Skill Sets view. (If the user does not have access to a particular skill, a forbidden icon (🚫) appears next to that skill.)

Add/Remove buttons

These buttons move selections from one list to the other. To assign a Skill Set to the Campaign, select it in the *Available Skill Sets* list. Then click **Add**.

Selected Skill Sets list

This list contains the names of Skill Sets that this campaign will evaluate when selecting records from the contact list. To disable skills-based dialing for a campaign, move all entries to the list on the left.

Persistent Connection

This campaign setting configures a wave audio file to play when remote Interaction Scripter Client users login to establish a persistent connection. This wave file should play a tone, or say something such as "connection established" to inform the agent that a persistent connection has been established. See also Remote Agent Support

> **NOTE:** A *persistent connection* allows agents to disconnect one call, keep the receiver off hook, and place or receive the next call via the client, using the same connection between their telephone and the server. The Interaction Center automatically reconnects new calls using the existing phone connection.

Audio File

Selects the wave file played to agents when persistent connections are made.

Upload New

Opens dialog allowing selection of a file to upload.
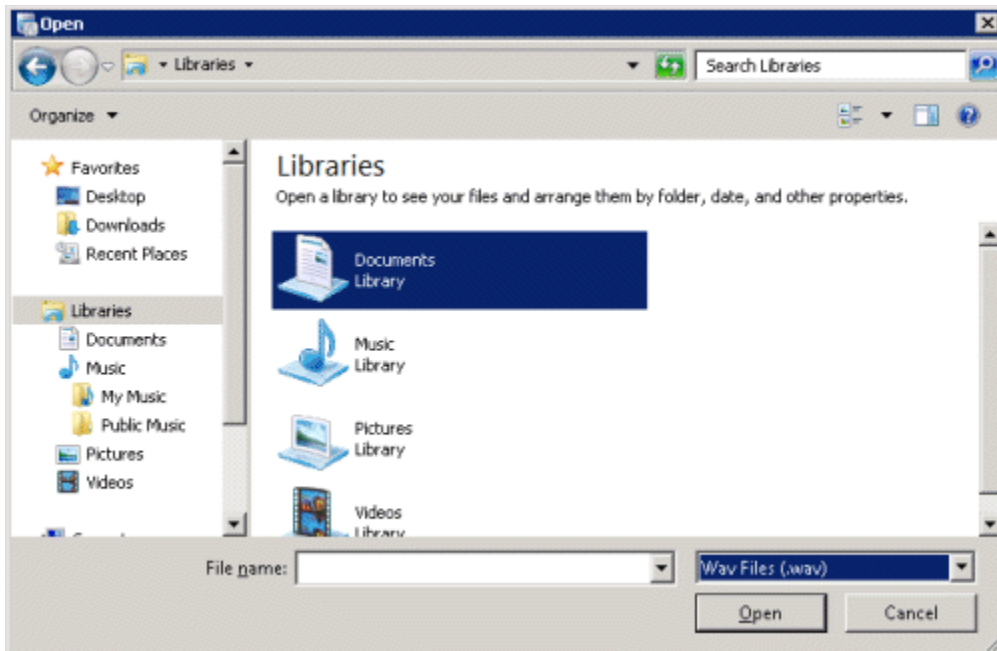
Automation Tab

The automation tab assigns an optional Schedule, Policy Set, Rule Set, or Stage Set to the campaign. Other options on this tab configure Dialer to take specific actions based on call analysis results. For example, Dialer can send a fax if a fax machine is detected, of play a wave file to an answering machine.

Schedule

> Schedules control when a campaign is on or off (running or not). To assign a schedule to this campaign, select from the Schedule drop list. Schedules are optional.

Policy Sets

> Assigns optional Policy Sets to this campaign. Policy Sets provide control over the processing of individual contact records. A single campaign can use multiple Policy Sets. Policy Sets are applied to the calls placed by the Campaign in the order configured here. Use the Move Up and Move Down buttons to change the order of policy selections in the *Selected Items* list. Topmost items are evaluated first.

> A padlock icon (🔒) next to a Policy Set indicates that it is a locked policy. Once a locked policy set is saved on a campaign, it can only be removed by a user with the "Lock Policy Sets" security right.

> A forbidden icon (🚫) next to a Policy Set indicates that the current user does not have permission to this object. When an item is forbidden, it cannot be removed from the list.

Rule Sets

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Rule Sets are logical operations that control the execution of campaigns. To assign a Rule Set to this campaign, select a Rule Set from the drop list. Rule Sets are optional.

Stage Set

Each campaign may have an associated Stage Set. A Stage Set defines the discrete tasks that agents perform while talking to a contact. Each *stage* identifies a step (completing action) of a campaign call, such as a sales pitch or wrap-up. A *Stage Set* is a collection of stages that have been given a name. Stage Sets are optional.

Once a Stage Set is assigned to a campaign, the Stage Set is dynamically referenced. From then on, the campaign dynamically references the contents of the selected Stage Set. If a stage is removed from the Stage Set, this change is immediately adopted by the campaign. Dynamically referenced stages make maintenance easier. If you update a Stage Set, you don't have to update all campaigns that reference that set.

However, adding or removing stages from a stage set can potentially cause campaign scripts to become out of sync with stage numbers defined in a Stage Set. If you update a Stage Set, you must coordinate your changes with script developers.

It is extremely important that you accurately define and use stages for your predictive campaigns. The predictive algorithm cannot accurately predict an agent's availability unless predictive stages have been defined for terminating stages.

Call Analysis

Call Analysis is the term for analyzing a connection to determine if the call reached a live person, a fax machine, or an answering machine, and whether or not an agent is available to process the call.

Depending upon the dialing mode, Interaction Dialer can take the actions listed in the table below after call analysis has figured out what is at the other end of a placed call. This allows you to configure the processing that will occur when a call is answered by a live person, answering machine, or fax.

Call Analysis Result	Dialing Mode			
	Predictive	**Power**	**Preview**	**Agentless**
Live Person	Connect to Agent	Connect to Agent	No Action Available	Hang Up File Attendant Profile
No Available Agent	Hang Up	Hang Up	No Action Available	No Action Available

	Play File Route To Attendant Profile	Play File Route To Attendant Profile		
Answering Machine	Hang Up Play File Route To Attendant Profile Connect to Agent	Hang Up Play File Route To Attendant Profile Connect to Agent	No Action Available	Hang Up File Attendant Profile
Fax	Hang Up Play File Route To Attendant Profile Connect to Agent	Hang Up Play File Route To Attendant Profile Connect to Agent	No Action Available	Hang Up File Attendant Profile

Configurable Actions based on Call Analysis Results

Connect to Agent. Route the call to an available ACD agent.

Hang Up. Configures Dialer to disconnect when a live person, answering machine, or fax machine answers the call.

Play File. Plays a wave audio file to the contact, or sends a fax file to a fax machine. For best performance, all .WAV files should be in the format 8 kHz mono mu-law PCM. The G-711 .WAV format is recommended, since it uses the fewest resources and does not need to be translated to another format by the system. On-the-fly conversion is performed when the format of the audio in the .WAV file is anything other than 8 kHz mono mu-law PCM. If a .WAV file is going to be played often, the 8 kHz mono mu-law PCM format allows CIC to bypass Microsoft Audio Conversion Manager and play the audio with much less overhead.

A fax document consists of one or many pages of data contained in an .i3f format file. Fax files are created using the Interaction Fax application. The path to fax and wave files must be the same on any Outbound Dialer server that will run the campaign. In other words, the file must exist in the same location on each participating server, or all servers must point to the same network location and each Outbound Dialer must have read access to the specified

Interaction Dialer Manager Help

path. In addition, the wave file directories must be included in the virtual directory configuration of Prompt Server.

Route To Attendant Profile. Pass the call to an Outbound Interaction Attendant profile. Interaction Attendant is PureConnect's IVR solution. Outbound Interaction Attendant profiles are created by running the outbound version of Interaction Attendant. When you select the Play File or Route To Attendant Profile actions, you'll need to configure additional settings:

File

The name and path to the wave file.

Attendant Profile

The name and path to the Attendant Profile

Max Retries spin control

This option is for Fax machines only. It sets the maximum number of Fax retry attempts made before the contact is considered to be a failure.

Repeat spin control

Sets a wav file to be repeated a configurable number of times. Use this feature to play custom hold audio while leaving a call on hold waiting for an agent to become available. To do so, set the No Available Agent call analysis result to "File", select a wave file to play, and set the number of times that the wave file should repeat.For example a repeat setting of 1 will cause the wave file to play twice in total. There is a 10 second pause between each play.

Allow ACD: Connect to Agent if one becomes available

This feature can be used to make a legislative message interruptible or not when an Agent is not initially available to take the call. Agentless campaigns can play a .wav file, or Attendant Profile to play if no Agent is available when a live person is reached. This is accomplished by selecting "No Available Agent" and the action to "File" or "Attendant Profile".Afterward you can control whether or not routing to an Agent will occur, using the "Connect to Agent if one becomes available" checkbox.

- When this option is checked, the called party is immediately rerouted to the newly available Agent.
- When this option is unchecked, no ACD routing occurs, and the call is disconnected after the .wav file plays or it is processed by Attendant.

Seconds of Silence

This option is for Answering Machines only. It sets the total number of seconds that each Outbound Dialer should wait before playing a wave file to an answering machine.

Campaign Sequence Tab

Campaign Sequence Tab

If you have installed the Advanced Campaign Management Dialer Feature License, you'll see the Campaign Sequence tab in the Campaign Properties Panel. Basically, the Advanced Campaign Management feature allows you to take a campaign and configure it to automatically modify its behavior throughout the day as conditions change. To do so, you'll break your campaign down into groups, each with the same set of campaign properties. You'll adjust the values of the campaign properties in each group. You'll then arrange these campaign groups in a sequence such that the flow of the campaign moves from group to group based on time, event, or statistical triggers.

Options on the Campaign Sequence tab allow you to create and modify Campaign Groups and Campaign Sequences.
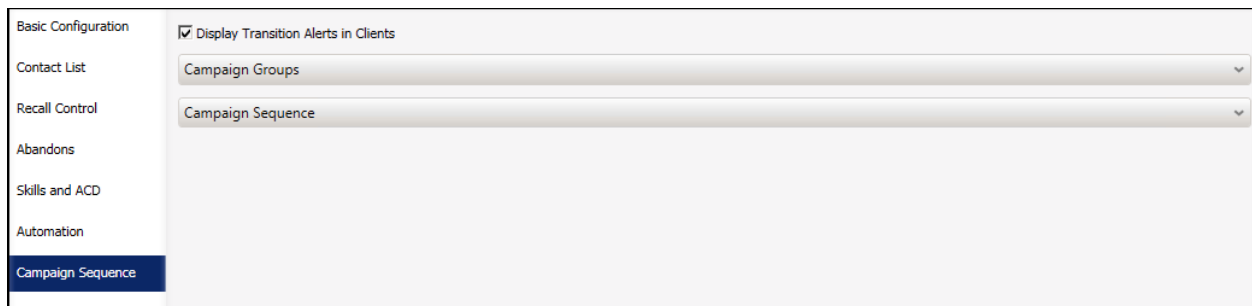
This tab contains one general configuration option and two sections:

- Display Transition Alerts in Clients
- Campaign Groups
- Campaign Sequence

Display Transition Alerts in Clients

Select the **Transition Alerts in Clients** check box if you want to Dialer to display a toast notification to alert your agents when a campaign transition occurs. If you don't enable this feature, agents will not be aware of campaign transitions. To prevent Dialer from displaying a notification for every transition, use the Display Transition Alerts campaign property to disable transition alerts for certain campaign groups.

In Interaction Connect, notifications appear in the **middle** of the screen.

In Interaction Scripter .NET Client, notifications appear in the **bottom right corner** of the screen.
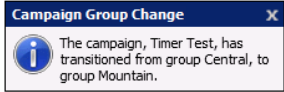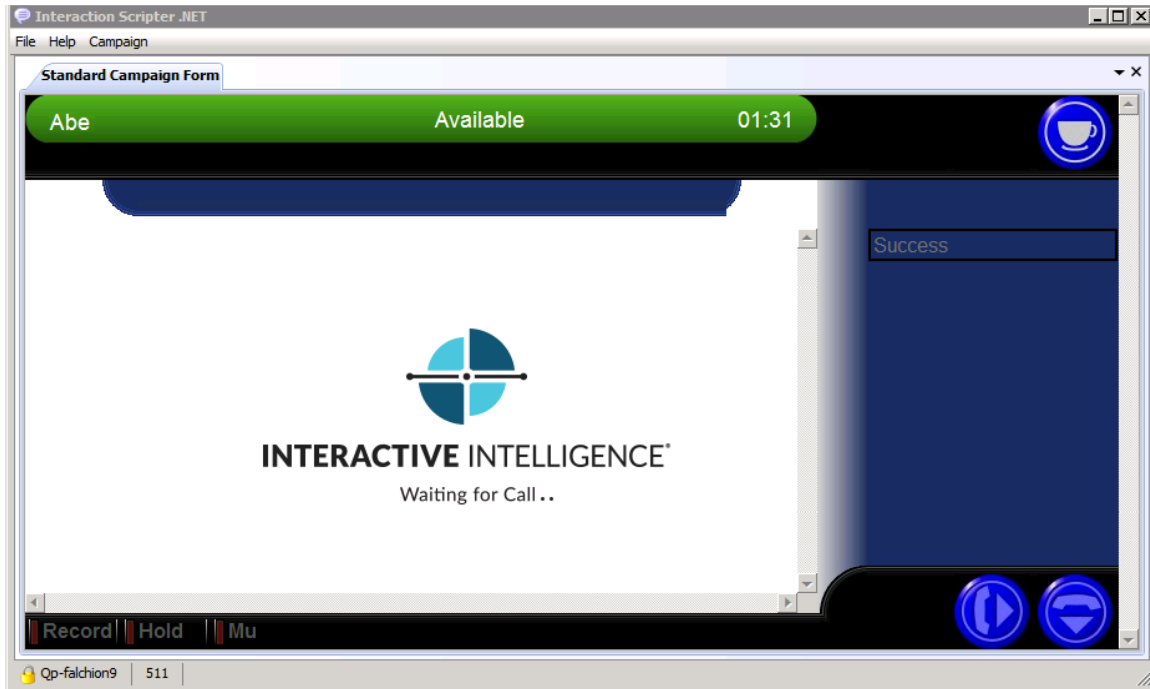
Campaign Groups

Campaign Groups

The Advanced Campaign Management feature allows you to essentially break up a campaign into a set of Campaign Groups. As you create the Campaign Groups, you assign the same set of campaign properties to all of the campaign groups. Then, you individually adjust the values of the campaign properties for each individual Campaign Group.
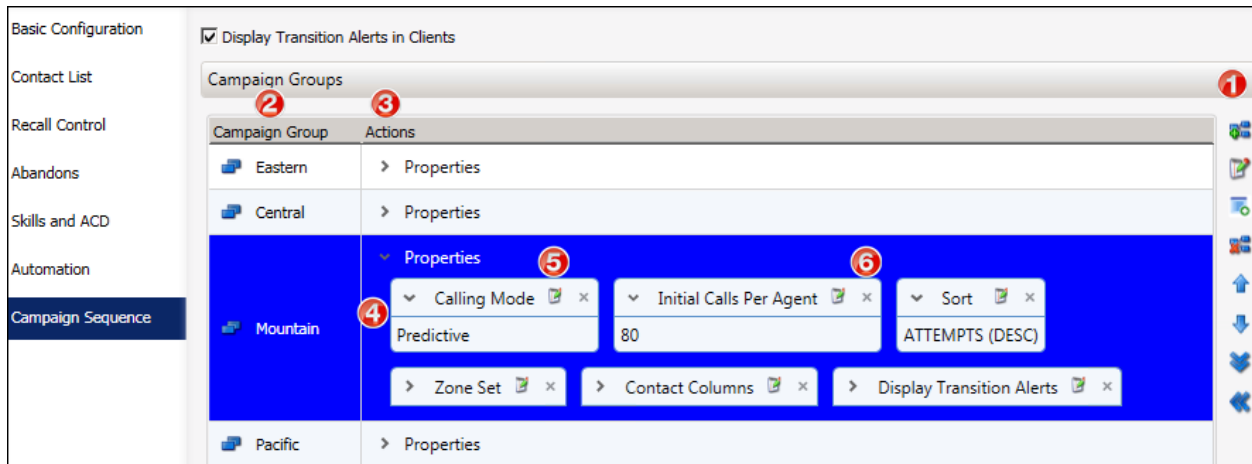
You'll use the controls in the Campaign Groups section to create and modify campaign groups:

On the right side of the Campaign Groups panel is a tool bar with controls that you'll use to create, modify, remove, and organize campaign groups.

Add Campaign Group

      Allows you to create and assign your campaign group a name

Rename Campaign Group

      Allows you to rename a campaign group.

Add Campaign Group Action

      Displays the Add Campaign Group Action dialog in which you select a campaign property and specify its value. Together, the property and value are known as a campaign group action. A campaign group will have multiple properties and you will add and configure each property separately using the Add Campaign Group Action dialog.

NOTE: The first campaign group that you create along with the properties you add, will essentially become a template for all subsequent campaign groups. All campaign groups must have the same properties. So if you add a property to one campaign group, that property will be added to every campaign group.

Remove Campaign Group

      Allows you to remove (delete) a campaign group from the campaign sequence. Keep in mind that when you remove a campaign group any other campaign groups that are linked to it in the campaign sequence will be effected.

Move Campaign Group Up

      Allows you to move the selected campaign group up in the list when altering the order of the campaign groups prior to automatically generating the campaign sequence.

Move Campaign Group Down

      Allows you to move the selected campaign group down in the list when altering the order of the campaign groups prior to automatically generating the campaign sequence.

Expand All Campaign Groups

1

		Allows you to view all the properties for all of the campaign groups. Collapse All Campaign Groups Allows you to hide all the properties for all of the campaign groups.
2		Campaign Group Column Displays the names of the campaign groups.
3		Actions Column Lists all the properties that belong to the each campaign group. Properties are hidden by default in order to provide you with an uncluttered view of all the campaign groups. Properties are viewable by clicking the adjacent expander control. When you do so, you'll see that each property appears in its own panel.
4		Properties Panel Each property in a campaign group has its own panel that contains a set of controls for viewing and manipulating that property. At the top of the panel you'll see an expander control that is adjacent to the name of the property. Below the expander you'll see the value assigned to the property. The value is viewable by default, if you click the expander, the property value is hidden.
5		Edit Campaign Group Action Displays the Edit Campaign Group Action dialog box in which you can alter the value of the campaign property.
6		Delete Allows you to remove a campaign property from a group.

Add Campaign Group

To create a campaign group, you'll use the Add Campaign Group command.

1. Click the Add Campaign Group button.
2. When the dialog box appears, enter an appropriate name for the campaign group.
3. Click OK to add the campaign group to the Campaign Group list.
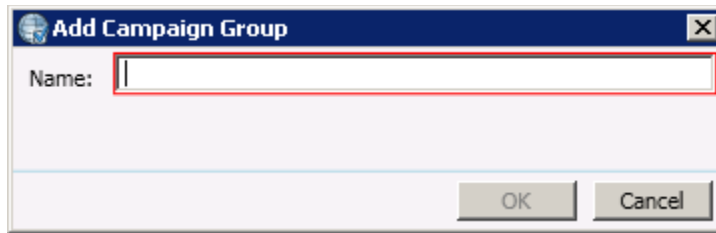
Rename Campaign Group

To rename a campaign group you'll use the Add Campaign Group command.

1. Click the Add Campaign Group button.
2. When the dialog box appears, enter an appropriate name for the campaign group.
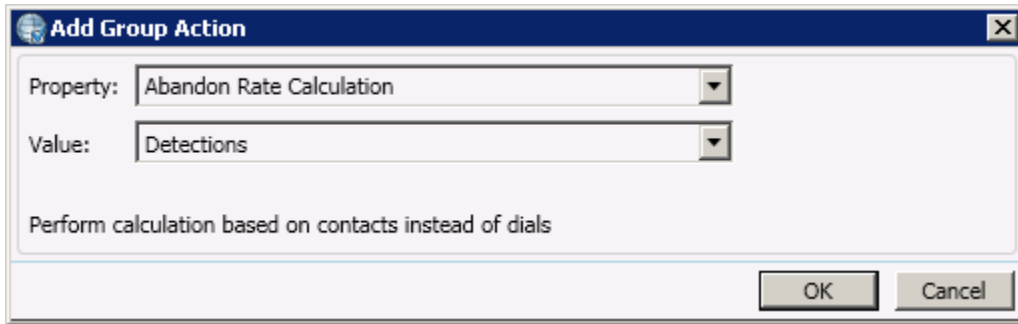3. Click OK to add the new campaign group name to the Campaign Group list.
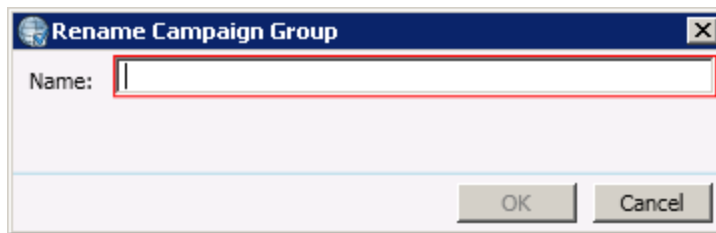
Add Campaign Group Action

To add a campaign group action, you'll use the Add Campaign Group Action command. A campaign group action consists of a campaign property and its associated value. All campaign groups will have the same campaign properties.

- If you are adding a campaign group action to the first campaign group, keep in mind that this campaign group action will be automatically be added to any subsequent campaign groups that you create.
- If you are adding a campaign group action to an existing campaign group, keep in mind that this campaign group action will be automatically be added to any other existing campaign groups.

To add a campaign group action:

1. Click the Add Campaign Group Action button.
2. When the dialog box appears, select a Property.

3. Select a Value and, if required, configure it appropriately.
4. Click OK to add the action to the campaign group.
5. Repeat steps 1-4 to add other campaign actions to the campaign group.

Related Topics

Campaign Properties

Remove Campaign Group

To remove a campaign group, you'll use the Remove Campaign Group command.

> **NOTE**: If you have already created a campaign sequence, all sequence items that reference this campaign group will be removed as well. This may create unattached items in the campaign sequence. If that happens, the icons representing the unattached campaign sequence items will show an error symbol.

To remove a campaign group:

1. Click the Remove Campaign Group button.
2. When the dialog box appears prompting you to confirm the operation, click OK.
3. The campaign group will be removed from the Campaign Group list.

Edit Campaign Group Action

To edit a campaign group action, you'll use the Edit Campaign Group Action command.

1. Click the Edit Campaign Group Action button.
2. When the dialog box appears, you'll see that the Property text box is disabled, so can't change the actual property.
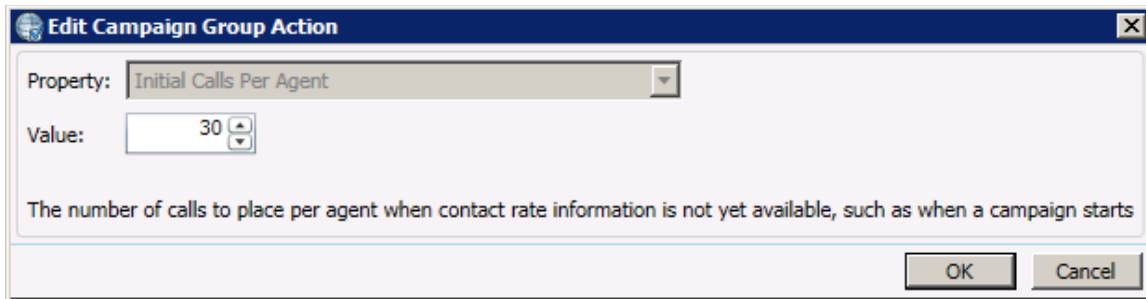
3. Select a Value and, if required, configure it appropriately.
4. Click OK to add the altered action to the campaign group.

Campaign Sequence

Campaign Sequence

Once you have created your Campaign Groups, you'll use the controls the Campaign Sequence panel to create and modify a campaign sequence.

On the right side of the Campaign Sequence panel is a toolbar with controls that you'll use to create, modify, remove, and view campaign sequence items.

1	Generate Campaign Sequence	Takes the list of campaign groups in the Campaign Groups panel and automatically creates a campaign sequence based on the order specified in the Campaign Groups list. Once a campaign group is added to a campaign sequence, it becomes a part of a new entity called a Campaign Sequence Item. A campaign sequence item consists of a campaign group, an activation, and a parent.
	Add Campaign Sequence	Allows you to manually create a campaign sequence by selecting campaign groups from the Campaign Groups section.

	Edit Campaign Sequence	Allows you to edit a campaign group's activation type and parent group(s) in the campaign sequence.
	Remove Campaign Sequence	Allows you to remove a campaign group from the campaign sequence. Keep in mind that if the campaign group that you remove from the campaign sequence is a parent of another campaign group in the campaign sequence, then that campaign group will become an orphan. You will then need to choose a new parent group using the Edit Campaign Sequence control.
	Show Campaign Sequence Diagram	Provides you with a detailed graphical view the campaign sequence.
2	Campaign Group Column	Lists the name of the campaign group in the campaign sequence.
3	Activation Column	Shows the activation item that will trigger the transition to the next campaign group.
4	Parent Column	Shows the campaign group's parent group in the campaign sequence.

Generate Campaign Sequence

To quickly create a campaign sequence, you'll use the Generate Campaign Sequence command. Using this command takes the list of campaign groups in the Campaign Groups panel and automatically creates a campaign sequence based on the order specified in the Campaign Groups list.

To generate a campaign sequence:

1. Click the Generate Campaign Sequence button.
2. When the dialog box appears prompting you to confirm the operation, click OK.
3. The campaign groups will appear in the Campaign Sequence panel.
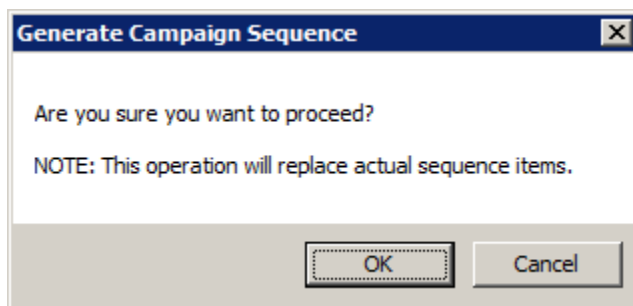
Once a campaign group is added to a campaign sequence, it becomes a part of a new entity called a Campaign Sequence Item. A campaign sequence item consists of a Campaign Group, an Activation Type, and a Parent.

As the Generate Campaign Sequence command adds each campaign group to the campaign sequence, it configures the campaign sequence item with default settings:

- The Activation Type is configured as a System Event.
- The activation set to Contact List Recycled.
- The parent of first group in the campaign sequence is set as the [Startup Group].
- The parents of the each of other groups will be set to the group the precedes it in the Campaign Groups list.

You can reconfigure the Activation Type and the Parent of each campaign sequence item using the Edit Campaign Sequence Item command.

Related Topics

Edit Campaign Sequence

Configure an Activation

Configure a Parent

Add a Campaign Sequence Item

If you wish to manually create a campaign sequence or want to add a campaign group to an existing campaign sequence, you will use the Add a Campaign Sequence Item command. Adding a campaign sequence item consists of selecting a campaign group, choosing and configuring a activation type, and then selecting one or more campaign sequence items as the parent(s).

To add a campaign sequence item:

1. Click the Add a Campaign Sequence Item button.
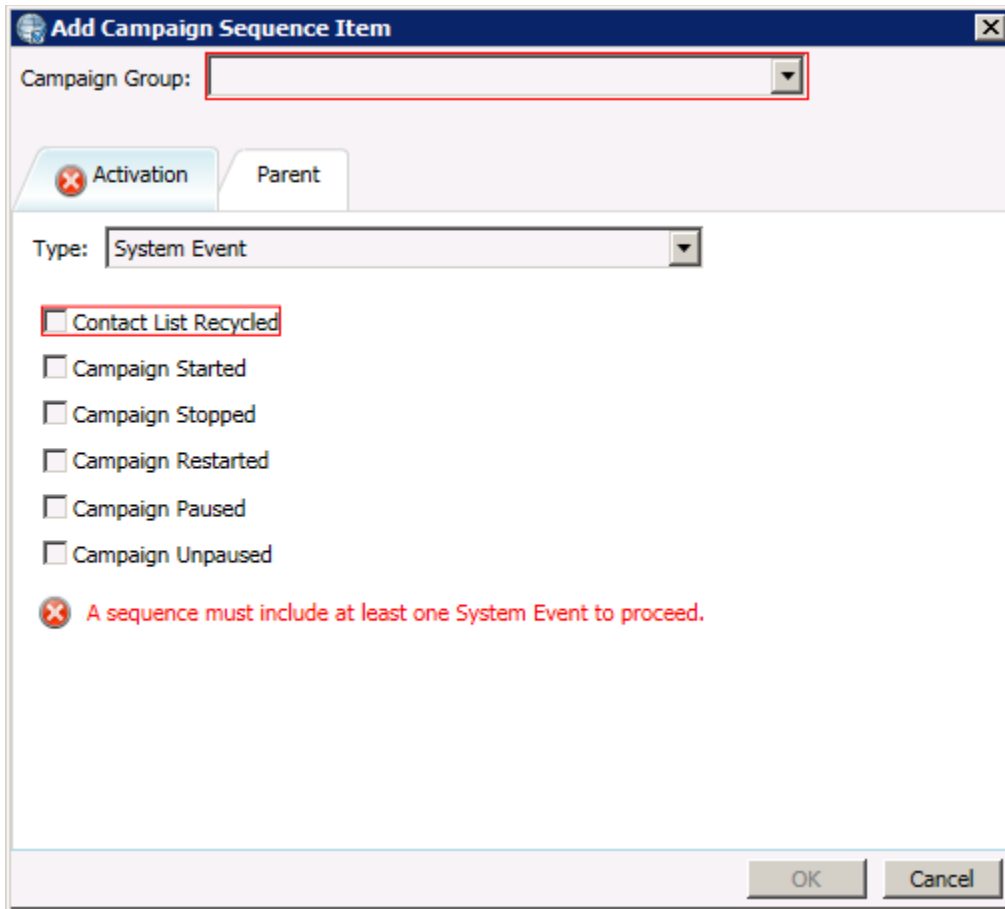
2. When the dialog box appears, use the drop-down to select a Campaign Group.
3. On the Activation tab, use the Type drop-down to select one of the available types and proceed with the appropriate configuration options.
4. Once you have configured the Activation, select the Parent tab and choose a parent campaign sequence item.
5. Click OK complete the configuration procedure and add the new campaign sequence item to the campaign sequence.

Related Topics

Configure an Activation Type

Configure a Parent

Edit Campaign Sequence Item

If you wish to edit an existing campaign sequence item, you will use the Edit Campaign Sequence Item command. Editing a campaign sequence item can consists of choosing a campaign group, choosing and configuring an activation type, or selecting one or more campaign sequence items as the parent(s).

Note: In a typical campaign sequence item editing operation, you'll only be changing the Activation Type and the Parent; however, if you want to alter the whole campaign sequence without having to add or delete individual campaign sequence items, you can change the campaign group assigned to the campaign sequence item.

To edit a campaign sequence item:

1. Click the Edit Campaign Sequence Item button or double-click the Campaign Group name.
2. When the dialog box appears, you can select a different campaign group.
3. On the Activation tab, select one of the available types and proceed with the appropriate configuration options.
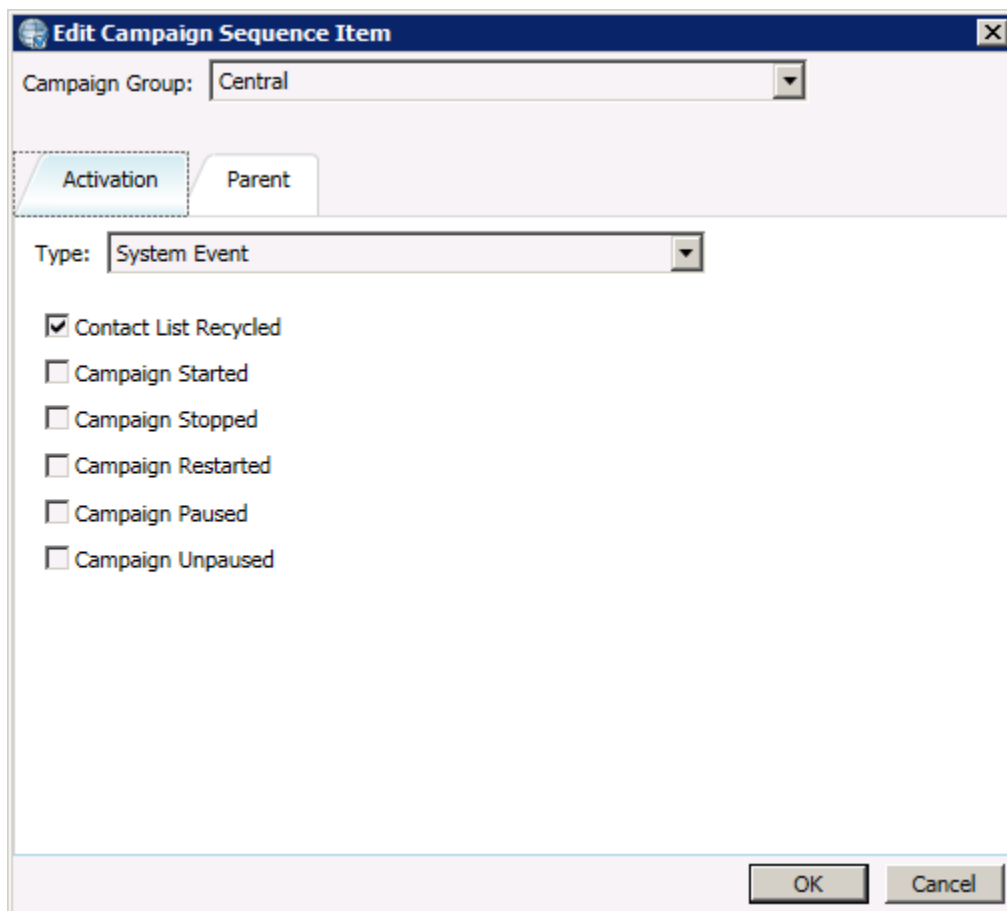
4. Once you have edited the Activation, select the Parent tab to edit the parent campaign sequence item.
5. Click OK complete the configuration procedure.

Related Topics

Configure an Activation

Configure a Parent

Remove Campaign Sequence Item

Note: If you remove a campaign sequence item, all sequence items that reference this as a parent will become unattached items in the campaign sequence. If that happens, the icons representing the campaign sequence items will show a warning symbol.

For the campaign sequence to work properly, you'll need to specify a new parent. If you need assistance in reconnecting your campaign sequence, you can use the Campaign Sequence Diagram.

To remove a campaign sequence item:.

1. Click the Remove Campaign Sequence Item button.
2. When the dialog box appears prompting you to confirm the operation, click OK.
3. The campaign sequence item will be removed from the Campaign Sequence list.

Related Topics

Campaign Sequence

Add Campaign Sequence

Edit Campaign Sequence

Configure a Parent

Campaign Sequence Diagram

Configure an Activation Type

Configure an Activation Type

On the Activation tab, use the Type drop-down to select one of the available activation types and then proceed with the appropriate configuration options.

- Configure a Statistic activation type.
- Configure a System Event activation type.
- Configure a Time activation type.

Related Topics

Campaign Sequence

Configure a Parent

Configure a Statistic activation type

A Statistic activation type functions similarly to a statistic rule. A statistic type compares the run time value of a statistic to a user-defined value configured in the campaign sequence item.
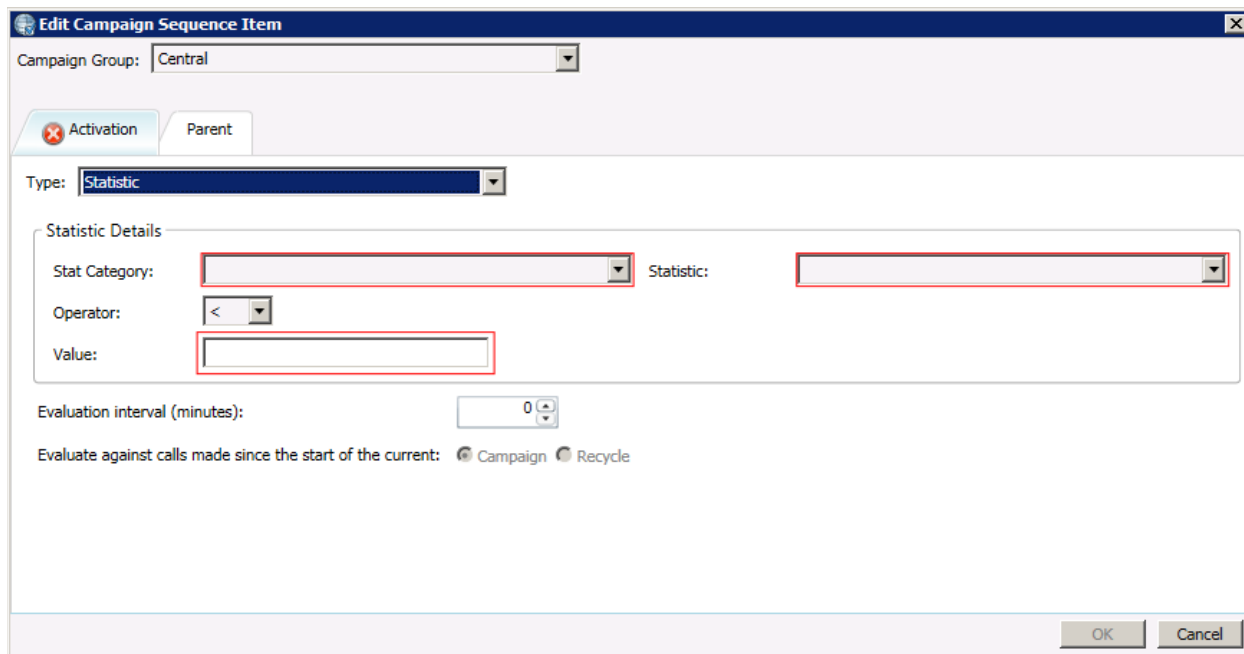
> **NOTE:** Because campaign sequence transitions occur on a fairly regular basis, certain statistics may behave differently than you might expect. See Campaign Sequence Statistics for more information.

The available settings are:

Stat Category

> Select the category of statistics you'd like to monitor:
>
> Dialer agent statistics—summarize the activity of a specific agent.
>
> Dialer campaign statistics—provide details about the activity of a campaign.
>
> Dialer wrap up statistics—summarize the dispositions of the calls during a campaign.

Statistic

> Once you select a Stat Categories, select an individual statistic:

Dialer agent statistics

Dialer campaign statistics

Dialer wrap up statistics

When you select Dialer wrap-up statistics, you'll be prompted to specify a Wrap-up Category and Code.

Operator

Select the comparison operator to use to compare the run time statistic to the fixed value you specify.

!=	Not equal to
<	Less than
<=	Less than or equal to
=	Equal to
>	Greater than
>=	Greater than or equal to

Note: Use equal to and not equal to with care. These operators return true only if the value of a statistic matches at the time when the comparison is performed. In many cases, it is better to use <= or >= instead.

Value

Enter any fixed value to compare to the current value of the statistic.

Evaluation Interval (minutes)

Sets the number of minutes that this campaign sequence item will wait before evaluating the statistic to see if it is true or false.

Evaluate against calls made since the start of the current Campaign | Recycle

Sets the time period to be considered by the campaign sequence item:

Campaign—measure the statistics from the time when the campaign was started.

Recycle—measure the statistics from the last recycle of the contact list.

To configure a Statistic activation type:

1. Select Statistic from the Type drop-down.
2. Select the appropriate settings.

3. Click OK

Related Topics

Configure an Activation

Dialer agent statistics

Dialer campaign statistics

Dialer wrap up statistics

Wrap-up Category and Code

Campaign Sequence Statistics

Built-in Statistics by Category

Dialer agent and campaign statistics are:

Dialer agent statistics	Dialer campaign statistics
Abandon Rate (by calls)	Abandon Rate
Abandon Rate (by contacts)	Active Agents
Abandon Rate (by detections)	Active Calls
Average Break Time	Adjusted Calls Per Agent
Average Dialer Talk Time	Agents On Break
Average Idle Time	Cached Contacts
Average Non-Dialer Talk Time	Calls Per Agent
Average Talk Time	Calls Per Hour
Contact Rate	Connected Calls
Contacts Per Hour	Current Pace
Dialer Calls	Effective Idle Agents
Idle Periods	Estimated Completion

Logged In Time	Filter
Non-Dialer Calls	Filter Size
Percent Break Time	Idle Agents
Percent Dialer Talk Time	Last Error
Percent Idle Time	Last Warning
Percent Non-Dialer Talk Time	Non-Dialer Agents
Stage	Priority
Station	Proceeding Calls
Status	Recycle Blocked
Successes Per Hour	Recycle Size
Successes Rate (by calls)	Recycles Remaining
Successes Rate (by contacts)	Sort
Time In Stage	Status
Time In Status	Total Agents
Total Abandons	Workgroup
Total Break Time	
Total Breaks	
Total Contacts	
Total Detections	
Total Dialer Talk Time	
Total Idle Time	
Total Non-Dialer Talk Time	
Total Successes	

Total Talk Time	
Dialer overall statistics	**Dialer phone number detail statistics**
Active Agents	Attempts
Calls Per Agent	Attempts Abandoned
Calls Per Hour	Attempts Answering Machine
Connected Calls	Attempts Busy
Non-Dialer Calls	Attempts Fax
Proceeding Calls	Attempts No Answer
Total Agents	Attempts Remote Hang up
	Attempts Rescheduled
	Attempts System Hang up
	Contact Rate
	Contacts
Dialer skill statistics	**Dialer stage statistics**
Cached Contacts	Average Time
Callable Contacts	Completed Calls
Finishing Agents	Percent Completed
Idle Agents	Total Calls
Outstanding Contacts	Total Time
Scheduled Contacts	
Total Agents	
Total Contacts	
Dialer wrap up statistics	**Dialer zone statistics**
Average Time	Cached Contacts
Percent Calls	Callable Contacts

Percent Time	Scheduled Contacts
style="Total Calls	Status
Total Time	Total Contacts

Related Topics

Dialer Statistics

Configure a System Event activation type

A System Event activation type triggers a campaign sequence transition when the configured system event occurs.

The available system events are:

Contact List Recycled

> Trigger the campaign sequence transition when the campaign has recycled.

Campaign Stopped

>Trigger the campaign sequence transition when the campaign is stopped by a Manual Off command or by its schedule.

Campaign Started

>Trigger the campaign sequence transition when the campaign is started by a Manual On command or by its schedule.

Campaign Restarted

>Trigger the campaign sequence transition when the campaign is manually restarted.

Campaign Paused

>Trigger the campaign sequence transition when the campaign is paused.

Campaign UnPaused

>Trigger the campaign sequence transition when the campaign is unpaused.

To configure a System Event activation type:

1. Select System Event from the Type drop-down.
2. Select one or more of the available system event check boxes.
3. Click OK

Related Topics

[Configure an Activation](#)

Configure a Time activation type

A Time activation type triggers a campaign sequence transition when the specified time occurs.

Time

> Select the time of day that you want the campaign sequence transition to occur.

Every Day

> Trigger the campaign sequence transition every day at the specified time.

Selected Days

> Trigger the campaign sequence transition on the selected days at the specified time.

Exact Date

> Trigger the campaign sequence transition on a specific date at the specified time.

Timer

> Trigger the campaign sequence transition after the specified number of minutes elapse. Specifically, once a campaign sequence item with a Timer activation type becomes active, the timer begins counting down to the next transition.)

To configure a Time activation type

1. Select Time from the Type Drop-down.
2. Specify the time of day.
3. Choose and configure one of the available time settings.

Related Topics

Configure an Activation

Campaign Sequence Statistics

Because campaign sequence transitions occur on a fairly regular basis, certain statistics may behave differently than you might expect.

Calls Per Agent Setting

As you know, when you set up a campaign, you can specify the value of the Initial Calls Per Agent setting. Dialer uses this value to determine the number of calls to place on a prediction when a campaign is started or reset or when an agent is idle. This value remains in effect until Dialer is able to determine an effective contact rate. Once that happens, Dialer sets and automatically adjusts the Calls Per Agent value as conditions change while the campaign is running.

When you are using Advance Campaign Management and set up a campaign sequence that uses the Initial Calls Per Agent property as a Campaign Group Action, you can set a different value, or the same value, for each campaign group. Regardless of how you configure value of the Initial Calls Per Agent property, you are going to notice that this value is reset each time a campaign transition occurs. Thus, Dialer will have to repeat the process of determining an effective contact rate each and every time that a campaign transition occurs.

For example, suppose that Campaign Group 1 has an Initial Calls Per Agent setting of 5 and Campaign Group 2 has an Initial Calls Per Agent setting of 3. Now suppose that as the campaign sequence is running with Campaign Group 1 as the active group, Dialer adjusts the Calls per Agent value up to 11. As soon as a campaign transition occurs and Campaign Group 2 becomes the active group, the Calls per Agent value is reset to 3 - the value assigned to the Initial Calls Per Agent setting for Campaign Group 2.

You will notice this value change reported in any of the Dialer supervisor views, such as Dialer Campaign Sequence Details, that are configured to display the Call Per Agent statistic. You will also notice this change reported in the CampaignStats Table.

Related Topics

CampaignStats Table

Configure a Parent

Configure a Parent

On Parent tab, you'll select one or more campaign sequence items as the parent of the item that you are currently configuring. More specifically, you'll be identifying which campaign sequence item you want to be the predecessor to the one that you are currently configuring.

When you access the Parent tab, you'll see two list boxes: Available items and Selected items.

Available items

In the Available items list box, you'll find all of the campaign sequence items/campaign groups currently in the campaign sequence. You can specify any one or multiple campaign sequence items to be the parent. You'll also find a special item called [Any]. If you want this particular campaign sequence item to be able to follow any of the available items in the campaign sequence, you will choose the [Any] item.

Selected items

In the Selected items list box, you'll find any campaign sequence items you've previously added and if this is a the first item in the campaign sequence, you'll find a special item called [Startup Group]. By default, the [Startup Group] is the first group in the campaign sequence. If you are manually adding campaign sequence items to a campaign sequence and are configuring the very first campaign sequence item, then you will want to leave the [Startup Group] in the Selected items list box. If you are adding subsequent campaign sequence items to the campaign sequence, then you will want to remove the [Startup Group].
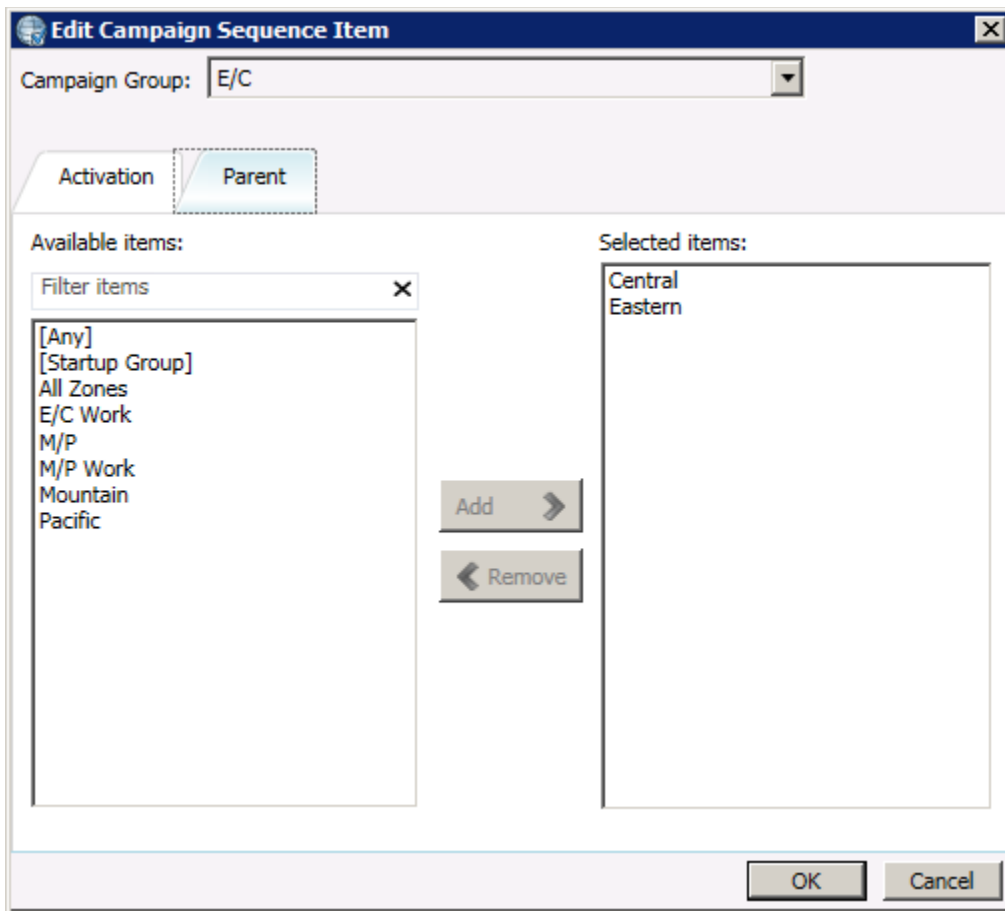
To configure a parent:

1. Select a parent:
   - In the Available items list box, click **Add**.
   - Or, in the Selected items list box, click **Remove**.
2. Click **OK**.

Related Topics

Campaign Sequence

Configure an Activation

Startup Group

Any

Startup Group

When you automatically generate a campaign sequence or if you manually add campaign groups to a campaign sequence, you'll see that the [Startup Group] is configured as the parent of the first group

in the sequence by default. Every campaign sequence must have a [Startup Group] item. The [Startup Group] item is essentially a place holder that signifies the first item in the campaign sequence . Once you turn on a campaign sequence, the [Startup Group] item immediately transitions the campaign to the first item in the sequence.

If you are manually adding campaign groups to a campaign sequence and are configuring the very first campaign sequence item, then you will want to leave the [Startup Group] in the Selected items list box. If you are adding subsequent campaign sequence items to the campaign sequence, then you will want to remove the [Startup Group].

Related Topics

Configure a Parent

Campaign Sequence

Any

The [Any] item is essentially a placeholder that indicates that the way that the campaign sequence is structured, there are multiple parent items that could be active when the transition is configured to occur. Since you have no real idea which campaign sequence item will be running, you can't really specify an exact parent. As such, you would select the [Any] item as the parent. In other words, choosing [Any] as the parent ensures that the transition will occur regardless of which campaign sequence item is currently active.

Example

To see how the Any item works, let's suppose that you have a campaign transition that is configured to occur at 1:00 every day and you have a campaign transition that is configured to occur at 4:00 every day. You also have several other campaign sequence items that could be running at any time depending on how various conditions play out during the day. In this case, you have no real idea which campaign sequence item will be running at 1:00 or at 4:00. Since, you can't really assign specific parents to the campaign sequence items that will transition at 1:00 and 4:00, you would assign the [Any] item as the parent.

Related Topics
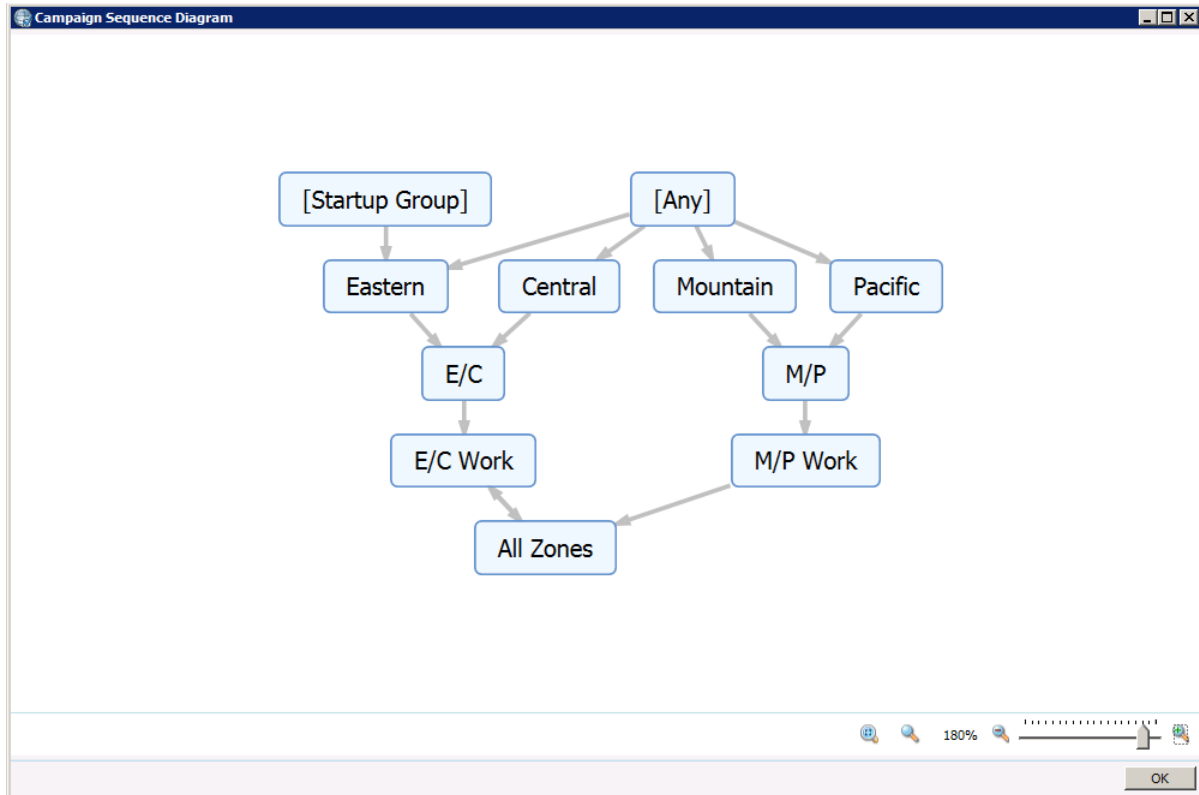
Configure a Parent

Campaign Sequence

Campaign Sequence Diagram

Campaign Sequence Diagram

A Campaign Sequence Diagram is essentially a flowchart that graphically shows the organization of a campaign sequence and is designed to help you visualize your campaign sequence as you build it.

When you click its button, the Campaign Sequence Diagram appears in a separate pop out window so you can see both the list and the diagram at the same time.

Each item in the sequence is represented with a node displaying the campaign group name. Arrows representing the campaign transition connect each node. Color coding and tool tips aid in the visualization and understanding of how of the campaign sequence is configured.

NOTE: Keep in mind that the Advanced Campaign Management feature actually has two separate diagram views - one in the Campaigns Sequence tab in Interaction Administrator and one in the Dialer Campaign Sequence Details view in IC Business Manager. The version in the Campaign Sequence tab is designed for viewing a campaign sequence as you are building it while the one in the Dialer Campaign Sequence Details view is designed for monitoring a running campaign sequence. As such, there are slight differences when it comes to color coding.

Features

The Campaign Sequence Diagram employs a number features and controls to help you visualize a campaign sequence as you build it.

[Startup Group]

> Every campaign sequence with have a [Startup Group] item that appears at the top of the diagram. The [Startup Group] item is essentially a place holder that is by default set up as the first group in the campaign sequence and will appear at the top of the diagram.

[Any]

If a campaign sequence item needs to be able to transition regardless of which campaign sequence item is currently active, its parent will be configured as the [Any] item. When this type of configuration is employed in the campaign sequence, the [Any] item will appear at the top of the diagram and arrows will indicate which campaign sequence items are configured with the [Any] item as the parent.

Arrows

The arrows indicate the direction of the campaign transition. When you hover your mouse pointer directly over any arrow that connects two campaign sequence items, a tool tip appears and displays a description of the trigger that will activate that particular transition.

Color coding

Color coding provides you with at a glance information about where in the campaign sequence each item belongs.

Drag and drop

By default, the diagram illustrates the campaign sequence with a tightly grouped set of icons. To make it easier for you to visualize the campaign sequence, you can use drag and drop to spread things out a bit. Just click a campaign sequence item icon and drag it to where you want it to be. As you do so, the arrows will follow.

Zoom level controls

You can use the zoom level controls at the bottom to adjust the size of the diagram. There are five controls that you can use to adjust the zoom level.

- Fit the entire content area into the viewport
- Scale the content to 100%
- Zoom out from the content
- Zoom in on the content
- Use the slider to manually adjust the zoom level

Related Topics

Color Coding

Arrow Tooltips

Color Coding

Color coding provides you with at a glance information about where in the campaign sequence each item belongs. When you access the Campaign Sequence Diagram from the Campaigns Sequence tab in Interaction Administrator, you are essentially viewing the campaign sequence in a building mode.
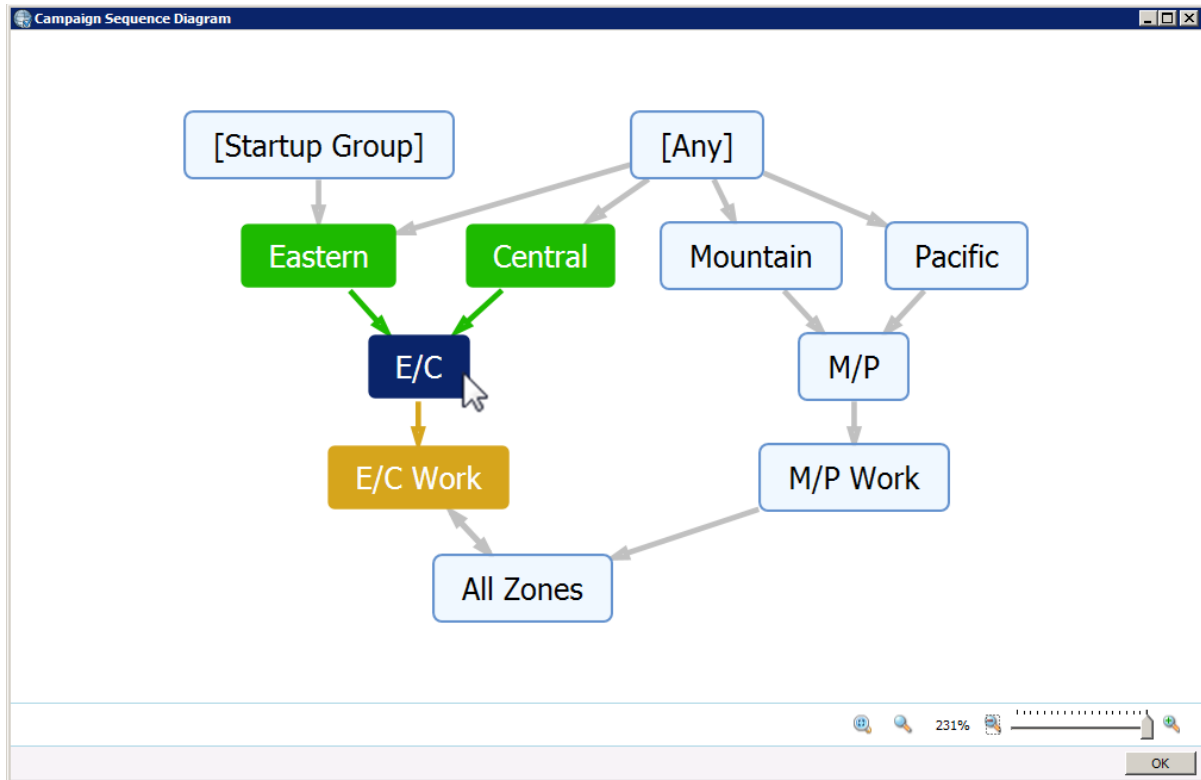
In this mode, the initial view shows all campaign sequence items as white until you hover over them. The goal of the color coding is this diagram is to allow you to essentially perform what-if analysis on your campaign sequence. Just point to any item in the sequence and be able to see how the sequence will play out if that item was the active item in the campaign sequence.

When you hover over a particular campaign sequence item, it turns blue to indicate that it that would be the active item. Any item designated as a parent will turn green and any item that would come next in the sequence will turn yellow.

Color	Description
Blue	Shows what would be the current campaign sequence item.
Green	Shows what would be the previous campaign sequence item(s).

Yellow	Shows what would be the pending campaign sequence item(s).

Related Topics

Campaign Sequence Diagram

Arrow Tooltips

Arrow Tooltips

The arrows indicate the direction of the campaign transition. When you hover your mouse pointer directly over any arrow that connects two campaign sequence items, a tooltip appears and displays a description of the trigger that will activate that particular transition.
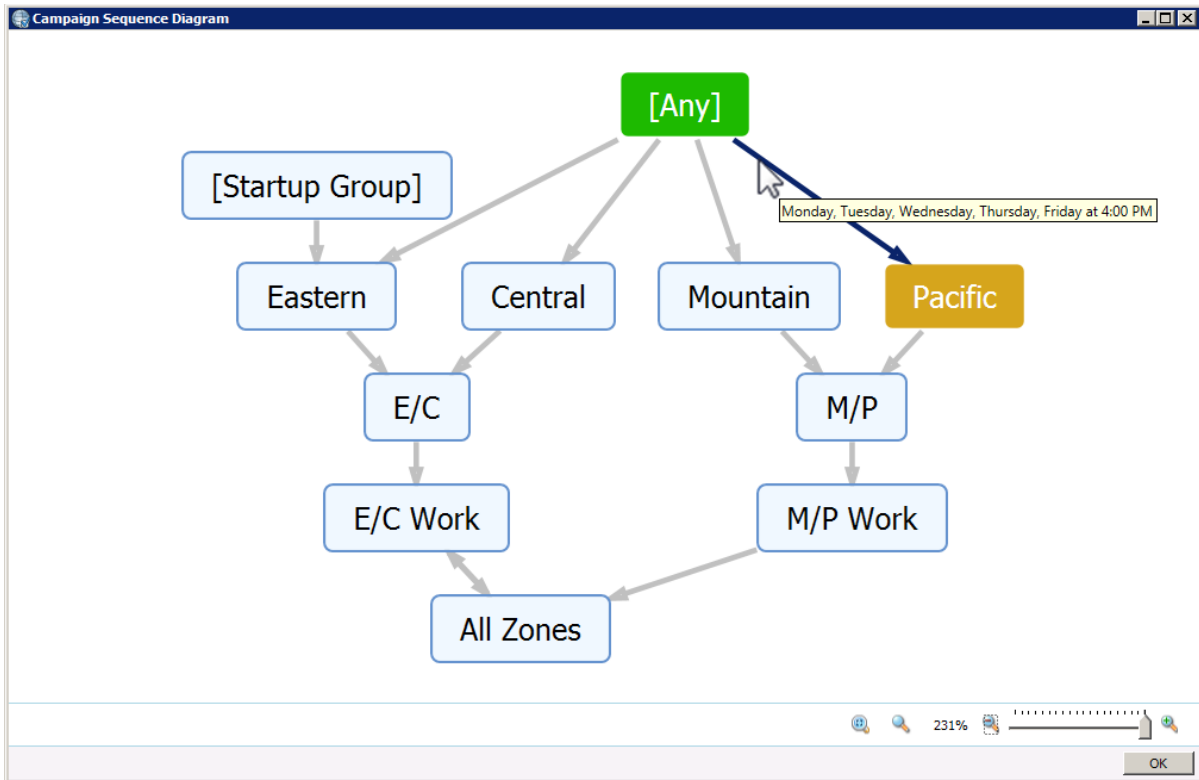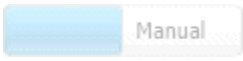

Related Topics

Campaign Sequence Diagram

Color Coding

Start a Campaign

A new campaign waits in a manual **off** condition until you change its execution status:

1. At the **Home** screen in Dialer Manager, click **Campaigns.**
2. Select a campaign in the list of entries.
3. Click the Basic Configuration tab.
4. Use **Campaign Execution Controls** to set the status of the campaign. The controls are:

3.

Campaign Execution Controls			
1	**Status:**	Textual status indicator	This control displays the execution state of the campaign. If a schedule has control over the campaign, status will be **On** or **Off**. When a campaign is running under manual control (not in accordance with a schedule) its status will be **Manual On**, **Manual Off**, or **Pause**.
2	Manual	Graphical Status indictor	Visually indicates whether or not the Campaign is running under Auto or Manual control or in accordance with a schedule.
3	▷	Start	Turns the campaign on.
4	ⓘ	On for Scheduled Calls Only	Turns the campaign on for scheduled calls only. Places only agent-scheduled calls. Ignores the campaign schedule. o Auto-scheduled calls are not placed. o Priority dials are still made. o No regular calls are placed. When this campaign state is switched to, any cached contacts that the campaign will no longer call (regular calls, queued precise calls) are flushed from the cache back to the database.
5	▪	Stop	Stops outbound dialing once the cache is empty. Ignores the campaign schedule. If you stop a campaign (by selecting Stop), rather than by clicking Pause, agents must log in when the campaign is restarted by clicking this button again. If you click the Pause button, you can resume the campaign by clicking Pause again, and agents won't need to

6		Pause/Resume	Temporarily stops all outbound dialing activity for the campaign. All active calls will complete, but no new calls will be generated. This command is used to temporally halt a campaign without requiring agents to log back in once processing is resumed. When a campaign is Paused, no calls are placed, but the record cache is maintained. To resume the campaign, press Pause again. Agents will not need to login when the campaign resumes.
7		Recycle Campaign	Recycle refers to the process of restarting the call selection process at the beginning of the contact list. This can happen automatically after all records are processed, or manually in response to a Reset Campaign command. A recycle period is the time that Interaction Dialer needs to process all records in a contact list.
8		Reset Campaign	Resets a running campaign, The contact list will be processed from the top to reach parties that were not contacted in a previous pass. If major settings have been changed (DSN, Sorting or Filters, etc.), the campaign is reset and restarted with the new configuration. This command also sets the count of recycles back to zero.
9		Run Test	Tests the campaign configuration to verify database connection, contact list, sort and filter criteria. Sort and filter criteria are appended to create a SQL statement. If the campaign is configured to use skills-based dialing, skill settings are automatically included for evaluation in the SQL selection statement. If the test fails, diagnostic information is displayed to indicate what went wrong. If the statement executes successfully, then campaign test results are displayed. Test results return three sets of information:
			Test Result Description

At the top of the first row (continuing from previous page):
login. Outbound calling will resume once agents change to available status.

			Campaign Call List Statistics	Information about the call list, including: o Total records in the contact list table o Number of callable records after filtering o Number of records blocked by filters o Number of un-callable records o Number of records with no phone numbers o Number of scheduled calls o Number of skill combinations in the contact list that are not dial-able
			Data Sample	A sample of callable record phone numbers, used to validate the phone number column selection. The data sample lists contact, sort, and filter columns to validate sort and filter criteria. The data sample is sorted and filtered exactly as your contact list will be when dialed. However, data for scheduled calls is not returned.
			Skill Sets Required	A list of Skill Sets required by the campaign. This breakdown of callable records by skill makes it easy to verify skill configurations assigned to the campaign.

4.
5. Click **Save**.

Related Topics

Campaign Execution Controls

Copy a Campaign

You can duplicate a campaign by selecting it in the list of campaign entries, copying it to the clipboard, and pasting it as a new entry.

1. In Interaction Administrator, expand the Interaction Dialer container. Then select the **Campaigns** container.
2. Select a campaign in the **Campaign Entries** panel.
3. Click **Copy** to copy the selected entry to the clipboard.
4. Click **Paste** to paste the contents of the clipboard.
5. In the **Name** field, change *New Item* to a more meaningful campaign name.
6. Change campaign settings as desired.
7. Click **Save**.

Paste a Campaign

The **Paste** button pastes a campaign entry from the clipboard to the list of campaign entries. See Copy a Campaign.

Remove a Campaign

Removing a Campaign deletes it permanently from the list of Campaign entries.

1. In Interaction Administrator, expand the Interaction Dialer container. Then select the **Campaigns** container.
2. Select a campaign in the **Campaign Entries** panel.
3. Click **Delete**. You are asked to confirm this operation, since it cannot be undone.
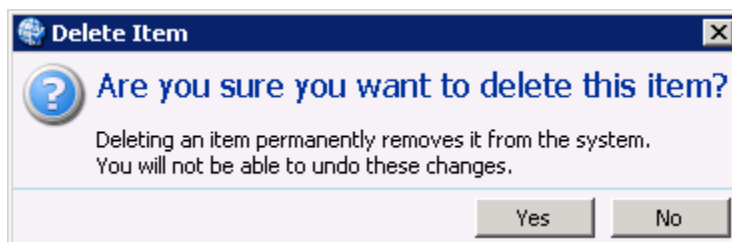
4. Click **Yes** to confirm.

Scripts

Scripts view

Overview

Every campaign has a **script** that pops on the agent desktop when a call is sent to an agent. Scripts run in Interaction Scripter Client—the desktop application that Dialer agents use to interact with campaign calls. Scripts display updatable data items and call disposition options.

The scripts you can configure in Interaction Dialer Manager are called **base scripts**. Base scripts are easier to create than custom scripts, because they are constructed by composing entries in Dialer Manager's Scripts container, instead of by programming web pages.

Custom scripts require a programmer to write JavaScript and HTML in accordance with guidelines published in the *Interaction Scripter Developer Guide*. Base scripts don't require any special expertise. Anyone can create them.

Scripts view user interface

The Scripts user interface displays script entries at the top of the screen, with buttons for adding, copying, pasting, or deleting entries. The rest of the screen is devoted to managing details of an entry. The Scripts view has two tab pages.

- The Miscellaneous tab manages the name of a script, and settings which affect the appearance and functionality of Interaction Scripter Client.
- The Pages tab defines pages, the contact column controls that appear on each page, and buttons for dispositioning the call or navigating between pages.

What's in a Base Script?

A base script defines **settings** that affect the appearance and functionality of the Interaction Scripter Client. For example, a script defines whether a *Request Break* button is offered.

A base script defines **columns** from the contact list that the agents see as page controls in Interaction Scripter Client. Page controls display contact columns are text boxes, radio buttons, numeric fields, drop lists, or date/time controls. The script determines whether each control is editable by the agent. Data updated by agents is written back to the contact list after the call is dispositioned.

Base scripts define **text** for agents to read, usually to the contact. This text can include macros, allowing contact-specific information to be presented from the contact list. To create attractive pages, the text portion of a base script can contain simple HTML markup.

Base scripts define **call disposition buttons** that agents can press to transition to the next call.

A base script has one or more **pages**. Each page is a screen that agents can view in Interaction Scripter Client. Every page can have distinct page controls, text, call disposition and navigation buttons. Each page is assigned a stage number. Stages identify each segment of a call that statistics can be collected upon. Stages are saved in groups (called Stage Sets) that can be assigned by name to one or more campaigns. Stages help the server make more accurate predictions by measuring the amount of time that each agent spends in tasks of a call.

Scripts define **navigation buttons** that jump to another page in the script. This makes it easy for agents to navigate a multi-page script.

Here's how it comes together. A base script is assigned to a campaign. When a call for that campaign is routed to an agent, Interaction Scripter Client displays page controls, text, and buttons to the agent. In

Preview mode for example, information is presented to the agent before a call is placed. The agent can review data and then place a call to the contact, or optionally skip to the next contact. The agent may also request a break. The user interface provides standard telephony options found in most software phones. Agents can record, mute, transfer, hold, and disconnect calls, for example.

While a campaign is active, the Outbound Dialer server monitors agent performance at each predictive stage and maintains statistics that allow it to predict the probability that the call will complete in the current stage. The server estimates how long each agent will take to complete that stage of the call. This helps it estimate when and how many calls it should place to keep agents busy.

Miscellaneous tab

The Miscellaneous tab manages options that control the appearance and functionality of the Interaction Scripter Client.

Name

When a new Script is added, this field sets the display name of the Script.

Contact List

Selects a contact list, so that columns from that list can be selected for display as page controls later. Note that selecting a contact list does not tie the script to any particular contact list. This selection merely allows the user interface to provide a list of contact columns to select from.

> **Note**: When a contact list is selected for the purpose of displaying its columns in a script, any contact list used with that script must have the same columns. Since the contact list assigned to a campaign might be different from the one that the script refers to, care should be taken to ensure column compatibility since Dialer does not validate this association.

See also: Page Controls expander.

Display expander

Request Break button

When checked, Interaction Scripter Client will display a button that agents can click to request a break.

Preview Skip button

When checked, Interaction Scripter Client will display a Skip button while in Preview dialing mode.

24-Hour Time Format

This option determines the time format displayed in Interaction Scripter when agents schedule a call back. When this option is checked, time is displayed 24-hour notation.

Allow expander

Editing of Number to Dial

When checked, the number to dial can be edited for a Preview campaign.

> **Note**: When a user in a preview campaign edits the number to dial and then places that call, Dialer dials that number without any type of scrubbing. So it's possible that an agent entering the number could inadvertently place a call a number that is on the Do Not Call List, to a number that is out of the time zone, or any other condition that Dialer specifically prevents an agent from calling under normal conditions.

Entry of Callback Number

Check to allow Agents to specify the callback number when scheduling a call.

Agent Callbacks

This option determines whether scheduled callbacks are "agent-owned". In other words, it determines whether a scheduled callback is routed to a specific agent, or to any available agent in the participating ACD workgroup.

Call Control expander

Pickup Alerting Calls

> This option allows administrators to specify whether alerting calls should be automatically picked up by the base script. When this option is checked and an alerting call arrives on the agent's queue, it will be automatically answered if the agent is in an available status. When this option is unchecked, agents must manually pick up calls by clicking a button.

Auto-disconnect Call upon Disposition

> Check to disconnect the call automatically once a call disposition button is clicked. If the agent is allowed to disconnect the call, a "Wrap-up" page appears so that the agent can finish the call before Interaction Scripter Client sets their status to available. While wrap-up is underway, the agent's status is "Follow-Up".

Additional Calls expander

If you have been granted the Modify Base Script Compliance Override security right, you'll be able to access and select options in the Additional Calls expander. Using these options, you can then create and configure Base scripts that implement the Follow Up Call feature.

Allow agents to make additional calls to same record

> Selecting this check box essentially enables the Follow Up Call feature. When you choose this option, Interaction Scripter Client will add an option to the base script window that will allow an agent to be able to access and dial any additional phone numbers on a contact record.

> **Note**: Keep in mind that an agent must have the Allow Agent Compliance Override security right in order to be able to perform any of following actions when using the Follow Up Call feature.

Allow editing of phone numbers

> Check to allow agents to make ad-hoc calls by manually entering a number that is not on the contact record. The number will be checked against all of the compliance regulations set in the campaign. The subsequent rights will determine if the agent is allowed to bypass those compliance regulations.

Permit override to DNC check

> This right will allow agents to bypass a DNC check and place the call even if it is DNC blocked. The DNC check can come from either DNC.com or from a custom DNC source. This applies to ad-hoc numbers.

Permit override to TimeZone check

This right will allow agents to bypass a timezone check and place the call even if it is blocked by a timezone restriction. This applies to ad-hoc numbers.

Permit override to Skills check

This right will allow agents to bypass a skill check and place the call even if they do not possess the required skill. This does not apply to ad-hoc numbers.

Permit override to Daily Limit check

This right will allow the agent to bypass the daily limit check and continue to make calls even if they exceed the daily limit restriction. This does not apply to ad-hoc numbers.

Pages tab

Pages tab
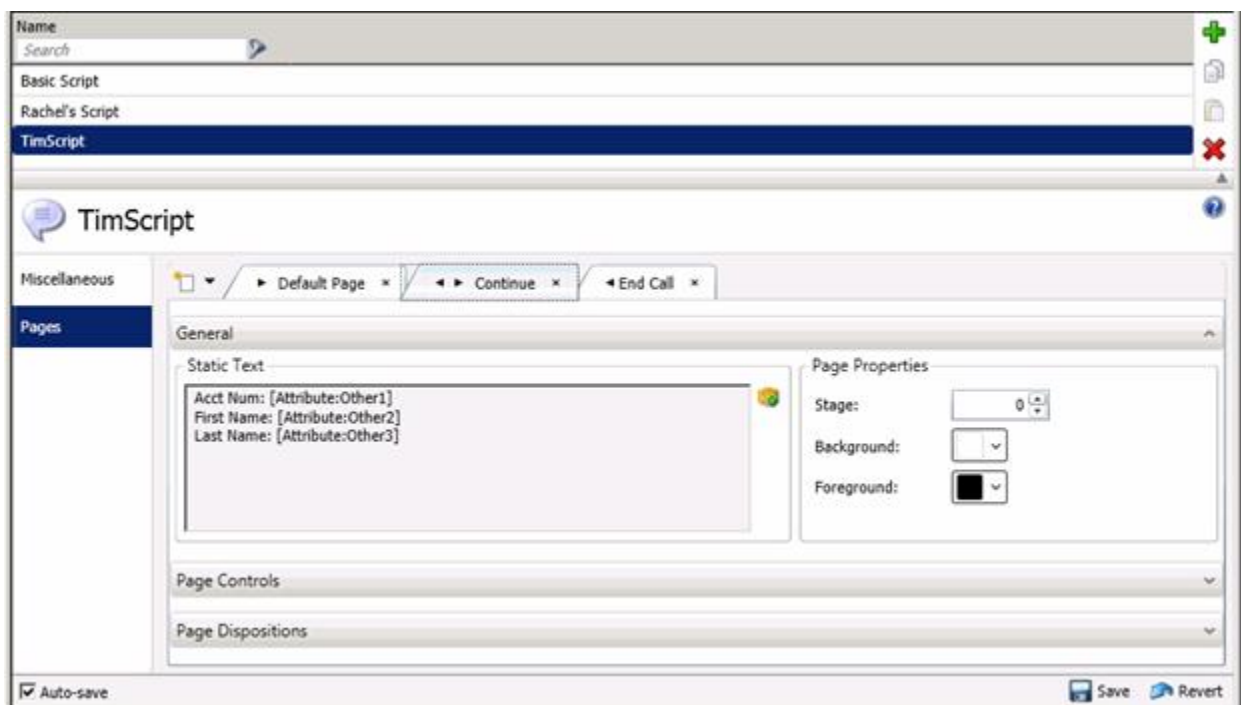
The **Pages tab** manages pages in the script. Every script has a *Default Page*, which corresponds to the "Call Connected" stage (Stage 0). Controls at the top of the view (**1**) add new pages, (**2**) display a menu of existing pages, which is the same as clicking a tab (**3**).

This page has 3 expanders. The General expander configures text for the agent to read, and assigns a stage number to the page. The Page Controls expander adds visual controls to the form that display information from the contact list. The Page Dispositions expander manages buttons that agents click to disposition the call, or navigate to another script page.

General expander

General expander

The General expander configures text for the agent to read, and assigns a stage number to the page.

Static Text

Text typed here will appear at the top of the page for the agent to read. Use it to include instructions, phrases for the agent to say, or reference information. You can type plain text, insert macros, and even format text using simple HTML tags. See Script Page Example.

If you enter plain text (with or without macro variables), your text will be centered on the agent's display. But you can format your text using simple HTML tags. For example, you can make text bold or italic using Bold and <i>Italic</i> tags.

As a rule of thumb, you can format text using the HTML tags that can appear in the <body> section of a web page. However, HTML or JavaScript that would cause page navigation (such as JavaScript's location.href property) is not supported. Many excellent HTML tutorials are available online. One good reference is w3schools.com.

There are several ways to override the default centering of text. One way is to enclose the text in a **div** tag:

```
<div style="text-align: left;">This sentence is left-aligned.</div>
```

You can use **inline styles** to control the font, position, size, and color of text. For example:

```
<p style="color:sienna;margin-left:20px">This paragraph uses inline
style formatting.</p>
```

References to graphics can be inserted, if the graphic is hosted on a web server somewhere. This example displays a logo graphic on the page:

```
<img src="http://www.server.com/logo.gif">
```

You can insert **hyperlinks**, but take care to open the linked web page in a second window. To do this, code the hyperlink using **target = "_blank"** to prevent navigation to a page with no way to return and disposition the call. Interaction Scripter Client does not provide a Back button, and it does not recognize keyboard shortcuts for returning to the previous page in the browser history. Here's how to code a hyperlink:

```
<a href="https://www.genesys.com/" target="_blank">Genesys</a>
```

The target attribute specifies where to open the linked document. If you forget the target attribute, the user will not be stranded with no way to go back and disposition the call. Interaction Scripter Client guards against this problem by inspecting the source. It automatically adds target="_blank" to links that don't have a target attribute.

Insert Macro button ( )

Opens dialog used to insert a macro variables into the static text of a Rule Action, Policy Behavior, or Base Script. See Insert a Macro.

Stage

This control sets the ID number of the stage corresponding to this script page. The steps of a campaign call are called *stages*. The predictive algorithm maintains agent performance statistics for each stage while a campaign is running. Stages facilitate the prediction process and to allow the Dialer to better determine an agent's progress within a call. For this reason, a page in a base script can be associated with stage numbers defined for a campaign using the Stage Sets view. Stage 0 is the default number of the first stage.

To identify the stage number that corresponds to a page in your script, you must look to see which Stage Set is assigned to the Campaign, and then examine its Stage Set to find out what stages have been defined.

1. To do this open the Campaigns view. Edit the campaign that will be used with this script, and note the name of the Stage Set assigned to it.
2. Next, open the Stage Sets view, and select that Stage Set entry. Look at the stage numbers associated with each stage. Choose the number of the stage that corresponds to this script page.
3. Return to the Pages tab of the Scripts container. Use the number control to assign a Stage ID number to this script page. If you are not sure, or the Campaign does not use a Stage Set, set the Stage number to 0.

Background

Opens a color picker that sets the background color of the text region.
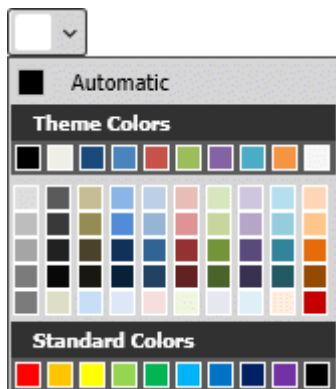
Foreground

Opens a color picker that sets the foreground text color of the text region.

Dialer Call Attributes

In addition to using the CallAttribute:? macro to insert the value of an interaction attribute into a base script, as described in the Macros topic, and using the macro to insert custom attributes into an advanced script, as described in the Interaction Scripter Developer's Guide, you can also use this macro to insert several Dialer Call attributes into a base script.

The Dialer Call attributes that you can use in a base script are the following:

IS_Attr_CampaignGroup

If the Advanced Campaign Management feature is in use, this attribute will display the name of the active campaign group in the campaign sequence that is currently running.

If a campaign is using rule groups as an automation tool, this attribute will display the name of the active rule group in the campaign that is currently running.

If the agent on a call when the group changes, the name of the active group will not change in the Scripter window until the current call is dispositioned and a new call is received under the new group.

IS_Attr_CampaignName

This attribute will display the name of the campaign that is currently running.

IS_Attr_CampaignID

This attribute will display the ID of the campaign that is currently running.

Related Topics

Macros

Insert a Macro

Follow the steps below to insert a macro (variable) into the static text of a Rule Action, Policy Behavior, or Base Script. At runtime, the current value of a property or statistic is dynamically inserted into the text, replacing the macro token.

1. Place the insertion point where the macro should go.
2. Click the ( ) icon.
3. Select a macro from the **Macro drop list**. If necessary, supply additional parameters, such as an attribute name in the example above.

4.   Click **OK** to insert the macro variable at the cursor position.

Script Page Example

The text below illustrates the use of macros and HTML formatting in the text of a script page. The graphic above shows how the script appears in Interaction Scripter .NET Client.

<p>This paragraph was composed in the **Pages** tab of a **Script Configuration**. This feature makes it easy to provide agents with instructions for interacting with a customer. Here an example of using macros in the text displayed to an agent:**</p>**

<hr>

****Agent:**** [Agent ID]**
**

****Street Address****: [Attribute:Street]**
**

****Call Id****: [Call ID]**
**

****Call Attribute****: [CallAttribute:Eic_CallIdKey]**
**

****Identity****: [Identity]**
**

****NTD****: [Number To Dial]**
**

<hr>

\<div style="text-align: left;"**\>**You can compose plain text or apply simple HTML formatting, using **\<b\>**Bold**\</b\>** and **\<i\>**Italic**\</i\>** tags, line breaks and horizontal rules. You can also use inline styles to format HTML statements. Here is an example:**\</div\>**

\<p style="color:sienna;margin-left:20px"**\>**This paragraph uses inline style formatting.**\</p\>**

\<div style="text-align: left;"**\>**If you add hyperlinks, be sure to set the target of the link to **\<b\>**target="_blank"**\</b\>**, so that the link opens in a new window. Otherwise, the agent could navigate away from the page, and could not return to disposition the call.**\</div\>**

\<br\>All text is centered by default.

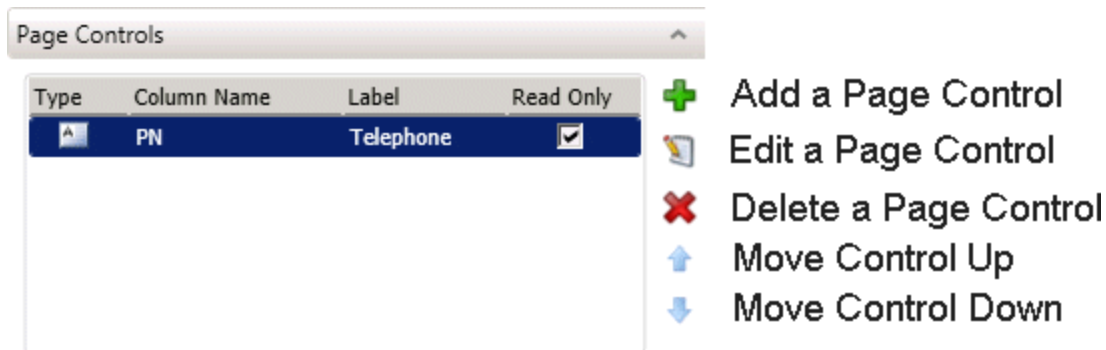**\<p** align ="left"**\>**You can include graphics, if they are hosted on a web server. Here is an example:**\</p\>**

\<img style="width: 50px; height: 50px;" alt="" src="http://www.server.com/ logo.gif"**\>\<br\>**

\<br\>As before, you can add controls to a page:

Page Controls expander

The Page Controls expander adds visual controls to the form that display information from the contact list.

Page controls are columns from the contact list that the agents see on screen as visual controls in Interaction Scripter Client. Page controls display information using text boxes, radio buttons, numeric fields, drop lists, or date/time controls.

1. To add a page control, click **Add**. The *Add New Control* dialog appears.

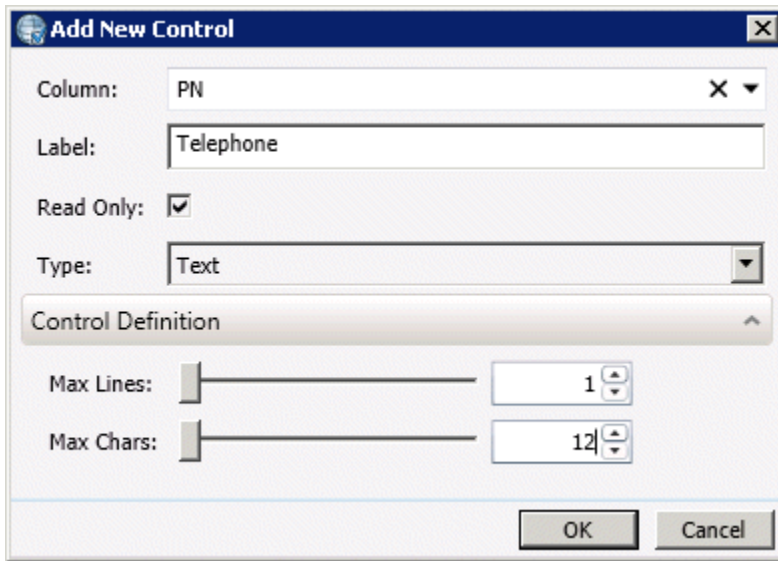2. Use the **Column** drop list to select a contact column.
3. Type a **Label** to display as the name of the control.
4. Check Read-Only to prevent agents from changing this data item in Interaction Scripter. When this box is checked, agents cannot update the database field.
5. Selects the **Type** of user interface control to display the database column in. Your choices are DateTime, Drop List, Numeric, Radio Box, and Text. Based on your selection, different options appear under *Control Definition*:

Type	Options	Description
Text	Max Lines	Sets the height of the text field, in terms of the number of rows that it contains. The default is one row high. Up to 10 rows can be specified.
	Max Chars	Sets how much data can be entered into the field. It does not control the display width of the field. No validation is performed to compare this entry with the field length defined in the contact list table. Consequently, you should not select a value that is larger than the table will support. If you do, updates to the database may end up in the Error Queue. The default is 2048 characters, but you can lower that if need be.
DateTime	None	Displays a date and time.
Drop List	Name/Value Pairs	Prompts for a collection of Name/Value pairs. Name is the item that will appear in the drop list. Value is the value returned to the column.

Radio Box	Name/Value Pairs	Prompts for a collection of Name/Value pairs. Names appear on the form as radio buttons. Value is the value returned to the column.
Numeric	Minimum and Maximum Numeric Values	Prompts for minimum and maximum numeric values. When a numeric spin control appears on the script page, the agent is limited to the minimum and maximum values assigned here. These values can range from –100000 to 100000.

6. Click **OK**. Repeat this procedure to add other columns to the page as needed.

Page Dispositions expander

The Page Dispositions expander manages buttons that agents click to disposition the call, or navigate to another script page.

About call disposition push buttons

Base scripts define call disposition buttons that make it easy for agents to transition to the next call. For example, if a call reaches an answering machine, the agent ends the call by clicking a button marked "Answering Machine". Agents can transition quickly to another call if a number is out of service, if the call is not answered, is answered by the wrong person, or is answered by a machine. Agents can also jump to another page in a multi-page script.

Behind the scenes, call disposition buttons assign wrap-up Category codes that are used later to report on the effectiveness of the campaign. These buttons are disabled while the agent is waiting for a call or a screen pop. When calls reach the desired contact, agents use page controls to update information from the party. For example, an order might be placed, or a survey conducted. The agent then transitions to the next call by clicking a disposition button.

Interaction Scripter Client (or Scripter in Interaction Connect) keeps track of agent interactions with the base script. For example, when calls are completed, the client routes update messages to the Central Campaign server for processing. These updates are eventually written to the contact list table.
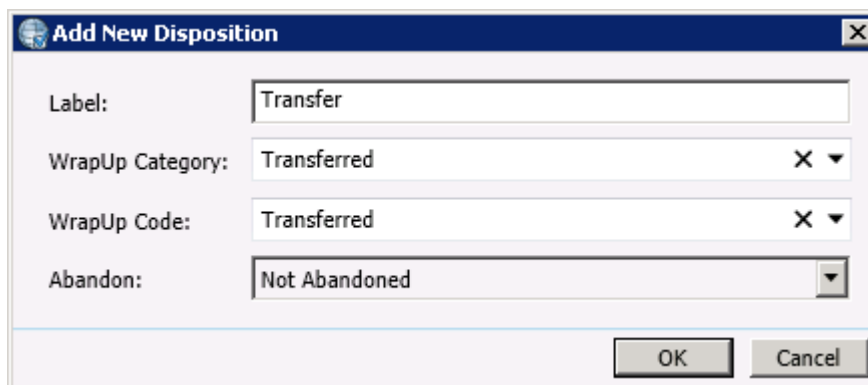
> **Note: Using Scripter in Interaction Connect with wrap-up codes enabled on a workgroup in Interaction Administrator**
> If you enabled wrap-up codes on a workgroup, add the same wrap-up codes to the workgroup in IA that you add to a disposition on a base script. A wrap-up code must exist on the workgroup and the base script so that Dialer can update the wrap-up code in the CallHistory table and the InteractionWrapup table. If a wrap-up code exists on the base script and not on the workgroup, Dialer cannot update the wrap-up code in the InteractionWrapup table.

For each page of a script, you should define buttons that allow agents to transition to the next call, or to navigate to another page. The expander lists disposition entries, with buttons to add, edit, delete, and change button order of appearance.

1. To add a Disposition button, click **Add**. The **Add New Disposition** dialog appears:

2. In the **Label** field, type the text that you want to appear as the button caption. This can be up to 100 characters in length.
3. Use the **WrapUp Category** drop list to select the category that will be logged when this button is clicked.
4. Use the **WrapUp Code** drop list to select the code that will be logged when this button is clicked.
5. Use the **Abandon** drop list to indicate whether this call should be considered an abandoned call or not.

6. Click **OK**. Repeat this procedure to add other page disposition buttons as needed.

How to create a Page Navigation button

To create a button that jumps to another script page:

1. Type a descriptive label for the button in the **Label** field.
2. Set **WrapUp Category** to **Navigate**.
3. Select a destination page in the **Script Page** drop list. The default value of *Script Page* is "Select an existing script page". This is to remind you that a destination page must exist before this button can be created.

Contact Lists

Contact Lists view

Interaction Dialer Manager's powerful contact management features make it easier for administrators to manage large contact tables, directly in the IDM user interface. This view manages **contact list entries**. Each entry is a collection of properties that convey to Interaction Dialer details about the table used to store contact phone numbers. This view provides utilities that query the contact list to create filters that select a subset of data, and functions that manage scheduled callbacks for agents who are unavailable.

1	The Contact List Entries panel displays the currently available contact lists. Buttons on the right side of the panel add, copy, paste, or remove contact lists.
2	The Contact List tabs allow you to configure properties and control various aspects of the currently selected contact list. There are five tabs on which you can set the properties of a contact list: • Options on the Details tab set the minimum required properties of a contact list object. You must select a connection, a table that contains contact records, and identify at least one column that contains contact phone numbers. • Options on the Data Query tab make it easy to query the contact list, save queries as filters, and apply actions to query results to modify or remove records. • Options on the Scheduled Calls tab manage scheduled callbacks for unavailable agents—agents who are sick, on vacation, or who have left the company. • Options on the DNC Metadata tab allow you to manage and search thru additional metadata from DNC.com. • Options on the Campaign Ownership tab allow you to manage the ownership of records from a single contact list that is shared by multiple campaigns.
3	Depending on which Contact List tab you select, you'll see a set of appropriate properties and controls.

Details tab

Details tab

Options on the **Details** tab set the basic properties of a contact list object. At minimum you must select a connection, a table that contains contact records, and at least one column that contains contact phone numbers. For background information, see Define Phone Number Types and Associate a phone number column with a phone number type.

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Main Section

The main section appears at the top of the Details tab and either allows you to configure a new contact list or displays details about an existing contact list.

Name

> Appears when you create a new contact list and allows you to assign a name to a new contact list.

Display Name

> Show the name assigned to the contact list.

Connection

Drop down containing names of database connections used with Dialer.

Table

> Drop down used to select a contact list table from the database, followed by a list refresh button.

Create Table

Starts a wizard that creates a new contact list table in Dialer's database. See Create Table wizard.

Import Contacts

Starts a wizard that imports data into a contact list. See Import Contacts wizard.

Export Contacts

Starts a wizard that exports contact list records to the destination file format of your choice. See Export Contacts wizard.

Contact Columns

The controls in Contact Columns section identify all the columns in the contact information and are used to identify those that contain telephone numbers. Each telephone number column can be associated with a user-defined phone number type.

Available Columns

Columns in the contact list table.

Selected Contact Columns

Columns that have been selected.

Create Table

Create Table

You will use the Create Database Table wizard to retrieve records from a data source and place them into a new contact list table. The new table is automatically assigned to the campaign so it is imperative that you ensure the integrity of the data source.

Create Database Table wizard

Data Source Considerations

Create Database Table wizard

To create a new contact list table in Dialer's database:

1. Open the **Contact Lists** view in Interaction Dialer Manager.
2. Select a contact list entry. When a new contact list table is created, it will be automatically assigned to this contact list entry.
3. Click the **Create Table** button.

4. When the **Create Database Table** wizard appears, select a connection from the *Connection* drop list, or accept [Default Connection].

5. Type a name for the new table in the *Name* box. Click **Next**.

6. Use the *Source Type* drop list to select a data source for the wizard to use as a template when the new table is created. This also tells the wizard where to acquire contact data. The format of fields in the table to be imported must match the schema of a contact list table. A new table will be created to match the format of the source you select in this step, and records from it will be copied to the new table.

7. Depending on the Source Type you select, you'll need to provide specific items of information. (See Source Type Specifications.)

8. Click **Next**.

9. The next screen maps fields in the data source to fields in the destination table. You can add custom columns to the destination table, choose not to import data from source columns, and even remove columns to prevent them from appearing at all in the destination table.

   To add a new custom column to the destination table, click the 🕂 button. This adds a new row at the bottom of the grid. You can give each custom column a name, and set its destination data type, display size, precision, and scale.

   on table.

   Size—the display size of the column, in characters. When a contact list has multiple contact columns, Interaction Dialer requires all phone number columns to be the same type and size.

Precision—the number of digits in a number.

Scale—the number of digits to the right of the decimal point in a number

❌**button**—removes a selected column from the grid, preventing that column from being created in the destination table.

Skip check box—controls whether or not data from a source column is copied to the destination column. When a column is skipped, that column is created in the destination table but no data is copied to the destination column. To create an empty table, skip all columns. Custom columns can be skipped like regular columns.

Note: Starting with Dialer 4.0 SU2, if you are adding more than one custom column to the destination table for contact information, the Destination Data Type for each column must be the same.

10. When you are finished mapping the fields, click **Next**. You'll see a summary of the selections made, and actions that will be performed is displayed.
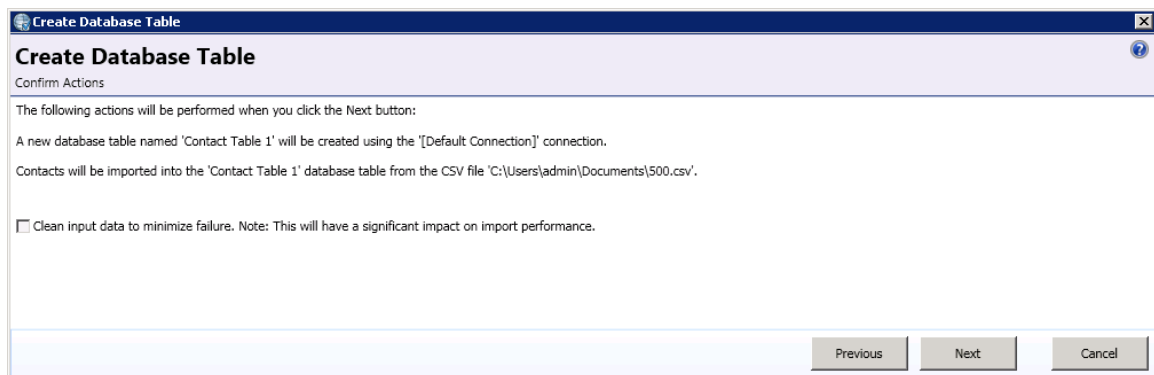
If there are line breaks in the data file that you are importing into the database table, you can select the Clean input data to minimize failure check box to have the Create Database Table wizard remove the line breaks before importing the data file. However, keep in mind that using this feature can be time consuming process and will decrease the performance of the overall import procedure.

11. Click **Next** to continue. The new table will be created, or an error message will be displayed to indicate what went wrong (e.g. table with same name already exists, an so on.)
12. Click **Finish** to dismiss the wizard.

Related Topics

Source Type Specifications

Data Source Considerations

The new table is automatically assigned to the campaign so it is imperative that you ensure the integrity of the data source.

Oracle users

Information for users of Oracle-based data sources.

- To use Oracle as Dialer's database or as the data source for database connections, the Oracle client software must be installed on each client machine. For this reason Oracle users are advised to install Oracle client software on each client PC. In addition, the database provider on client machines must use the same database provider that the Central Campaign server uses to connect to the Dialer database. Otherwise, applications may generate unhandled exceptions because the requested database provider does not exist on the client.

  You can download the Oracle Client from:
  http://www.oracle.com/technetwork/database/enterprise-edition/downloads/112010-win32soft-098987.html under "Oracle Database 11g Release 2 Client (11.2.0.1.0) for Microsoft Windows (32-bit)".

- Oracle documentation highly discourages use of quoted identifiers for table names. In accordance with the stance that Oracle has taken with regard to quoted identifiers, Interaction Dialer does not support contact list tables whose names are enclosed in quotes. For this reason, Dialer does not create tables with spaces in the name. DialerTranServer removes all special characters, including spaces, from the name when it creates tables. The following special characters are removed automatically: '`|#*?[].!$ -&*()=+:;/\\

Import Contacts

Import Contacts

You will use the Import Contact List wizard to retrieve records from a data source and place them into a new contact list . The new list is automatically assigned to the campaign so it is imperative that you ensure the integrity of the data source.

Import Contact List wizard

Data Source Considerations

Import Contact List wizard

To import records:

1. Open the **Contact Lists** view in Interaction Dialer Manager.
2. Select a contact list entry. When a new contact list table is created, it will be assigned automatically to the contact list entry selected in this step.

3. Click the **Import Contacts** button.

4. When the **Import Contact List** wizard appears, use the *Source Type* drop list to select a input data source. The format of fields in the data source must match the schema of a contact list table.

5. Depending on the Source Type you select, you'll need to provide specific items of information. (See Source Type Specifications.)

6. Click **Next**.

7. The next screen shows the mapping of the fields in the data source to the fields in the destination table and allows you to choose data that you want to import. If there is data in a source column that you do not wish to have copied to the corresponding destination column, select the **Skip** check box at the end of that row. When a column is skipped, no data from that in that field in the data source is copied to the destination table.

8. Click **Next**.
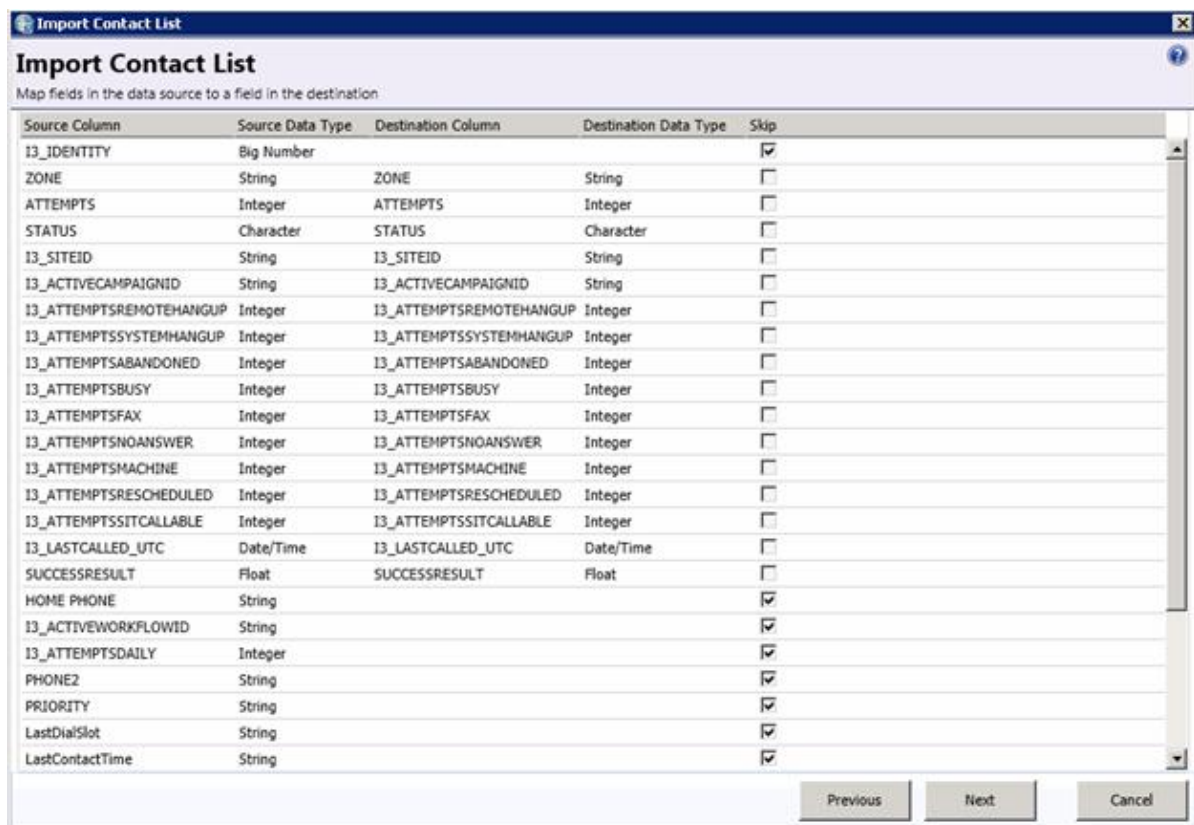
9. A summary of the selections is displayed. Click **Next** to continue.

10. Wait for the import process to complete. If an error occurs, a message will appear that will indicate what went wrong. Otherwise the wizard will indicate that the import process was successful and indicate the number of records that were imported.

11. Click **Finish** to dismiss the wizard.

> **NOTE:** The import wizard makes it possible to add new contact records at any time. To dial new records inserted by this wizard, a recycle is required. However, there is a another way to add

contact list records so that they can be dialed immediately without requiring a recycle. See Priority Dialing for details.

Related Topics

Source Type Specifications

Data Source Considerations

The new list is automatically assigned to the campaign so it is imperative that you ensure the integrity of the data source.

Microsoft users

Information for users of Microsoft-based data sources.

Microsoft DLL's

- The Import Contacts Wizard uses Microsoft DLL's that are resident if you have Microsoft Office or Microsoft Outlook installed. If neither product is installed, import of Excel .xlsx files will fail with this message:
- "The Microsoft.ACE.OLEDB.12.0 provider is not registered on the local machine"
- To resolve this problem without installing Office or Outlook, install the *Microsoft Access Database Engine 2010 Redistributable*, from this web address: http://www.microsoft.com/en-us/download/details.aspx?id=13255

bcp Utility

- Due to a bug in Microsoft's bulk copy program (bcp) it is not possible to import contact lists into SQL server databases if the name of any column contains spaces or any other white space characters. See http://support.microsoft.com/kb/179657.
- Also, when using Microsoft SQL Server, please note the following schema consideration:

Default schema

- When using the contact list import feature to create a table, the table will be created under the database user default schema. When adding contacts to an existing table, that table is expected to be in the default schema. If the selected table is not in the default schema or more than one table with the same name exists in the database, the operation will fail.

Excel spreadsheet (XLS or XLSX) or a CSV files

- Before importing an Excel spreadsheet (XLS or XLSX) or a comma-separated values (CSV) file, you must clean empty rows and columns that follow data to be imported. Otherwise, trailing rows and columns of empty data may cause problems when the file is imported. To clean spreadsheet rows and columns:

     a.   In Excel, select empty rows that follow information you want to import.

     b.   Right-click to access the context menu.

     c.   Choose **Clear Contents**.

- Before importing an Excel spreadsheet (XLS or XLSX) or a comma-separated values (CSV) file, you need to be sure that the file does not contain any line breaks. A file that contains line breaks will be corrupted during the import procedure causing the data to be unreliable.

Oracle users

Information for users of Oracle-based data sources.

- To use Oracle as Dialer's database or as the data source for database connections, the Oracle client software must be installed on each client machine. For this reason Oracle users are advised to install Oracle client software on each client PC. You can download the Oracle Client from: http://www.oracle.com/technetwork/database/enterprise-edition/downloads/112010-win32soft-098987.html under "Oracle Database 11g Release 2 Client (11.2.0.1.0) for Microsoft Windows (32-bit)".

- In addition, the database provider on client machines must use the same database provider that the Central Campaign Server uses to connect to the Dialer database. Otherwise, applications may generate unhandled exceptions because the requested database provider does not exist on the client.

Export Contacts

Export Contacts

You will use the Export Contact List wizard to export records from the contact list to an external data type. If you plan to later import this data into Dialer, you should take steps to ensure the integrity of the data.

Export Contact List wizard

Data Destination Considerations

Export Contacts wizard

To export records from a contact list:

1. Open the **Contact Lists** view in Interaction Dialer Manager.
2. Select a contact list entry. Then click the **Export Contacts** button. Records will be exported from the contact list associated with this entry.
3. The **Export Contact List** wizard appears. Select a type of output file from the Source *Type* list.

4. Supply items of information required for the source selected. (See Source Type Specifications.)
5. Click **Next**.
6. The next screen maps columns from the contact list to columns in the destination. You can add custom columns to the destination file, choose not to import data from source columns, and even remove columns to prevent them from appearing at all in the destination table.

   To add a new custom column to the destination table, click the 🟩 button. This adds a new row at the bottom of the grid. You can give each custom column a name, and set its destination data type, display size, precision, and scale. When a custom column is added, it has no source column.

Size is the display size of the column, in characters.

Precision is the number of digits in a number.

Scale is the number of digits to the right of the decimal point in a number.

❌**button** removes a selected column from the grid, preventing that column from being created in the destination file.

Skip checkbox controls whether or not data from a source column is copied to the destination column. When a column is skipped, that column is created in the destination table but no data is copied to the destination column. To create an empty table, skip all columns. Custom columns can be skipped like regular columns.

7. Click **Next**. A summary of the selections made, and actions that will be performed is displayed.
8. Click **Next** to continue. Wait while the export file is created and populated with data. If anything goes wrong, an error message will be displayed to indicate what went wrong. Otherwise you will

see a message that indicates a successful result. That message is "Successfully exported ___ records".

9. Click **Finish** to dismiss the wizard.

Related Topics

Source Type Specifications

Data Source Considerations

If you plan to later import this data into Dialer, you should take steps to ensure the integrity of the data.

Oracle users

Information for users of Oracle-based data.

- To use Oracle as Dialer's database or as the data source for database connections, the Oracle client software must be installed on each client machine. For this reason Oracle users are advised to install Oracle client software on each client PC. You can download the Oracle Client from: http://www.oracle.com/technetwork/database/enterprise-edition/downloads/112010-win32soft-098987.html under "Oracle Database 11g Release 2 Client (11.2.0.1.0) for Microsoft Windows (32-bit)".

- In addition, the database provider on client machines must use the same database provider that the Central Campaign server uses to connect to the Dialer database. Otherwise, applications may generate unhandled exceptions because the requested database provider does not exist on the client.

Source Type Specifications

When you are creating, importing, or exporting a Contact List or exporting a DNC Meta Table, the appropriate wizard will prompt you to identify the location of the data by selecting one of the available types from the Source Types drop down list. Depending on the source type that you select, the wizard will then prompt you for additional information specific to the source type that you selected. The following table outlines the additional information required for each source type:

Source Type	Items to Specify for Source	
SQL Server Database	**Server Instance**	The name of a SQL Server.
	User Name	A user name that has access rights to the SQL server in this field. (Common special characters are allowed.)
	Password	The password that corresponds to the user name.

		(Common special characters are allowed.)
	Database	The database that contains the table from which you want to import data.
	Table	The table that contains the contact records you want to import.
Oracle Database	**TNS Service**	The TNS (Transparent Network Substrate) service name of the Oracle database to which you want to connect.
		(TNS is an Oracle software architecture that network applications can use to access underlying network protocols. If you do not know this name, contact your database administrator (DBA) for assistance.)
	User name	A user name that has access rights to the database.
	Password	The password that corresponds to the user name.
	Table	The database table that contains the contacts you wish to import.
MS Access Database	**Database File**	The Access database to which to connect. Enter the fully qualified path to an access database (.mdb) file. If you click the *Select Access File* button (...) you can navigate to the database and avoid potential typing errors.
	Requires Password	Enable the User Name and Password fields.
	User Name	A user name with access rights to the database.
	Password	The password that corresponds to the user name.
	Table	The table that contains the contact records you want to import.
MS Excel Spreadsheet	**Spreadsheet**	The fully qualified path to an Excel spreadsheet (.xls or .xlsx). If you click the *Select Excel File* button (...) you can navigate to the file and avoid potential typing errors.
	Worksheet	A worksheet within the spreadsheet that contains the columns you want to import.
CSV File	**CSV File**	The fully qualified path to an comma-separated values file (.csv). If you click the Select CSV File button (...) you can navigate to the file and avoid potential typing errors.
Dialer Connection	**Connection**	The Dialer connection object.
	Table	A contact list table in Dialer's database from which to import records.

Related Topics

Create Database Table wizard

Import Contacts wizard

Export Contacts wizard

Exporting DNC Metadata

Data Query tab

Data Query tab

You can use the features on the Data Query tab to query the contact list and display a list of results in a data grid. You can then save your query results as filters. In addition, you can apply actions to records displayed in the grid, and commit changes back to the database.
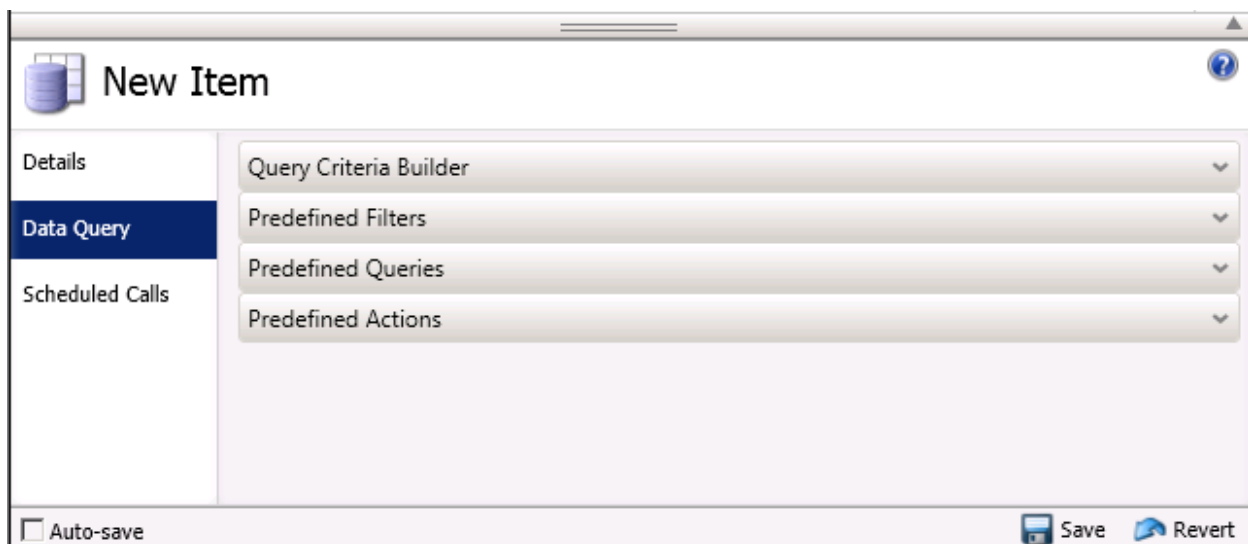
For example, it's possible to manually exclude contacts from being dialed by querying a contact list in Dialer Manager and then setting the Status column of specific contact record to E. This value indicates that the contact is excluded from being dialed.

The Data Query tab is divided into four sections that are accessible using expander controls:

- Query Criteria Builder
- Predefined Filters
- Predefined Queries
- Predefined Actions

Query Criteria Builder

You'll use the controls in the Query Criteria Builder section to build a custom query of the contact records.

Column

This row, with its drop-down lists, allows you to select columns from the database. The green plus sign allows you to add columns to your query while the red minus sign allows you to remove columns from your query. You'll use the red 'X' to clear all selections that you have made in the query fields.

Show

This row contains check boxes that you will select to decide which of the columns that you choose will appear in the query result.

Sort

This row allows you to apply either an ascending or descending sort to the column.

Criteria

This row allows you to input selection criteria; this must conform with SQL WHERE clause syntax. Criteria in the same row are considered an SQL logical conjunction (AND).

Or

There are three rows that allow you to apply a logical disjunction (OR) to your query.

Save Criteria

Once you have constructed your query, you can save your custom query as a filter by using the Save Criteria icon that appears at the end of the Sort row. You'll be prompted to name your filter.
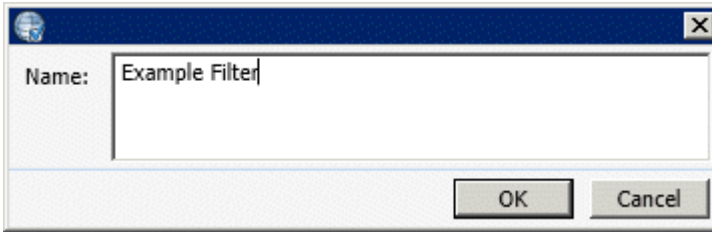
You can then access and run your filter from the Predefined Filters section.

Predefined Filters

You'll use the controls in the Predefined Filters section to select a custom filters and launch your query.
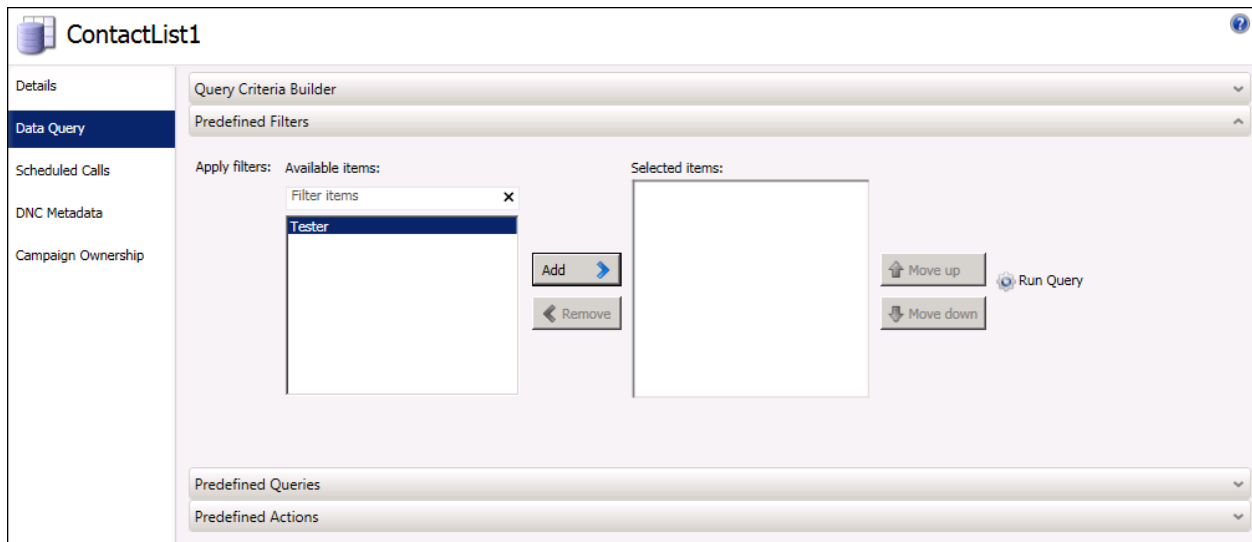
Available items

This list box allows you to view the Filters that you create in the Query Criteria Builder filters and choose one or more that you want to apply to your query.

Add/Remove

These buttons allow you to add filters to the Selected items list box and remove filters from the Selected items list box.

Selected items

This list box shows you the filters that will be applied to the query.

Move up/Move down

These buttons allow you to change the order in which the filters will be applied to the query.

Run Query

This button runs your custom query. When you run a query, the results appear in a grid at the bottom of Contact Lists view. You can then select items in the grid and use the controls in the Predefined Actions section to take actions.

Predefined Queries

You'll use the controls in the Predefined Queries section to select and run one of the built-in queries. To add flexibility, you can combine a predefined query with any of the filters selected in the Predefined Filters section. Once you run a query, the results appear in a grid at the bottom of Contact List view. You can then select items in the grid and take actions.
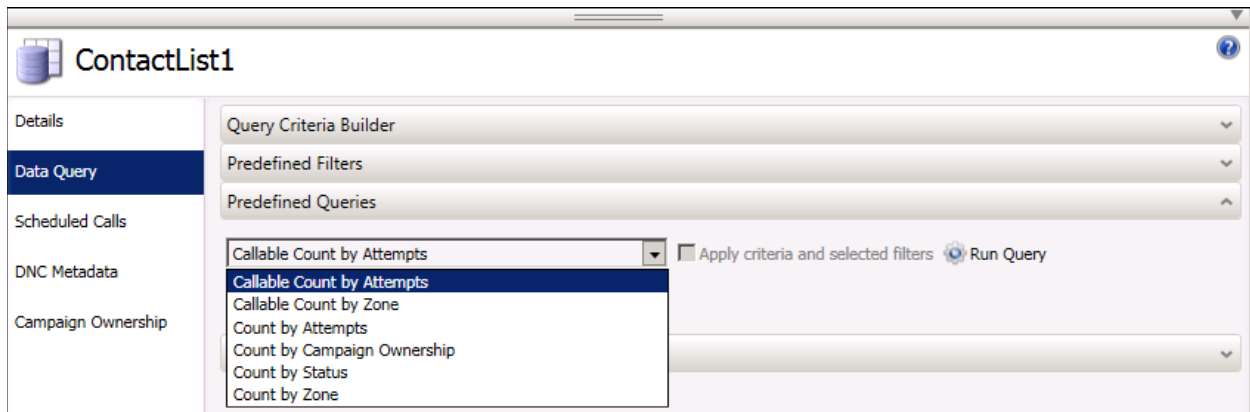
There are six predefined queries that you can choose:

Callable Count by Attempts

Displays a grand total of callable records, categorized by the number of call attempts.

Callable Count by Zone

Displays the number of callable records, categorized by time zone.

Count by Attempts

Displays a grand total of attempts and counts for each number of attempts.

Count by Campaign Ownership

Displays the campaigns that own records in a contacts as well as the number of records that each campaigns owns. See Campaign Ownership tab.

Count by Status

Displays a grand total and counts for each status code.

Count by Zone

Displays a grand total and counts for each time zone. Once you select one of the predefined queries, you can select the **Apply Criteria and selected filters** check box if you want to combine the predefined query with any of the filters selected in the Predefined Filters section. When you are ready, click the **Run Query** button to run your query. See also Query Results.

Predefined Actions

Predefined Actions

You'll use the controls in the Predefined Actions section to modify contact list records that you specify in the Query Results grid. This is a powerful feature, so use it carefully.

> **Note:** All of the actions available here *only* modify the Call List Table and not the Phone Number Detail (PND) table.
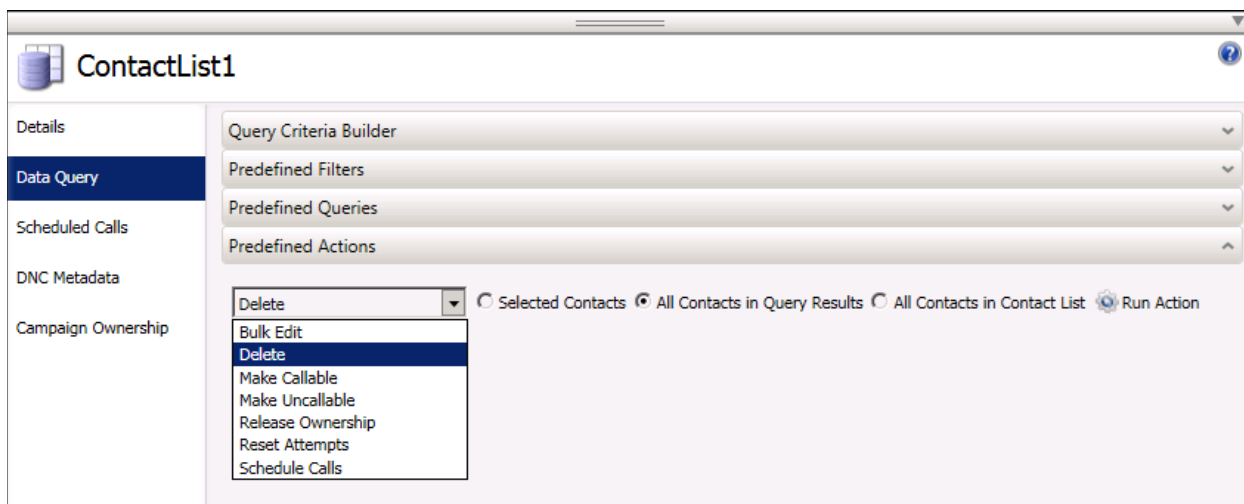
The predefined actions are:

Bulk Edit

This action allows you to write custom values to columns into the database. (See the Bulk Edit topic for more information.)

Delete

This action allows you to delete the selected records from the database.

Make Callable

This action changes the Status column to C, which marks the selected records as Callable.

Make Uncallable

This action changes the Status column to U, which marks the selected records as Uncallable.

Release Ownership

This action will only appear if your user account has the Contact List Ownership Control security right enabled. This action releases campaign ownership on the selected records. (See the Campaign Ownership tab topic for more information.)

Reset Attempts

This action resets the attempts count to zero, as if no contact attempts had occurred.

Schedule Calls

This action gathers the selected records and transfers them over to the Scheduled Calls tab where you can then add them to the scheduled calls database table. After you select an action, you must select an option to identify the contact records to apply the action to.

Selected Contacts

Indicates that the predefined action will apply only to contacts that are selected in the query results.

All Contacts in Query Results

Indicates that the predefined action will apply to all contacts in the query result.

All Contacts in Contact List

Indicates that the predefined action will apply to all contacts in the contact list. When you are ready, click the **Run Action** button to initiate the selected action and apply the changes to the selected contact records.

> **NOTE:** If the contact list has more than 500 records, you will be prompted to confirm the operation before the action actually commences. Choose **OK** to proceed or **Cancel** to abort.

Bulk Edit

When you select Bulk Edit as a Predefined Action, you'll see a grid showing a list of all the columns that make up a record in the contact list. You can then edit the values for any field in the selected records.
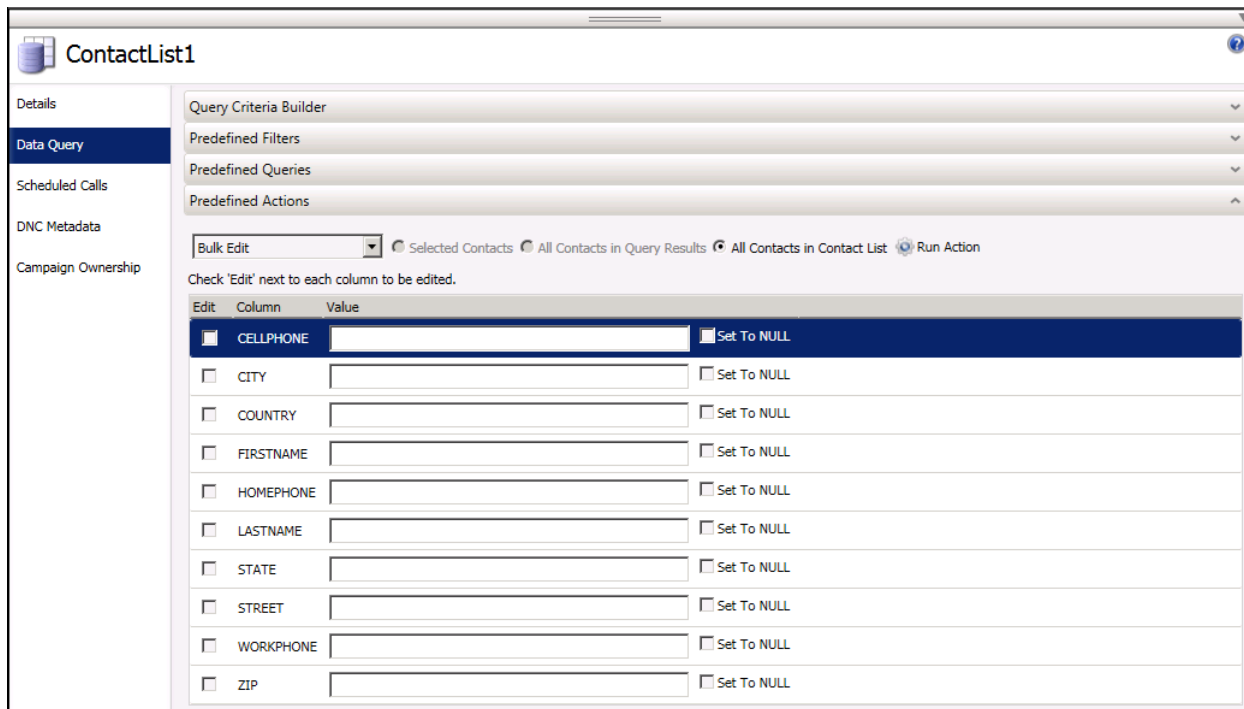
As you can see the Bulk Edit display presents you with a set of controls for selecting columns and altering their values.

To begin:

1. Select the **Edit** check box adjacent to the column whose value you wish to alter.
2. Do one of the following:
    o Type a new value in the **Value** text box.
    o Select the **Set to NULL** check box
3. Click the **Run Action** button.

Query Results

When you run a query, the query results will appear in a grid at the bottom of the Data Query tab right below the Predefined Actions expander. You can then select records and use the options in the Predefined Actions section to modify those records.

Scheduled Calls tab

Scheduled Calls tab

Managing scheduled callbacks for unavailable agents

Options on the Scheduled Calls tab manage scheduled callbacks for an agent who is unavailable (sick, on vacation, left the company, and so on). Agents who are sick, on vacation, or who have left the company are unavailable to process callbacks. When this happens, administrators can use the Scheduled Calls tab to:

- Reschedule callbacks for a specific date and time
- Assign agent callbacks to another agent

- Assign agent callbacks to any available agent in the campaign
- Postpone callbacks until an agent will be available
- Delete callbacks

Agents schedule callbacks at the request of a contact (e.g. "call me back next Saturday."). A **callback** is a scheduled outbound call that connects an agent to a particular contact at a particular time. Scheduled callbacks are sometimes called **agent-owned callbacks**, since the callback is assigned to be processed by a particular agent.

> **NOTE:** An agent-owned callback is a contact record that has an associated entry in the CallRecordSchedule table that schedules an outbound call to the contact. When the call is connected, it is routed to the agent who "owns" the scheduled call. Typically this is the agent who flagged the contact for callback in a previous conversation.

Search panel

Settings on the Search panel allow you to define a query that returns a list of callback records. The controls are:

Campaign

      Set to Any by default, this drop down allows you to select callbacks for a specific campaign.

Site

      Set to Any by default, this drop down allows you to restrict the search for callback records to an ODS server.

Agent

      Set to Any by default, this drop down allows you to select callbacks for a specific agent.

Phone Number

      This text box allows you to select callbacks to a specific contact number.

Any Date

      This check box allows you to determine the date range that you want to search. When selected, scopes callback criteria to all days of the week. When unselected, you can limit criteria to a range of days, by setting start and end dates/times using the Start and End calendar controls.

Start

      If you do not select the Any Date check box, you can use this calendar/time control to select a date and a time when the callback criteria will start.

End

If you do not select the Any Date check box, you can use this calendar/time control to select a date and a time when the callback criteria will end.

Reset Field

To reset the settings to the default values before entering new search criterion, use this button.

Search

To run your query and populate the Search Results list with matching records, use this button.

Actions panel

When search results are displayed in the grid, you can select any number of rows in the grid, select and configure an action, and then apply that action to the row or rows containing the scheduled callback records that you have selected.

Delete

This check box allows you to delete scheduled callback records. When selected, all other actions are unavailable.

Assign to agent

This check box allows you to select a specific agent from the drop-down and assign the selected callback records to that agent. By default, this setting is set to Any Agent.

Specify Date/Time

This check box allows you to use the calendar/time control to select a date and a time when the selected callback records will be dialed.

Postpone

This check box allows you to use the Days, Hours, and Minutes boxes to specify how long you want to postpone the selected scheduled callback.

Run Action

Once you have selected the rows you want to apply an action to, use this button to execute the action.

Search Results

When you run a query, the results showing each matching scheduled callback record are displayed in a grid under the column headings listed here. You can then select rows and apply changes those records using the controls in the Actions panel. You can also apply changes to all the records by using the drop-down column controls.

For example, you could select a site from the Site drop-down list and change the Site value for every record in the list of results. This change takes place immediately. For this reason you should narrow down the selections appropriately using criterion on the Search panel.

I3IDENTITY

An integer value that uniquely identifies each row in the contact list.

Campaign Name

Name of the campaign associated with the scheduled callback record. The drop-down in this column header allows you to select a campaign name and assign that campaign to every record in the list of results.

Agent

If the callback is agent-owned, this column displays the name of the agent who is to receive the call when the callback is placed. The drop-down in this column header allows you to select an agent and assign that agent to every record in the list of results.

Site

Name of the Outbound Dialer Server associated with the scheduled callback record. The drop-down in this column header allows you to select a site and assign that site to every record in the list of results.

Phone Number

Telephone number to be called.

Contact Column

The name of the column that contains the scheduled callback number. The drop-down in this column header allows you to select a contact column and assign that column to every record in the list of results.

Date

The date when the contact will be called.

Reschedule callbacks for a specific date and time

1. Open the Contact Lists view.
2. Select a contact list in the list of entries at the top of the view.
3. Select the Scheduled Calls tab.
4. Set criterion on the Search expander to select callback records. Click **Search**.
5. Check the **Specify Date/Time** box.
6. Use the date and time selection controls to set a different schedule for the callback.
7. Click **Run Action**.

Assign agent callbacks to another agent

1. Open the Contact Lists view.
2. Select a contact list in the list of entries at the top of the view.
3. Select the Scheduled Calls tab.
4. Set criterion on the Search expander to select callback records. Click **Search**.
5. Check the **Assign to Agent** box.
6. Select the name of the agent who should receive the callback.
7. Click **Run Action**.

Assign agent callbacks to any available agent in the campaign

1. Open the Contact Lists view.
2. Select a contact list in the list of entries at the top of the view.
3. Select the Scheduled Calls tab.
4. Set criterion on the Search expander to select callback records. Click **Search**.
5. Check the **Assign to Agent** box.
6. Select [Any Agent] to route the callback to any available agent who is participating in the campaign.
7. Click **Run Action**.

Postpone callbacks until an agent will be available

1. Open the Contact Lists view.
2. Select a contact list in the list of entries at the top of the view.
3. Select the Scheduled Calls tab.
4. Set criterion on the Search expander to select callback records. Click **Search**.
5. Check the **Postpone** box.
6. Select any combination of Days, Hours, and Minutes to postpone the callback by.
7. Click **Run Action**.

Delete callbacks

1. Open the Contact Lists view.
2. Select a contact list in the list of entries at the top of the view.
3. Select the Scheduled Calls tab.
4. Set criterion on the Search expander to select callback records. Click **Search**.

5. Check the **Delete** box.
6. Click **Run Action**.

DNC Metadata tab

DNC.com Metadata Management expander

In the DNC.com Metadata Management section you will enable the DNC.com metadata tracking and configure the cleanup of the metadata table contents.

Enable DNC.com Metadata Tracking

> This YES/NO toggle allows you to enable or disable the tracking of DNC.com metadata. Dialer only tracks DNC.com data for numbers that were blocked during a scrub operation. If you want to be able to go back later and find out why a certain numbers were blocked, you'll want to enable the metadata tracking feature. When you do so, Dialer will create a Meta Table and then store details about the numbers that were blocked including a Reason code. (See the Meta Table topic.)

Enable Automatic Table Cleanup

> If you enable the tracking of DNC.com metadata, this YES/NO toggle becomes available and allows you to force Dialer to automatically clean up the metadata table on a regular basis. In other words, old data will be expunged from the table. The cleanup procedure runs nightly at 1:15 a.m. CCS time.

Clean-up Metadata entries older than

> If you enable the automatic cleanup of the DNC.com table, this setting becomes available and allows you to specify what entries you want to clean up based the age of the entry. By default, the setting is configured for 30 days, which means that after data has been in the table for 30

days, it will be expunged. You can specify anywhere from 0 to 120 days for this setting. (Keep in mind if you set this to 0, will clean the table every night.)

DNC.com Metadata Search expander

After you enable the tracking of DNC.com metadata, you'll be able to search the Meta Table using the options in the DNC.com Metadata Search section. When you initiate a search, the results will appear in a grid at the bottom on the tab.

Date/Time

Any Date

If you are not concerned about specifying a date and time range, you can select the Any Date check box and all the data from the Meta Table will be exported.

Start/End

If you want to specify a specific date and time rang, (i.e. the date and time based on the CCS Local time that the record was returned from DNC.com, clear the Any Date check box and use the controls in the Start and End fields to select the range. In addition to the using the spin buttons to alter the date and time, you can select the drop down adjacent to each field to access a calendar control that allows you to pick the date and the time.

Campaign

You can enter a campaign name or select the campaign name from the drop down list. (The drop down list will only show campaigns that were most recently associated with the contact list; however, to find data from older campaigns that may still be in the table, you will have to manually type the campaign name in the box.) The only campaigns that will appear in this list are those that have used this particular contact list. By default, this setting is configured for Any campaign.

Phone Number

If you want to search the Meta Table for specific phone number, you can enter that phone number here.

Reset Fields

The Reset Fields button clears any changes you have made Start and End date fields and re-selects the Any Date check box.

Search

Once you have configured your search parameters, click the Search button to conduct your search of the Meta Table

Export

The Export feature allow you to export the results to a number of destination types. (See the Exporting DNC Metadata topic.)

Exporting DNC Metadata

Once you make selections in the DNC.com Metadata Search section on the DNC Metadata tab and click the Export button. You'll then see the Export DNC Metadata dialog box. See also: Meta Table

1. From the Destination Type drop down list, select one of the destination types and provide the required information. The fields in the Export DNC Metadata dialog box will change depending on the Destination Type you select. (See Source Type Specifications for more detailed information.)
2. Click **Next** to display the Mapping window and provide the required mapping information. As you do, you can add custom columns to the destination file, choose not to import data from source columns, and even remove columns to prevent them from appearing at all in the destination table.
3. Click **Next** to display the Confirm Actions dialog box.
4. Click **OK** to initiate the creating of the export file. If anything goes wrong, an error message will be displayed to indicate what went wrong. Otherwise you will see a message that indicates a successful result.
5. Click **Finish** to dismiss the wizard.

Campaign Ownership tab

Campaign Ownership tab

You can employ the controls on the Campaign Ownership tab to ensure that in the event that multiple campaigns are simultaneously using the same contact list, *only* one campaign will be able to dial a specific record in a contact list for a configurable period of time. In other words, the first campaign that dials a number in a particular record, owns that record, such that any other campaign that attempts to access that record will be denied until the ownership duration expires or is manually terminated.

If you have the Contact List Ownership Control security right enabled for your user account, you will also be able to release record ownership for campaigns.
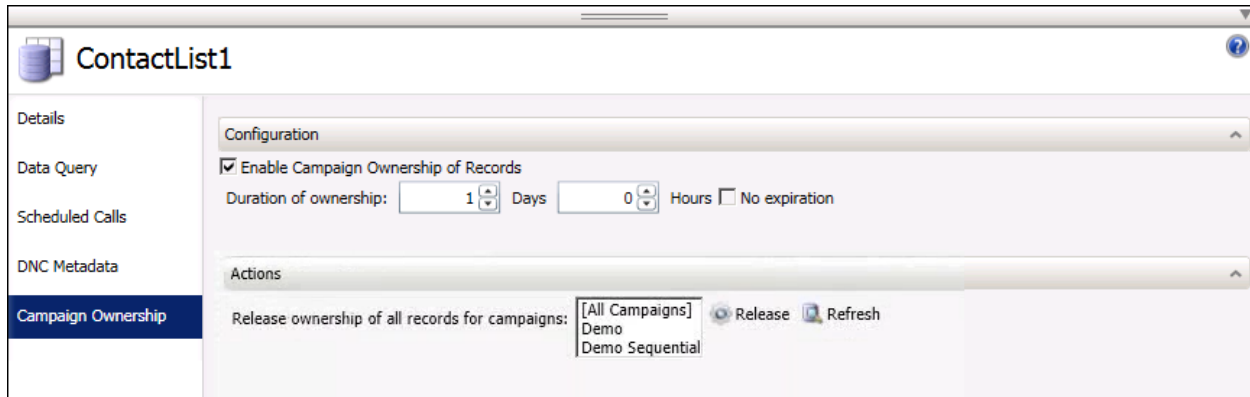
This tab contains two sections: Configuration and Actions.

Configuration

Selecting the **Enable Campaign Ownership of Records** check box allows you to specify that only one campaign will be allowed to dial a record in a contact list . You then use the **Duration of ownership** options to specify the period of time that the campaign may retain ownership of a record before it automatically releases that record back into the pool where it can be picked up by another campaign. You can then define the duration of ownership in **Days** and **Hours.**

On the other hand, you can select the **No expiration** check box, which will mean that once a campaign takes ownership of a record in a contact list, it can hold on to that record indefinitely.

Actions

If you have the Contact List Ownership Control security right , you will see the Actions section and the Release ownership of all records for campaigns control, which allows you to view the campaigns that own records and to release ownership of those records.

The list box in the Actions section allows you to see all the campaigns that currently own records in the contact list. If you suspect that the list is not up-to-date, you can click the **Refresh** button. You can select individual campaigns in the list or select All Campaigns and click the **Release** button. When you do, all records will immediately be released and become available to other campaigns sharing a contact list.

Special Notes

There are several special notes that you should be aware of when employing the Campaign Ownership feature.

- Recycling or Resetting a campaign will not effect campaign ownership of records. In other words, once you enable campaign ownership for a contact list, the records that become owned by a campaign will remain owned even after a campaign recycle or a campaign reset.

- Changing the Duration of ownership will effect all owned records. More specifically, if you set the Duration of ownership to No expiration and then later change the Duration of ownership to 3 Hours, any currently owned record in the contact list that has no expiration will eventually be updated to the 3 hour expiration.
- If Dialer has been unable to successfully complete a call to an owned record and the duration of ownership is close to expiring at the time that the call list is updated, the expiration will be renewed to whatever value is currently specified as the Duration of ownership.
- If you later clear the Enable Campaign Ownership of Records check box, two things will happen. First, all records that are already owned by a campaign will remain in that state until the duration of ownership expires or the records are manually released. Second, starting at the point you clear the check box, no other campaigns will be able to take ownership of records.

Related Topics

Security Rights > Interaction Dialer - Campaigns

Tracking Campaign Ownership

Tracking Campaign Ownership

Once you select the Enable Campaign Ownership of Records check box and specify a duration of ownership, campaigns that share a contact list are going to begin claiming ownership of records. When a claim to a record is staked, data indicating the claim is entered into three new fields associated with that record. These fields will allow you to track campaign ownership. These new fields in the contact list table are:

Field Name	Description
I3_campaignownerid	The ID of the campaign that owns the record.
I3_campaignownername	The name of the campaign that owns the record.
I3_campaignownerexpiration	The time that the ownership expires.

Query Criteria Builder

You can determine which records are owned by a campaign by adding any/all of the following fields to a query in the Query Criteria Builder section on the Data Query tab.

Predefined Queries

You find a predefined query in the drop down list titled Count by Campaign Ownership that will display the number of records in the contact list that are owned and identify which campaigns own those records. See also: Predefined Queries.

Advanced Interaction Dialer

Contact List Filters

Contact List Filters view

You can use Filters to specify the selection of a subset of records from a contact list to be dialed for a campaign. Filters are independent from a contact list, which means that the same filter can be assigned to more than one campaign-provided that the filter is compatible with each campaign's database. Furthermore, multiple filters can be assigned to the same campaign.

Depending on your needs, filters can be configured to work on a contact list table or a PND table. Filters are essentially SQL statements. However, instead of actually using SQL language, you select columns from the contact list and enter criteria to match against each column. Each filter entry defines the WHERE clause of an SQL statement that selects a subset of records from a contact list.
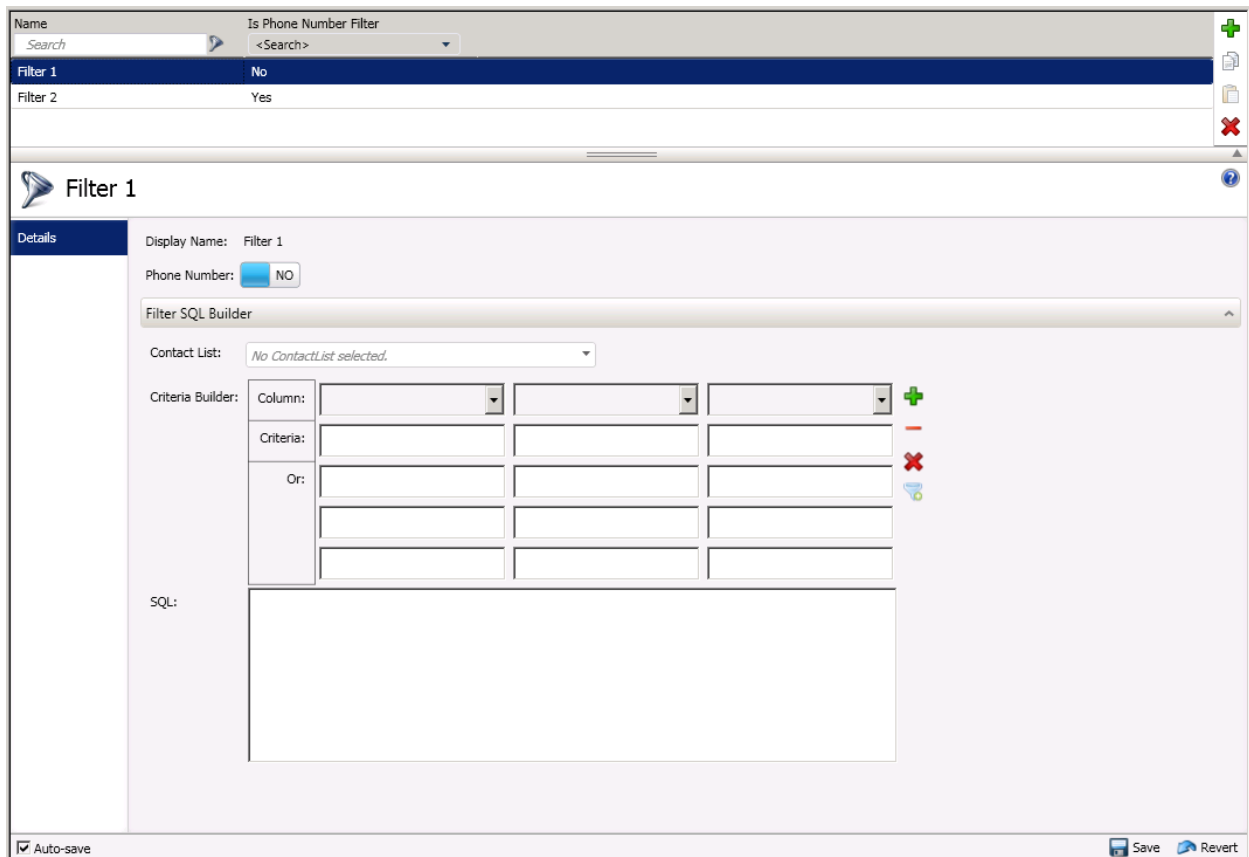
The Contact List Filters view is divided into two panels:

- The Filter Entries panel, at the top, lists existing Filter entries and provides controls that you can use to add, copy, paste, or remove entries.
- The Filter Settings panel, at the bottom, provides you with an interface for selecting and managing the properties of a filter.

Related Topics

Filter Panels

Working with Filters

Filter Tips

Filters Feature Overview

Filter Panels

Filter Panels

The Filters view is divided into two panels:

- The Filter Entries Panel lists existing Filter entries and provides controls that you can use to add, copy, paste, or remove entries.
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Related Topics

Working with Filters

Filter Tips

Contact List Filters view

Filter Entries Panel

The Filter Entries Panel lists existing Filter entries and provides controls that you can use to add, copy, paste, or remove entries.
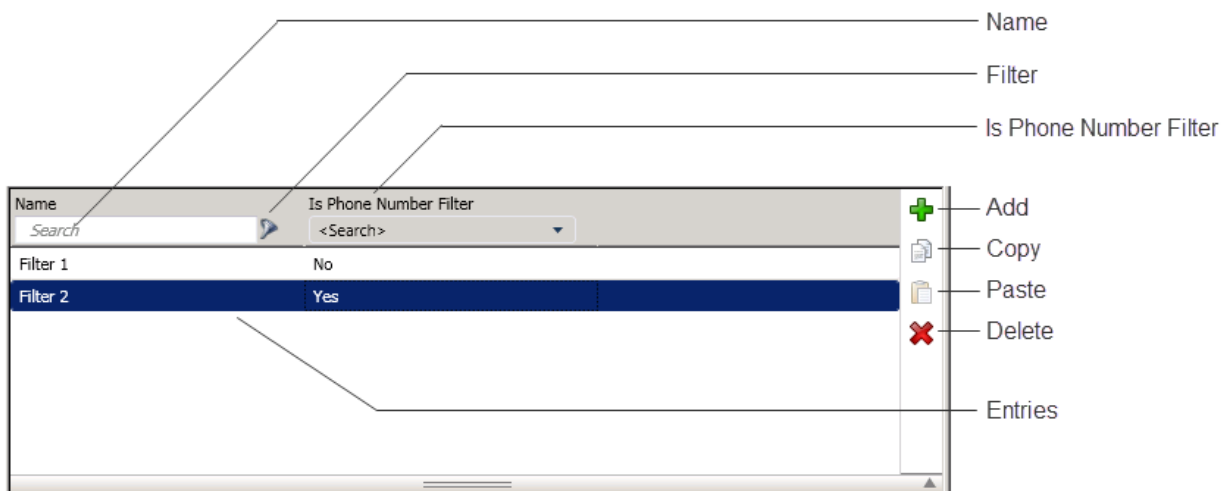
Name

Use the Name field to pare down the list, by specifying all or part of a filter name, to display only matching entries.

Filter

Click the funnel icon to specify whether filter text is contained within, starts, or matches campaign entry names.
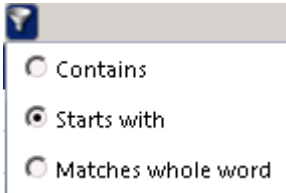
Is Phone Number Filter

Allows you to choose which filters you want to display in the Entries list based on the status of the Phone Number setting. This comes in handy when you have a lot of filters.
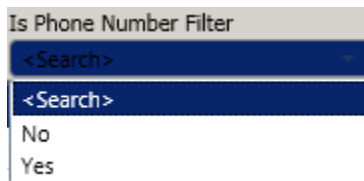
If you want to see filters where the Phone Number setting is YES, indicating that the filters are applied against the PND table associated with the Contact List, select Yes from the drop down.

If you want to see filters where the Phone Number setting is NO, indicating that the filters are applied against the contact list table associated with the Contact List, select No from the drop down.

If you want to see both, select <Search> from the drop down.

Entries

Each row in this list corresponds to a filter entry. Clicking a row opens that entry for editing.

Add

Adds a new entry.

Copy

Places a copy of the selected entry on the clipboard.

Paste

Pastes the contents of the clipboard as a new entry.

Delete

Deletes the selected entry. You are asked to confirm the delete operation:
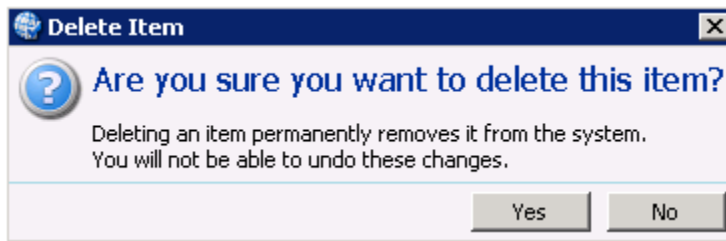
Related Topics

Working with Filters

Filter Tips

Contact List Filters view

Filter Settings Panel

The Filter Settings Panel provides you with an interface for selecting and managing the properties of a filter. It consists of two sections: At the top you'll find basic information for the filter and at the bottom you'll find the Filter SQL Builder expander section.

Name

This box sets the name of a Filter. This field appears when a new entry is composed. Afterward the name appears in the read-only *Display Name* box. Type a unique descriptive name that reflects the purpose of the new filter.

Display Name

This read-only field displays the name of a saved filter.

Phone Number

This toggle switch allows you to choose whether columns from the Contact List or PND table are displayed in the Criteria Builder's Column drop-down lists. By default, the Phone Number toggle is set to NO.

When the Phone Number toggle is set to NO, the corresponding SQL filter will be applied against the contact list table associated with the Contact List, which is configured for the Campaign where the Contact List Filter is applied.

When the Phone Number toggle is set to YES, the corresponding SQL filter will be applied against the PND table associated with the Contact List, which is configured for the Campaign where the Phone Number Filter is applied.

Filter SQL Builder expander

Contact List

Select a contact list with the columns you want to filter.

Criteria Builder

Column

Select a column to enter filter criteria against.

Criteria

The criteria you type in these columns is AND'd together. Text entered here is interpreted to create the WHERE clause of a SQL statement. The syntax of SQL filters conforms to standard SQL WHERE-clause syntax.

Customers can define criteria for any column in the contact list database, including custom fields such as Customer Number, or Last Ship Date. For example, to pull only those telephone numbers that start with 317, you would enter: LIKE '317%'.

OR

The criteria typed in OR columns creates a logical OR expression.

SQL

When you click the Create SQL button, this text box will display the generated WHERE clause that indicates how the SQL statement is constructed based on your input.

Add a column

Adds an additional column on the right.

Remove a column

Removes the right most column.

Clear all Criteria

Clears all entries and adds back default columns, if any were removed.

Create SQL

Populates the SQL box with the SQL WHERE statements, based on your entries.

Auto-save

Select this check box to automatically save the current item when you change selection.

Save

Save the modified item.

Revert

Revert the changes to the modified item.

Related Topics

Working with Filters

Filter Tips

Contact List Filters view

Working with Filters

Working with Filters

When working with Filters, you'll use these procedures.

Define a Contact List Filter

Assign Filters to a Campaign

Copy and Paste a Filter

Remove a Filter

Related Topics

Filter Panels

Filter Tips

Contact List Filters view

Define a Contact List Filter

Use this procedure to define a new filter. SQL Filters are optional. The syntax of SQL filters conforms to standard SQL WHERE-clause syntax.

Dialer_Manager_Help

To define a filter:

1. From within Advanced Interaction dialer, select **Contact List Filters**.
2. In the topmost pane, click **Add** ( ) to create a new Filter entry.
3. An entry titled **New Item** appears in the list of entries. Over type the default "New Item" to type a descriptive name in the *Name* field. This establishes the name you will see later, when you assign filters to a campaign.
4. Select a **contact list** that contains columns you want to filter against. The Contact List drop down is optional. Use it to test a Contact List Filter or to use the SQL Builder. Selecting a contact list allows columns to be populated. You can select columns to write SQL statements as needed. The resulting filter can be applied to any campaign which uses a similar contact list. As long as the same column name exists in the campaign's contact lists, the filter can be assigned to those contact lists regardless of the Contact List setting in the filter itself.
5. Use the **Column** drop list to select a database column. Customers can define criteria for any column in the contact list database, including custom fields such as Customer Number, or Last Ship Date.
6. Type text to match in the Criteria row. Text entered here is interpreted to create the WHERE clause of a SQL statement. For example, to pull only those telephone numbers that start with 317, you would enter: LIKE '317%'. The items you type in the Criteria rows are AND'd together. Criteria entered in OR rows creates a logical OR expression.
7. Repeat steps 5-6 to filter other columns.
8. Click Create SQL to populate the SQL box with a generated WHERE clause. This displays a statement constructed based on your input.
9. Click **Save** ( ) to save the new filter.
10. A filter is not used by any campaign until it is added to the Selected Filters list in the Filters section of the campaign configuration.

Related Topics

Contact List Filters view

Assign Filters to a Campaign

Assign Filters to a Campaign

When Contact List filters are assigned to a campaign, only those records that match filter criteria are selected for processing by a campaign, once the next cycle of calling begins.

To assign filters to a campaign:

1. From within Interaction Dialer, select **Campaigns.**
2. Select a campaign in the **Campaign Entries** panel.
3. Select the **Contact List tab**.
4. Scroll down to **Filters**. A single campaign can use multiple named Filters. The Filters will be surrounded by parenthesis and ANDed together in the SQL where clause for the recycle.

133
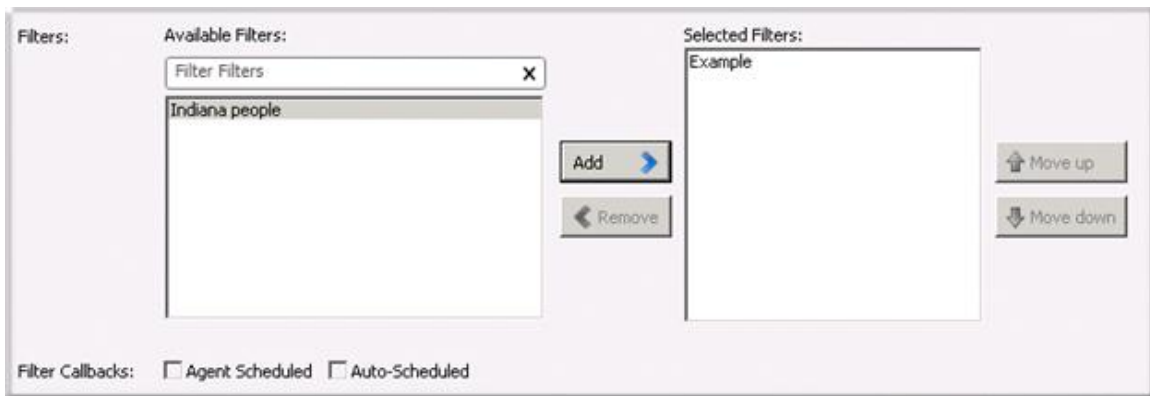
5. Select a filter in the **Available Filters** list. Click **Add** to move it to the **Selected Filters** list. Repeat to add additional filters, if necessary. Use the Move Up and Move Down buttons to change the execution order of filters. Topmost filters are applied first.

6. Click **Save** ( ) to save changes made to the campaign configuration. Your selected Filters will be used when the next cycle of calling begins.

Related Topics

Contact List Filters view

Copy and Paste a Filter

You can duplicate a Filter by selecting it in the list of Filter Entries panel, copying it to the clipboard, and pasting it as a new entry.

1. From within Advanced Interaction dialer, select **Contact List Filters.**
2. Select a Filter in the **Filter Entries** panel.
3. Click **Copy** ( ) to copy the selected entry to the clipboard.
4. Click **Paste** ( ) to paste the contents of the clipboard.
5. In the **Name** field, change *New Item* to a more meaningful name.
6. Modify Filter criteria as desired.
7. Click **Save** ( ).

Related Topics

Contact List Filters view

Remove a Filter

Removing a Filter deletes it permanently from the list of Filter entries.

Note: You cannot delete a Filter that is assigned to a Campaign.

To remove a filter:

1. From within Advanced Interaction dialer, select **Contact List Filters.**
2. Select a filter in the Filter Entries panel.
3. Click **Delete** (). You are asked to confirm this operation, since it cannot be undone.
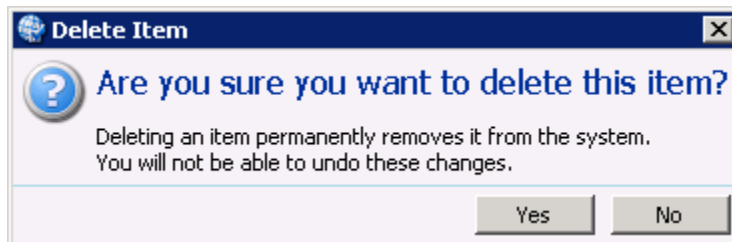
4. Click **Yes** to confirm.

Related Topics

Contact List Filters view

Filter Tips

Filter Tips

The following tips are useful when working with filters:

How to test for NULL entries

Filter Scheduled Callback records

Use a Rule Action to apply a Filter

Related Topics

Filter Panels

Working with Filters

Contact List Filters view

How to test for NULL entries

When construction a filter either in the Data Query section or in the Contact List Filters, you can configure the filter to test whether the entry was NULL or not:

'= null' or just 'null' translates to IS NULL

'!= null' or '<> null' translates to IS NOT NULL

The word null is not case sensitive.

Related Topics

Contact List Filters view

Filter Scheduled Callback records

Optionally, you can apply Filters to the selection of scheduled callback records, whether scheduled by agents or auto-scheduled by Dialer when it is unable to reach a contact. By default, filters are not applied to callback records. Filtering can be applied to either type of callback by setting Filter Callbacks options on the Campaign configuration.

To filter the selection of Scheduled Callback Records:

1. From within Interaction Dialer, select **Campaigns.**
2. Select a campaign in the **Campaign Entries** panel.
3. Select the **Contact List** tab.
4. Scroll down to **Filters**.
5. Next, use the *Agent Scheduled* and *Auto-Scheduled* check boxes to apply Filter criteria to the selection of callback records. By default, filters are not used when the system selects scheduled callback records. These check boxes optionally force scheduled calls to adhere to an active filter.

   Agent Scheduled

   Check to apply filter criteria to the selection of callbacks scheduled by agents.

   Auto-Scheduled

   Check to apply filter criteria to the selection of auto-scheduled callbacks. Auto-scheduled callbacks are created up by the system when it is unable to reach a targeted party for one of the following reasons:

Call was abandoned	Line was busy	System Hang Up
No answer	Answering Machine detected	Fax Machine Detected
Remote Hang Up		

6. Click **Save** to save changes to the Campaign configuration. Your changes will be applied when the next cycle of calling begins.

Related Topics

Contact List Filters view

Assign Filters to a Campaign
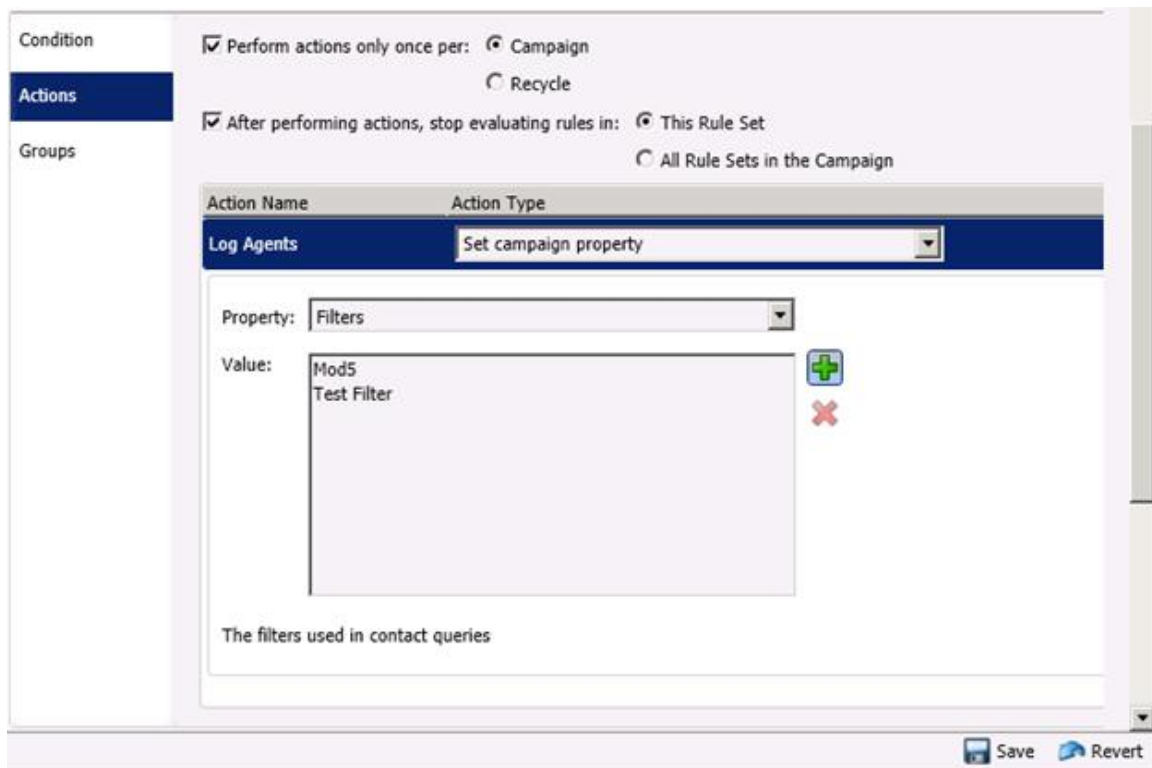
Filter Callbacks

Use a Rule Action to apply a Filter

1. In the Rule Sets view, add a new rule or select an existing rule.
2. Set the rule's condition.
3. Click the **Rule Actions** tab.
4. Set **Action Type** to **Set campaign property**.
5. Set **Property** to **Filters**.
6. Click **Add** ( ) to select filters to assign to this action.
7. Select filters from the **Available Items** list. Then click **Add** to move them to the **Selected items** list**.**
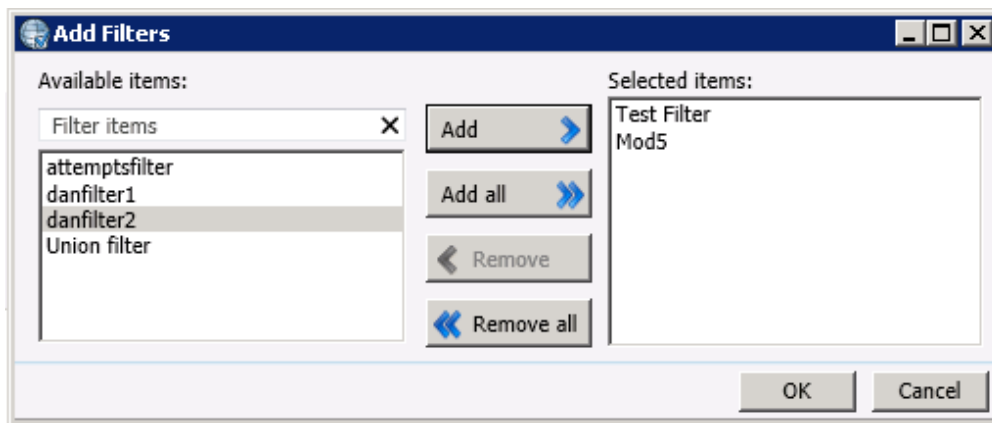
8. Click **OK**. Then click **Save** (💾).

Related Topics

Rule Conditions tab

[Contact List Filters view](#)

Global Dialer Settings

Global Dialer Settings view

Unlike other views, the Global Dialer Settings view doesn't configure a Dialer object. Instead it allows you to configure system-wide Dialer settings and several important features from the various tabs. Once Global Dialer Settings are configured, they rarely need to be changed.

Tab	Description
General	Configure general system-wide settings for Dialer.
Phone Number Types	Manage phone number types, which are user-defined strings that can be associated with contact columns to identify a type of telephone number.
Outbound Dialing Servers	Define settings for Outbound Dialer Servers.

Configuration Change Auditing	Manage Interaction Dialer's Configuration Change Auditing feature, which tracks all configuration changes made using Dialer Manager or an API such as IceLib.Configuration.Dialer.
HTTP Server	Configure settings for streaming data in and out of a contact list table.
Campaign Server Switchover	Identify the secondary Central Campaign Server for automatic switchover should the primary Central Campaign Server fail for any reason.
Campaign Server Parameters	View, create, modify, and delete Server Parameters on the Central Campaign Server.

General

The General tab contains various system-wide settings that you can configure for Dialer.

Delay in seconds before auto-dispositioning a disconnected interaction

Sets length of time that Interaction Dialer will delay the automatic dispositions that happen when an interaction disconnects without an explicit disposition. This applies only to interactions that were transferred to an Interaction Attendant profile or which were transferred away from an agent but did not get an explicit disposition before they were disconnected. This setting does not apply to agent-assigned calls. It is used when a call disconnects while in Attendant. The default delay is 120 seconds. This global ODS setting applies to all ODS servers under control of the CCS.

Pause a campaign when the database query failure rate exceeds

Sets the percentage of major errors that the DialerTranServer process will tolerate for a particular campaign before it automatically pauses the campaign so that administrators can troubleshoot and fix problems. The default value is 5, with 1-100 as the valid range. The default value of 5 means "pause the campaign if 5% of the queries fail".

Penetration data retention in days (0 is infinite)

Indicates the number of day to keep data in the penetration table. For example, set this parameter to 30 to delete data that is older than 30 days. Use the default value of 0 and the data in the penetration table is not deleted. Set the PenetrationDataCleanupTime parameter in the Campaign Server Parameters tab to indicate the time of day to delete the data.

If a Preview call fails to connect, play this file to the agent

This setting configures Dialer to play a WAV file to an agent if a preview call fails to connect. On an ISDN system, if a call results in Special Information Tones (SIT), it is disconnected, so there is no audio path to route to the agent. As a result, the blind transfer to the agent would fail and the agent would not get a New Preview Call notification. By setting this option to play audio to the agent, the system can indicate how the agent should disposition the Preview call. This global ODS setting applies to all ODS servers under control of the CCS.

If a Preview call encounters a busy signal, play this file to the agent

This setting configures Dialer to play a wave file when if a Preview call fails because the line was busy. On an ISDN system, when a busy call is disconnected state, there is no audio path to route to the agent, so the blind transfer to the agent would fail and the agent would not get a New Preview Call notification. By setting this option to play audio to the agent, the system can indicate how the agent should disposition the Preview call. This global ODS setting applies to all ODS servers under control of the CCS.

Supervisor can override the agent right to logon/logoff all campaigns

The "Logon Campaign" security right allows an agent to specify which campaigns that they want to be logged on to. This security right has the side effect of not allowing a Supervisor or Administrator to switch the agent's campaign membership.

Setting *this option* to *Yes* allows a Supervisor or Administrator to move agents who have the *Logon Campaign* security right to different campaigns, or to simply log them on to additional campaigns, overriding the restriction imposed by the security right, while still allowing agents to specify which campaign they wish to start with.

Max attempts per day reset at midnight based on

This setting allows you to specify how you want to identify midnight in order to determine when to reset the Max Attempts Per Day setting on the Campaigns | Recall Control tab.

By selecting UTC Time, you can specify that you want to use the primary time standard by which the world regulates time to identify midnight.

By selecting CCS Time, you can specify that you want to use the local time where the CCS is located to identify midnight.

Max Attempts daily call list queries reset

> This setting allows you to specify exactly how you want to define the length of a day for the Max attempt thresholds on the Campaigns | Recall Control tab.
>
> By selecting At Midnight, you can specify that a new day begins after 12:00 am.
>
> By selecting After 24 hours, you can specify that a new days begins 24 hours after the maximum attempts threshold was reached.

Related Topics

Phone Number Types

Phone Number Types

This tab of the Global Dialer Settings view manages phone number types—user-defined strings associated with contact columns to identify a type of telephone number. Examples of phone number types might be "Work", "Home", or "Cell". Phone number types describe the purpose of phone numbers columns in a contact list. Phone number types implement Dialer's **multiple phone numbers per contact** feature.
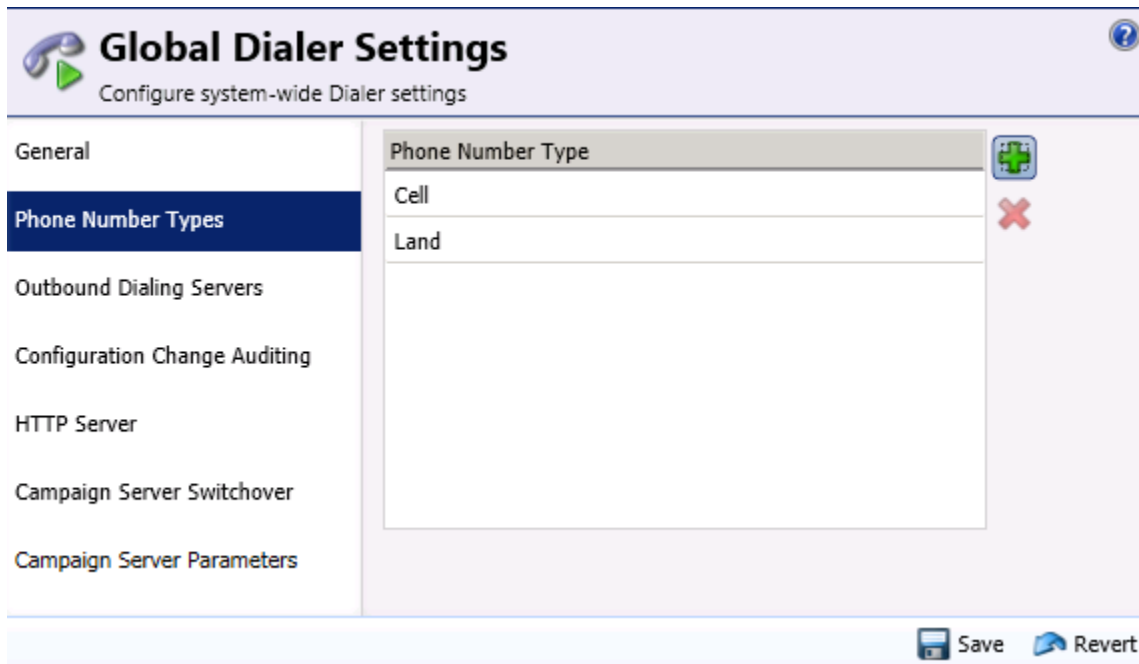
➕	Add a new Phone Number Type.
✖	Remove and existing Phone Number Type.

It is common for a contact to have more than one telephone number. For example, a contact list may provide columns named PN1, PN2, and PN3 for home, cell, and work numbers. Once types are defined and associated with these columns, Dialer will map each phone number with its type in the database, and track time zone, contact attempts, and status at the phone number type level. Dialer can use this information to track dialing attempts and results separately, or to dial certain numbers but not others. For example, Dialer can track home attempts separately from work, and dial home numbers differently than work or cell numbers. It is also common for a contact to have phone numbers in different time zones.

Laws and convention require that a phone number is dialed in an appropriate time based on its hosting area code and exchange. Other capabilities based on the type of a phone number are important, such as tracking home attempts and results separately from work, or dialing home numbers differently than work or cell numbers, and so forth. Phone Number Types can be used to make decisions in per call policies.

- The number of contact telephone numbers is limited only by database constraints.
- The order in which numbers are dialed can be changed dynamically using policies.

Related Topics

Define Phone Number Types

Associate a phone number column with a phone number type

Define Phone Number Types

To define phone number types:

1. From Dialer Manager, open the Advanced Interaction Dialer container and click **Global Dialer Settings**.
2. Select the **Phone Number Types** tab.
3. Click the Add ( ) button.
4. When you are prompted for a new phone number type, enter a descriptive string, which can be anything you like so long as it is unique.
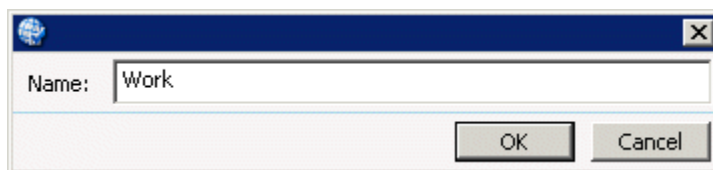
5. Click **OK**.

   Repeat steps 3-5 to define additional phone number types, as needed.

6. Click **Save**.

Associate a phone number column with a phone number type

This procedure explains how to associate a telephone number column in a contact list, with a user-defined phone number type. Once this association is established, Dialer will map each phone number with its type in the database and track each phone number's time zone, status attempts, etc.

To manage time zones, attempts, and other statistics at the phone number level, instead of for the contact as a whole:

1. First, define **Phone number types** using the Define Phone Number Types procedure.
2. At the **Home** screen in Dialer Manager, click **Contact Lists**.
3. Select a contact list in the list of entries at the top of the screen.
4. Select the **Details** tab.
5. Select a phone number column from the **Available Columns** list on the left.
6. Click **Add** to move that column to the **Selected Contact Columns** list.
7. Select an phone number column entry. Then click the drop list below **Phone Number Type**.

Contact Column	Phone Number Type
PN	[None] ▼
	[None]
	Cell
	Home
	Work
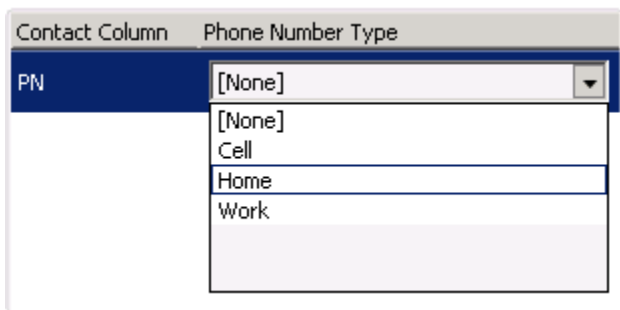
8. Select one of the available types. If this list contains no custom type entries, define them before performing this procedure.
9. Repeat steps 4-7 as needed to associate other phone number columns in the contact list with phone number types.
10. Click **Save**.

Outbound Dialing Servers

Outbound Dialing Servers

The Outbound Dialing Servers tab display information and provides controls that allow you to define certain settings for your Dialer server.
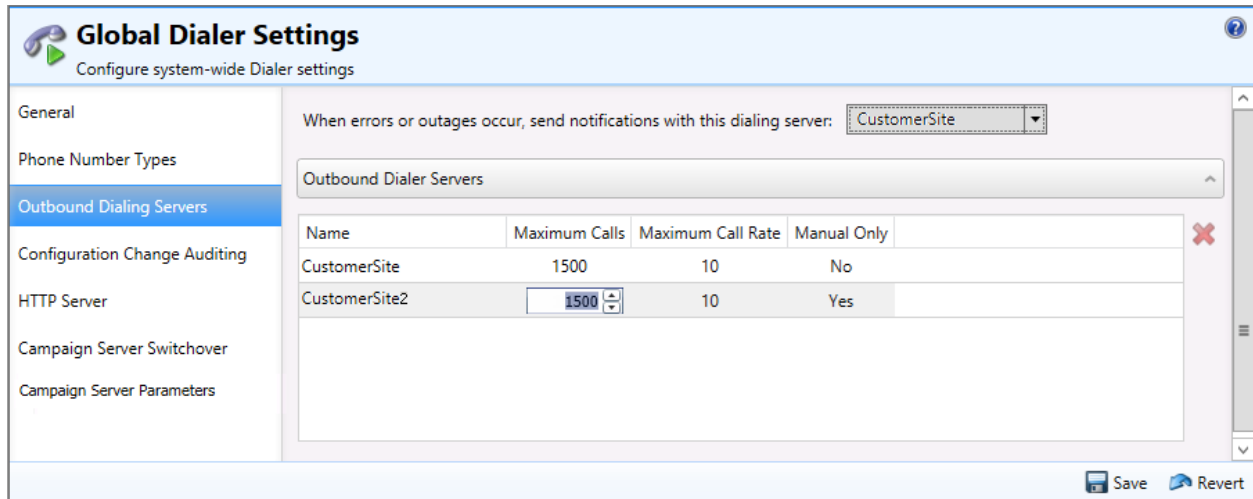
When errors or outages occur, send notifications with this dialing server

Displays a list of Dialer servers, so that you can select one server to which you want to send notifications and e-mails when errors or outages occur. The server you select becomes the Master Dialer server. A Master Dialer server is required in order for statistics to be aggregated appropriately. If the configured Master Dialer server is not available, the CampaignServer process will assign the first available Dialer server as the Master Dialer until the configured Master Dialer comes online (or a user changes this configuration).

Name

Each row in the grid contains the name of an Outbound Dialer Server.

Maximum Calls

Sets a global limit on the number of calls Dialer will place so that it doesn't use up all available lines or exceed the number of physically available channels. By default this setting is configured at 1500. To change the setting, click the existing value to reveal the spin control. The control sets a value ranging from 0 to 2,000,000,000 calls.

Maximum Call Rate

Sets the number of calls per second the Dialer will place. To change the setting, click the existing value to reveal the spin control. By default, this setting is configured at 10 calls per second. However, if you are using the Bulk Call API— a high performance bulk call placement API that consumes less system resources while providing higher call throughput—this setting must be bumped up to 16 calls per second or more.

Manual Only

If you are running a Dialer server with the Manual Calling feature license, then the Manual Only column will display Yes. If you are running a Dialer server with the standard Outbound Dialing Server feature license, then the Manual Only column will display No.

Save

If you make changes, click Save to enable them.

Revert

If you make changes and then decide against them, click Revert to reestablish the previous values.

Bulk Call API

Bulk Call API

The **Bulk Call API** option tells Dialer to use a high performance bulk call placement API that consumes less system resources while providing higher call throughput. Please note that the Bulk Call API supports SIP lines only. It cannot be used with TDM lines.

Customers who place more than 10 calls per second are advised to activate the Bulk Call API feature. It provides significantly faster outbound dialing through Interaction Dialer subject to the following considerations:

- When the Bulk Call API is used, pre-call custom handler policies are ignored by Dialer.
- You must configure the Maximum Call Rate setting to be 16 calls per second or higher.
- When the Bulk Call API is used, Dialer calls in a dialing state will not show up in Supervisor views that show call or queue activity. Calls that result in call analysis types set to "Hang Up" are not logged in the Call Detail table and do not appear in supervisor views. Conversely calls that result in call analysis types not set to "Hang Up" will show up in the Call Detail table and in non-Dialer supervisor views once call analysis has completed. All Dialer calls are logged in the Dialer CallHistory table.

Note: For more information about requirements of Bulk Call API and caveats associated with it, see How to implement the Bulk Call API for Interaction Dialer.

Related Topics

Enable Bulk Call API

Adjust Maximum Call Rate

Dial Settings

Enable Bulk Call API for a Campaign

To enable the Bulk Call API option for a Campaign:

1. From Dialer Manager, click **Campaigns**.
2. Select a campaign in the Campaign Entries panel.
3. Select the **Basic Configuration** tab.
4. If necessary, expand the **Dial Settings** expander.
5. Click the **Bulk Call API** toggle switch to set it to the **On** position.
6. Click **Save**. This change takes effect immediately.

NOTE: The Bulk Call API requires a Dialer Maximum Call Rate setting of 16 or higher.

Related Topics

Adjust Maximum Call Rate

Dial Settings

Adjust Maximum Call Rate

Once you have enabled the Bulk Call API feature for a Campaign, you must increase the Dialer Maximum Call Rate from its default of 10 calls per second. In our internal large-scale tests running on high-performance physical servers, we have been able to run at 100 calls per second. Set the Dialer Maximum Call Rate to a value that allows your server and configuration to run stably. We recommend that you start off at 16 and slowly increase the value while watching for problems.

To adjust this setting:

1. From Dialer Manager, open the Advanced Interaction Dialer container and click **Global Dialer Settings**.
2. Select the **Outbound Dialing Servers** tab.
3. In the row containing the ODS you want to change, click the existing **Maximum Call Rate** value to reveal the spin control and then use it to adjust the threshold value.
4. Click **Save**.

Configuration Change Auditing

Configuration Change Auditing tab

This tab manages Interaction Dialer's Configuration Change Auditing feature. When enabled, auditing tracks all configuration changes made using Dialer Manager, or an API such as IceLib.Configuration.Dialer. Auditing authorizes each Outbound Dialer server to record which user changed an object, and the properties of the object that changed. Auditing is a system-wide setting, meaning that auditing is either "on" or "off" for all servers. Auditing is disabled by default.

Auditing is enabled, messages and data are sent to the DialerTranServer process on the Central Campaign server, which in turn, writes records to the Audit table on the database server. Audit entries that are older than a configurable retention period are automatically removed from the Audit table.
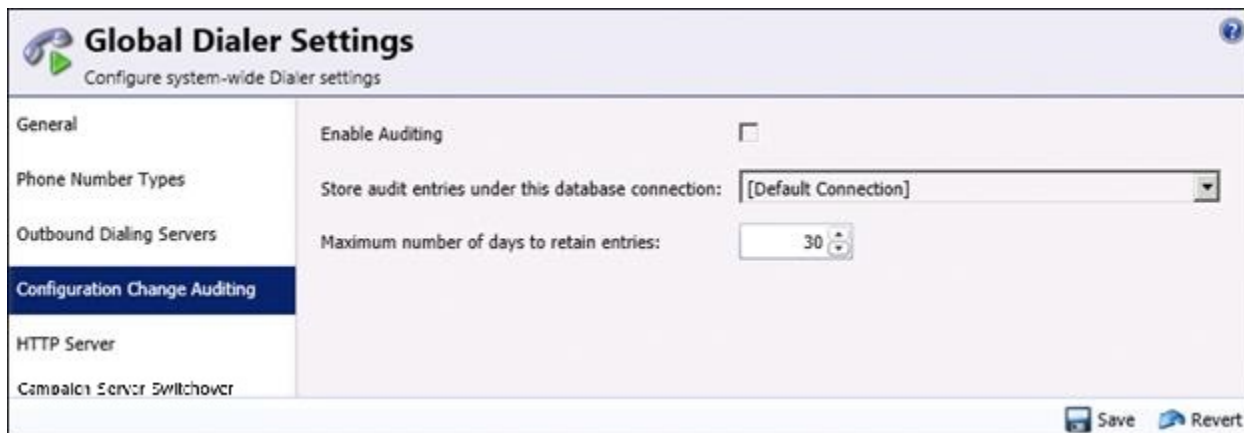
Enable Auditing

> Select this check box to enable auditing. When enabled, configuration changes (the user who changed an object, and the properties of the object that changed) are written to the Audit table.

Store audit entries under this database connection

> Selects the connection used to access Dialer database tables, specifically the Audit table.

Maximum number of days to retain entries

> Sets the number of days that audit entries should remain in the table before being automatically removed from the table.

Related Topics

Enable Configuration Change Auditing

Auditing vs. Trace Logging

Enable Configuration Change Auditing

To enable Configuration Change Auditing in Dialer Manager:

1. From Dialer Manager, open the Advanced Interaction Dialer container and click **Global Dialer Settings**.
2. Click the **Configuration Change Auditing** tab.
3. Select the **Enable Auditing** check box.
4. Optionally select a different database connection. The default connection is appropriate in most cases.

5. Optionally change the retention period for audit entries. Entries are kept for 30 days by default, and automatically deleted afterward.

6. Click Save.

Differences between Auditing and Trace Logging

Trace settings do not determine whether auditing is performed or the amount of data that is written to the Audit table. Within the CampaignServer trace file, there is an "Audit" trace topic that affects the verbosity of audit log messages in trace logs (vwrlogs) used by Customer Care and Developers. Audit messages are written to trace logs only if the Audit trace topic is set to "Status" or higher. The trace topic level is checked when Dialer Manager is opened so that the level is not retrieved numerous times. If the trace level is too low, no audit changes are written to trace logs.

Trace settings have no effect upon Configuration Change Auditing. However, trace logs can be useful in support situations. For example, a customer can send trace logs to Customer Care, so that a representative can analyze audit information without having to query the customer's database.

For the most part, customers should concern themselves with the "Enabled" setting on the Enable Configuration Change Auditing tab page of the Global Dialer Settings view. This setting is written to the dialer_config.xml file that is shared between the different Outbound Dialer machines. Since there is only one audit setting in dialer_config.xml, Auditing is either ON or OFF for all servers. When Auditing is turned on, database entries will be generated for the audit entries, regardless of the trace levels.

HTTP Server

HTTP Server

Using the settings on the HTTP Server tab you can configure HTTP Streaming of data in and out of a contact list table.

Use HTTPS checkbox

When checked, the HTTP Server will use secure HTTP protocol to stream data.

Accept requests at this address

Selects the address of the HTTP server.

Port

Sets the port that the HTTP server listens on. Port 8122 is used by default. The CCS install opens this port by adding it to the firewall's exclusion list. However, if a customer manually changes port from 8122 to something else, the customer is responsible for opening that firewall port manually.

Restart Server

This option restarts the server after you make a configuration change.

HTTP Streaming

Contact List Management features, such as the ability to import or export data, require access to Dialer's database. Interaction Dialer Manager does not perform direct database access. Instead, it passes requests to IceLib, so that routine transactions are handled consistently. However, IceLib isn't suitable for streaming large amounts of data into or out of a contact list, so a **streaming HTTP server** is used instead.

The streaming HTTP service runs as part of DialerTranServer on the Central Campaign Server. The address and port it listens on, as well as whether to use SSL, is configurable in Dialer Manager, is configured on the HTTP Server tab page.
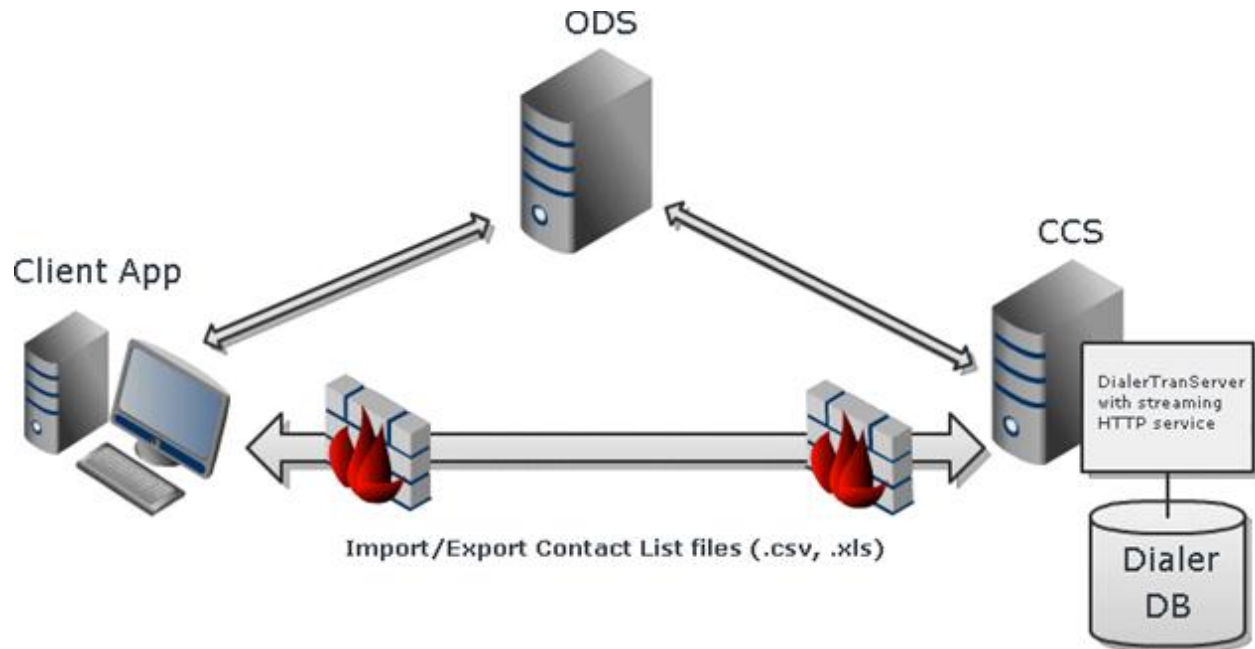
Contact list management features made possible by HTTP Streaming:

- You can import records into the Dialer call list from a CSV file, XLS file, or a database table.
- You can export records from the Dialer call list into a CSV file, XLS file, or a database table.
- You can query a small number of records to be displayed in a data grid in the user interface, and then commit changes to those records back to the database.

Campaign Server Switchover

Campaign Server Switchover

NOTE: The Campaign Server Switchover feature requires special installation steps. For more information on the CCS Switchover Setup Assistant, see the *Interaction Dialer Installation and Configuration Guide*, which you can find in the PureConnect Documentation Library.

On the Campaign Server Switchover tab, you'll see details about the current state of the Campaign Server Switchover configuration. If you have set up a Central Campaign Server Switchover pair, then you will see that switchover pair on the Campaign Server Switchover tab.

In addition to the switchover pair, you will see the Deactivate Switchover button. You must be a Master Administrator in order to use this button to deactivate the switchover pair. For more information, see Deactivate a Switchover. If you have not set up a Central Campaign Server Switchover pair, then you will see a message that informs you that no switchover is configured or that the backup server is unavailable.

NOTE: If you have configured a backup server and you see this message, then you need to check on the status of the network connection or the status of the physical server configured as the backup.

Deactivate a Switchover

You must have Master Administrator Access Rights in order to deactivate the CCS switchover pair.

You can use the Deactivate Switchover option to deactivate the switchover pair in the event that you need to perform major maintenance work on one of the CCS servers. When you use the Deactivate Switchover option, both CCS's will become unavailable once you have performed all the steps and the deactivation procedure is complete. You can then bring the Primary Campaign Server back online as the

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main CCS, but the Backup Campaign Server will become totally unusable as a campaign server. You will need to reinstall the CCS software from scratch.

To complete the procedure, you will need to perform steps on the Outbound Dialer Server as well as on both the Backup Campaign Server and the Primary Campaign Server .

Preparation

The first thing that you need to do is make sure that the system currently configured as the Primary CCS is the same system that was originally set up as the Primary CCS when you first ran the CCS Switchover Setup Assistant.

- If the original is currently the Primary CCS, then proceed to the next section.
- If the original is not currently the Primary CCS, you'll need to use the Switchover Control Panel to perform a manual switchover.

Central Campaign Server

1. Launch the Switchover Control Panel on either the Primary CCS or the Backup CCS.
2. Click the **Switch** button and wait until the switchover operation completes successfully.
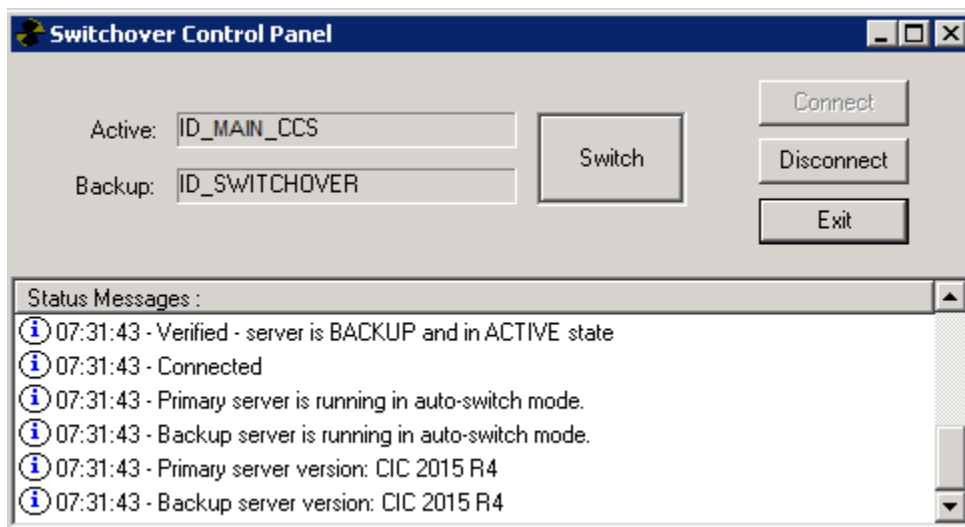
Outbound Dialer Server

1. Click the **Deactivate Switchove**r button.

2. When you see the confirmation dialog, click **OK**.
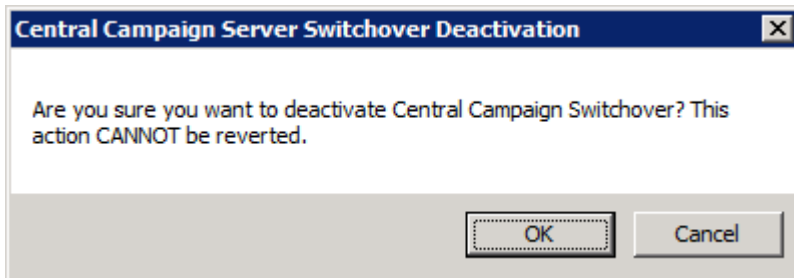
3. When you see the second confirmation dialog, click **OK**.
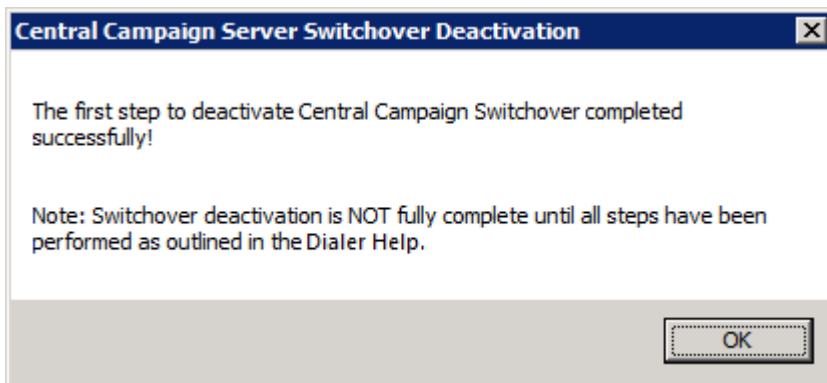
4. Proceed to the Backup Campaign Server.

Backup Campaign Server

1. Open an Administrator Command Prompt window.
2. Enter the command **Net Stop "Interaction Center"**
3. Wait until you see the stopped successfully message.
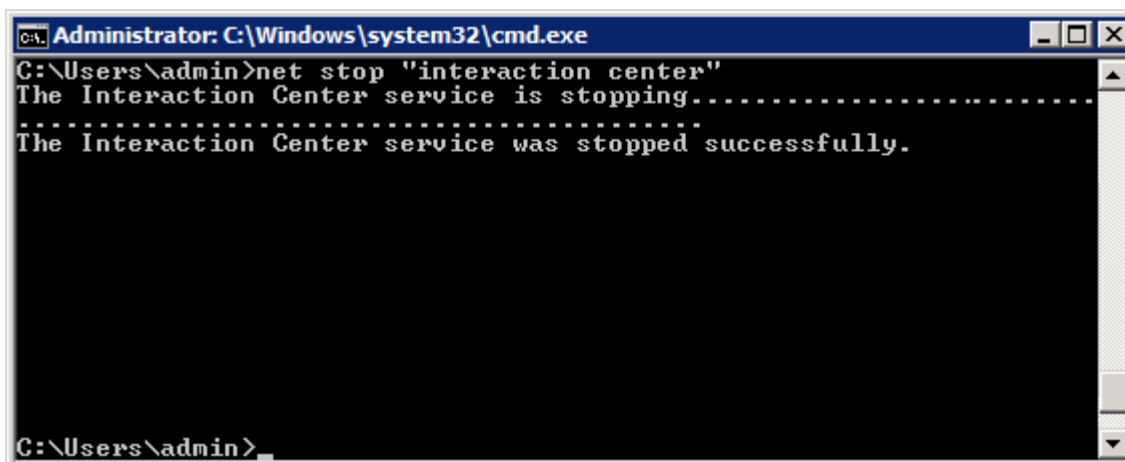
4. Proceed to the Primary Campaign Server.
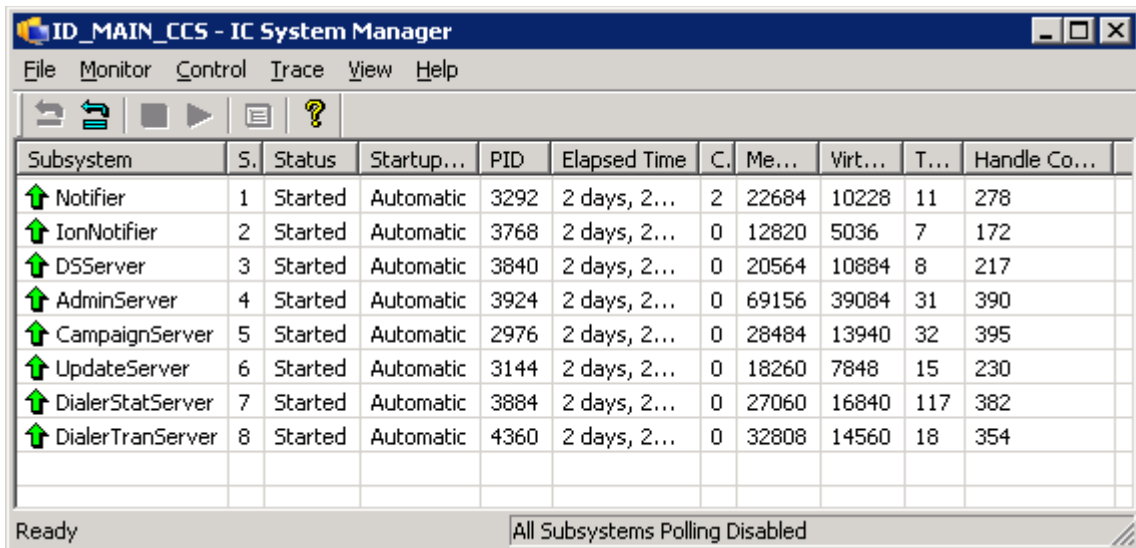
Windows Services Console

You can also stop Interaction Center from Windows' Services console. To do so:

1. Launch the Services console.
2. Locate the Interaction Center service.
3. Right click and select Stop from the context menu.
4. Wait until the Status column shows that the Interaction Center service has stopped.

Primary Campaign Server

1. Access the Restart command on the Start menu to reboot the system.
2. Once the machine is up and running, launch IC System Manager and verify that the FileMonitor and the SwitchoverService subsystems are NOT running. For more information on IC System Manager, see the IC System Manager Help in the [PureConnect Documentation Library](#).

3. Proceed to the Outbound Dialer Server.

Outbound Dialer Server

1. When you return to the Outbound Dialer Server, you'll find two Information dialogs that popped up in response to your stopping and starting Interaction Center on the Primary Campaign server.
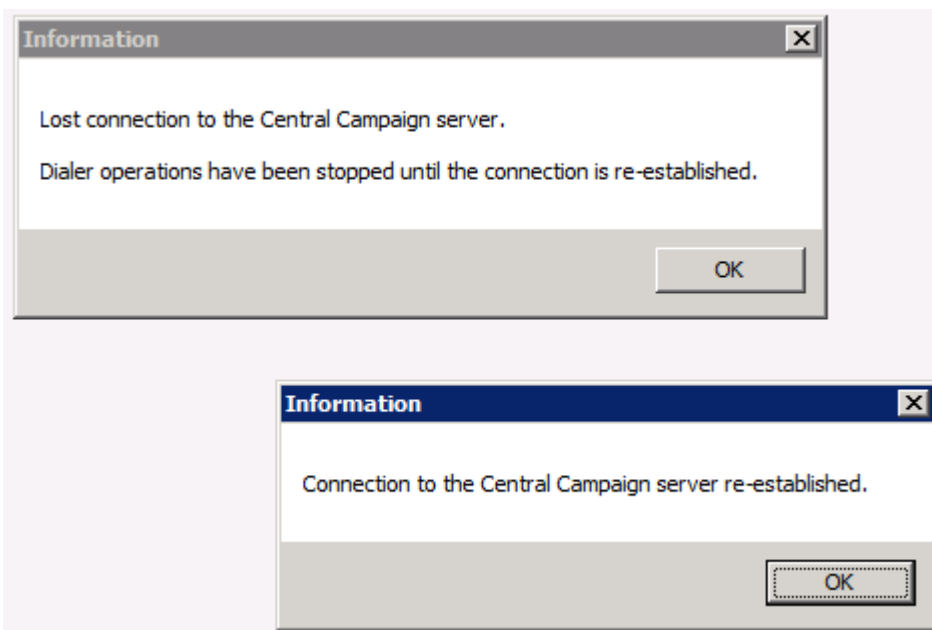
2. Click **OK** to close them.

3. You'll see that the Campaign Server Switchover tab now shows that there is no longer a switchover configuration.
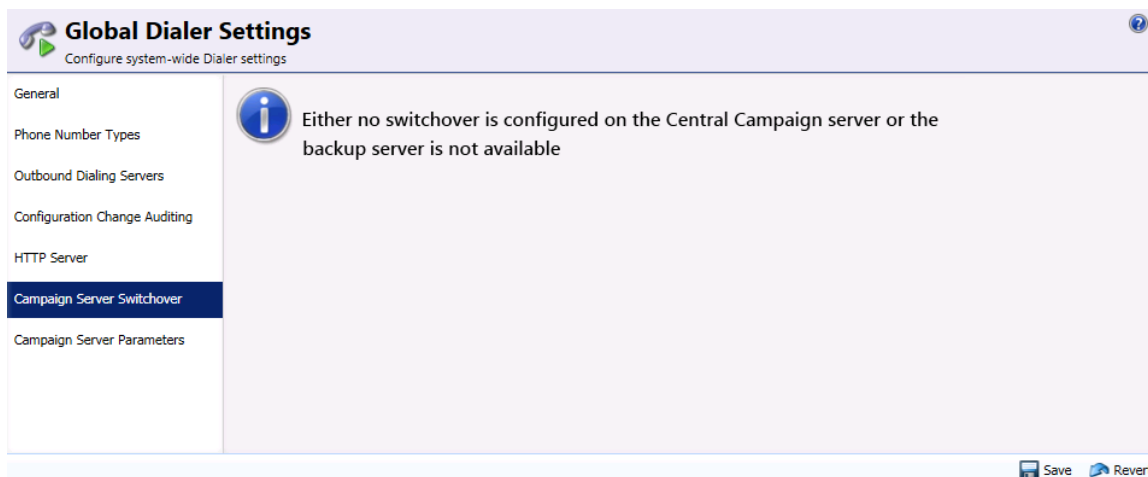
4. To verify that the Central Campaign Server is enabled and that the Backup Campaign Server is no longer present, launch Interaction Administrator, go to the Server Parameters container, and make sure that the Dialer Campaign Server parameter appears and that the Dialer Campaign Server Backup parameter doesn't contain a value.
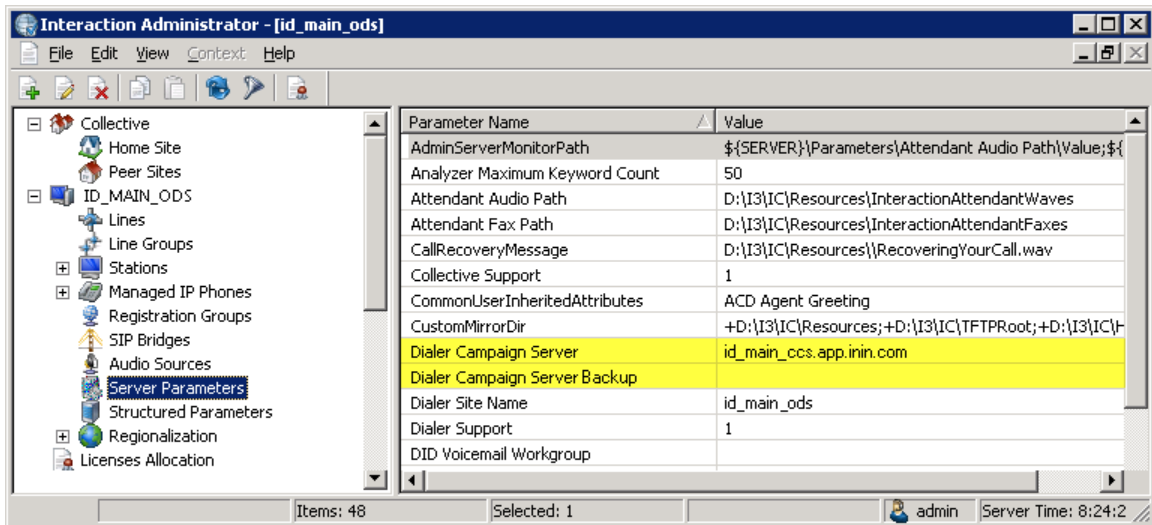
> **NOTE**: At this point, the Backup Campaign Server is totally unusable as a campaign server. The reason for this condition is that the "ServerName" DS entry must be renamed. The only way to do this is to reinstall the CCS software from scratch.

Campaign Server Parameters

Campaign Server Parameters

The options on the Campaign Server Parameters tab provide you with the ability to view, create, modify, and delete Server Parameters on the Central Campaign Server.
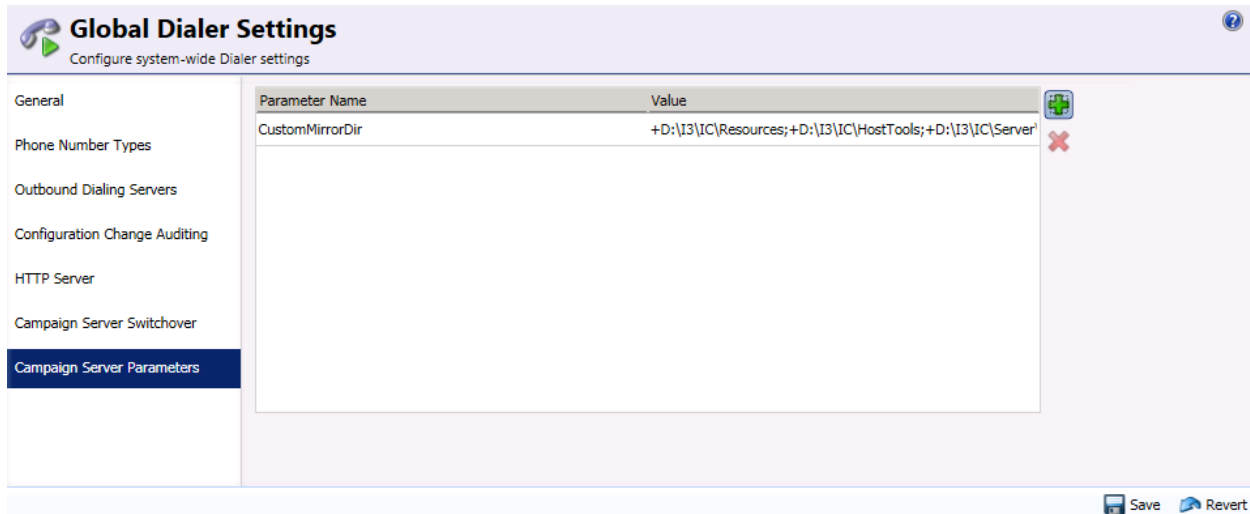
When you run the CCS Switchover Setup Assistant, the CustomMirrorDir parameter is added to the Campaign Server Parameters tab. The CustomMirrorDir parameter identifies the directories that are mirrored by the Switchover Service on the CCS.

In addition, you can use the controls on this tab to add and delete other CCS supported server parameters.

> **Note**: For more information on the CCS Switchover Setup Assistant, see the *Interaction Dialer Installation and Configuration Guide.* For more information on switchover parameters, see the *CIC Automated Switchover System Technical Reference.* You can find both in the PureConnect Documentation Library.

Related Topics

The CustomMirrorDir parameter

The Execute Custom Disposition As Standalone parameter

The PenetrationDataCleanupTime parameter

Add Parameters

Edit Parameters

Delete Parameters

The CustomMirrorDir parameter

The CustomMirrorDir parameter specifies one or more directories on the Primary Campaign server that are mirrored on the Backup Campaign server. Any time a file is added, removed, or modified in one of these directories, the change is mirrored in the corresponding directory on the Backup Campaign server.

You can use the options on the Campaign Server Parameters tab to view and edit the CustomMirrorDir parameter.

View the full directory path

The size of the panel limits the number of characters in the path that you can see at one time.

To view the full path:

 1.   Click the entry in the Value column to enable the text field.

2. You can then scroll through and view the entire directory path.
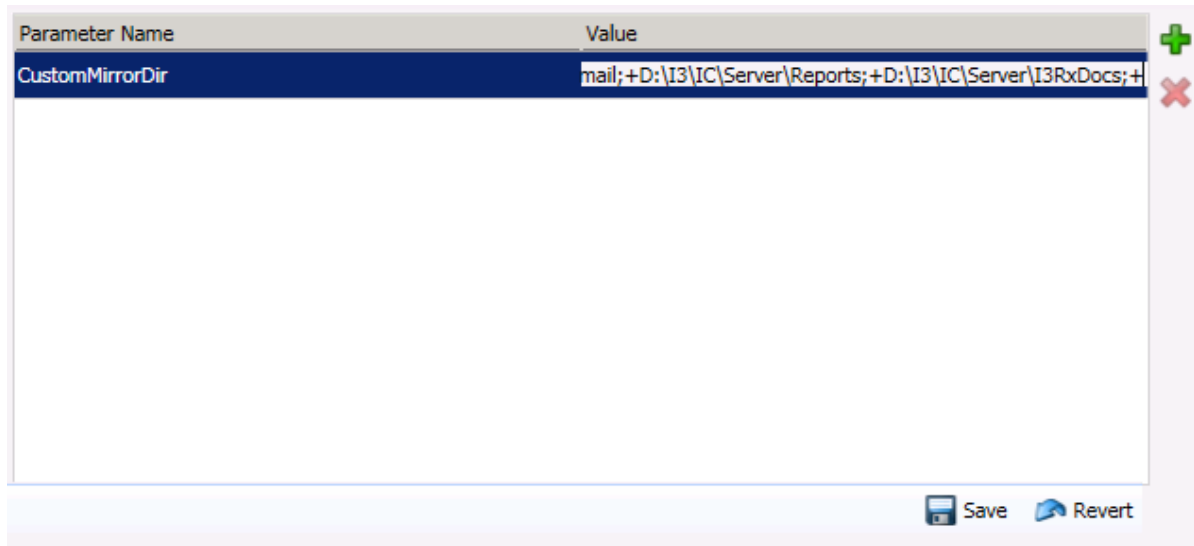
Editing the directory path

If you want to edit the CustomMirrorDir parameter's directory path, you can do so once you have enabled the text field. As you are editing, keep in mind that to mirror the directory recursively (including directory additions and deletions), place a + in front of the directory name. For example:

```
+D:\I3\IC\ImportantDir
```

To stop recursive monitoring, remove the +.

Note: The CustomMirrorDir parameter is required when you are using a campaign switchover pair, so while you can edit the value, you cannot delete the parameter. (You'll notice that when you select the CustomMirrorDir parameter, the Delete Campaign Server Parameter button is disabled.)

To edit the path:

1. Click the entry in the Value column to enable the text field.
2. Edit the path.
3. Press Enter to close the text field.
4. Click Save to save your changes.

The Execute Custom Disposition As Standalone parameter

The Execute Custom Disposition As Standalone parameter allows you to execute the custom disposition stored procedure (spid_disposition_custom) independently from a call list update stored procedure (for example, exec_tran_update_batch). You can use the Campaign Server Parameters tab to add, edit, and delete this parameter.

Set this parameter to:

False to not allow execution of a custom disposition stored procedure independently from a call list update stored procedure.

True, **Yes**, **1**, or **y** to allow execution of a custom disposition stored procedure independently from a call list update stored procedure.

Related Topics

Campaign Server Parameters

Add Parameters

Edit Parameters

Delete Parameters

The PenetrationDataCleanupTime parameter

The PenetrationDataCleanupTime parameter indicates the time of day to delete data in the penetration table. Set this parameter by using a 24 hour format. For example, set this parameter to 22:00 to delete the data 10:00 pm local time. The default of 00:00 deletes the data at midnight local time. Set the **Penetration data retention in days** parameter under the **General** tab to indicate the number of days to keep the penetration data.

You can use the **Campaign Server Parameters** tab to add, edit, and delete this parameter.

Related Topics

Campaign Server Parameters

General

Add Parameters

Edit Parameters

Delete Parameters

Add Parameters

You can add any valid server switchover parameter to the Campaign Server Parameters tab with the exception of three key switchover parameters: SwitchoverServer A, SwitchoverServer B, and Switchover Monitoring. These three parameters are set up by default when you run the CCS Switchover Setup Assistant and cannot be altered or deleted.

Note: For more information on the CCS Switchover Setup Assistant, see the Interaction Dialer Installation and Configuration Guide, which you can find in the PureConnect Documentation Library.

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To add a server parameter:

1. Click the Add Campaign Server Parameter button ( ).
2. When the Add Server Parameter dialog appears, type the parameter name in the Name field.

3. Click OK.
4. Once the parameter appears in the panel, click the Value column to enable the text field.
5. Enter the value that you want to assign to the parameter.

6. Press Enter to close the text field.
7. Click Save to save your changes.

Edit Parameters

Once you have added server parameters to the Campaign Server Parameters tab, you can edit the value any time you want to make a change in functionality.

To edit a server parameter:

1. Click the Value column to adjacent to the parameter to enable the text field.
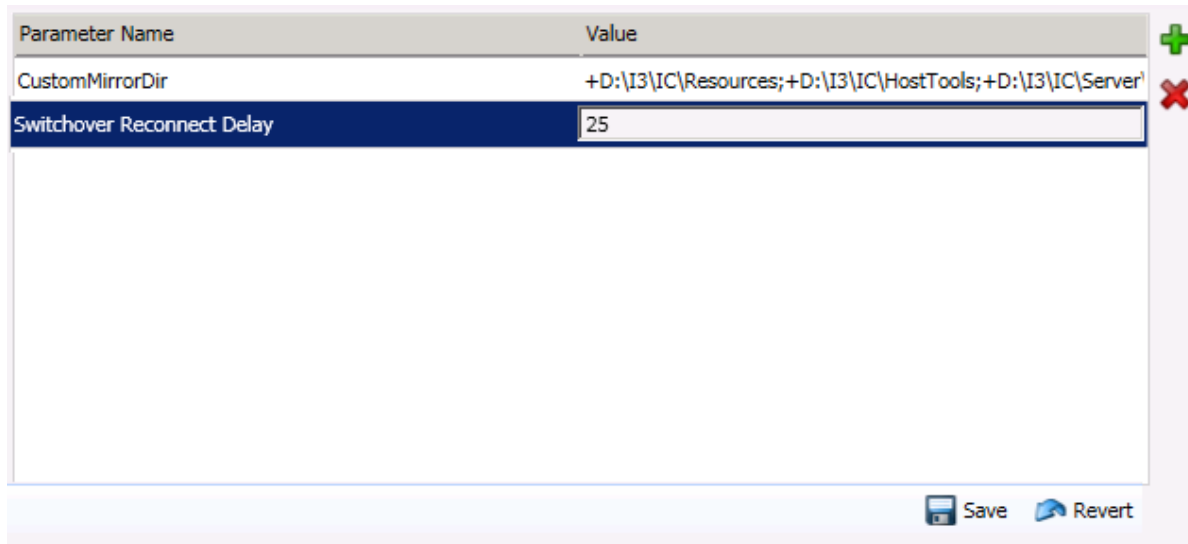
2. Edit the value.
3. Press Enter to close the text field.
4. Click Save to save your changes.

Deleting Parameters

You can delete a server parameter when you no longer need it.

To delete a server parameter:

1. Select the parameter.
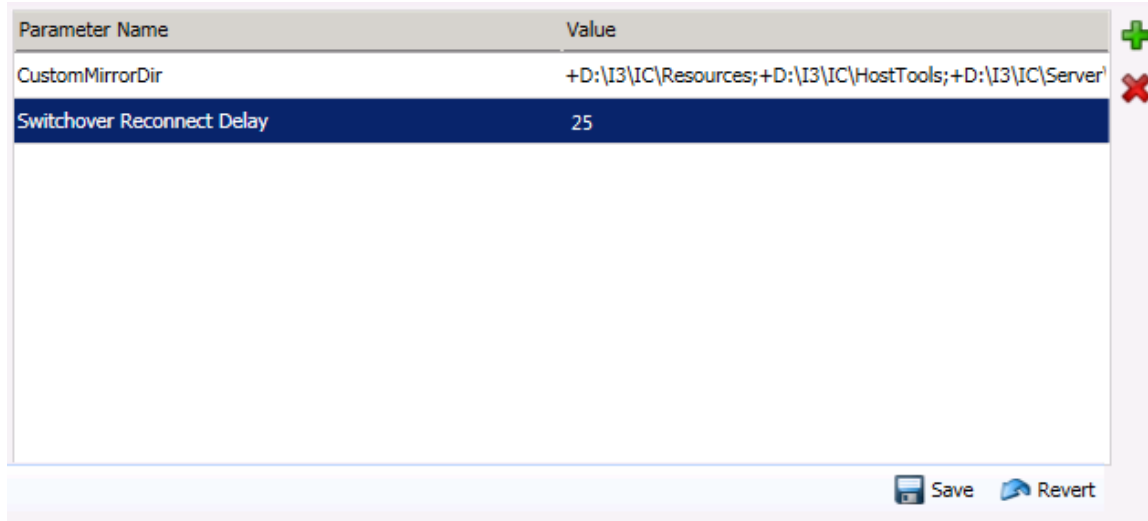
2. Click the Delete Campaign Server Parameter button ( ).
3. When the Remove item dialog appears, click OK.
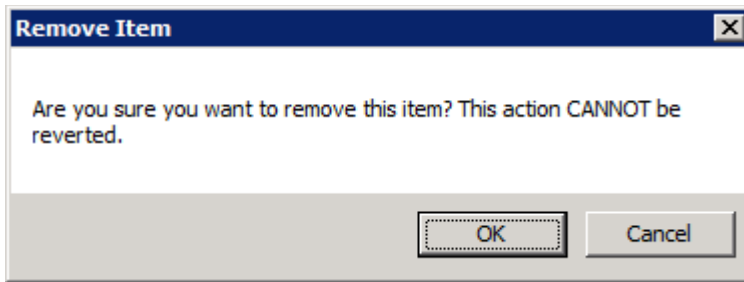
4. Click Save to save your changes.

Database Connections

Database Connections view

Overview

This view creates database connection objects. Installation of Dialer establishes a default connection that is often the only connection a call center needs to link Dialer to its databases. If additional connections are required, this view makes Dialer aware of them. A database connection is a **Universal Data Link** (.UDL) file that has been uploaded to the CCS by Dialer Manager.
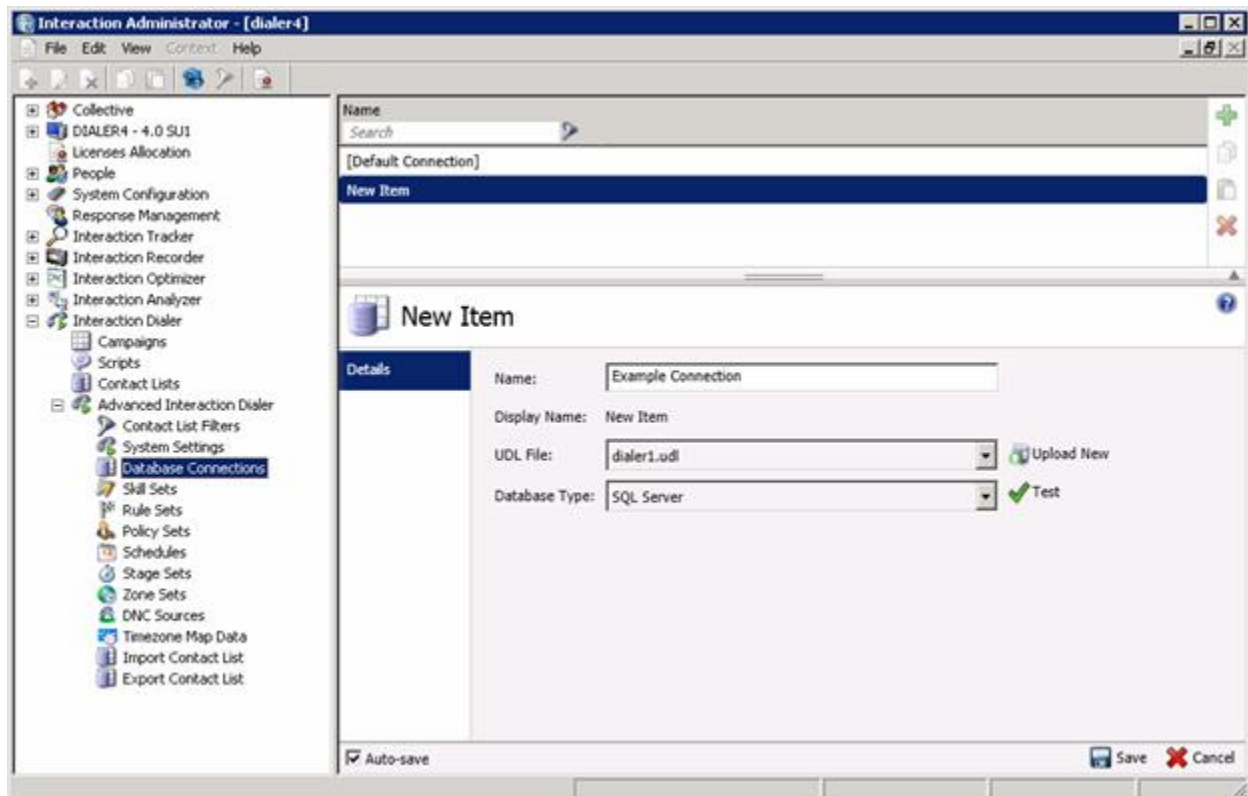
- A UDL file encapsulates everything a DBMS server needs to know to integrate with Interaction Dialer, and vice versa.

- UDL files are created outside of Dialer, to specify the OLE DB Provider, credentials and connection criterion required by Oracle or SQL Server DBMS.
- Dialer is unaware of UDL connections until you add them using this view.

Database connections allow a campaign to select a contact list, without specifying any details concerning the location of that file. As a prerequisite to defining a database connection in Dialer, customers must define a UDL connection as outlined in Create a UDL File. The resulting *Universal Data Link* (.UDL) file encapsulates everything that a DBMS server needs to know to integrate with an application such as Interaction Dialer.

However, many customers do not need to create custom database connections in order to use Interaction Dialer. A default database connection is created when Interaction Dialer is installed. It is called [Default Connection]. In many cases, [Default Connection] provides all of the database connectivity that a call center needs to run campaigns.

While each campaign might use a separate contact list table, typically these tables are stored in only one database. If this is the case, the Default Connection may be used exclusively. You cannot delete the default connection object, but you can modify it or define your own custom connection settings.

The process of adding a database connection in Dialer Manager uploads the UDL file to the Central Campaign server, where it can be shared by multiple configurations and servers. UDL files are stored in \I3\IC\Server\UDL if the default path was selected during installation of the Central Campaign server.

Related Topics

Create a UDL File

Add UDL as a Dialer Database Connection

Test a Database Connection

Associate a Database Connection with a Contact List

Create a UDL File

This procedure explains how to create a database connection file (.UDL) using Microsoft's Data Link Properties utility. A UDL file defines an OLE DB data source that connects a database server with applications. You must create a UDL file before adding a Dialer database connection.

Prerequisites

- You cannot define a connection to a database that does not exist. Your database administrator must create the database first.
- If you use Oracle DBMS, the Oracle Client must be installed as a prerequisite. Otherwise, you won't be able to select the OLE DB provider for Oracle in step 7 below. You can download the client which includes the "Oracle Database Utilities" from:
  http://www.oracle.com/technetwork/database/enterprise-edition/downloads/112010-

win32soft-098987.html under "Oracle Database 11g Release 2 Client (11.2.0.1.0) for Microsoft Windows (32-bit)".

Procedure

1. Begin by creating an empty text file that has a **.udl** extension. This is easily accomplished using Notepad. Launch **Notepad** now.
2. Pull down the **File** menu and select **Save**.
3. Navigate to the desktop.
4. Type a name for the connection in the **File name** box. Specify **.udl** as the file extension.
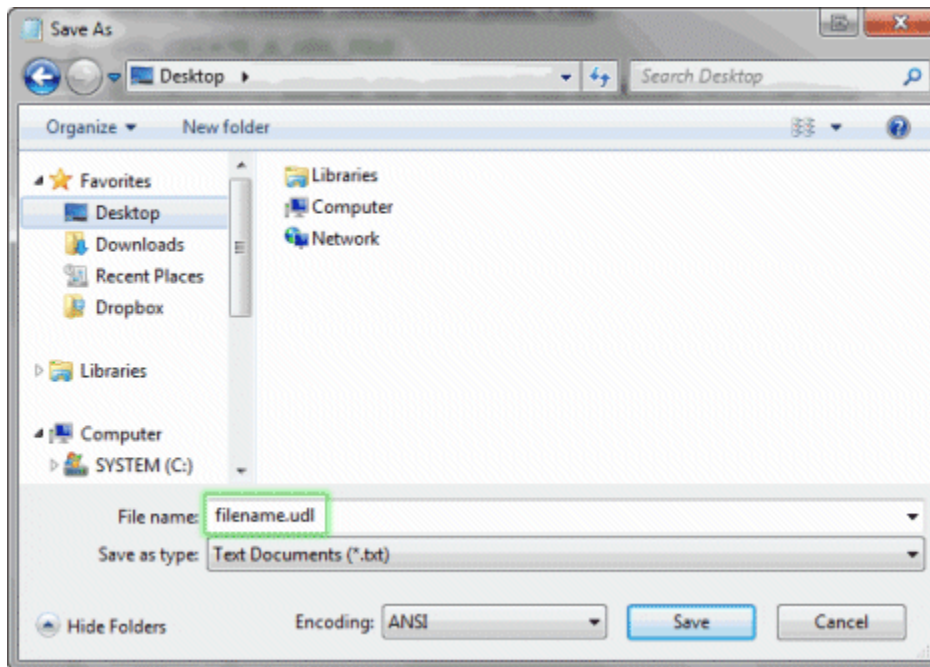
5. Click **Save**. Then close Notepad.
6. Double-click the .udl file on the desktop to open it in **Microsoft's Data Link Properties** utility.
7. The *Connection* tab is active by default. Select the **Provider tab** instead. It lists available OLE DB service providers.

> By the way, if you click the **Help** button at any time while this dialog is active, topics from Microsoft's help system will appear to lead you through the configuration process.
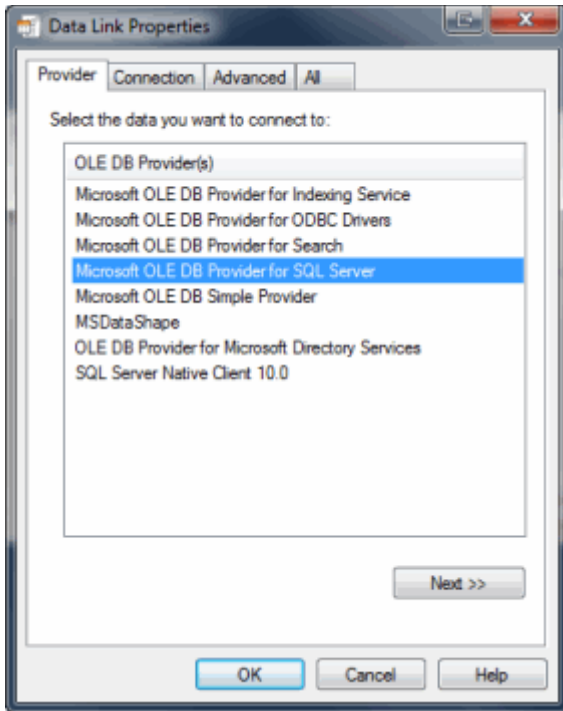
If you use **Microsoft SQL Server**, select **Microsoft OLE DB Provider for SQL Server**.

If you use **Oracle**, select **Oracle Provider for OLE DB**. DO NOT select *Microsoft OLE DB Provider for Oracle*. *Oracle Provider for OLE DB* is listed only if the Oracle Client is installed.

8. Click **Next** to advance to the *Connection* tab. The Connection tab associates a service provider with a specific database server. Slightly different Connection options are displayed, depending upon whether you selected a provider for SQL Server or Oracle.

SQL Server	Oracle

Provider | Connection | Advanced | All

Specify the following to connect to SQL Server data:
1. Select or enter a server name:
DIALERDATA ▼ Refresh
2. Enter information to log on to the server:
○ Use Windows NT Integrated security
● Use a specific user name and password:
User name: AdminID
Password: Password
☐ Blank password   ☑ Allow saving password
3. ● Select the database on the server:
dialer ▼
○ Attach a database file as a database name:

Using the filename:

Test Connection

Provider | Connection | Advanced | All

Specify the following to connect to this data:
1. Enter the data source and/or location of the data:
Data Source: dialer
Location

2. Enter information to log on to the server:
○ Use Windows NT Integrated security
● Use a specific user name and password:
User name: dialer_user
Password: ●●●●●●●
☐ Blank password   ☑ Allow saving password
3. Enter the initial catalog to use

Test Connection

For **SQL Server**, select or type the name (or IP address) of the server that hosts Dialer database tables, in the **Server Name** field. This is the name of your Central Campaign server, unless you are running the DBMS on a different machine.

Specify a **User Name** and **Password** needed to access Dialer databases on the server. This user account must have privileges to create, delete, modify, add indexes, insert records and update records on Dialer tables. Contact your database administrator for a user account that meets these requirements.

Make sure that **Allow saving password** is checked. The password will be stored in the UDL file.

Choose the database that contains the campaign tables you wish to associate with this UDL connection from the **Select the database on the server** drop list.

For **Oracle**, type the name of the data source in the **Data Source** field.

Select **Use a specific user name and password**.

Specify a **User Name** and **Password** needed to access Dialer databases on the server. This user account must have privileges to create, delete, modify, add indexes, insert records and update records on Dialer tables. Contact your database administrator for a user account that meets these requirements.

Make sure that **Allow saving password** is checked. The password will be stored in the UDL file.

9. Click the **Test Connection** button. If "Test connection succeeded" appears in an alert box, the connection is working properly.
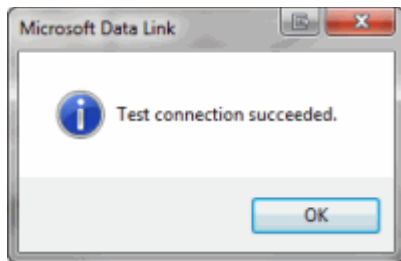
10. Click **OK** to close the alert box. If a different message appears, correct your entries and try again.

11. In most cases it is all right to leave settings on the *Advanced* tab unchanged. Options on that tab specify additional network and access permission settings, using features that are appropriate for the selected service provider. Click **OK** to close the *Data Link Properties* dialog.

> **NOTE:** A new database connection is not used until it is associated with a campaign in Dialer.

Add UDL as a Dialer Database Connection

A UDL file contains the information that a database needs to connect with applications and vice versa. However, Dialer is unaware of UDL connections until you add them to its list of **Database Connections**.

> **UDL files are stored on the Central Campaign Server**
>
> When a connection is added in Dialer Manager, a copy of the UDL file is uploaded to the Central Campaign Server (CCS), making it available to all Outbound Dialer Servers managed by that CCS. UDL files are stored on the CCS in a folder below the directory that contains the CampaignServer. The path is **C:\I3\IC\Server\UDL**, unless the default path was changed during installation.
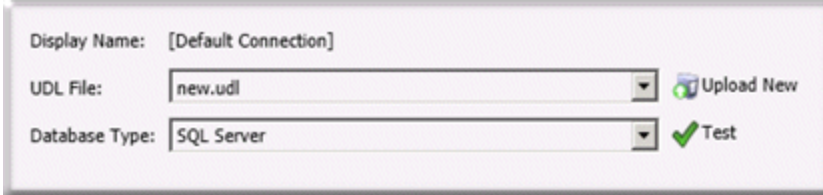
To add a UDL as a Dialer connection:

1. In Interaction Administrator, select **Database Connections** below the Interaction Dialer container.
2. Click the **Add** button. An entry temporarily named **New Item** will appear in the list of entries.
3. Edit the **Name** field to give this connection a descriptive name, so that you can identify it later when you associate this connection with a campaign. This name may contain spaces or special characters.
4. Click Upload New.
5. A **File Open** dialog appears, prompting you to navigate to a UDL file. Select the UDL file you want to use for this connection. Click **Open**. This uploads the file to the Central Campaign Server.
6. In the **UDL File** list, select the name of the file just uploaded.
7. Set **Database Type** to SQL Server or Oracle, as it appropriate for this connection.
8. Click **Save**.

Test a Database Connection

Testing a database connection ensures that the UDL and Dialer connection are working properly.

1. At the Home screen in Dialer Manager, click Database Connections. In Interaction Administrator, expand the Interaction Dialer container and then select **Database Connections**.
2. Select a Database Connection entry in the list at the top.
3. Click **Test**.

If the test succeeds, you will see:
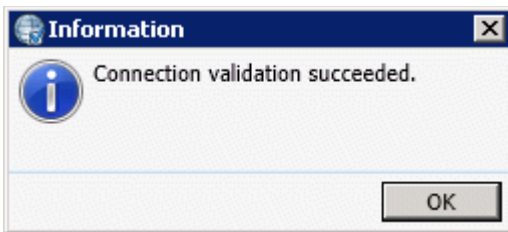
If the test fails, the result is:
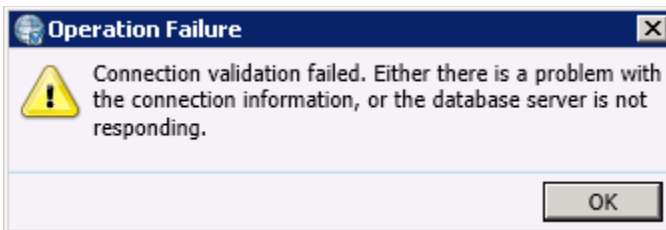
Associate a Database Connection with a Contact List

When the attributes of a Contact List are defined in Dialer, a database connection must be selected. This tells the Central Campaign server which tables to use for a particular campaign.

1. At the **Home** screen in Dialer Manager, click **Contact Lists.**
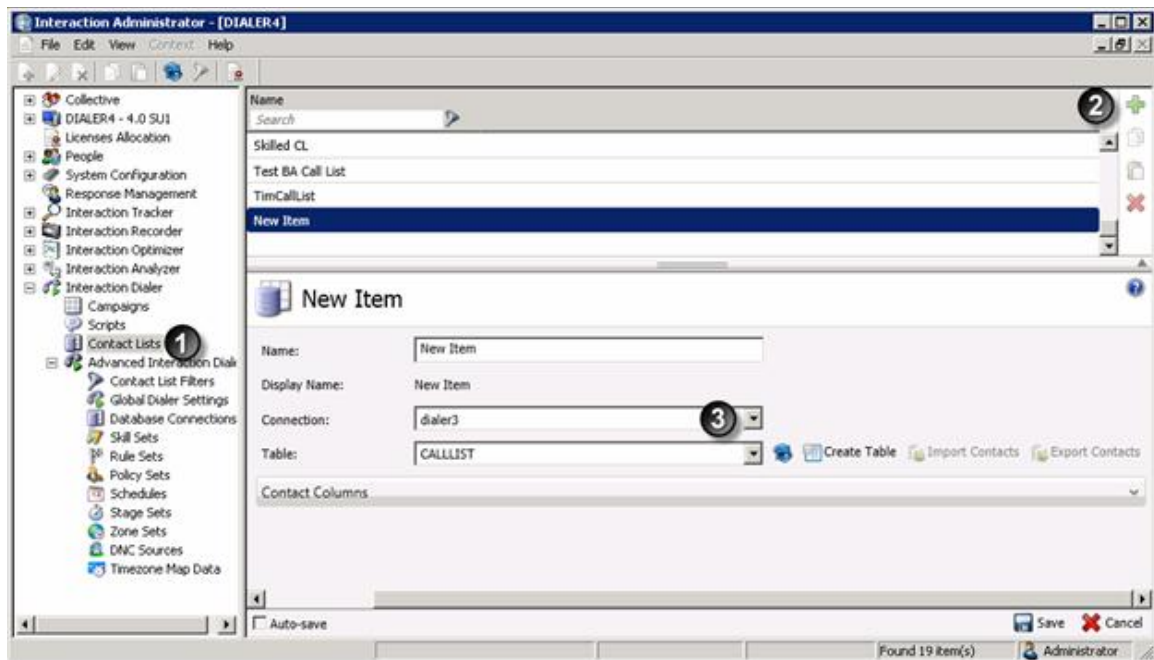
2. Click **Add** () to create a new Contact List object, or select an existing entry from the list at the top of the view.

3. Select a database connection from the **Connection** drop list.

Skill Sets

Skill Sets view

Overview

This view is used to implement **Skills-Based Dialing**, an optional feature that looks at skills in contact records, to dial only those contacts that can be handled by the available agent pool. Skills-based dialing is available for preview, power, and predictive campaigns.

Skills-based dialing:

- Matches contacts skill requirements to available agent's skills before placing calls
- Dials portions of a call list at different ratios based on contact skills
- Uses skills-based routing to get connected call to most skilled agent

The Skill Sets view manages Skill Set entries. Each Skill Set maps a skill column in the contact list to skills defined in CIC. A Skill Set manages skills from a Campaign's point of view—by identifying which CIC skills will be used to select contacts.
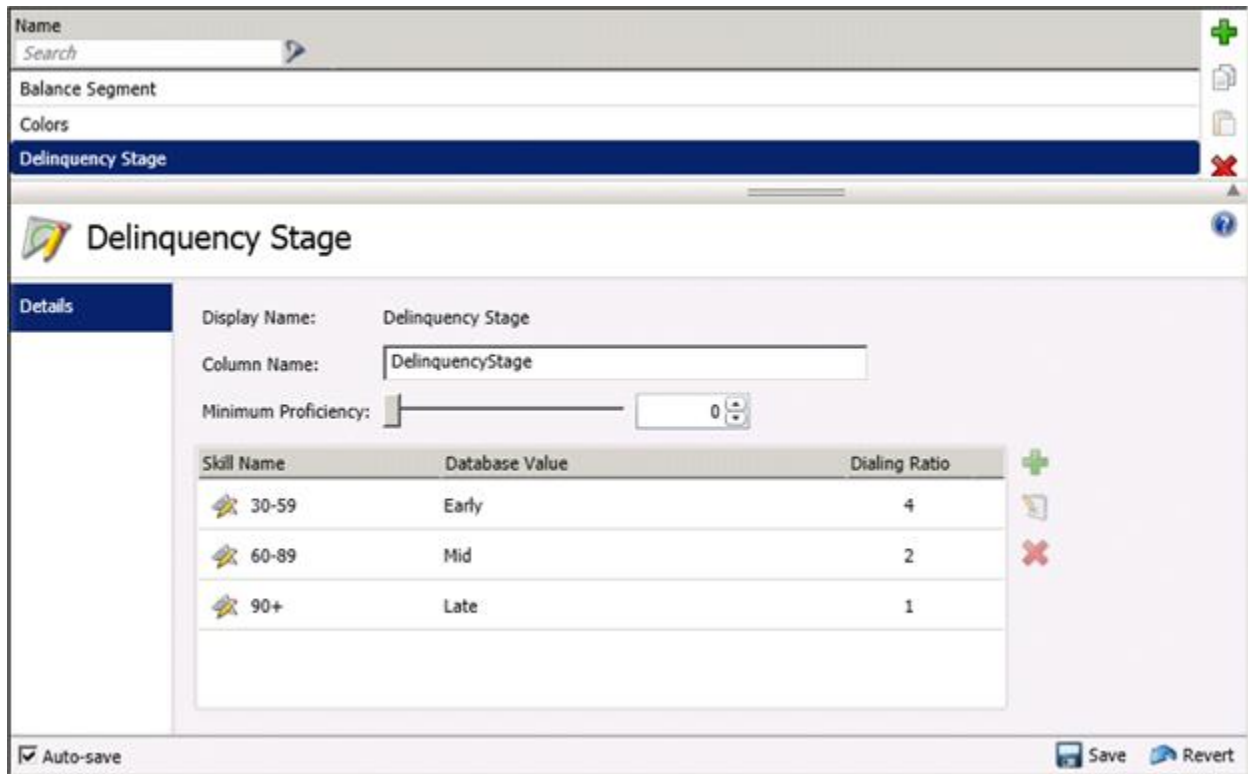
Like other Dialer Manager views, the top portion of the view displays a list of entries, with buttons to add, copy, paste, and delete items. The lower portion of the view manages details of the selected Skill Set.

Skills-Based Dialing Feature Overview

Skills-Based Dialing is available for preview, power, and predictive campaigns. To understand this feature, it is important to differentiate between skills-based routing and skills-based dialing.

- **Skills-Based Routing involves an already connected call**. It sends an already connected call to an agent that has required skills, such as the ability to speak the contact's language, required product familiarity, etc.

  Skills-based routing is an ACD feature of CIC that can be used for both inbound and outbound calling. Skills are associated with interactions (required skills) and with agents (available skills). The ACD subsystem matches these skills up to route an interaction to the best available agent. Dialer can use ACD-based skills-based routing to route a live caller to the best available agent.

  Skills-based routing works well in a predictive or power dialing environment when all agents have the skill(s) and can accept the call. However, it does not work as well when skills are used to select from a subset of agents. This latter use of skills-based routing can result in excessive abandons and a poor dialing experience. The solution is to use skills-based dialing instead.

- **Skills-Based Dialing looks ahead to pick contacts to be dialed**. It examines skills in contact records, to dial only those contacts that can be handled by the available agent pool.

  Skills-based dialing selects only contacts in the contact list that can be handled by the available agent pool. Skills are evaluated *before* contacts are dialed. The mixture of contacts' required skills and agents' anticipated availability and skills is dynamic and must be managed similarly to pacing. Some examples of outbound situations in which only a subset of agents will have a skill include:
  - State-based licensing—wherein lenders and insurers must be licensed in states into which they are attempting to sell.
  - Specialized selling or collections—when a subset of agents are trained or allowed to handle particular products or customers.
  - Language skills—when the contact has special language requirements.

Once a contact with an appropriate skill requirement is selected to be dialed and a live person contacted, that contact's skills are associated with the connected call. Then the call is routed to the most appropriate available agent using skills-based ACD routing.

Skills-Based Dialing balances the contacts being dialed with the capabilities of the available agents who could receive calls. This requires sub-selecting only those contacts in the call list that could be handled by the available agent pool before attempting to dial those contacts. The mix of contacts' required skills and agents' anticipated availability and skills is very dynamic and is managed in real time similarly to pacing.

Once a contact with an appropriate skill requirement is selected to be dialed and a live person contacted, that contact's skills are associated with the connected call for use by CIC's ACD in using skills-based routing to get the call to the most appropriate available agent.

> To implement Skills-Based Dialing, the contact list must be populated with a custom skills column per contact (e.g. language indicator, state code, etc.) to be matched up with the associated campaign's agent pool skill sets.

Related Topics

Configure Skills-Based Dialing

Configure Skills-Based Dialing

Skills-based dialing compares skills required by contacts with agent skills, to dial only those contacts that can be processed by the available pool of agents.

To implement skills-based dialing, perform these tasks:

1. To perform this initial step, you may need help from your database administrator. Add a new column to the contact list and populate each row with the name of one skill required by each contact. An index should be created on the skill column. For example, you might define a new

column titled "Preferred Language" and populate each row with codes for the contact's preferred language, using "EN" for English, "SP" for Spanish, "FR" for French, and so forth.

2. The next step is to define corresponding CIC skills in Interaction Administrator using the Skills view, which is a child of the People view in Interaction Administrator. It defines a skill and agents who possess that skill. To implement skills-based dialing, skills must be defined in this view and assigned to agents. Afterwards a Skill Set can be defined, and associated with campaigns.

A skill defines an ability that individual agents may or may not have, such as special training or certification, expertise with a particular product, or the ability to speak a foreign language.

In Interaction Administrator, expand the **People** view. Then click the **Skills** view.

3. Press **Add** (🞤) to add a new skill. In the **Name** box on the **Configuration** tab, type a unique and descriptive name for a skill that at least some agents have. Skill names can be single words or phrases, and may contain spaces.

Skill names don't have to match the database values defined in step 1. For the language example above, you might define CIC skills named "English", "French", and "Spanish", instead of mimicking the database values "EN", "FR", and "SP".

4. Click the **Add** (🞤) button on the **Workgroups** expander. The *Assign Skill to Workgroups* dialog appears. Select workgroups whose agents possess this skill. Then click **Add**. You will define exactly which agents later. When you are finished, click **OK**.
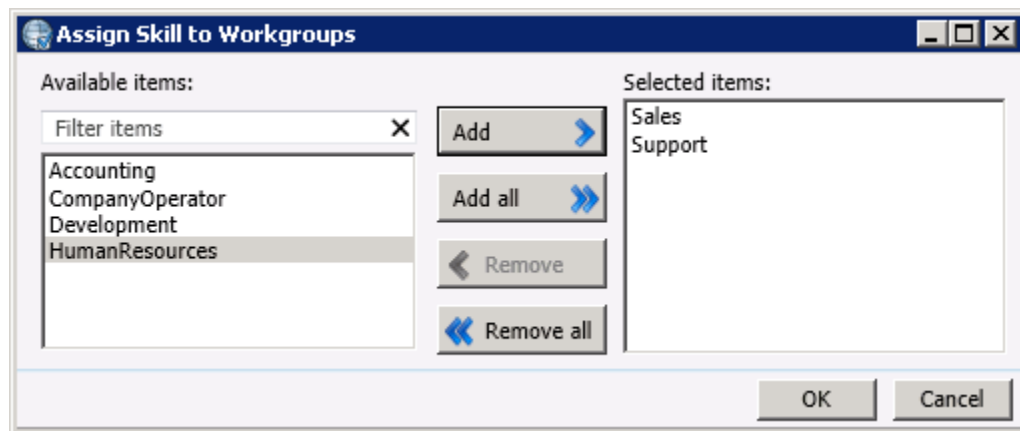
There are other ways to assign skills to a User or Workgroup in Interaction Administrator, but use of the Skills view is recommended to define skills for skills-based dialing, since this procedure both defines a skill and assigns it to agents.

5. The workgroups you selected now appear in the **Workgroups** expander.
    a. Click to edit the **Proficiency** column for each workgroup. **Proficiency** indicates overall ability to apply the skill. Select a number between 1 and 100 to assign a proficiency level to this workgroup for the selected skill. Higher numbers indicate greater skill level.
    b. Click to edit the **Desire to use** columns for each workgroup. **Desire to Use** is also a number between 0 and 100, to indicate how willing the workgroup is to use the

skill. For example, all agents may have a high level of proficiency with a particular skill (such as technical support) but may have very little desire to use that skill in an ACD environment. Higher numbers indicate greater desire to use this skill.
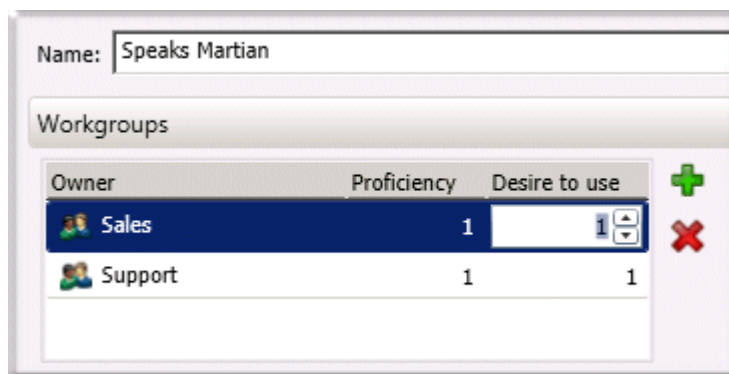
6. Click the **Add** () button on the **Users** expander. The *Assign Skill to Users* dialog appears. This is used to indicate which agents in the workgroups have the skill.
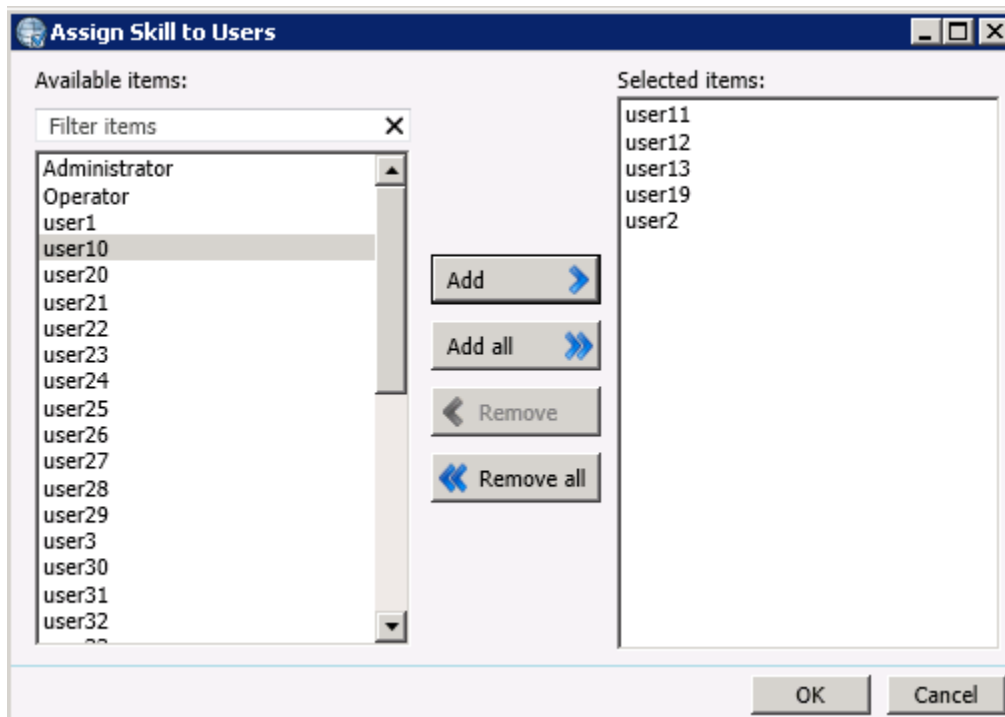
7. Click, shift-click, or Ctrl-click to select the name(s) of Agents in the *Available items* list. Click **Add.** Then click **OK**. The names of selected users will appear in the **Users** expander.
   a. Click to edit the **Proficiency** column for each agent. Proficiency indicates an agent's overall ability to apply the skill. You can assign any number between 0 and 100.

b. Click to edit the **Desire to Use** column for each agent. This is also a number between 0 and 100. The higher the number, the greater the agent's desire to use this skill. For example, an agent may have a high level of proficiency with a particular skill (such as technical support) but may have very little desire to use that skill in an ACD environment.

8. Click **Save**. Repeat steps 3-7 to define other skills as needed.

9. You are ready to define a Skill Set. Open the Skill Sets view.

10. Click **Add** (➕) to create a new Skill Set. Since CIC skills are defined for different purposes, the Skill Set will identify a subset of skills to use with a campaign. A Skill Set selects a set of CIC skills, and defines other parameters, such as the minimum skill proficiency that agents must have.

11. Type a descriptive name in the **Name** box. This name can contain spaces and special characters.

12. In the **Column Name** box, type the name of the custom contact list column that contains skill values that will be matched against this Skill Set. This is the custom column you created back in step 1.

13. Use the **Minimum Proficiency** slider to choose a number between 1 and 100. This indicates the overall minimum proficiency that agents must have to process contacts for this Skill Set.

14. Now, click the **Add** button to select a skill. This is the plus icon that appears to below and to the right of *Minimum Proficiency*.

15. A dialog appears to prompt for selection of an existing skill (defined back in step 3). Use the **Skill** drop list to select a skill.

16. The string you enter in the **Database Value** box maps the CIC Skill (e.g. "French") to a value in the custom contact list column you added in step 1. In the example above, the contact column contains a code for the French language ("FR"). This is mapped to the CIC skill named "French". This defines correspondence between CIC skills and row values in a custom contact list column.

17. Use the Dialing Ratio slider to indicate preference to require a skill. It skews the relative number of calls that will be placed for each skill. For example, if the dialing ratio is 2 for skill A, and 1 for skill B, then Dialer will call twice as many skill A's as skill B's.

It is important to understand that dialing ratio skews the relative number of calls that will be placed for each skill. Interaction Dialer performs calculations to dial calls in ratios relative to the number of logged in agents supporting the skill requirements. The dialing ratio allows for fine tuning of this control. The ratios are relative to Dialer's own skills-based dialing calculations.

Dialing Ratio Examples

As a general rule, all dialing ratios should be equal. For this reason, the dialing ratio always defaults to 1. Similar to a pace setting of 0, this puts Dialer in complete control of calculating when to dial calls for each skill requirement. But, adjusting dialing ratios allows for greater precision when configuring skills-based dialing. One use of the Dialing Ratio would be to assign 1 skill per sub-list (e.g. client A), give all agents all skills related to all lists, and then tweak the Dialing Ratios to get through 1 sub-list faster than another.

Example 1: call three lists at the same time and get them done at the same relative rate.

Sub-list A– 100,000 records

Sub-list B– 50,000 records

Sub-list C– 10,000 records

Set Sub-list A's ratio to 10, Sub-list B's to 5, and Sub-list C's to 1. All other things being equal, the percentage penetration into those lists will be the same.

Example 2: complete Sub-list A 3 times as fast as Sub-list B.

Sub-list A– 100,000 records

Sub-list B– 100,000 records

Set A's ratio to 3, B's ratio to 1. All other things being equal, Sub-list A will process 3 records for every 1 record from Sub-list B. Combining these Sub-lists into 1 campaign gives people the ability to call through all lists at the same time (instead of separate campaigns active at different times).

18. Click **OK**. Repeat steps 14-17 for other skill values that might appear in the custom contact column.
19. When you are finished, click **Save** to store the Skill Set.
20. The final task is to assign this Skill Set to a campaign. Open the **Campaigns** view. Then select a Campaign.
21. Click the **Skills and ACD** tab. If necessary, click to expand the **Skills-based Dialing** expander. You should see the name of the skill set in the Available Items list.
22. Select the Skill Set. Then click **Add** to move it to the **Selected Items** list. Repeat to assign other skill sets as needed.

You can define more than one Skill Set for a campaign. For example, you might use one Skill Set to define languages spoken by multilingual agents, and another to categorize product skills or certifications.

Considerations when multiple Skill Sets are assigned to a campaign

Many Skill Sets can be associated with one campaign. This allows for multiple skill requirements. This is especially common in the insurance industry where an agent might be licensed in only certain states and might also only be licensed to sell certain types of insurance products. By using separate Skill Sets for state and product, the agent that only sells auto insurance products in 10 states will only receive calls meeting those criteria.

Similar to predictive dialing in general, predictive skills-based dialing will operate most efficiently with greater than 8 agents per skill requirement. Larger pools of eligible agents result in lower idle times and lower abandonment rates.

At this time, Dialer does not evaluate skills when calls are routed to Finishing Agents. Finishing Agents receive all calls, regardless of skill settings. A future version of Dialer may allow tracking the skills of finishing agents and restricting dialing to only dial skills that can be handled by a logged-in finishing agent.

The problem with restricting dialing based on finishing agent availability is that it is impossible to know before dialing which calls will require a finishing agent. Furthermore, Dialer does not restrict dialing based on finishing agent availability.

23. Click **Save** to store the Campaign configuration change. Skill-based routing is now configured for the campaign.

Rule Sets

Rule Sets view

Rule Sets define conditional logic to automate the run time characteristics of campaigns. A collection of Rules is called a *Rule Set*. Rule Sets are an optional component of campaigns. Rules Sets have no effect unless a campaign is configured to use them. It is important to understand that Rule Sets, but not individual rules, are assignable to campaigns. *Rules Sets* do not affect the processing of individual contact records. *Contact Policies*, on the other hand, define conditions and behaviors that control the processing of individual contact records. For more information, see Policy Sets view.

The Rule Sets view consists of three panels that you will use to create your rule set.

1	In the top panel, you will create a Rule Set container by specifying a name for the rule set.
2	In the middle panel, you will create the Rules and/or Groups that will be in the rule set.
3	In the bottom panel, you will use the controls to configure how the rules and groups will function.

Related Topics

[Working with Rule Sets](#)

[Working with Rules](#)

[Working with Rule Groups](#)

[Configure Rules and Groups](#)

Working with Rule Sets

Working with Rule Sets

In the top panel of the Rule Sets View, you can use the controls to create new and view existing Rule Sets. Highlighting a rule entry displays its details in the bottom half of the window.
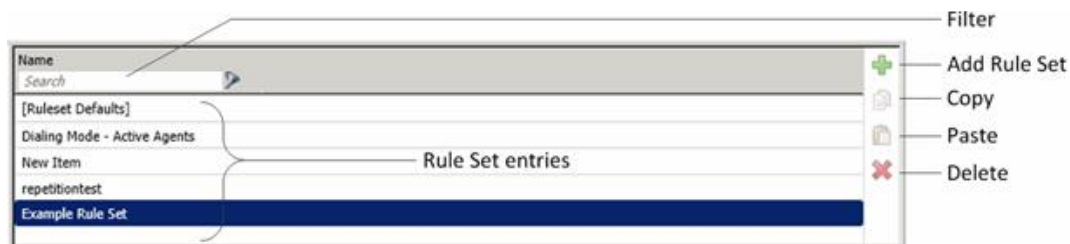
Name/Filter

Use the Name/Filter field to activate the display filter to pare down the list, by specifying all or part of a Rule Set name. Click the funnel icon to specify whether filter text is contained within, starts, or matches campaign entry names.
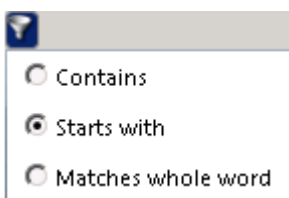
Add Rule Set button ( )

Adds a Rule Set entry.

Copy button ( )

Places a copy of the selected entry on the Clipboard.

Paste button ( )

Pastes the contents of the Clipboard as a new entry.

Delete button ( )

Deletes the selected entry.

Related Topics

Add a Rule Set

Edit a Rule Set

Delete a Rule Set

Add a Rule Set

Use this procedure to create a new Rule Set.

1. Open the Rule Sets view in Interaction Dialer Manager.
2. Click the **Add Rule Set** button () to create a new entry.
3. Type a unique name in the **Name** field to describe the new Rule Set. This descriptive label can be anything you like. It may contain spaces or special characters; for example "Newspaper Campaign Rule Set".

Edit a Rule Set

To open an existing Rule Set for editing:

1. Open the Rule Sets view in Dialer Manager.
2. Select a Rule Set by clicking an entry in the list of Rule Sets.
3. Make changes as needed.
4. Click **Save.**

Delete a Rule Set

To delete a Rule Set, follow these steps:

1. Open the Rule Sets view in Dialer Manager.
2. Select a Rule Set by clicking an entry in the list of Rule Sets.
3. Click the Delete Rule Set button ().
4. Click **Yes** to delete the Rule Set.
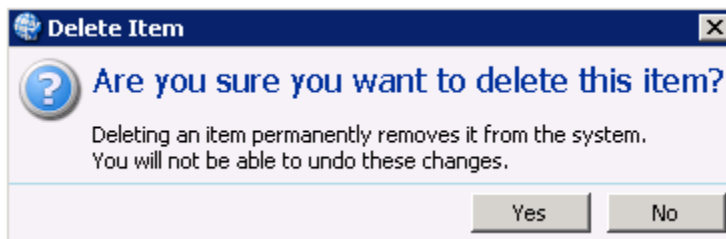
Working with Rules

Working with Rules

In the middle panel of the Rule Sets View, you can use the controls on the Rules tab to create new rules as well as view or modify existing rules.
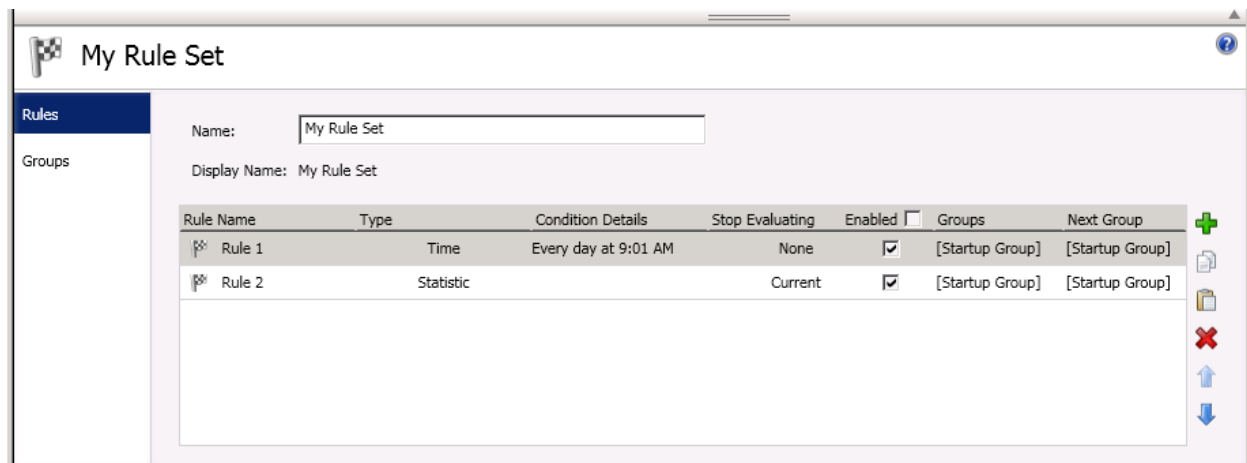
Related Topics

Add a Rule

Delete a Rule

Modify rule evaluation order

Copy and paste rule items

Add a Rule

This procedure explains how to define a rule within a Rule Set. Please note that the CampaignServer process will start accumulating data for custom statistics after the rule has been defined and saved. This means that a custom statistic rule defined after a campaign has started will not contain statistics that were generated before the rule was defined. Therefore, it is best practice to define custom statistic rules before the campaign is started.

1. Create a new Rule Set or edit an existing one.

2. Select the **Rules** tab.

3. Click the **Add Rule** button (➕).

4. Type a descriptive name for the Rule. Then click **OK**.

Delete a Rule

To delete a Rule, follow these steps:

1. Open the Rule Sets view in Dialer Manager.
2. Select a Rule by clicking an entry in the list of Rules.
3. Click the Delete Rule Set button (❌).
4. Click OK when prompted to confirm the operation.

Modify rule evaluation order

The Up and Down arrow buttons change the evaluation order of rules in a Rule Set. The higher a rule appears in the list, the sooner it is evaluated. To reposition rules in the list, follow these steps:

1. Select the rule you wish to move.
2. Click Up or Down to position the rule higher or lower in the list.

Copy and paste rule items

The Copy and Paste buttons clone a rule in a Rule Set, or copy a rule from one Rule Set to another.

1. Open the Rule Set that contains the rule you want to copy.
2. Select a rule.
3. Click *Copy* (🖻) to place the selected rule on the Clipboard.
4. Optionally open a different Rule Set.
5. Click *Paste* (📋). You are prompted to name the pasted rule.
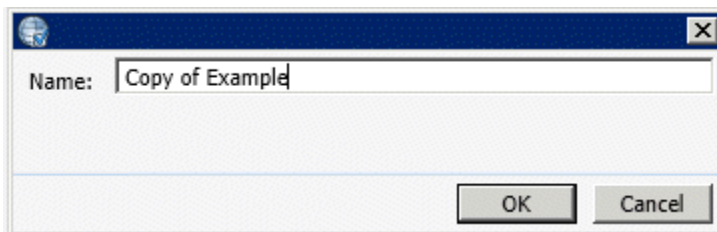
6. Enter a descriptive name. Then click **OK**.

Working with Rule Groups

Working with Rule Groups

In the middle panel of the Rule Sets View, you can use the controls on the Groups tab to create new rule groups as well as view or modify existing groups. Once you create a group, you can associate it with individual rules using controls on the Rules expander. Rule Groups make it possible for an action to activate selected rules in a Rule Set at once. Each set of Rule Groups is visible to the current Rule Set only.
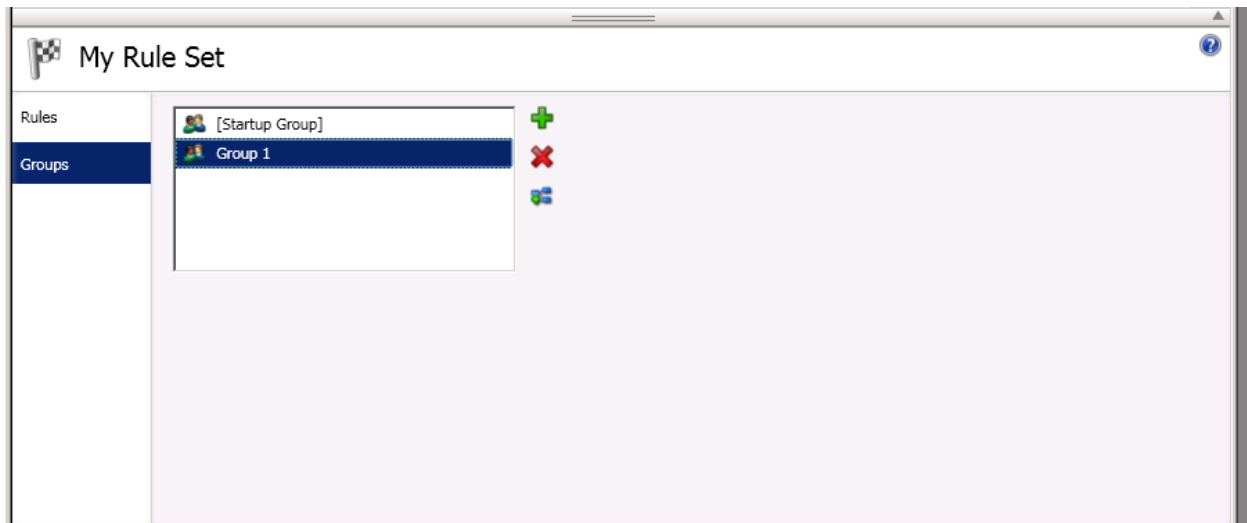
Related Topics

Add a Rule Group

Delete a Rule Group

Add Rule Sets to a Campaign Group

Configure Groups

Add a Rule Group

1. Create a new Rule Set or edit an existing one.
2. Select the **Groups** tab.
3. Click the **Add Rule Group** button ( ).
4. Enter a descriptive name for the Rule Group.
5. Click **OK** and the name of the group appears in the Groups list.

Related Topics

Associate a Rule with a Rule Group.

Delete a Rule Group

1. Open a Rule Set for editing.
2. Expand the **Groups** tab.
3. Click the **Delete** button ( ).
4. Confirm that you want to delete the group by clicking **OK**.
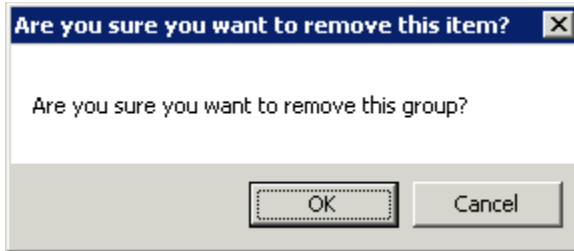
If no rules are associated with this group, the Rule Group is deleted. Otherwise, a message states that the group could not be deleted because it is in use.
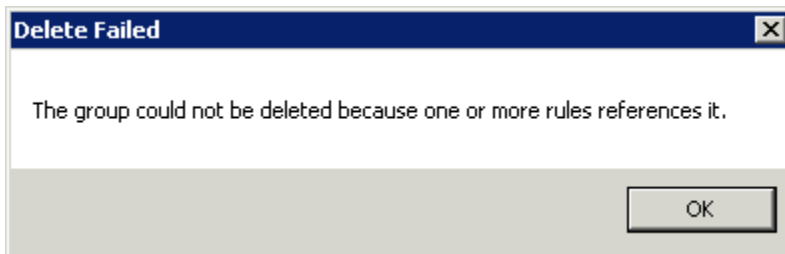
If the *Delete Failed* message appears:
   a. Open each rule that references the group.
   b. Select the **Groups** tab from the **Rules** tab page.
   c. Select the name of the group you want to delete from the **Selected Items** list.
   d. Click **Remove**.
   e. Click **Save** (💾).
   f. Repeat steps a-e to edit remaining rules in the Rule Set that reference the group.

Add Rule Sets to a Campaign Group

If you have installed the Advanced Campaign Management feature license, you'll see an Add Campaign Groups button on the Groups tab. This feature essentially allows you to add rules to a campaign group, thus extending the power and flexibility of the campaign sequence feature.

To add rule sets to campaign group:

1. Create a new Rule Set or edit an exiting one.
2. Select the **Groups** tab in the left pane.
3. Click the **Add Campaign Groups** button.
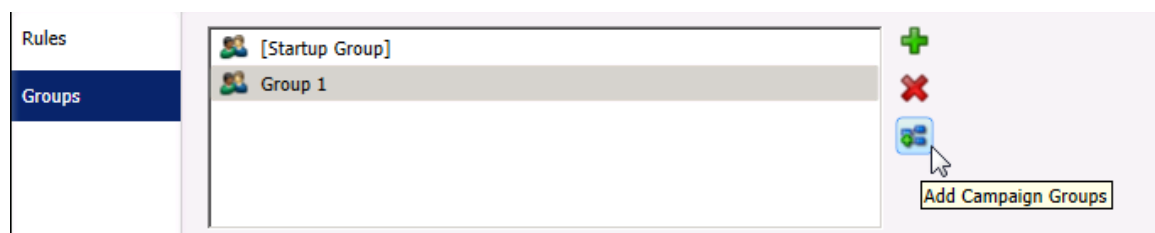
4. When the Add Campaign Groups dialog box appears, select a campaign sequence.

5. Once the Campaign Groups panel is populated, select the campaign group(s) you want to add.

6. Click **OK** and you'll see the campaign groups added to the Groups list.

7. Select the Rules tab in the left pane and select the rule that you want to add to the campaign group.

8. Select the **Groups** tab in the bottom pane.

9. Select the groups in the **Available Items** list and click the **Add** button.

10. If the [Startup Groups] appears in the Selected Items list, select it, and click the **Remove** button.

An Example

Since this is a lengthy task, let's take a look at an example. Suppose that you want to be able to switch between calling modes depending on the number of available agents. To do so, you might create a rule set like the following:
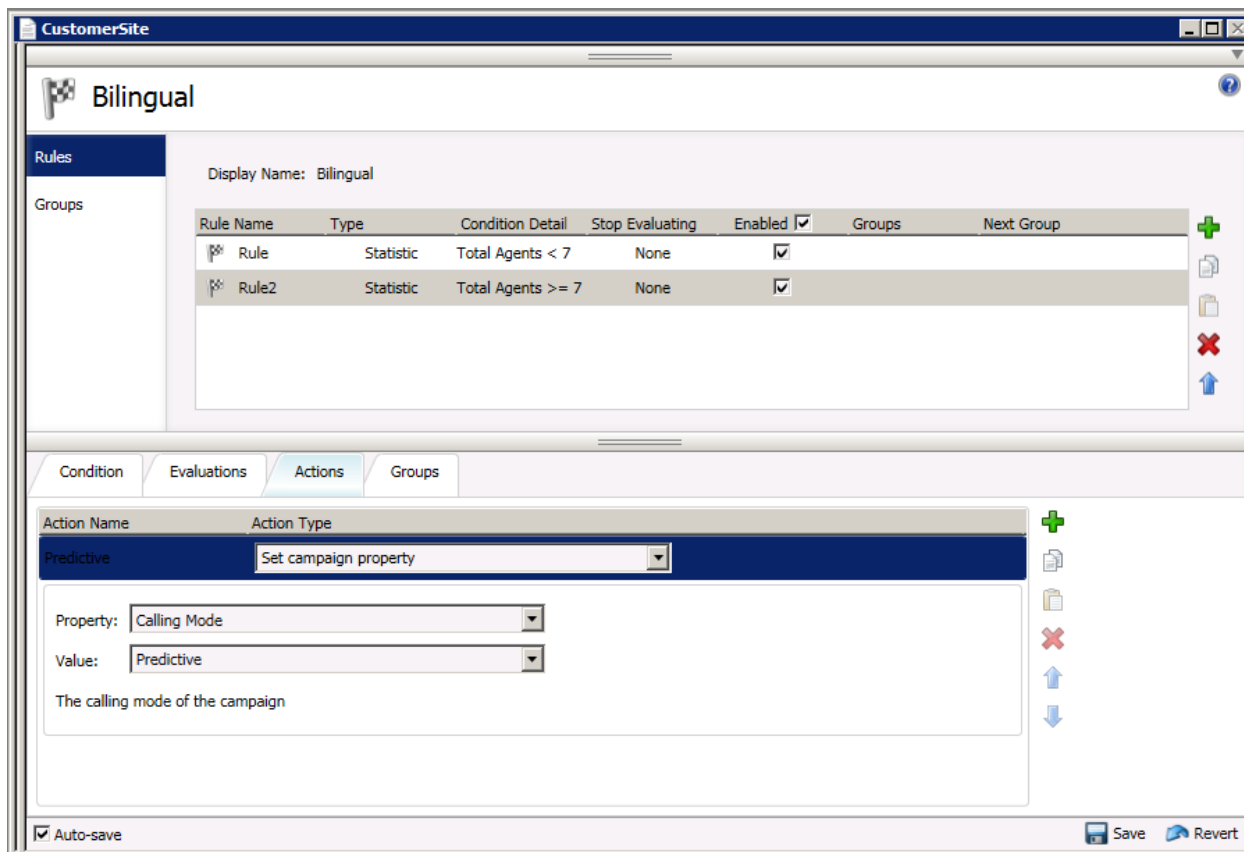
Now suppose that you only want this rule set to apply to one campaign group. To do so, you select the Groups tab, click the Add Campaign Groups button, select a campaign group, and then click OK to add it to the Groups list.
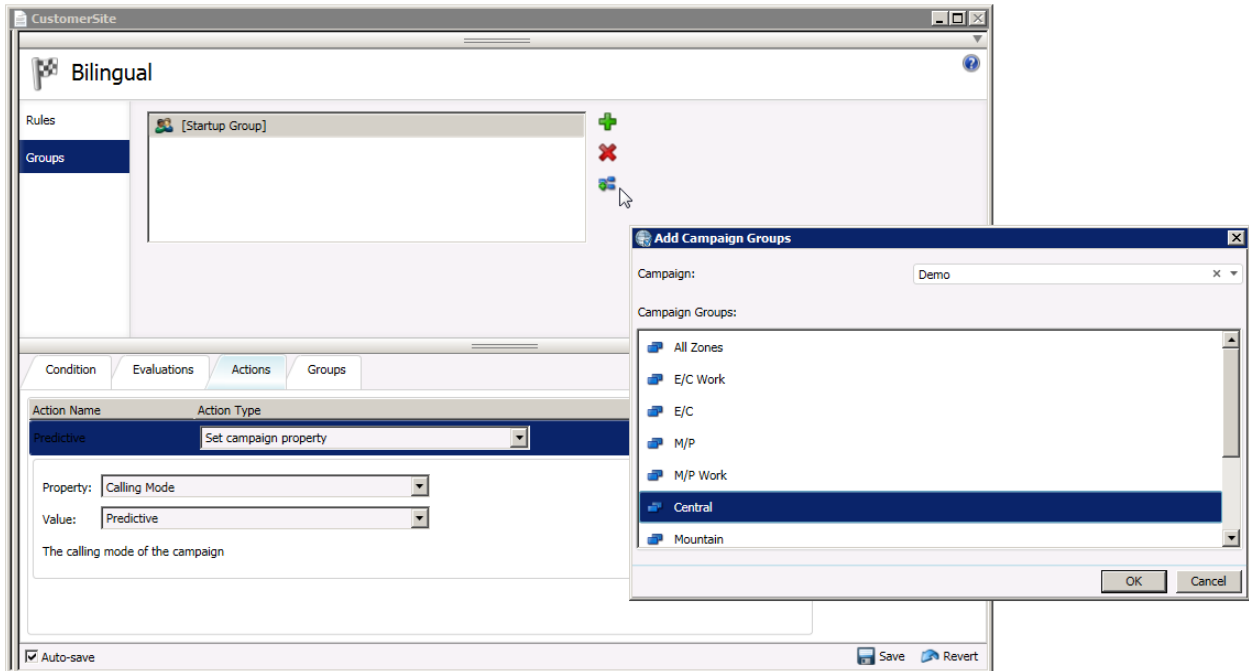
Once you have created a rule set and added a campaign group to the Groups list, you can then access the Groups tab in the bottom pane and add the campaign group to the rule set.
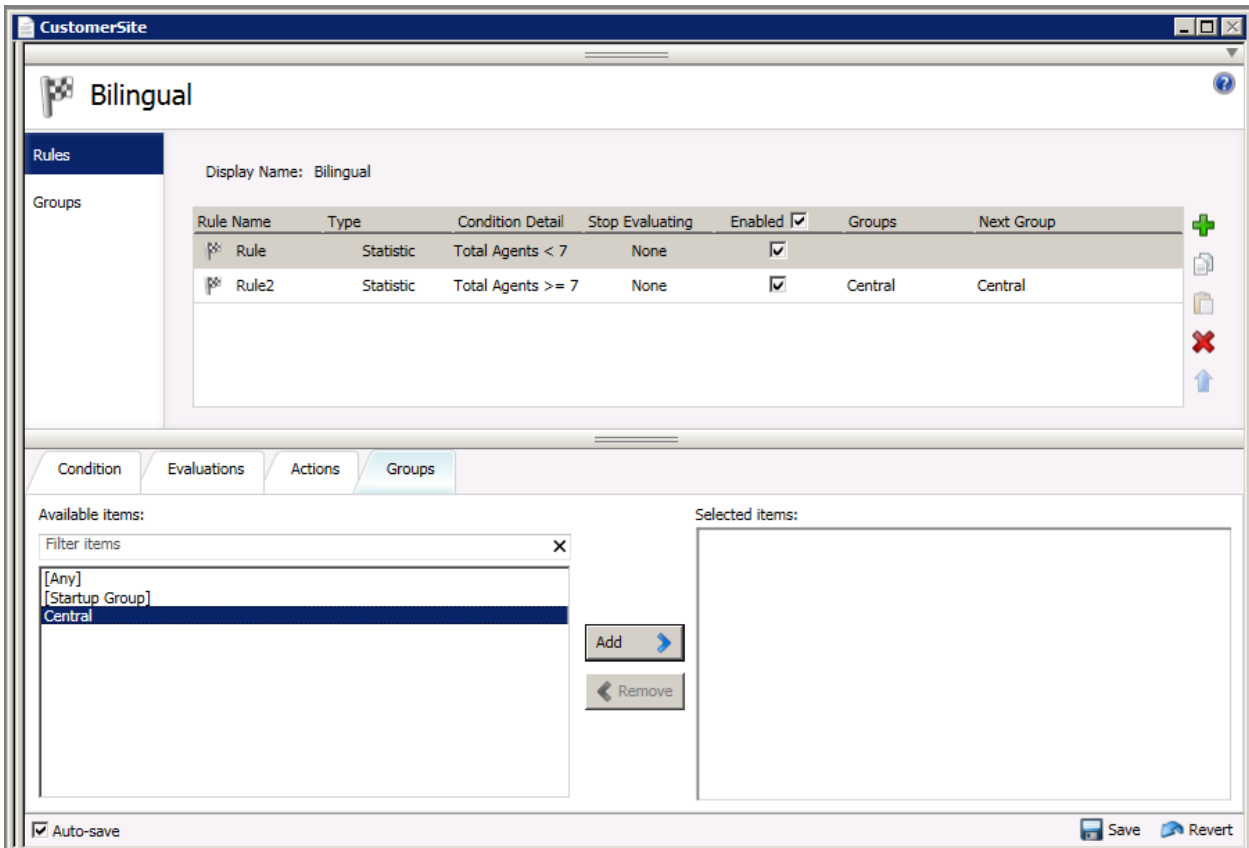
After you save the rule set, the rule set in this example will only engage when the Central campaign group is currently active in the campaign sequence.
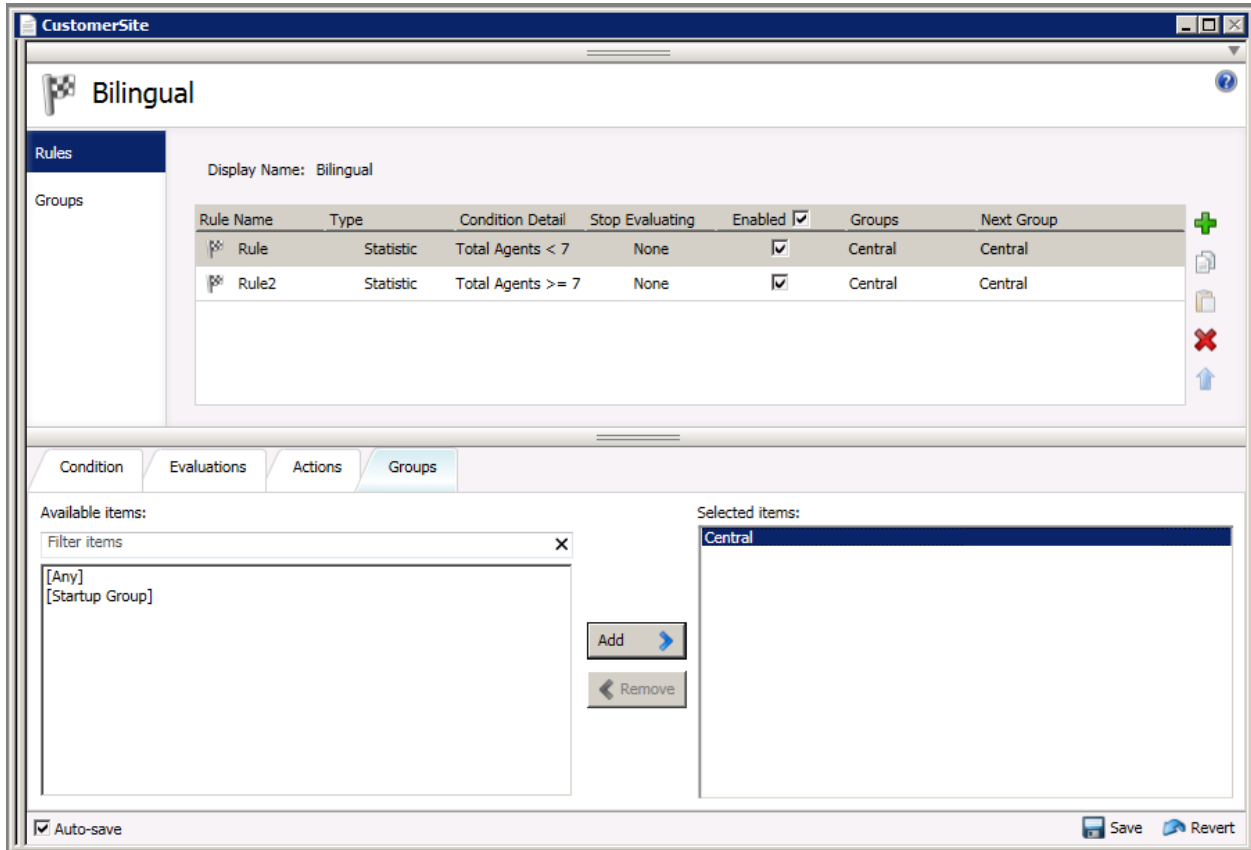
Configure Rules and Groups

Configure Rules and Groups

Use the controls on the tabs in this panel to configure how the rules and groups will function in each Rule Set. Each rule has a condition, evaluation parameters, action to take when criterion are met, and potential membership in a rule group and these are configured on the appropriate tab.

Condition

> Rules evaluate a single condition (a statistic, system event, or time) to determine whether to run one or more Actions. One Rule can run many actions when its condition is true.

Evaluation

> These settings determined whether a rule is evaluated for the campaign or contact list recycle, and whether other rules are evaluated when the rule's conditions are met.

Actions

Actions perform work to affect the processing of a campaign. For example, Actions can pause a campaign, recycle its contact list, change the dialing mode, apply a filter, log agents out of the campaign and into a different one, send an Email, run a handler, pass control to a different set of rules, and more.

For example, a statistic-based rule could send an email when a campaign goal is achieved (for example Total Calls > 1000). An event-based rule could send an Email (or perform a different action) when a campaign is started (for example Campaign Started event).

Groups

Groups identify rules that can be turned on or off collectively by an action. Rules can belong to multiple groups defined within the Rule Set. A group is a user-defined label by which rules can be classified.

Related Topics

Configure a Condition

Configure Evaluations

Configure Actions

Configure Groups

Configure a Condition

Configure a Condition

Once you create a rule, you are ready to configure the Condition.

1. Select the Condition tab
2. From the Type drop down, select one of the available types and proceed with the appropriate configuration options:
   o Configure a Statistic
   o Configure a System Event
   o Configure a Time
3. Once you have configured the Condition, select the Evaluations tab.

Statistic

A statistic rule compares the run time value of a statistic to a user-defined value coded into the rule. For example, a statistic rule might compare the *Total Successes* to 100, to send an Email when the 100 campaign calls have met the goal for the campaign. Statistic rules create an evaluable condition within the campaign based on either built-in statistics or custom fields within the database. Think of statistic rules as simple mathematical equations. The calculated value is a built-in statistic that may be summed,

counted, or averaged. The operation is the type of evaluation to occur and the comparison value is the value to be compared against.

Stat Category

Select a Stat Category. The available categories include:

- Dialer agent statistics
- Dialer campaign statistics
- Dialer wrap up statistics

Statistic

Select a statistic from the *Statistic* box. A different selection of statistics is available for each category. For example, if you choose a statistic in the Dialer wrap up statistics category, you will be prompted to select a wrap-up Category and wrap-up code also.

Comparison Operator

Select a comparison operator. This drop down sets the comparison operator used to compare a run time statistic to a static value.

!=	Not equal to
<	Less than
<=	Less than or equal to
=	Equal to
>	Greater than
>=	Greater than or equal to

Use equal to and not equal *to* with care. These operators return true only if the value of a statistic matches *at the time when the comparison is performed.* In many cases, it is better to use <= or >= instead.

Value

Enter any fixed value to compare to the current value of the statistic.

Evaluation Interval (minutes)

Sets the number of minutes that this rule will wait before evaluating the statistic to see if it is true or false.

Evaluate against calls made since the start of the current Campaign | Recycle

Sets the time period considered by the rule—whether or not statistics are measured from the last recycle of the contact list, or further back to the time when the campaign was started.

Related Topics

Built-in Statistics by Category

Built-in Statistics by Category

Dialer agent and campaign statistics are:

Dialer agent statistics	Dialer campaign statistics
Abandon Rate (by calls)	Abandon Rate
Abandon Rate (by contacts)	Active Agents
Abandon Rate (by detections)	Active Calls
Average Break Time	Adjusted Calls Per Agent
Average Dialer Talk Time	Agents On Break
Average Idle Time	Cached Contacts
Average Non-Dialer Talk Time	Calls Per Agent
Average Talk Time	Calls Per Hour
Contact Rate	Connected Calls
Contacts Per Hour	Current Pace
Dialer Calls	Effective Idle Agents
Idle Periods	Estimated Completion

Logged In Time	Filter
Non-Dialer Calls	Filter Size
Percent Break Time	Idle Agents
Percent Dialer Talk Time	Last Error
Percent Idle Time	Last Warning
Percent Non-Dialer Talk Time	Non-Dialer Agents
Stage	Priority
Station	Proceeding Calls
Status	Recycle Blocked
Successes Per Hour	Recycle Size
Successes Rate (by calls)	Recycles Remaining
Successes Rate (by contacts)	Sort
Time In Stage	Status
Time In Status	Total Agents
Total Abandons	Workgroup
Total Break Time	
Total Breaks	
Total Contacts	
Total Detections	
Total Dialer Talk Time	
Total Idle Time	
Total Non-Dialer Talk Time	
Total Successes	

Total Talk Time	
Dialer overall statistics	**Dialer phone number detail statistics**
Active Agents	Attempts
Calls Per Agent	Attempts Abandoned
Calls Per Hour	Attempts Answering Machine
Connected Calls	Attempts Busy
Non-Dialer Calls	Attempts Fax
Proceeding Calls	Attempts No Answer
Total Agents	Attempts Remote Hang up
	Attempts Rescheduled
	Attempts System Hang up
	Contact Rate
	Contacts
Dialer skill statistics	**Dialer stage statistics**
Cached Contacts	Average Time
Callable Contacts	Completed Calls
Finishing Agents	Percent Completed
Idle Agents	Total Calls
Outstanding Contacts	Total Time
Scheduled Contacts	
Total Agents	
Total Contacts	
Dialer wrap up statistics	**Dialer zone statistics**
Average Time	Cached Contacts
Percent Calls	Callable Contacts

Percent Time	Scheduled Contacts
style="Total Calls	Status
Total Time	Total Contacts

Related Topics

Dialer Statistics

System Event

A system event rule fires the rule when a specific campaign event occurs. At least one system event must be selected.
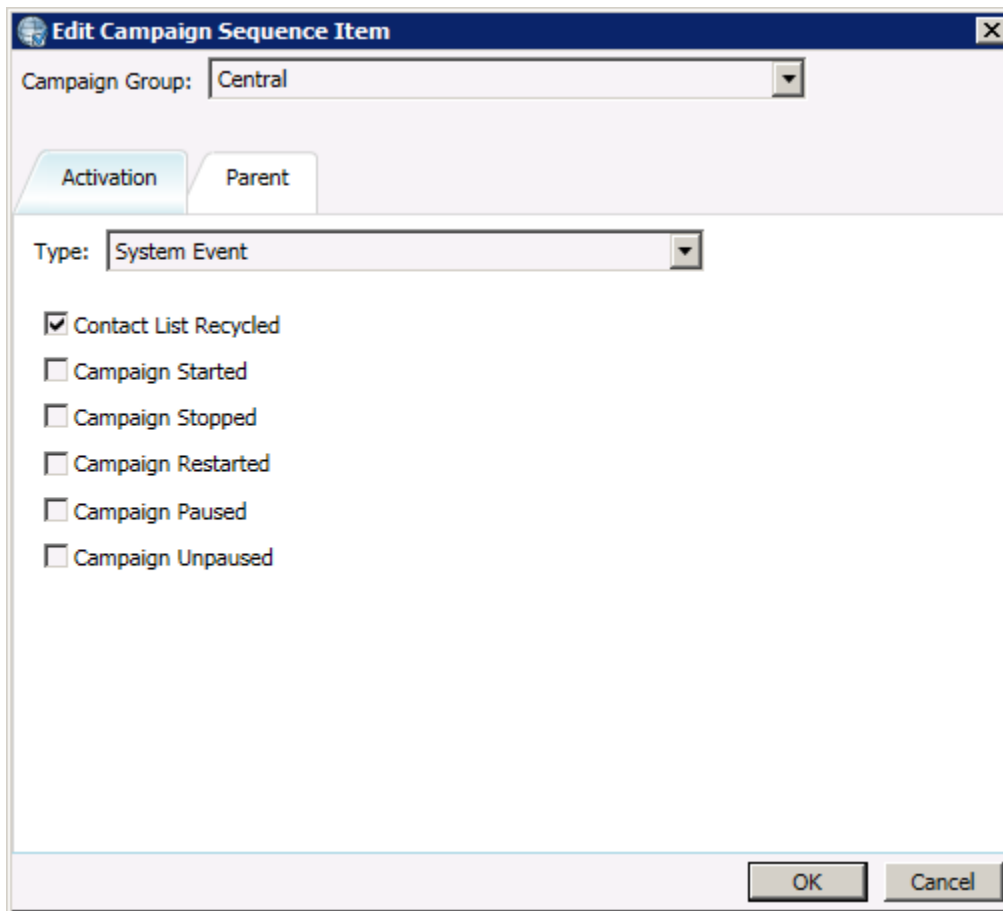
Contact List Recycled

Fire rule when the campaign has recycled.

Campaign Stopped

Fire rule when the campaign is stopped by a *Manual Off* command or by its schedule.

Campaign Started

Fire rule when the campaign is started by a *Manual On* command or by its schedule.

Campaign Restarted

Fire rule when the campaign is manually restarted.

Campaign Paused

Fire rule when the campaign is paused.

Campaign UnPaused

Fire rule when the campaign is unpaused.

Time

A time-based rule triggers actions at a given time, on particular days of the week, or on a specific date, or daily. Times are relative to the system clock of the Central Campaign server.

Time

Sets the time of day that you want the rule to fire.

Every Day

Sets the rule to run every day.

Selected Days

Sets the rule to run on the selected days.

Exact Date

Sets the rule to run on a specific date.

Interval (minutes)

Specifies a time interval (in minutes) that you want the rule to run. The rule will execute every configured number of seconds. This provides a way to recycle the call list every 15 minutes, for example.

Configure Evaluations

Once you configure a Condition, you are ready to configure Evaluations.

1. Select the Evaluations tab
2. Choose one or both of the Evaluation options.

Perform actions only once per (Campaign) | (Recycle)

This option determines whether or not actions are repeated the next time that a rule is evaluated within a given campaign or contact list recycle. For example, an action that sends an Email when a campaign reaches its goal would have this box checked, so that a single Email would be sent when the campaign reaches its goal.

Otherwise, an Email message would be sent every time the Rule evaluates True, which would continue to occur in each successive evaluation of the rule. For instance, if a > operation was used, the rule would continue to evaluate True, since the campaign total would always be greater than the threshold value used to trigger the rule.

After performing actions, stop evaluating rules in (This Rule Set) | (All Rule Sets in the Campaign)

These settings determine whether other rules in the Rule set are subsequently evaluated if this rule returns a True result to indicate that the rule matches a current condition. If this rule returns a False result, this option is ignored. You can stop evaluating rules in the current Rule Set, or stop evaluating all Rule Sets in the campaign.

- When "**After performing actions, stop evaluating rules in**" is unchecked, successive rules in the rule set will be evaluated when this rule returns a True result.
- To prevent other rules in the set from being evaluated, check "**After performing actions, stop evaluating rules in**" and select **This Rule Set**.
- To prevent further rule evaluation for all rule sets associated with the campaign, check "**After performing actions, stop evaluating rules in**" and select **All Rule Sets in the Campaign**.

Configure Actions

Configure Actions

Once you configure Evaluations, you are ready to configure Actions. Rules invoke *Actions* that affect the processing of a campaign.

1. Select the Actions tab.
2. Click **Add** () to create a new action for this rule. Type a name for the new action. Then click **OK**. The action is added to the list of actions in the view.
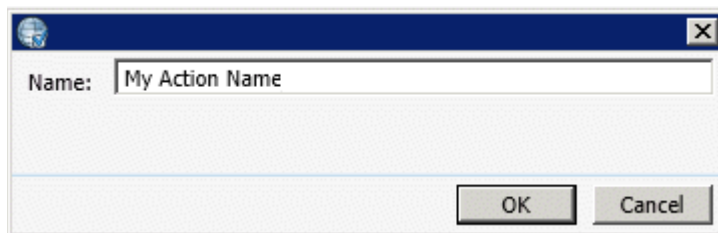
3. From the Action Type drop down, select one of the available actions and proceed with the appropriate configuration operations. See Action Types for details.
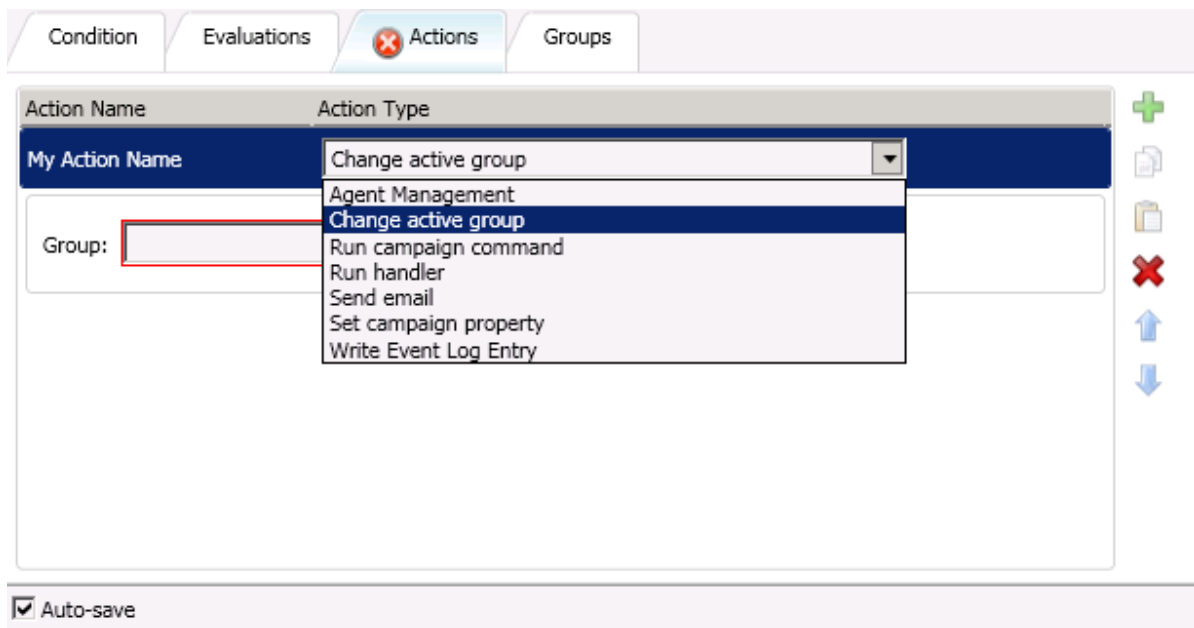
4. Click **Save** ( ).
5. Repeat steps 1-4 to add additional actions to the rule, if desired. Remember, actions are performed only when a rule evaluates to True.

Action Types

Action Types

An *Action Type* specifies the general type of work to be performed by a rule action. The available Action Types are:

Action Type	Description
Agent Management	Logs agents out of one campaign and into another.
Change active group	Changes the active Rule group
Run campaign command	Runs a command on the Central Campaign server that controls the processing of a campaign.
Run handler	Runs the Dialer_RuleActionEvent handler on each master dialer server. Customers may edit this handler (using Interaction Designer) to add custom logic that meets their business needs.
Send email	Sends an Email message to one or more recipients.
Set campaign property	Sets a property on the current campaign.
Write Event Log Entry	Logs an Event Log message on the Central Campaign server. The message is written to the Central Campaign server's event log, but not to the event logs of participating Outbound Dialer servers.

About Notification Actions

Several actions send notifications (for example send an Email or write an event log message). These *notification actions* contain fixed content. The content of the message is defined when the Action is defined. However, you can insert macros into the text of a notification message. Macros are variables whose value is inserted at run time into the text of a notification message. For example, you might use macros to insert the name of the current campaign into the body of an Email message, along with statistics for Total Calls, Abandonment, and Total Successes.

Agent Management

The Agent action automates participation in campaigns at the agent or workgroup level. Specifically it logs individuals or workgroups out of one campaign and into another.

Each agent's status (availability to take a call) is maintained when the agent is logged off one campaign and logged into another. This prevents placement of calls for agents who are not at their desk.

Requirements

Before you can use the Agent Management Action to log agents out of one campaign and into another, you must enable two other settings:

- Supervisor can override the agent's right to logon/logoff all campaigns global setting. Enabling this setting allows a Supervisor or Administrator to move agents, who have the Logon Campaign security right, to different campaigns.
- Dialer Delay Campaign Transition Login server parameter. Enabling this parameter will make sure that Dialer will delay the login to the destination campaign until after it has granted the previous campaign logout request.

To change campaign participation using a rule action:

1. Add a new rule or edit an existing rule.
2. Configure the rule's condition.
3. Click the Actions tab.

4. Click **Add** () to create a new action.
5. Give the new action a name.
6. Set the *Action Type* to **Agent Management**.
7. To select workgroups, click . Select workgroups in the list on the left. Click **Add**. Then click **OK**.
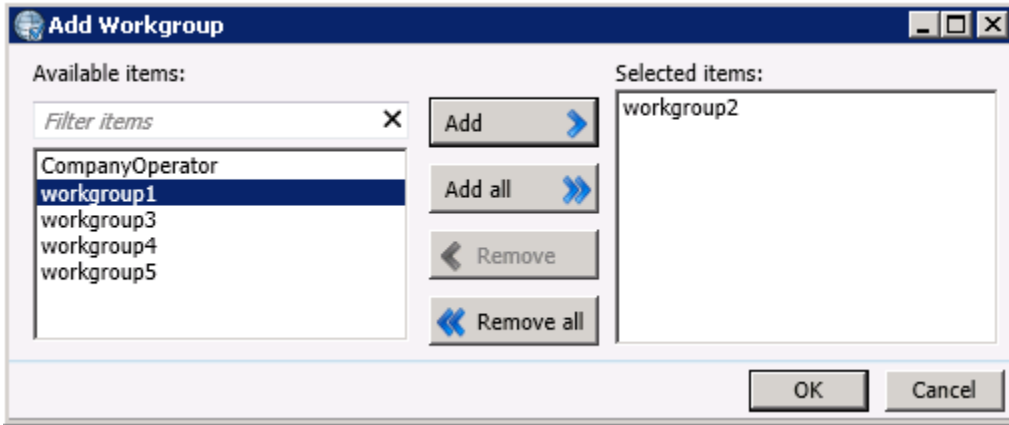
8. To select agents, click . Select agent names in the list on the left. Click **Add**. Then click **OK**.
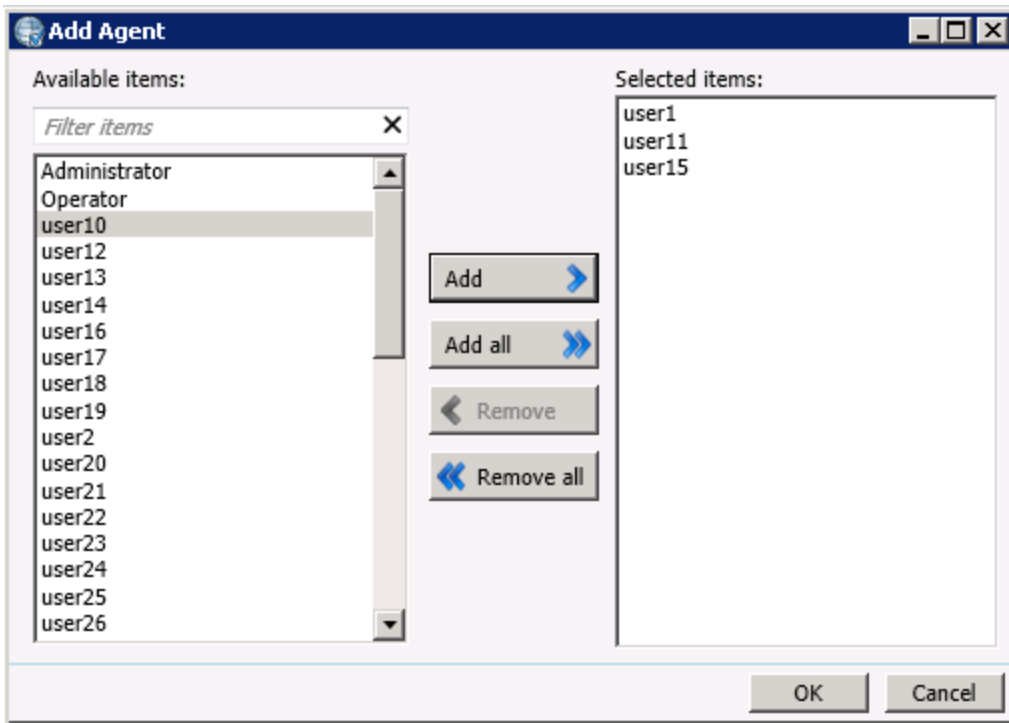
9. Click next to "Log out of these campaigns" list. Select campaigns in the list on the left. Click **Add**. Then click **OK**.
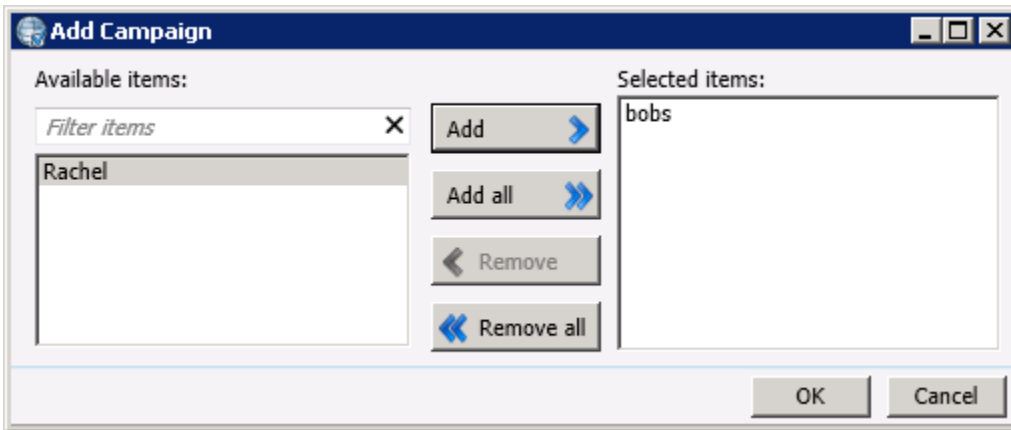
10. Click ✚ next to "Log into of these campaigns". Select campaigns in the list on the left. Click **Add**. Then click **OK**.
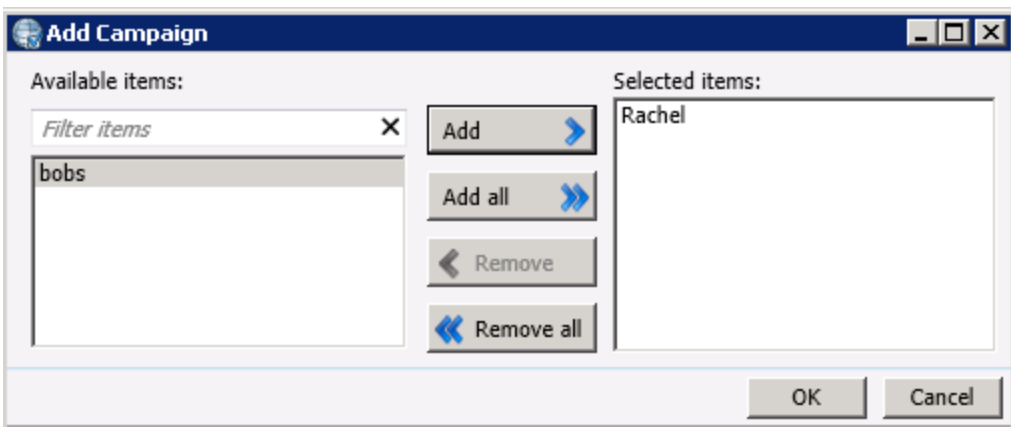
11. The screen will show the agents and workgroups selected, and campaigns to log them out of, and in to. Click OK.
12. Optionally configure the Groups tab.
13. Click **Save** when finished.

Related Topics

Action Types

Server Parameters

Change active group

This action changes the active Rule group. **Rule Groups** identify rules that can be turned on or off collectively by an action. Rules can belong to multiple groups defined within the Rule Set. A group is a user-defined label that rules can be classified by.

The Rule Group that is active at startup is known as the [Startup Group]. Rules associated with the startup group are active until a *Change active group* action activates a different group. This sets the active group for the Rule Set. The Campaign Server only evaluates rules that belong to the currently active group.

To configure an action to change the active group, select a rule group from the Group box.

Related Topics

Action Types

Working with Rule Groups

Associate a Rule with a Rule Group

Run campaign command

This action runs a command on the Central Campaign server that controls the processing of a campaign.

Action list box

Select processing action to perform on the current campaign.

- *End*—closes the campaign.
- *Pause*—temporarily halts outbound dialing.
- *Recycle Campaign*—restarts the call selection process at the beginning of the contact list.
- *Reset*—resets the running campaign, meaning that its contact list will be processed from the top to reach parties that were not contacted in a previous pass. If major settings have been

changed (DSN, Sorting or Filtering, etc.), the campaign is reset and restarted with the new configuration. This command also sets the count of recycles back to zero.

- *Scheduled calls only*—switches the campaign's dialing mode to dial scheduled calls only. In this execution state, Dialer places only calls that were rescheduled by agents. Priority dials are still made, but no regular calls are placed. Auto-scheduled calls are not placed in this mode.

Note: If the campaign is already running on a schedule and its current status is Auto On, selecting the Scheduled calls only action will be ignored and the campaign will continue to run in its current schedule.

- *Unpause*—if the campaign is paused, Unpause removes the pause condition, returning the campaign to the Manual On or Auto status, as is appropriate. If the campaign is not paused, Unpause does nothing.

Related Topics

Action Types

Run handler

This action runs the Dialer_RuleActionEvent handler on each master dialer server. The action passes a user-defined *Event Id* and *Event Data* payload to the handler. By default, Dialer_RuleActionEvent, does nothing except provide an entry point for future customization. Customers may edit this handler (using Interaction Designer) to add custom logic that meets their business needs.

A *Run Handler* action always runs the Dialer_RuleActionEvent handler. You cannot use this action to launch a different handler.

Event ID

A unique string that is later used to retrieve the event.

Browse button (*)*

Opens the macro selection dialog, so that you can insert macro text into the Event ID passed to the handler.
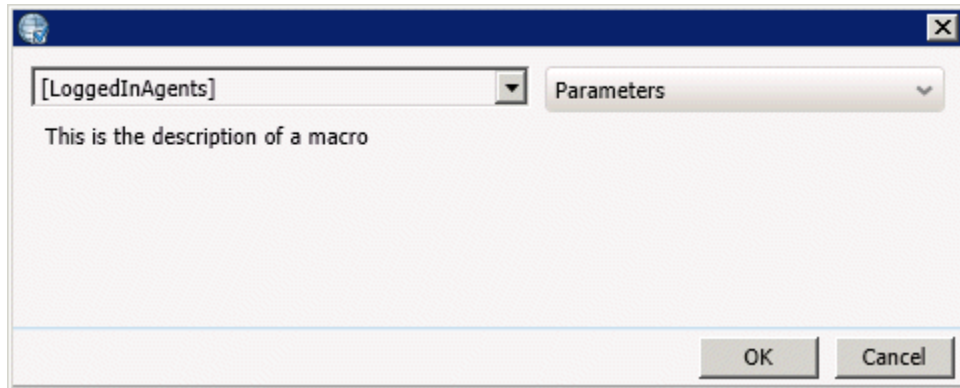
Event Data

User-defined string data passed to the handler. The information entered here is sent to the Dialer_RuleActionEvent handler as payload data. You can optionally insert macros into the data passed to the handler.

Browse button (*)*

Opens the macro selection dialog, so that you can insert macro text into the Event Data passed to the handler.

Related Topics

Action Types

Send email

This action sends an Email message to one or more recipients. The message includes a subject and body.

From

  Internet Email address of the sender.

To:

  Internet Email address of recipient(s). Use semicolons to separate multiple Email recipients.

Subject field

  The subject of the Email message. Click ( ) to insert macros.

Message field

  The body of the Email message. Click ( ) to insert macros.

Related Topics

Action Types

Set Campaign Property

The Set Campaign Property action sets a property on the current campaign.

To create an action that sets a campaign property, follow these steps:

1. Select Set campaign property from the **Action Type** box.
2. Select a property from the **Property** box. Based upon the property selected, you are prompted to type in a text box, select from a list, radio button, or spin control.
3. Specify a Value to assign.

Related Topics

Action Types

Campaign Properties

Write Event Log Entry

This action logs an Event Log message on the Central Campaign server. The message is written to the Central Campaign server's event log, but not to the event logs of participating Outbound Dialer servers.

Severity list box

This box sets the severity level of the message. Select Error, Information, or Warning.

Message field

The text typed in this field is written to the log entry. Click 🌐 to insert macros into the body of the Log message.

Related Topics

Action Types

Campaign Properties

Campaign Properties
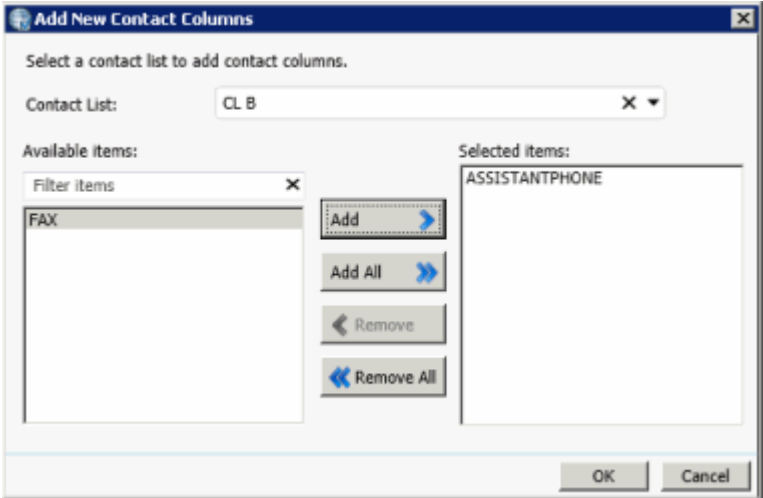
Each campaign property has a name, a read-only description, and a value. *Name* is the campaign property you can set. *Description* describes the selected property. *Value* establishes a new property setting. Various visual controls appear in the Value area, so that you can assign a new value to the selected property. The following properties of the current campaign can be set by a Set Campaign Property action:
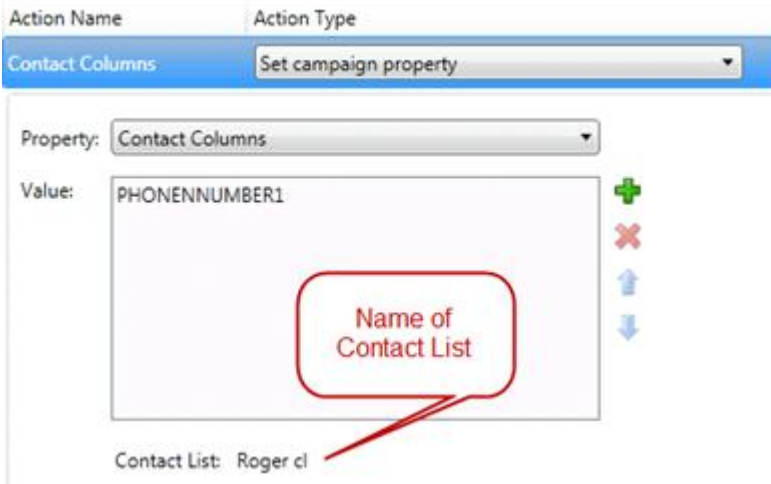
Campaign Property Action	Description
Abandon Rate Calculation	Perform a calculation based on contacts instead of dials
ACD Agent Available Time Interval	The amount of time (in seconds) to wait before increasing the Agent Available value by one. The longer an agent is available, the higher his or her Agent score will be.
ACD Agent Available Time Weight	The level of importance for Agent Available Time in the Agent Score formula. If you want to assign calls to the agent who has been off the phone the longest, weight this parameter more heavily than Weight for Agent Skill and Weight for Agent Cost.
ACD Agent Cost Weight	The level of importance for Agent Cost in the Agent Score formula. Agent Cost is an attribute assigned to an agent in Interaction Administrator. Use a positive value in this parameter to assign the call to the agent with the highest cost. Use a negative value in this parameter to assign the call to the agent with the lowest cost.
ACD Agent Skill Weight	The level of importance for Agent Skill in the Agent Score formula. Agent skill levels are normally assigned in Interaction Administrator on a User or Workgroup level. If Agent Skill is more important for you than Agent Cost, Agent Available Time, or some other custom attribute, weight this parameter more than the other weight parameters.
ACD Priority Level	The priority level assigned to calls. If you want priority taken into account when calculating interaction scores, you should also increase the value in the Weight for Priority parameter.

ACD Priority Weight	If you are concerned with matching calls with the highest priority to agents, then increase the Weight for Priority more than the weights for Skills or Time in Queue or System.
ACD Skill Weight	If you are concerned with matching calls to agents with the best skill for that call, then increase the Weight for Skills more than the weights for Priority or Time in Queue or System.
ACD Time in Queue Weight	If you are concerned with matching calls that have been holding in this queue the longest to agents, then increase the Weight for Time in Queue more than the weights for Skills, Priority, or Time in System.
ACD Time in System Weight	If you are concerned with matching calls that have been connected to CIC the longest to agents, then increase the Weight for Time in System more than the weights for Skills, Priority, or Time in Queue.
ACD Workgroup	Specifies an ACD Workgroup for the Outbound Dialer Server to use. The Value list box displays the names of available ACD workgroups. This workgroup must exist on each Outbound Dialer server.
Agentless Answering Machine Action	Sets the action to perform when an answering machine is detected by call analysis.
Agentless Answering Machine Attendant Profile	Sets the Attendant profile to route the call to when an answering machine is detected by call analysis.
Agentless Answering Machine File	Sets the wave audio file to play when an answering machine is detected by call analysis.
Agentless Answering Machine Seconds of Silence	Sets the amount of time the system will wait before playing a wave audio file to an answering machine.
Agentless Fax Action	Sets the action to perform when a fax machine is encountered: connect to agent, hang up, play file, or route to Attendant profile.
Agentless Fax Attendant Profile	This property sets the Attendant profile used for contacts that are Faxes, if *Agentless Fax Type* is set to *Attendant Profile.* This sets the Attendant profile to route the call to when a fax machine is encountered.
Agentless Fax File	This property identifies the Fax file to be transmitted by a multi-modal Fax campaign. A Fax document consists of one or many pages of data contained in an .i3f format file. Enter the fully qualified path to an Interaction Fax (*.i3f) file in the value field. Since this path needs to be accessible from any Outbound Dialer server that will run the campaign, the path should be entered in UNC format or as a network file mapping that all Outbound Dialer servers that run this workflow will recognize—in other words, the drive letter must be the same for the Outbound

	Dialer server machines participating in the campaign. For example: \\servername\path\filespec.i3f (a UNC path) R:\faxes\project\filespec.i3f (a mapped drive) Regardless of the method used, each Outbound Dialer must have read access to the specified path. A Fax document consists of one or many pages of data contained in an .i3f format file. Fax files are created using the Interaction Fax application. To open Interaction Fax: 1. Click the Start button. 2. Select Programs > PureConnect> Interaction Fax. 3. Press F1 to open the application's online help file. This will tell you how to create a fax document.
Agentless Fax Max Retries	This property sets the maximum number of Fax retry attempts made before the contact is considered to be a failure.
Agentless Live Person Action	Sets the action to perform when a live person is reached: connect to agent, hang up, play file, or route to Attendant profile.
Agentless Live Person Attendant Profile	Selects an Attendant profile to route the call to when a live person is reached, for a campaign that has dialed a contact and reached a live person. The Value list box contains names of custom profiles defined in Interaction Attendant. This property overwrites the profile name configured on the Agentless tab of the campaign object, only when *Live Person* type is selected for Call Analysis Result, and Attendant Profile is the selected Action.
Agentless Live Person File	This property sets the fully qualified path to a wave audio (*.wav) file that the action will play when a campaign reaches a live person. Since this path needs to be accessible from any Outbound Dialer server that will run the campaign, the path should be entered in UNC format or as a network file mapping that all Outbound Dialer servers that run this workflow will recognize—in other words, the drive letter must be the same for the Outbound Dialer server machines participating in the campaign. For example: \\servername\path\filespec.wav (a UNC path) R:\faxes\project\filespec.wav (a mapped drive) Regardless of the method used, each Outbound Dialer must have read access to the specified path. In addition, the wave file

	directories must be included in the virtual directory configuration of Prompt Server.
Auto Pace Limit	Sets the maximum level of aggressiveness of a campaign.
Auto-map Time Zone	Toggles automatic mapping of phone numbers to a predefined zone.
AutoSchedule Answering Machine Max Attempts	Sets the maximum number of times a rescheduled call may reach an Answering Machine before the contact is marked as un-callable.
AutoSchedule Busy Reschedule Delay	Sets the number of minutes the system will wait before retrying a call that previously busy.
AutoSchedule Busy Max Attempts	Sets the maximum number of times a rescheduled call may encounter a busy signal before the contact is marked as un-callable.
AutoSchedule Answering Machine Reschedule Delay	Sets the number of minutes the system will wait before retrying a call that previously reached an answering machine.
AutoSchedule Fax Max Attempts	Sets the maximum number of times a rescheduled call may reach a fax machine before the contact is marked as un-callable.
AutoSchedule Fax Reschedule Delay	Sets the number of minutes the system will wait before retrying a call that previously reached a fax machine.
AutoSchedule Ignore Recycles	When enabled, auto-scheduled calls are flagged so that future recycles of the contact list do not dial this entry a normal contact.
AutoSchedule No Answer Max Attempts	Sets the maximum number of times the system will call a contact that is not answering before the contact is marked as un-callable.
AutoSchedule No Answer Reschedule Delay	Sets the number of minutes system will wait before retrying a call that previously received no answer.
Auto Schedule Remote Hang Up Max Attempts	Sets the maximum number of times a rescheduled call may be disconnected by the remote party before the contact is marked as un-callable.
AutoSchedule Remote Hangup Rechedule Delay	Sets the number of minutes the system will wait before retrying a call that was terminated by the remote party.
AutoSchedule System Hang Up Max Attempts	Sets the maximum number of times that the system will call a contact back if the system itself terminated the call before marking the contact as un-callable.
Autoschedule System Hangup Reschedule Delay	Sets the number of minutes the system will wait before retrying a call that was terminated by the system itself.
Base Script	If you are using the Advanced Campaign Management feature to create Campaign Sequences, you can use the Base Script campaign property to assign different base scripts to various campaign groups.
Call Timeout	The maximum length of time (in seconds) that an outbound call will stay in the waiting queue before the Outbound Dialer server disconnects it. This determines the amount of time that the

	server should spend waiting for an agent to become available after the remote party has answered the call.
Caller ID Display Name	Sets the name that contacts will see on Caller ID devices. Call Centers with multiple clients can set this property to identify the company for whom they are conducting a campaign. Some Central Offices may not support this feature.
Caller ID Display Number	The telephone number that contacts will see on Caller ID devices. Call Centers with multiple clients can set this property to associate a telephone number with a campaign (if the CO supports this feature). For example, 1-800-FLOWERS.
Calling Mode	This property sets the calling mode for a campaign. Interaction Dialer offers supplemental calling modes in addition to its main predictive mode. These modes give agents more granular control over outbound interactions or conduct agentless campaigns. Calling modes are assigned on a per-campaign basis.
Campaign Priority	Campaigns can be assigned a priority number—an integer between 1 and 100, inclusive, that Dialer uses to decide how many calls to place for each campaign for each agent.
Campaign Statistics Interval	Sets the interval at which campaign statistics are gathered and logged.
Contact Columns	Assigns a subset of contact columns from those defined on the Contact List to be dialed by that campaign and/or changes the order in which contact columns will be dialed. You can select columns only after selecting a contact list. All Contact Columns selected must be from the same contact list. Once a column is selected, the contact list is listed below the selected value, so that you can check that all columns come from the same list:

Copy Dialer Attributes to Call Attributes	Toggles whether to copy contact attributes to the call's attributes before forwarding the call to an Attendant profile.
Customize Contact Columns	Enables use of a customized contact columns list.
Dialing Schedule	The schedule used by the campaign.
Display Transition Alerts †	Allows you to enable/disable transition alerts on a per Campaign Group basis when running a Campaign Sequence. † If you have installed the Advanced Campaign Management Feature License in Dialer, you'll have access to the Display Transition Alerts property.
Enable Preview Countdown	Toggles whether or not the preview countdown timer is enabled for a Preview campaign. **Note:** If you are running Interaction Dialer using the Manual Calling feature license, then the Preview Countdown feature is not supported.
Filter Agent Scheduled Callbacks	Toggles the use of filters on agent-owned filtered callbacks.
Filter Auto-Scheduled Callbacks	Toggles the use of filters on autoscheduled filtered callbacks.
Filters	Sets the filters used in contact queries, by assigning Filter objects to the selection of contact list records.
Follow up Status	Selects a status that Dialer will put the agent into when a Dialer call disconnects but has not been dispositioned yet. A typical selection might be "Follow Up". The list allows selection of any agent status defined in CIC. The rule can select a different status from the status configured for the campaign on the Recall Control Tab.
Group	Sets the logical group that the campaign belongs to. Group is a descriptive label that is optionally assigned to a campaign. Interaction Dialer does not use this information internally, but it

	is useful for identification purposes. A group designation is useful when several campaigns are related in some way. For example, a call center might conduct several campaigns for a corporate client, and store the name of the client in the Group field.
Incoming High Threshold	Sets the number of inbound waiting calls in the ACD workgroup that will cause the dialing server to stop making predictions. The campaign is paused when this threshold is reached.
Incoming Low Threshold	Sets the number of inbound waiting calls in ACD workgroup that will cause the dialing server to resume making predictions and unpause a campaign.
Initial Calls Per Agent	Sets the number of calls to place per agent when contact rate information is not yet available, such as when a campaign starts.
Line Group	Sets the name of the line group used by the campaign. This identifies a set of lines that the Outbound Dialer server will use to place campaign calls. This line group must exist on each Outbound Dialer server that is assigned to the workflow. Line Groups are defined in the Line Groups container in Interaction Administrator.
Max Lines	Sets the maximum number of lines a campaign may use.
Maximum Abandon Rate	The maximum percentage of abandoned calls that the Outbound Dialer will allow before it automatically lowers the pacing. A typical value might be 3%.
Maximum Attempts	Sets the maximum number of times a contact record will be dialed before it is marked as uncallable.
MaxDailyAttemptsDefinition	Sets the way that the Maximum Daily Attempts Count will be implemented. Either by record or by phone number.
Maximum Preview Time	Sets the total number of seconds to allow the agent to preview a number before dialing.
Maximum Recycles	Sets the number of additional times the system will cycle through the contact list before ending the campaign. This action sets the maximum number of times that this campaign should recycle before it is stopped. This is the total number of times that this campaign should recycle through its contact list in an effort to reach contacts that could not be reached before.
No Agent Action	Sets the action to perform when no agent is available to take the call: connect to agent, hang up, play file, or route to Attendant profile.
No Agent Attendant Profile	Sets the Attendant profile to route the call to when no agent is available to take the call.
No Agent File	Sets the wave audio file to play when no agent is available to take the call.
Perform Answering Machine Detection	Toggles whether call analysis should attempt to detect answering machines.

Perform Call Analysis	This action enables or disables Call Analysis for the campaign. *Call Analysis* is a CIC process that analyzes a connection to determine if the call reached a live person, a Fax machine, or an Answering Machine, and whether or not an agent is available to process the call.
Phone Number Filters	Selects filters used in phone number detail queries.
Policy Sets	Sets a list of Policy Sets used by the campaign. Select the name of an existing Policy Set from the list, or select [None] to discontinue use of the currently active Policy Set (if any). If this list does not contain user-defined Policy Sets, you can use the Policy Sets view to create a new policy set.
Reschedule Delay	This action sets the delay interval for auto-scheduled calls. This is the amount of time (in minutes) that the system will wait before checking if an agent is available to take an auto-scheduled callback. If the agent is unavailable when it is time to dial an agent-owned callback, the system waits for a configurable number of minutes specified by this property before calling the party. This interval is known as the *reschedule delay*.
Restrictive Abandon Rate Calculation	Whether or not to perform calculations based on contacts instead of dials. This enables or disables the restrictive abandon rate calculation. By default, the restrictive calculation is used to moderate the pace of a campaign. When this setting is disabled, the abandonment calculation is: Abandons / Total Calls and not Abandons / Total Contacts When the restrictive abandon rate calculation is enabled, the abandonment calculation is: Abandons / Total Contacts
Rule Set	This action applies a Rule Set to the campaign. Select the name of an existing Rule Set from the list, or select [None] to discontinue use of the current Rule Set (if any). If this list does not contain user-defined Rule Sets, you can use the Rule Sets view to create a new Rule Set.
Scripter URL	This property sets the URL of the custom campaign script associated with the current campaign. This is the URL of the first HTML page displayed by a custom campaign script—if your company has licensed *Advanced Interaction Scripter*, and has created a custom campaign script for the campaign. The URL can be either a UNC path (\\fileserver\path\filespec) or a web address (http://...). Leave blank if you are using a base script.
Sort	This action sorts a contact list by the columns you select.
Stage Set	Assigns a Stage Set object to the current campaign. Select the name of an existing Stage Set from the list, or select [None] to

	discontinue use of the current Stage Set (if any). If this list does not contain user-defined Stage Sets, you may use the Stage Sets view to create a new Stage Set.
Timezone Map Option	Sets options that govern whether time zone mapping occurs, and which phone numbers are automatically mapped to a time zone.
Use Autoschedule Settings for Agent Callbacks	Toggles whether this campaign's Auto-Schedule settings apply to own-agent callbacks.
Zone Set	Sets the Zone Set used by this campaign. Select the name of an existing Zone Set from the list. If this list is empty, you must use the Zone Sets view to create a new Zone Set.

Related Topics

Set Campaign Property

Action Types

Display Transition Alerts Property

If you have installed the Advanced Campaign Management Feature License in Dialer, you'll have access to the Display Transition Alerts property, which allows you to enable/disable transition alerts on a per Campaign Group basis when running a Campaign Sequence.

When you are configuring a Campaign Sequence, you can select the Display Transition Alerts in Clients check box to configure Dialer to display notifications in Interaction Scripter whenever a campaign transition occurs. In the event that you don't want Dialer to display a notification for every transition, you can use the Display Transition Alerts campaign property to disable transition alerts for certain campaign groups.

Example

In the example shown here, the Display Transition Alerts in Clients check box is selected to configure Dialer to display notifications to agents whenever a campaign transition occurs. And, the Display Transition Alerts campaign property is assigned to the campaign groups in the campaign sequence in order to control which campaign transitions will not display transition alerts.
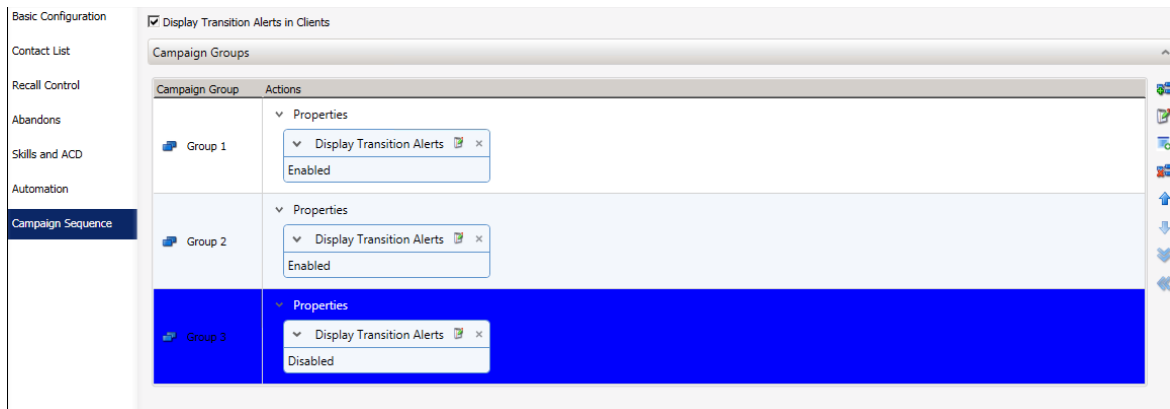
As you can see, Groups 1 and 2 have Display Transition Alerts campaign property Enabled, but Group 3 has the Display Transition Alerts campaign property Disabled. As such, when the Campaign Sequence transitions from Group 1 to Group 2, Dialer will display a notification. However, when the Campaign Sequence transitions from Group 2 to Group 3, Dialer will not display a transition alert.

Related Topics

Campaign Sequence Tab

Campaign Properties

Base Script

If you are using the Advanced Campaign Management feature to create Campaign Sequences, you can use the Base Script campaign property to assign different base scripts to various campaign groups. When you do so, each time that the campaign transitions from one group to the next in a campaign sequences, a different script will appear in the Interaction Scripter client.

Example

In the example campaign sequence shown here, which will transition from one campaign group to the next based on time zones, there is a separate base script for each time zone. You'll also notice that the Display Transition Alerts in Clients check box is selected to configure Dialer to display notifications to agents whenever a campaign transition occurs.

Enabling the Display Transition Alerts in Clients check box will ensure that the agents are aware of the campaign transition and as such will be alerted to the new base script, which will likely contain different wording for each time zone.

215
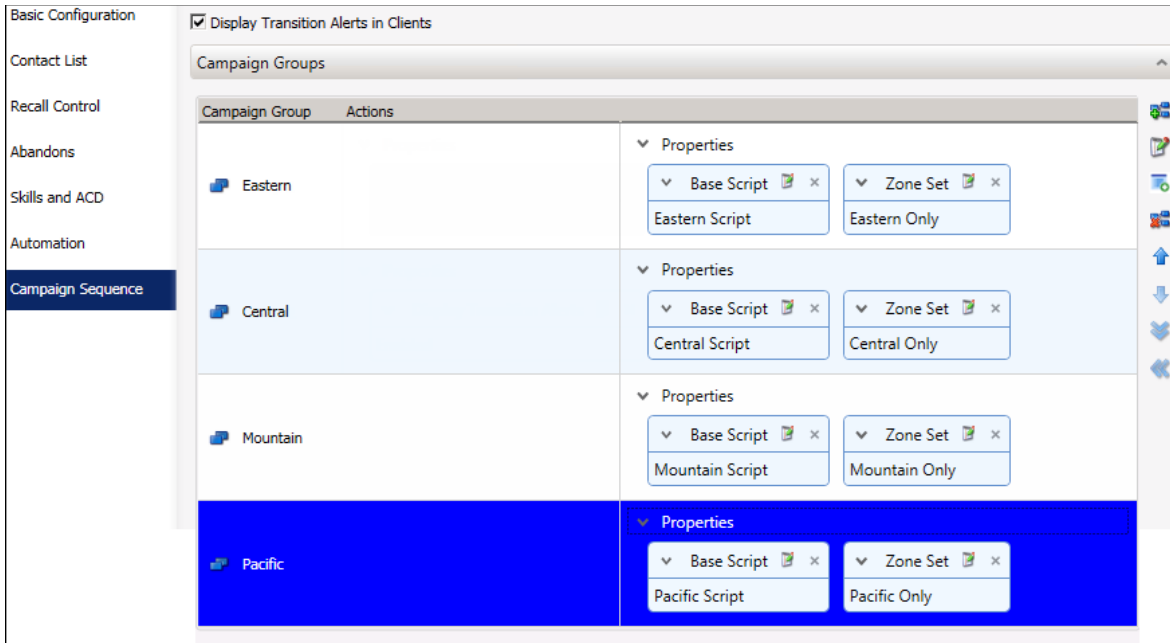
Related Topics

[Campaign Sequence Tab](#)

[Campaign Properties](#)

Configure Groups

Configure Groups

Options on this tab associate a rule with one or more **Rule Groups**. A Rule Group is a descriptive name defined in the Rule Set that individual rules can be associated with.
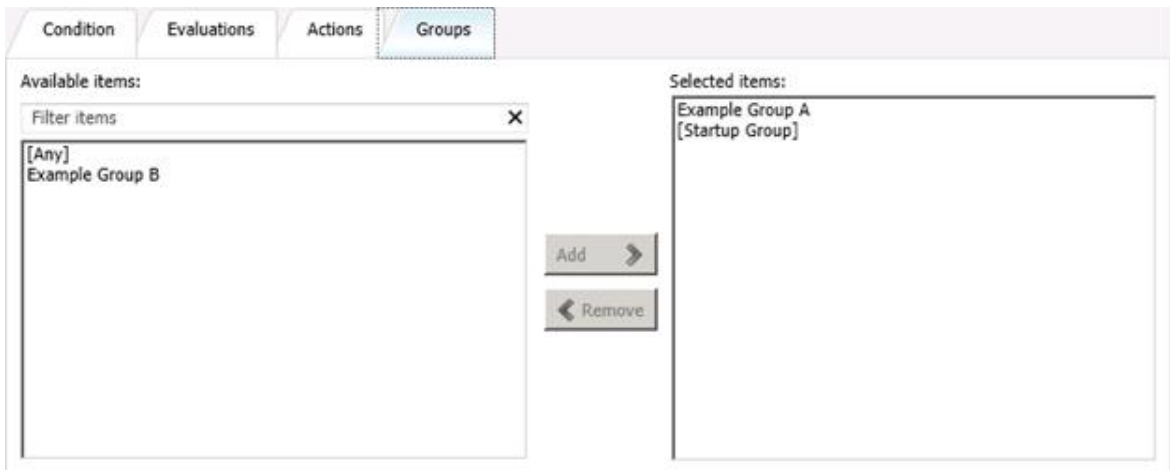
Available items

This list contains the names of Rule Groups that the rule can be assigned to.

Add button

Adds items selected in the Available items list to the Selected items list.

Selected items list

This list contains the names of Rule Groups assigned to this rule.

About [Startup Group]

The Rule Group that is active at startup is known as the [Startup Group]. Rules associated with the startup group are active until a Change Active Group action activates a different group. This sets the active group for the Rule Set. The Campaign Server only evaluates rules that belong to the currently active group. To find out which rules are active when the Rule Set is initially evaluated, select [Startup Group].

About [Any]

When selecting the groups for a rule, an [Any] group is also listed. Adding [Any] group to the rule will cause the rule to be evaluated regardless of which group is currently active.

Associate a Rule with a Rule Group

1. If you have not done so already, open a **Rule Set** for editing.
2. Select a **Rule** in the Rule Set.
3. Click the **Groups** tab in the bottom pane.
4. Select groups in the **Available Items** list. Then click **Add**. A rule can belong to more than one group.

Policy Sets

Policy Sets view

Overview

A *Policy Set* is a top level Dialer object composed of one or more contact policies. A policy is a per-contact rule. Contact policies provide low-level control over the processing of individual contact records. A policy is made up of conditions and behaviors. Conditions determine when the policy applies. Behaviors define the work performed when a policy condition is true.

Each behavior modifies the processing of an individual contact record. For example, a behavior might prevent a contact from being dialed, or require that the call is routed to an Agent who has a specific skill set. Policies allow for implementation of legislative requirements that involve per-contact behavior. Policies also fire notification events based on individual contact results. Policy Sets are optional. To have any effect, a Policy Set must be assigned to a campaign.

Policy Evaluation Types

To control *when* conditions are evaluated, a policy can be defined as a *Pre Call*, *Call Analysis*, or *Disposition* evaluation type.

- *Pre Call* policy objects are evaluated <u>before the call is made</u>.
- *Call Analysis* policy objects are evaluated immediately <u>after the Call Analysis result is determined</u>, but before the call is sent to an agent or is dispositioned.
- *Disposition* objects are evaluated <u>after the call is finished</u> and is dispositioned.

This timeline illustrates when each policy type will be evaluated, per contact list record. Policy evaluation type is determined according to the **tab** under which the policy is created.

Related topics

Add a Policy Set

Edit a Policy Set

Delete a Policy Set

Assign Policy Sets to a Campaign

Add a Policy Set

1. In Interaction Administrator, expand the Interaction Dialer container. Then select the Policy Sets container.
2. Click **Add** to create a new Policy Set entry.
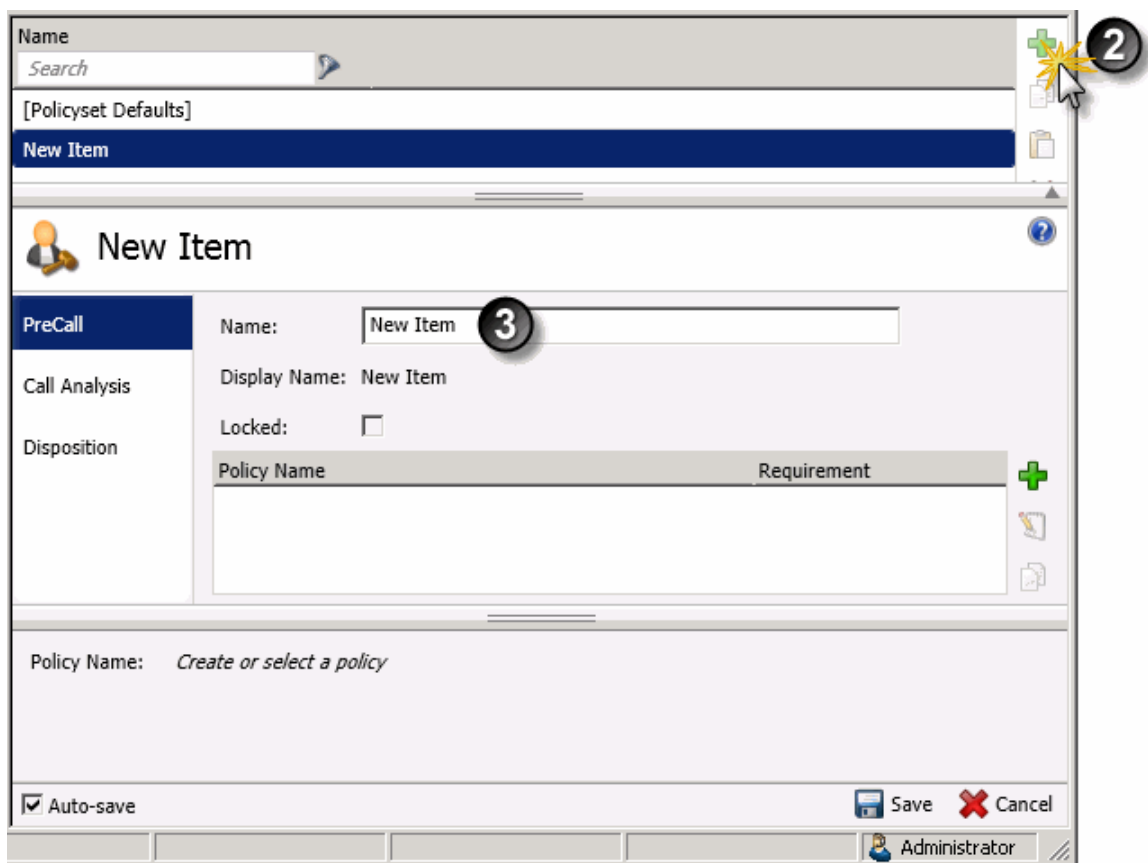
3. An entry titled **New Item** appears in the list of entries, and properties of the new entry are displayed. Type a descriptive name in the **Name** field. This name will become the name of the Policy when the entry is saved, replacing the default "New Item".
4. Optionally check the **Locked** box. This will lock the policy object so that it cannot be modified, removed, or unlocked by any person who does not have the "Lock Policy Sets" security right. Once a policy has been locked, users who do not have this right can view the policy but they cannot remove or edit it until a person who has the right removes the lock. Locked policies can

be assigned to a campaign, but they cannot be removed from a campaign except by persons who have the "Lock Policy Sets" security right.

> **Note**: Leave this option unchecked unless you have a specific reason to lock the policy. If you lock a policy, you won't be able to manage it later, unless the "Lock Policy Sets" security right is assigned to you.

5. Click the **Pre Call**, **Call Analysis**, or **Disposition** tab to control when the policy condition will be evaluated. Pre Call policy conditions are evaluated before the call is made. Call Analysis conditions are evaluated immediately after the Call Analysis result is determined, but before the call is sent to an agent or is dispositioned. Disposition policy objects are evaluated after the call is finished and is dispositioned.
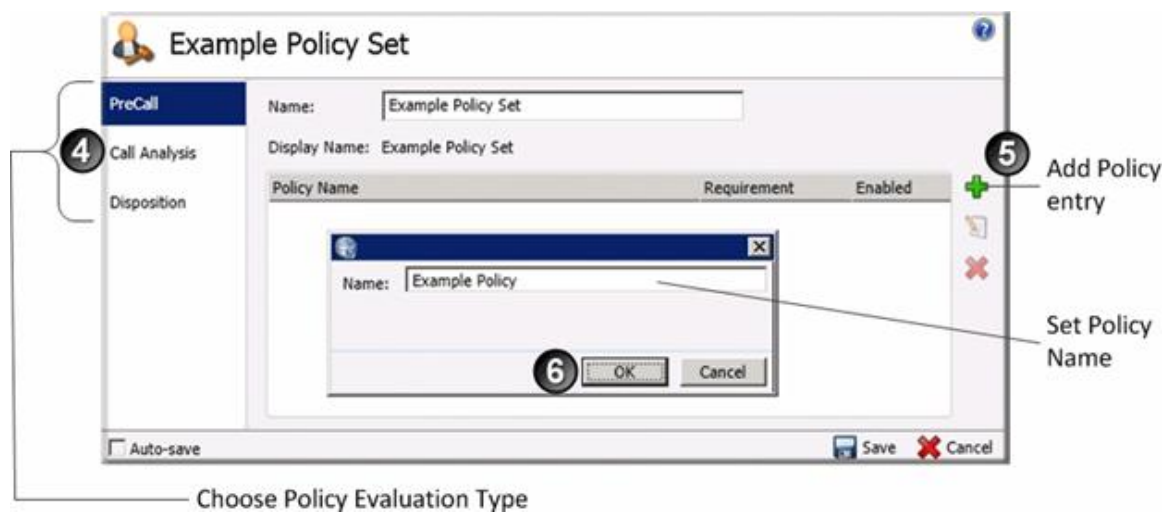
6. Click **Add** to add a policy entry to the policy set. Give the policy a descriptive name.
7. Click **OK** to dismiss the *Policy Name* dialog.

Configure a Condition

8. Next, define the condition associated with this policy. The *Conditions* tab is selected by default. Click **Add** (![add icon]) to define a new policy condition.
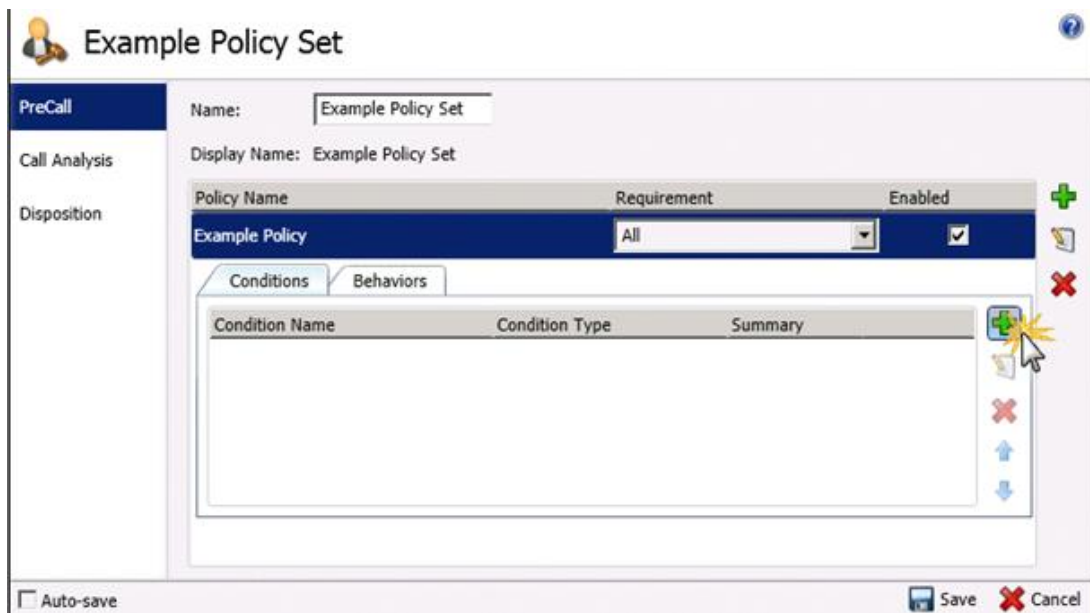
9. The *Add Policy Condition* dialog appears. Type a name for the new condition in the **Name** box.
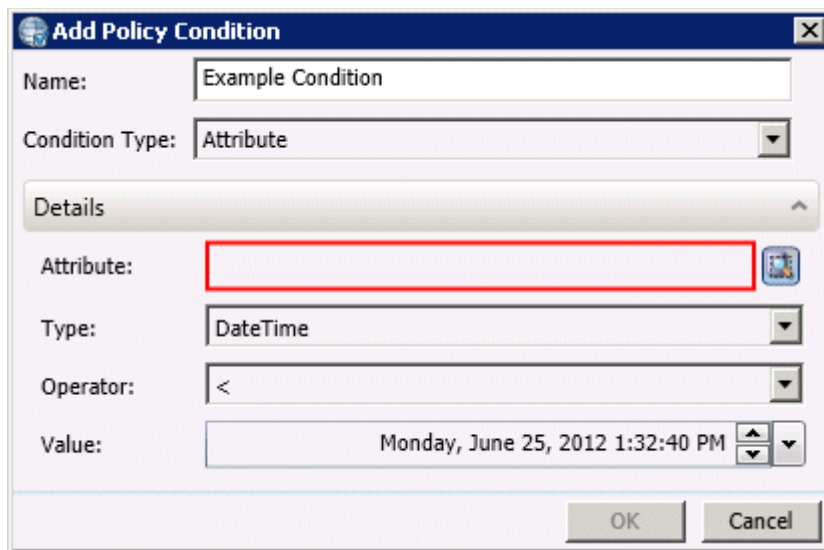
10. Select a condition type from the **Condition Type** list. Condition type is what will be evaluated to determine whether to execute behaviors for this policy. You can define different conditions based upon whether the policy type is PreCall, Call Analysis, or Disposition. The table below lists the condition types that are available for each policy type.

	Policy Evaluation Type		
Condition Type	**PreCall**	**Call Analysis**	**Disposition**
Abandon			x
Attribute	x	x	x
Call Analysis		x	

Call Attribute		x	x
Call Category	x	x	x
Call Dialing Mode	x		
Disposition			x
Duration		x	x
Phone Number Details	x		
Phone Number Type	x	x	x
Statistic	x	x	x
Time	x	x	x

11. Configure options for the condition type selected. Use the hyperlinks in the table above to view details about each condition type.

Configure Behaviors

12. Click the **Behaviors** tab.

13. Click **Add**. The *Add Policy Behavior* dialog appears.

14. Type a name for the new condition in the **Name** box.

15. Select a behavior type from the **Behavior Type** list. Behaviors are actions performed when the policy condition is true. You can define different behaviors based upon whether the policy type is PreCall, Call Analysis, or Disposition. The table below lists the behavior types that are available for each policy type.

	Policy Evaluation Type		
Behavior Type	**PreCall**	**Call Analysis**	**Disposition**

Agentless		x	x
Attribute	x	x	x
Call Analysis	x		
Call Attribute	x	x	x
Call Routing	x		
Callback	x	x	x
Calling Party	x		
Contact Columns	x		
Custom Data	x	x	x
Custom Handler	x	x	x
Custom Stored Procedure			x
Disposition	x	x	x
DNC Update			x
Email	x	x	x
Event Log Message	x	x	x
Number to Dial	x		
Preview Dialing	x		

16. Configure options for the behavior type selected. Use the hyperlinks in the table above to view details about each behavior type.
17. Optionally repeat steps 12-14 to add additional policy behaviors.
18. When you are finished, click **Save**.

Condition Types

Abandon condition type
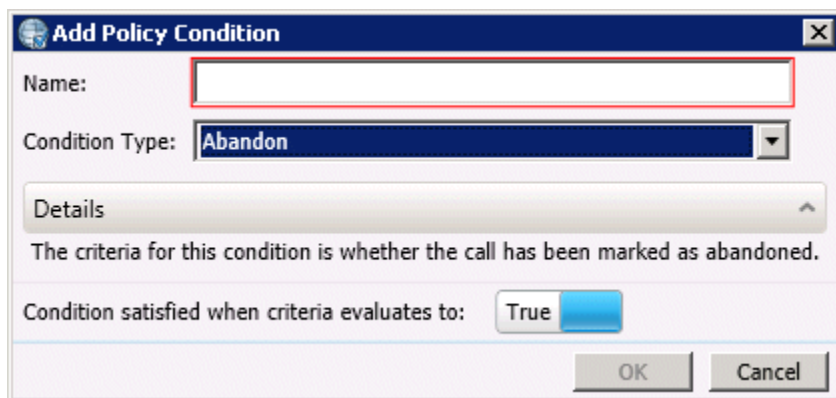
The Abandon condition type evaluates whether or not the call was abandoned, either by the system or the remote party.

Name

Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Think of a descriptive name that describes the criteria that this condition evaluates. For example, "1000 Campaign Calls placed".

Condition Type

Select "Abandon" to display options that configure this condition.

Details

There are no configurable options in the details expander, only a label that describes the purpose of this condition.

Condition satisfied when criteria evaluates to True | False

Determines whether the condition evaluates to True when the criteria is true or false.

Attribute condition type

Attribute condition type

An Attribute condition compares the value of a contact list column to a constant value. You can use behaviors to perform arithmetic operations on contact columns.

NOTE: Arithmetic operations add or subtract attribute values from columns in a contact list, using addition and subtraction operators in the Arithmetic Operation drop list. For example, you might set up a policy behavior to keep a running total of the number of times that a message has been played to the contact. This is accomplished by creating two behaviors. The first plays the message when an Answering Machine is detected. The second behavior increments a call list column to count how many times the wav file has been played to the contact.

Name

Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Think of a descriptive name that describes the criteria that this condition evaluates. For example, "1000 Campaign Calls placed".

Condition Type

Select "Attribute" to display options that configure this condition.

Details expander

Attribute

This field prompts for the name of a column in the Contact List. Clicking **Browse** ( ) opens the Column Wizard, so that you can select a column by name after selecting a contact list.

Type

Use this list box to select the attribute's data type (Date/Time, Number, String, or Time Offset).

When you select the Date/Time or Time Offset condition, Dialer expects the data in the Contact List to be in the standard SQL DATETIME format:

YYYY-MM-DD HH:MM:SS[.MMM]

Where YYYY-MM-DD is Year, Month, Day and HH:MM:SS[.MMM] is Hours, Minutes, Seconds, Milliseconds.

(Milliseconds are optional)

When you select Time Offset, keep in mind that it compares the value of an attribute to an offset of the current date/time. The value of Time Offset is added to the current time. The resulting sum is compared to the value of the attribute.

To look into the past, Time Offset should be entered as a negative number of hours. For example, a value of -2.5 will compare an attribute time to a time 2.5 hours in the past. Entries for Time Offset can use decimal places to compare partial hour offsets.

In the example below, the -2.5 Time Offset would allow the Condition to evaluate to True if GMTValue were greater than or equal to 2.5 hours past due:

Note: When you select either Time Offset or Date\Time in the Type field, and then use local time, keep in mind that Dialer assumes that the Attribute is using UTC for the time. As such, you must account for the UTC difference in the Value field.

Operator

Selects the operator used to compare the attribute with a value.

!=	not equal to
<	less than
<=	less than or equal to
=	equal to
>	greater than
>=	greater than or equal to
Regex	regular expression (See Using Regular Expressions.)

Value

The attribute is compared to the value defined here. If Type is *Number* or *String*, you are prompted to type into a field. If Type is Date/Time, calendar controls appear so that you can select a date and time of day. Macros are supported in the Value field when the String type is selected.

Condition satisfied when criteria evaluates to True | False

Determines whether the condition evaluates to True when the criteria is true or false.

Column Wizard
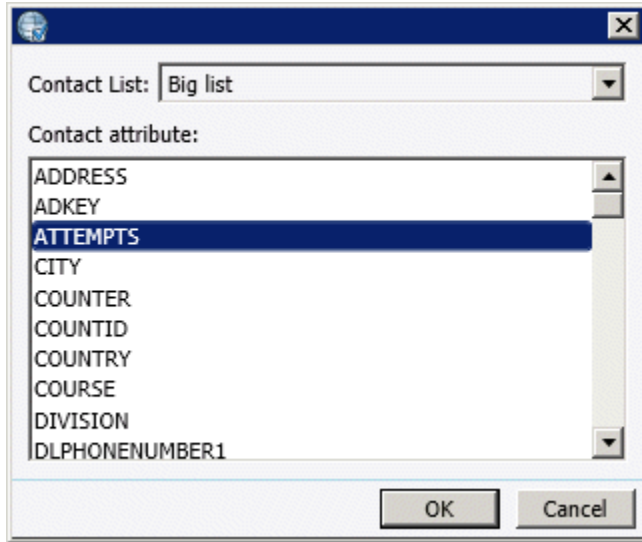
The column wizard selects a column (attribute) from a contact list table. It helps prevent configuration errors, by eliminating the need to type column names into a form.

1. Select a contact list from the *Contact List* box. Columns from that table appear in the *Contact attribute* control.
2. Select a contact attribute.
3. Click **OK**.

Duration condition type
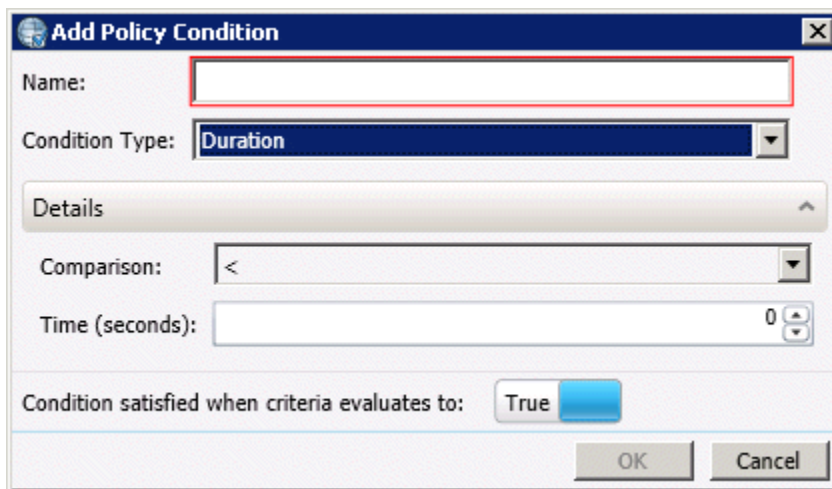
This condition compares the duration of the interaction to a time in seconds.

Name

Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

Select "Duration" to display options that configure this condition.

Details expander

Comparison

Selects the operator used to make a time comparison.

!=	not equal to
<	less than
<=	less than or equal to
=	equal to
>	greater than
>=	greater than or equal to
Regex	regular expression (See Using Regular Expressions.)

Time (seconds)

Selects an amount of time, in seconds, to match against the duration of the interaction.

Condition satisfied when criteria evaluates to True | False

Determines whether the condition evaluates to True when the criteria is true or false.

Disposition condition type
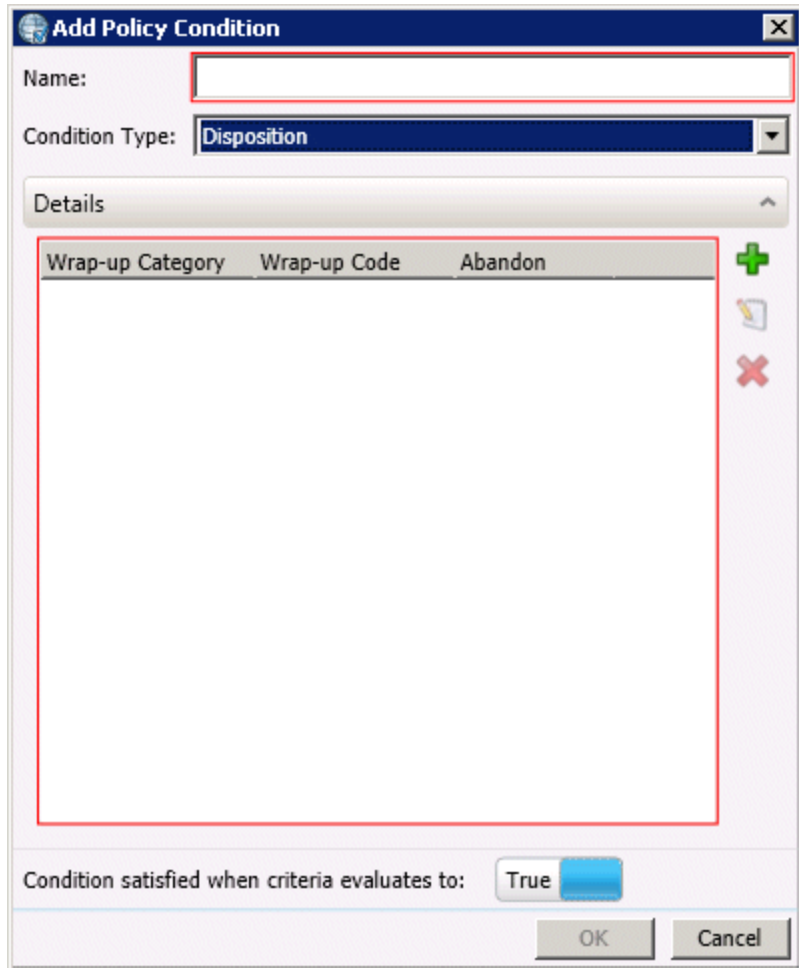
A Disposition condition will evaluate to True if the Disposition of the contact matches the specified Wrap-up Category and Wrap-up Code.

Name

> Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

> Select "Disposition" to display options that configure this condition.

Details

Wrap-up Category/Code list

This control lists wrap-up category/code pairs. You can select multiple pairs to be evaluated. To select a wrap-up pair, click the Add (   ) button. This opens the *Add New Disposition* dialog:
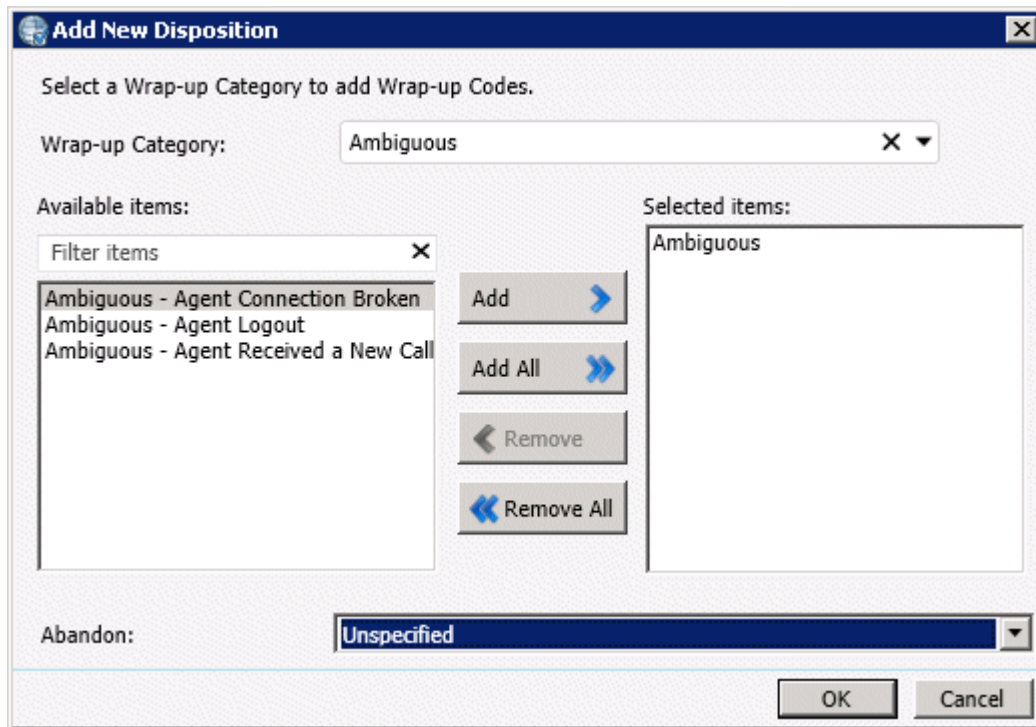
The controls on the *Add New Disposition* dialog are:

Wrap-up Category

Selects a wrap-up Category code. For background information, see wrap-up Codes and Categories.

Available items / Selected items (Wrap-up Code)

Selects a wrap-up Code.

Abandon

Matches an abandonment result: Abandoned, Not Abandoned, or Not Specified.

Edit button

The **Edit** button (   ) re-opens an existing, selected entry in the *Add New Disposition* dialog.

Delete button

The **Delete** button (   ) removes a selected entry.

Condition satisfied when criteria evaluates to True | False

> Determines whether the condition evaluates to True when the criteria is true or false.

Call Dialing Mode condition type
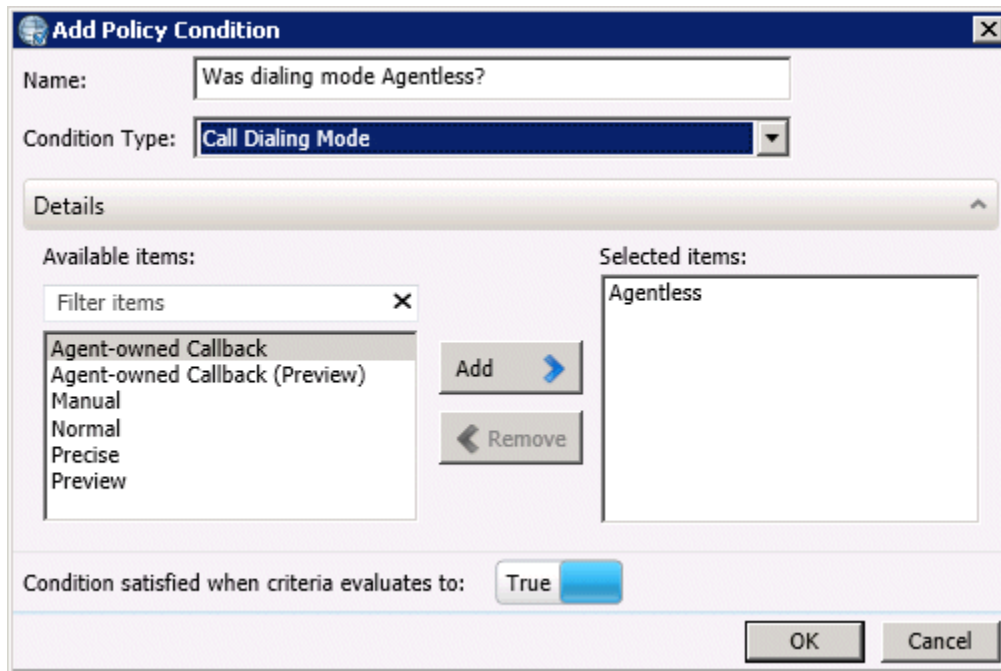
This pre-call condition type allows a policy to evaluate the dialing mode used to dial the contact. This is used primarily to determine if the call was placed as a non-preview dial in conjunction with the Phone Number Type to comply with new regulations.

Name

> Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

> Select "Call Dialing Mode" to display options that configure this condition.

Details

Available Items

> Displays a list of dialing modes to select from.

Add button

Adds any modes selected in Available items list, to the *Selected items* list. Items in the latter list will be examined when the condition is evaluated.

Remove button

Moves the item selected in the *Selected items* list back to the list of *Available items*, thereby excluding it from being evaluated.

Condition satisfied when criteria evaluates to True | False

Determines whether the condition evaluates to True when the criteria is true or false.

Call Category condition type

This condition type allows a policy to examine call category information for the current contact record. This allows a policy to execute behaviors based upon the type of call (normal campaign call, agent-owned callback, priority call, etc.)

Name

Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

Select "Call Category" to display options that configure this condition.

Details

Add button

> Adds the category selected in Available items list, to the *Selected items* list. Items in the latter list will be examined when the condition is evaluated.

Remove button

> Moves the item selected in the *Selected items* list back to the list of *Available items*, thereby excluding it from being evaluated.

Condition satisfied when criteria evaluates to True | False

> Determines whether the condition evaluates to True when the criteria is true or false.

Call Attribute condition type

This condition compares the value of an interaction attribute to a supplied value. An *interaction attribute* is a name/value pair of strings that remain with the call object as it is routed through the Interaction Center. The attribute condition type uses the term *attribute* to refer to contact columns, but in this context, "attribute" refers to an interaction attribute attached to the interaction, which is usually a telephone call.

Name

> Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

Select "Call Attribute" to display options that configure this condition.

Details

Call Attribute

The name of the call attribute that you want to examine. The names of reserved call attributes are documented in the *Interaction Attributes Reference Guide* in the System APIs section of the PureConnect Documentation Library.

Type

Use this list box to select the attribute's data type (Date/Time, Number, or String).

When you select the Date/Time or Time Offset condition, Dialer expects the data in the Contact List to be in the standard SQL DATETIME format:

```
YYYY-MM-DD HH:MM:SS[.MMM]
```

Where YYYY-MM-DD is Year, Month, Day and HH:MM:SS[.MMM] is Hours, Minutes, Seconds, Milliseconds.

(Milliseconds are optional)

When you select Time Offset, keep in mind that it compares the value of an attribute to an offset of the current date/time. The value of Time Offset is added to the current time. The resulting sum is compared to the value of the attribute.

To look into the past, Time Offset should be entered as a negative number of hours. For example, a value of -2.5 will compare an attribute time to a time 2.5 hours in the past. Entries for Time Offset can use decimal places to compare partial hour offsets.

Operator

Selects the operator used to compare the Call Attribute with a value.

!=	not equal to
<	less than
<=	less than or equal to
=	equal to
>	greater than
>=	greater than or equal to
Regex	regular expression (See Using Regular Expressions.)

Value controls

> The attribute is compared to the value defined here. If Type is Number or String, you are prompted to type into a field. If Type is Date/Time, calendar controls appear so that you can select a date and time of day. Macros are supported in the Value field when the String type is selected.

Condition satisfied when criteria evaluates to True | False

> Determines whether the condition evaluates to True when the criteria is true or false.

Call Analysis condition type
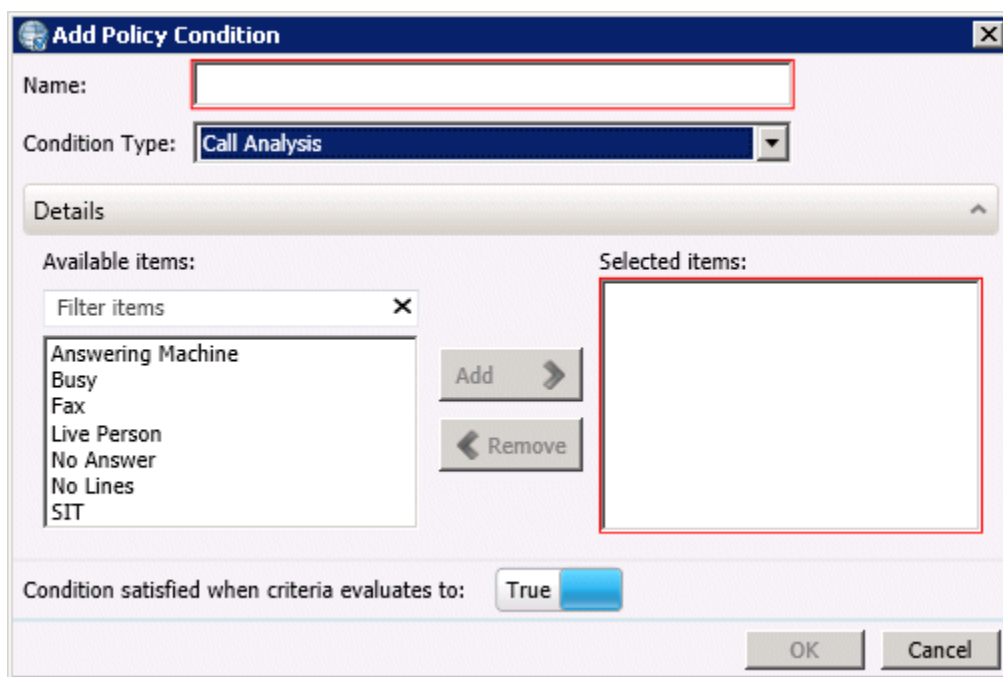
This condition will evaluate to True if Call Analysis returns a matching result. If Call Analysis is turned off, "Live Person" will be used to make the comparison.

Name

> Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

> Select "Call Analysis" to display options that configure this condition.

Details

Available items

> This list contains call analysis results that can be compared to the call analysis result of an actual call. Select an item. Then click **Add** to move it to the *Selected items* list. When SIT is selected, all SIT reason codes (SIT Callable, SIT Uncallable, etc.) are compared to the actual call analysis result.

Selected Items

> This list contains call analysis results that have been selected for comparison with the call analysis result of an actual call. To remove an item, select it in the *Selected items* list. Then click **Remove**.

Condition satisfied when criteria evaluates to True | False

> Determines whether the condition evaluates to True when the criteria is true or false.

Phone Number Details condition type

Phone Number Details condition type

This pre-call condition type allows you to use phone number-level attempt counters as a condition in Pre-Call policies.

Name

> Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

Select "Phone Number Details" to display options that configure this condition.

Details

Phone Number Details

Selects an attempts counter to compare against. The attempt counters include:

Attempts Abandoned

Attempts Answering Machine

Attempts Busy

Attempts Fax

Attempts No Answer

Attempts Remote Hangup

Attempts Rescheduled

Attempts SITCallable

Attempts System Hangup

Custom (See Setting phone number details to custom)

Total Attempts

Operator

Selects the operator used to compare the attempt counter to a value.

!=	not equal to
<	less than
<=	less than or equal to
=	equal to
>	greater than
>=	greater than or equal to
Regex	regular expression (See Using Regular Expressions.)

Value

237

Sets a value to compare to the counter.

Condition satisfied when criteria evaluates to True | False

Determines whether the condition evaluates to True when the criteria is true or false.

Setting Phone Number Details to Custom

You can configure a policy condition to evaluate a custom Phone Number Details column:

1. Add a Policy Condition.
2. Set its *Condition Type* to "Phone Number Details".
3. Select "Custom" from the *Phone Number Detail* list.>

4. At this point, you can select a custom Phone Number Details column, and configure evaluation type, operator, value, and test a regular expression value. The figure below shows the dialog that appears when you choose a custom phone number detail column.

5. Select the attribute's data Type (Date/Time, Number, String, or Time Offset).

   When you select the Date/Time or Time Offset condition, Dialer expects the data in the Contact List to be in the standard SQL DATETIME format:

   YYYY-MM-DD HH:MM:SS[.MMM]

   Where YYYY-MM-DD is Year, Month, Day and HH:MM:SS[.MMM] is Hours, Minutes, Seconds, Milliseconds.

   (Milliseconds are optional)

   When you select Time Offset, keep in mind that it compares the value of an attribute to an offset of the current date/time. The value of Time Offset is added to the current time. The resulting sum is compared to the value of the attribute.

   To look into the past, Time Offset should be entered as a negative number of hours. For example, a value of -2.5 will compare an attribute time to a time 2.5 hours in the past. Entries for Time Offset can use decimal places to compare partial hour offsets.

6. Select an Operator to use to compare the attribute with a value.

!=	not equal to
<	less than
<=	less than or equal to
=	equal to
>	greater than
>=	greater than or equal to
Regex	regular expression (See Using Regular Expressions.)

7. Choose a Value to compare to the selected attribute.

    If Type is *Number* or *String*, you are prompted to type into a field. Macros are supported in the Value field when the String type is selected.

    If Type is Date/Time, calendar controls appear so that you can select a date and time of day.

    If Type is Time Offset, you'll see a spin button control and can select either a positive or negative number.

8. Set the *Condition satisfied when criteria evaluates to* toggle to either True or False to determine whether the condition evaluates to True when the criteria is true or false.

Phone Number Type condition type

This condition compares the *Phone Number Type* of the current contact to predefined phone number types. Phone Number Types are user-defined strings that can be associated with contact columns to identify a type of telephone number. Examples of phone number types might be "Work", "Home", or "Cell". Phone Number Types are defined and managed from the *Phone Number Types* page on the Dialer Configuration entry:

When Campaigns are configured, individual contact columns in a Campaign's contact list can be assigned a phone number type. Tagging a contact's various contact numbers with phone number types allows for better aggregation of campaign statistics in Interaction Supervisor, and makes it easier to set the order in which contact columns will be dialed.

Name

Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

Select "Phone Number Type" to display options that configure this condition.

Details

Available items

This list contains phone number types that were defined in Global Dialer Settings.

Selected items

This list contains phone number types that will be compared to the phone number type of the contact.

Add button

Moves the item selected in the *Available items* list to the *Selected items* list, so that the policy will compare the type of the contact with the selected phone number type.

Remove button

Removes the selected item from the *Selected items* list, so that the phone number type will no longer be compared to the contact's phone number type.

Condition satisfied when criteria evaluates to True | False

Determines whether the condition evaluates to True when the criteria is true or false.

Statistic condition type

The condition type compares a period statistic to a predefined value.

Name

> Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

> Select "Statistic" to display options that configure this condition.

Details

Period

> This option selects the period (time interval) that the statistic applies to.

- *Campaign*—scopes statistics from the time when the active campaign began running to the present.
- *Recycle*—scopes statistics from the time when the Contact List was last recycled to the present.

Statistic Category

Selects a Dialer statistical category.

Dialer agent statistics	Summarize the activity of a specific Dialer agent.
Dialer campaign statistics	Totals that pertain to a campaign or site.
Dialer wrap up statistics	Summarize the dispositions of Dialer calls

Time condition type

This condition type compares the Central Campaign server's current time to a specific time or time range. This allows a campaign to behave differently during work hours versus in the evening, using a Policy condition to detect the time of day.

Name

> Type a name for the new policy condition in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the criteria that this condition evaluates.

Condition Type

> Select "Time" to display options that configure this condition.

Details

Time Range

> Sets start and end times for the days, date, or daily type selected.

Every Day

>Defines a daily time period that is delimited by start and stop times.

By Date

>Scopes the time range to a specific range of dates.

By Day

>Scopes the time range to specific days of the week and hours of the day.

Condition satisfied when criteria evaluates to True | False

>Determines whether the condition evaluates to True when the criteria is true or false.

Behavior Types

Agentless behavior type

This behavior& sets a media type for an Agentless interaction. It can send a Fax, play a wave audio file (Voice), or send the contact to an Attendant profile.

Name

>Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

>Select "Agentless" to display options that configure this condition.

Dialer_Manager_Help

Details

Type

Use this control to select a media type:

Select **Audio File** to play a recording to the contact. Then use the **File** box to select a recording. You can optionally upload a recording by pressing the **Upload** button. If multiple Outbound Dialer servers are participating in the campaign, the path and file must exist on each server.

Select **Fax** to transmit a fax document. Then use the **File** box to select a fax file. You can optionally upload an *.i3f fax file by pressing the **Upload** button. If multiple Outbound Dialer servers are participating in the campaign, the path and file must exist on each server.

Select **Interaction Attendant** to pass the contact to an outbound Interaction Attendant Profile. Then use the **Attendant Profile** box to select an outbound profile configured in Interaction Attendant.

If you select *Agentless* to transfer to a Attendant profile, but no outbound profiles are listed, run Interaction Attendant with the /out switch and publish an outbound Profile configuration.

Seconds of Silence

This option applies to *Audio File* and *Interaction Attendant* types only. It sets a total number of seconds that each Outbound Dialer should wait before playing a wave file to an answering machine.

Attribute behavior type
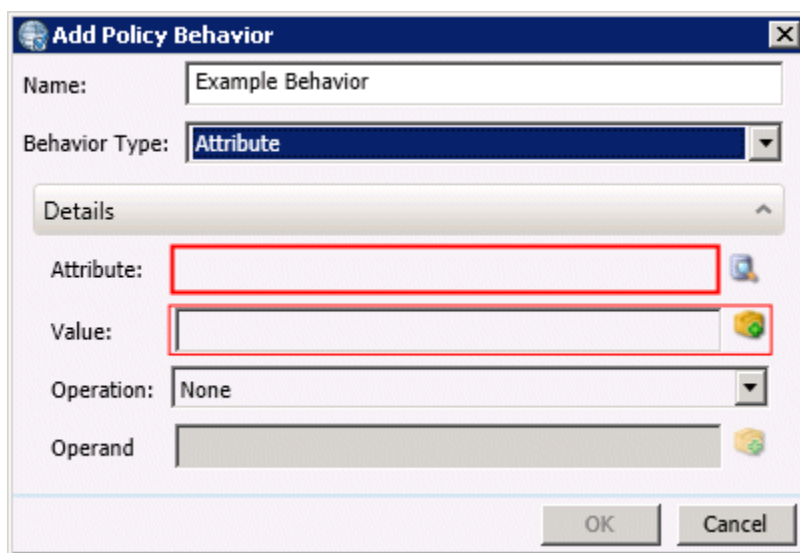
This behavior writes a value to the contact list database column (Attribute) of your choice. If the Policy Evaluation Type is Pre Call, the new value will be part of the Attribute set sent to the Agent. Once the contact is completed, the new value will be written to the database—if the attribute is set on a Pre-Call

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or Call Analysis evaluation type, and the script updates the value, then the value that the agent script specified will be written to the database.

Name

> Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the action this behavior performs.

Condition Type

> Select "Attribute" to display options that configure this behavior.

Details

Attribute field

> This field stores the name of the Contact List column that will be updated. Clicking **Browse** (🔍) opens the Column Wizard, so that you can select a column by name after selecting a contact list.

Value Field and Macro button

> Use the Value field to enter a static value that will be assigned to the attribute. If you want to use a macro in this field, click the **Macro** (🟢) button. (For more information, see the Macros topic.)

Operation

> Use this drop list to select plus, minus, or None, depending upon whether you want to add or subtract attribute values from columns in a contact list.

Operand

> The numeric value that you want to add or subtract. You can also use a macro instead of a literal value.

How to assign the result of a text substitution macro to a database column

By using an Attribute behavior, you can assign the dynamic result of a text substitution macro to the value of a database column. This essentially sets the value of a database field to the value of another field in a specified campaign. A macro is a variable whose value is inserted at runtime. To do this, open a Policy Set configuration and follow the steps below:

1. Open a behavior for editing or add a new behavior.
2. Select **Attribute** as the *Behavior Type*.
3. Click **Browse** (🔍) to select an attribute column.
4. Click the **Macro button** (🟢). Then select **[Attribute:?]**.

5. Select a campaign and database column. This is the value that will be written to the attribute column.

Call Analysis behavior type
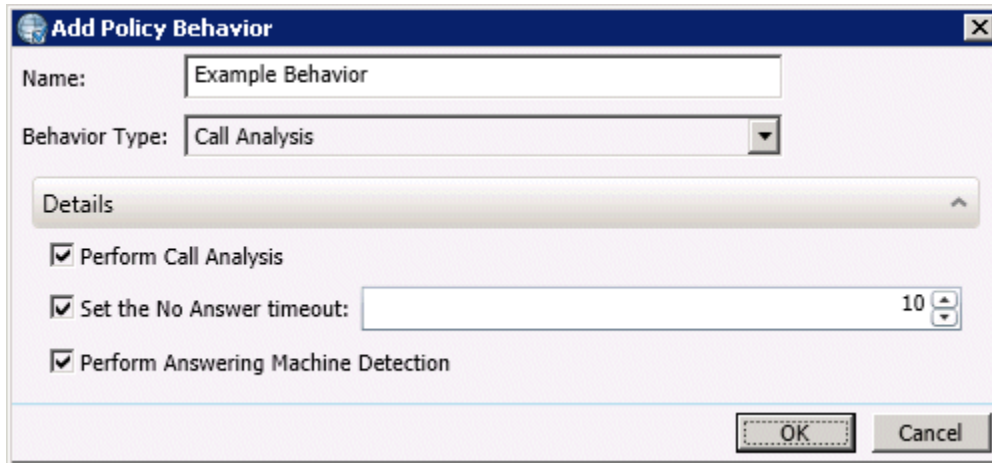
This Pre Call behavior enables or disables call analysis, answering machine detection, and also allows the No Answer Time Out Threshold to be set dynamically.

Name

> Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the action this behavior performs.

Condition Type

> Select "Attribute" to display options that configure this behavior.

Details

Perform Call Analysis

> Call Analysis is a CIC process that analyzes a connection to determine if the call reached a live person, a Fax machine, or was busy. Check this box to enable Call Analysis.

No Answer Time Out (checkbox and numeric value field)

> This option allows the *No Answer Time Out* setting to be set dynamically on a per-call basis. No Answer Time Out is the number of seconds that the system will wait for the contact to answer. It signifies how long a call in a Ringing state (not connected or answered) will stay active before Telephony Services disconnects the call.

> Many sites have customizations set up to leave messages for people after they have reached a certain number of attempts. To reach the answering machine, the No Answer Timeout typically

needs to be high. This option can be used to set the timeout higher on a per-call basis (while keeping it low most of the time). It allows customers to increase the timeout when leaving a message is planned. For example, when 'Attempts > X'.

Perform Answering Machine Detection

When checked, adds detection of answering machines to the call analysis. To enable this option, the 'Perform Call Analysis' checkbox must be checked.

Call Attribute behavior type
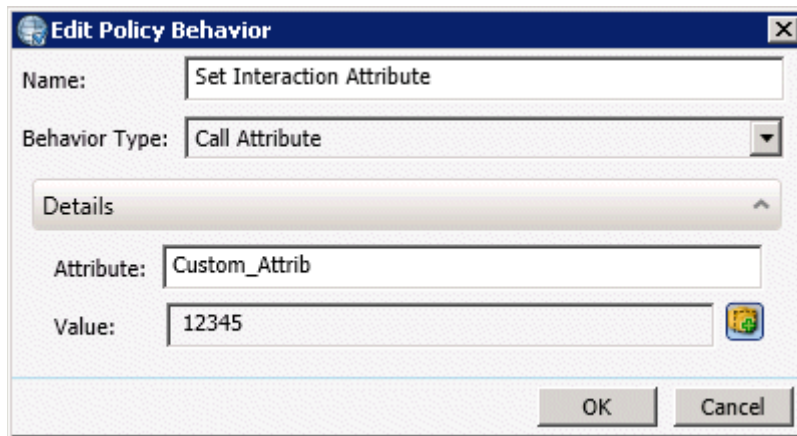
This behavior sets a call attribute that will remain with the call object as it is routed through the Interaction Center. A call attribute is a name/value pair of strings. In this context, attribute is a user-defined property of a call object—a call attribute is not a column in the Contact List. For example, this behavior can be used to set an account code before the call is placed or routed.

Name

Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes the action this behavior performs.

Condition Type

Select "Call Attribute" to display options that configure this behavior.

Details

Attribute

This field prompts for the name of a call attribute. Call attribute names that begin with "Eic_" or "InAtt_" are normally reserved for use by the system. If the value of a reserved attribute is improperly changed, the system may not function as intended.

For more information about attributes, see Interaction Attributes Technical Reference in the System APIs section of the PureConnect Documentation Library.

Value

The value of any call attribute. This string can be anything you like, but special care should be taken when changing the value of reserved attributes. If you want to use a macro in this field, click the **Macro** (🔧) button. (For more information, see the Macros topic.)

Call Routing behavior type

When you select the Call Routing behavior type for a PreCall policy , you can configure exactly how you want the call to be routed by selecting a routing type and configuring the appropriate settings.

Routing Type

There are four routing types that you can choose from when you are configuring a Call Routing behavior type: Do Not Dial, Normal, Precise, and Preview. Depending on the Routing Type that you choose, additional settings may be available.

Do Not Dial

Selecting the Do Not Dial routing type will configure the system to not dial the contact. When you select this option, Dialer assigns a wrap-up Category of "Skipped" and a wrap-up Code of "Do Not Dial", so that the skipped call is logged in the CallHistory table with statistics generated for Interaction Supervisor.

When you select this option, none of the settings in the Details section are available.

Normal

Selecting the Normal routing type will configure the system to route the contact to an agent in the normal way.

When you select this option, the Set an ACD skill on the interaction check box becomes available allowing you to select a skill and specify weight settings. You can use a slider or a spin control to specify the Proficiency, Desire, and Weight numbers. Proficiency and Desire number can range from 0 to 100 while the Weight number can range from -10 to +10.

Minimum Proficiency	Sets the minimum proficiency level required for this skill. Agents who do not possess this minimum skill proficiency will not be eligible to receive this interaction. The higher the number, the greater the skill level required.
Maximum Proficiency	Sets the maximum proficiency level required for this skill. Agents who exceed this maximum skill proficiency will not be eligible to receive this interaction.
Proficiency Weight	Indicates how important Proficiency Level is for this skill, as opposed to other skills that have been specified. If you are more concerned with this skill, then weight this parameter more heavily than Weight for Proficiency Level in other skills. Use the slider to select a positive or negative number. The weight assigned to skills and attributes is evaluated before calls are routed to the appropriate agent.
Minimum Desire To Use field	The value for Desire to Use a particular skill is assigned on an agent by agent basis in Interaction Administrator. Agents who do not meet the minimum Desire to Use level you specify are not eligible to receive this interaction. The higher the number, the greater the level of desire the agent has to use this skill.
Maximum Desire To Use field	The value for Desire to Use a particular skill is assigned on an agent by agent basis in Interaction Administrator. Agents who exceed the maximum Desire to Use level you specify are not eligible to receive this interaction. The higher the number, the greater the level of desire the agent has to use this skill.
Desire to Use Weight	Same as Proficiency weight, but affects evaluation of the Agent's desire to use a particular skill. It indicates how important Desire to Use this skill is, as opposed to other skills you have specified. If you are more concerned with this skill, then weight this parameter more heavily than Weight for Desire to Use in other skills.

Precise

Selecting the Precise routing type will configure the system to wait until an agent is available, pull that agent out of the pool of available agents, place the call, wait for the call to be dispositioned, and finally put the agent back in the pool of available agents. When you select this option, none of the settings in the Details section are available.

Preview

Selecting the Preview routing type will configure the system to wait until an agent is available, present the agent with a screen pop that consists of information about the contact, and place a call object in an initializing state on the agent's queue. The system will then either wait for the agent to manually make the call or, if the Preview Countdown is enabled, make the call once the time on the countdown timer elapses.

When you select this option, the Enable Preview Countdown check box becomes available allowing you to use the spin control the select the number of seconds to wait before automatically dialing the call.

Related Topics

[Add a Policy Set](#)

[Skill Sets](#)

Callback behavior type

This behavior schedules a call back to the contact. If the policy evaluation type is Pre Call, the contact is not called at all for this policy evaluation. This behavior can also be applied on a post-call (Disposition) basis, wherein the contact was called, and should be called again later. For example, a company might make a sale, and use this feature to call the customer later to verify customer satisfaction with a product or service.

Name

Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

Select "Callback" to display options that configure this condition.

Details

Absolute (Date)

Configures the behavior to schedule a callback on a specific date. This enables a control that sets target date.

Relative (days)

Sets a number of days to wait before calling the contact back.

Absolute (Time)

Configures the callback to occur at a specific time of day. This enables a control that sets hour, minute, and a.m. or p.m.

Relative (Hours|Minutes)

Configures the callback to occur at an offset of hours and minutes from the current time, on whatever absolute or relative date was selected. Enables a control that allows a time offset in hours and minutes to be configured.

Calling Party behavior type

This behavior sets the Calling Party name and Calling Party telephone number that this contact may see as Caller ID information. In order for both pieces of information to be displayed, ISDN is required on the

customer side. Although this feature is supported on ISDN lines, not all carriers honor calling party name and calling party number. Check with your carrier or C/O for feature availability.

Name

>Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

>Select "Calling Party" to display options that configure this condition.

Details

Name

>Enter the name of the company for whom this campaign is being conducted, or click the Macro button ( ) to set the calling party name based on the value of a contact list column.

Phone Number

>Enter a Calling Party telephone number or click the Macro button ( ) to set the calling party number to the value of a contact list column.

Contact Columns behavior type
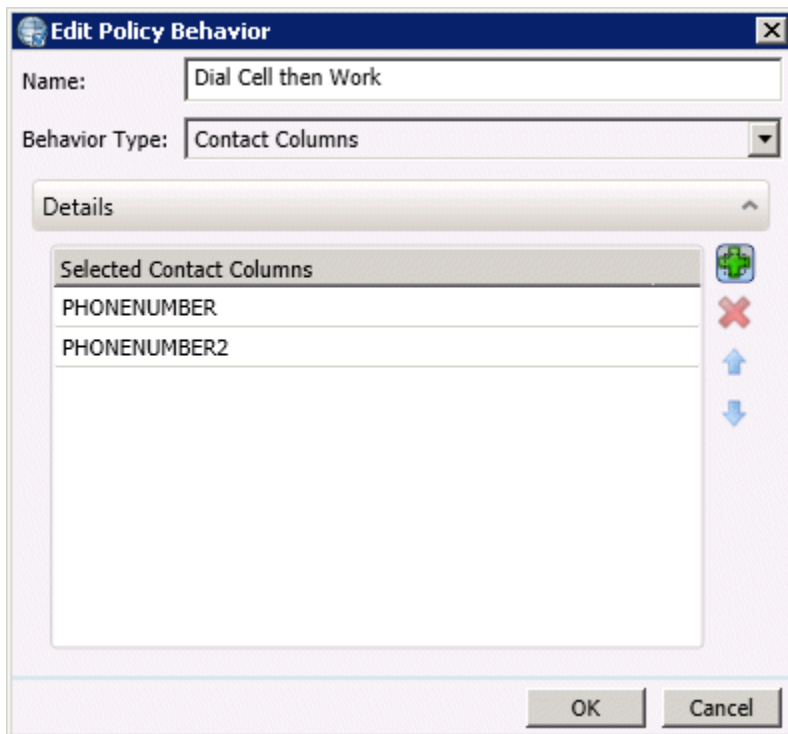
This behavior overrides the contact column dialing order set for a Campaign. When a contact has multiple contact columns, this behavior type is evaluated once to set the order. It is not be evaluated for each individual contact column.

Perhaps a customer wants to be called first on a cell phone, then at work, and never at home—because the customer is buying his spouse a gift and don't want a call to spoil the surprise. The customer's preference could be marked as a custom Attribute, and then the Contact Column order could be reordered by this Behavior.

Name

> Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

> Select "Contact Columns" to display options that configure this condition.

Details

Add button

> Clicking this button invokes the *Add Contact Column* dialog so that you can select column from a contact list. Set the contact list used by the campaign this policy will be assigned to. Next, select a contact column before clicking **OK** to save. Repeat until you have chosen the columns you want to dial.
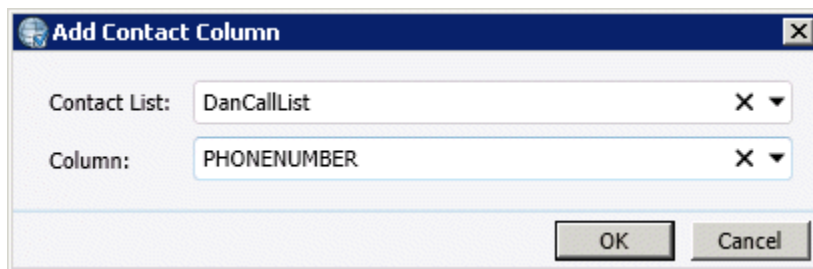
Remove button

> Deletes the selected column from the list (but not from the Contact List).

Up/Down buttons

> These buttons reorder items in the list, thereby affecting the order in which telephone numbers are dialed.

Custom Data behavior type

This behavior writes custom data to Custom data 1, Custom data 2, or to both columns in the Call History table. Using this behavior type, you can configure a policy to write data to these Call History columns that may be useful for the particular dialer implementation, but is not already written to the table by default. There is a variety of data that can be configured to write to these columns. See Macros for a list of macros that can be leveraged.

To configure a Custom Data Policy Behavior

As an example, Custom Data Policy behaviors can utilize Phone Number Detail data. A Policy Behavior can reference the active contact's phone number details attribute value.

1. Set Behavior Type to Custom Data.
2. Click click the **Macro** () button. (For more information, see the Macros topic.)
3. Choose ContactPNDAttribute.
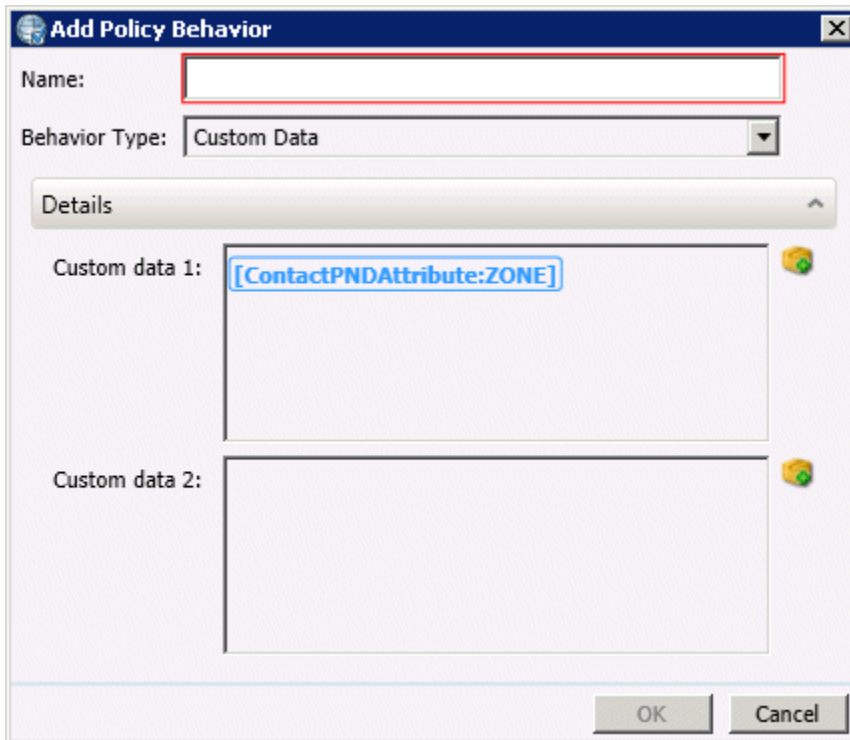
4. Click the button next to *Contact PND Attribute* field.
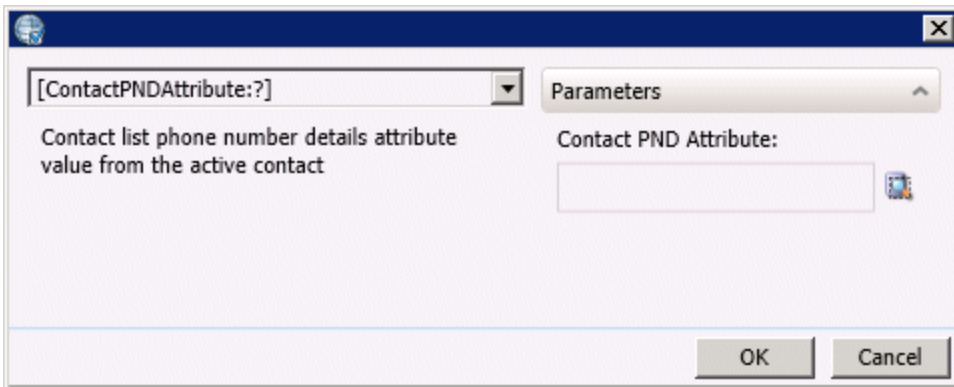
5. Select a Contact List.
6. Select a custom Phone Number Detail column.
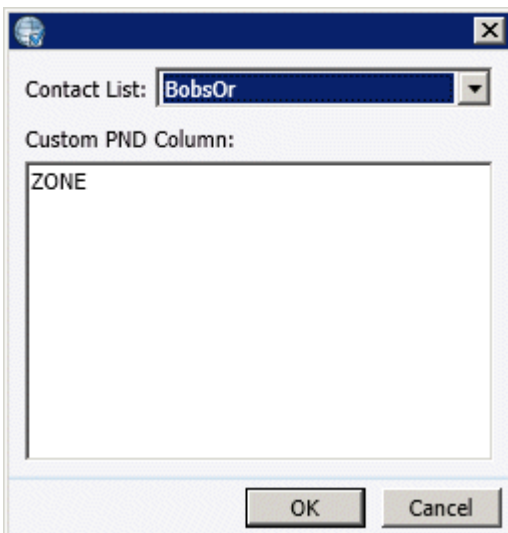
7. Click **OK**. The policy now references custom PND data.

Custom Handler behavior type
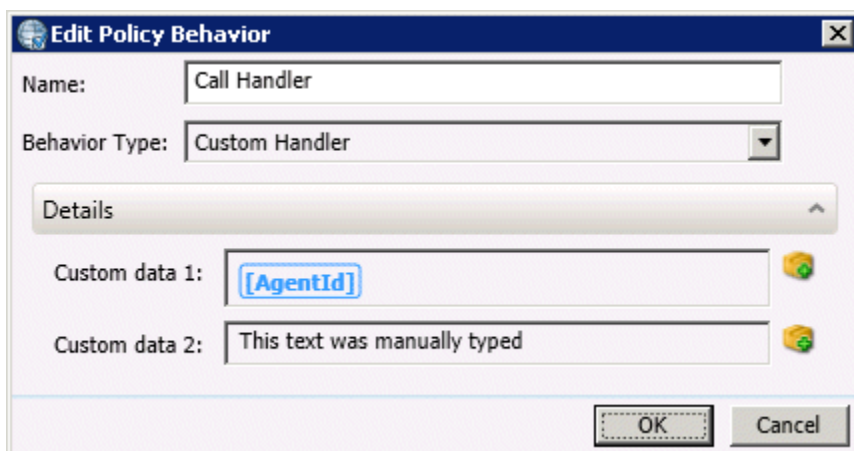
This behavior runs the Dialer_RuleActionEvent handler on the Dialer server, passing the macro values or manually entered text to the handler as payload data.

By default, the Dialer_RuleActionEvent handler does nothing except provide an entry point for future customization. Customers may edit this handler (using Interaction Designer) to add custom logic that meets their business needs. This behavior always runs the Dialer_RuleActionEvent handler. You cannot use it to launch a different handler.

Name

> Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

> Select "Custom Handler" to display options that configure this condition.

Details
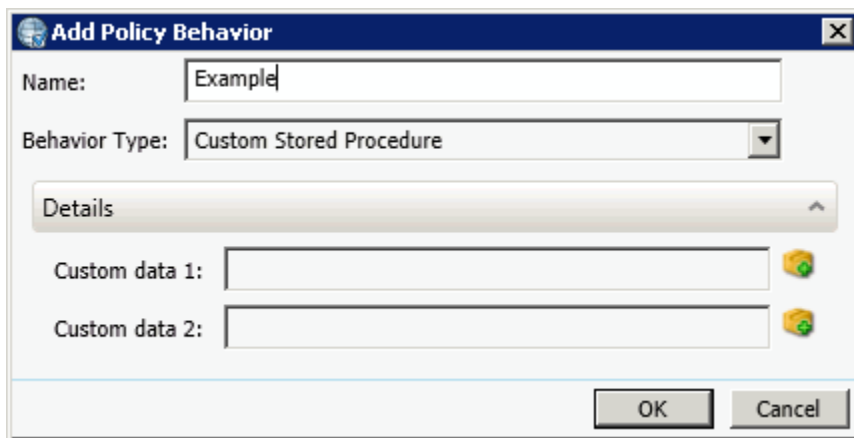
Custom data 1

> User-defined string data passed to the handler.

Custom data 2

> User-defined string data passed to the handler. This string may contain macros. If you want to use a macro in the custom data fields, click the **Macro** () button. (For more information, see the Macros topic.)

Custom Stored Procedure behavior type

Overview

This policy disposition behavior type (Custom Stored Procedure) allows customers to execute SQL at the end of any type of call, potentially to update a table outside of Dialer. For example, once a number has been dialed, it could be added to a custom exclusion table, so that the number is never dialed again, because it has been dealt with.

To implement custom SQL, customers add custom code to a stored procedure (sproc) in the contact list database. The sproc takes any arbitrary action based on parameters passed to it.

The sproc is only engaged if customers set up a Policy disposition behavior (Custom Stored Procedure). Dialer automatically passes call attributes to the sproc, along with additional information (defined in the behavior) that is not already attached to the call object.

Customers are responsible for coding whatever the stored procedure should do, and also for configuring a Policy disposition behavior to invoke the procedure. The stored procedure must be in the CallList. It cannot be in the CIC database.

Usage

This policy disposition behavior can be used to query against a custom Phone Number Detail column. It invokes a sproc in the call list database to perform a logical operation of some sort, such as altering records in the call list database or altering entries in custom columns. The procedure accepts two optional character strings for custom information.

The data for the sproc call is sent from the ODS to the CCS as part of the call list update. If the call list update fails for any reason, then the entire update is sent to PMQ for retry and the custom sproc is not called. If the call list update succeeds, then the custom sproc data will be packaged into a separate PMQ message and queued.

Custom sproc PMQ messages appear in the I3\IC|PMQ\UpdateServer3\Disposition_Custom_Sproc directory in the CCS. This ensures that the call list update will always happen first, and that the custom sproc call is made. If a custom sproc call fails, it will be retried the same number of times as the call list update is attempted.

User Interface

Name

Type a name for the new behavior in the Name field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

Select "Custom Stored Procedure" to display options that configure this condition.

Custom data 1

Any additional information not already attached to the call object that will be passed to the sproc in @i_CustomArgument1.

Custom data 2

Any additional information not already attached to the call object that will be passed to the sproc in @i_CustomArgument2.

If you want to use a macro in the custom data fields, click the Macro ( ) button. (For more information, see the Macros topic.)

Parameters passed to stored procedure

This behavior always calls a sproc named "spid_disposition_custom".   If a sproc of that name doesn't exist in the call list database for a campaign, a sproc with that name will be created with the proper arguments and an empty body. Dialer passes the following parameters to the stored procedure:

SQL Server parameter name	SQL Server parameter type	Oracle parameter name	Oracle parameter type	Description
@i_CampaignName	nvarchar(255)	i_CampaignName	nvarchar2	Name of the campaign
@i_ContactIdentity	bigint	i_ContactIdentity	number	The value of the call list and PND table's i3_identity columns. Uniquely identifies a contact.
@i_ContactColumnId	bigint	i_ContactColumnId	number	The value of the column id containing the phone number called for the contact that resulted in the contact disposition. Uniquely

				identifies a phone number and PND row (in addition to the PND i3_identity column).
@i_ContactColumnName	nvarchar(255)	i_ContactColumnName	nvarchar2	The name of the column in the call list table that contains the phone number called for the contact that resulted in the contact disposition.
@i_ContactPhoneNumber	nvarchar(255)	i_ContactPhoneNumber	nvarchar2	The phone number called for the contact that resulted in the contact disposition.
@i_InteractionId	nvarchar(255)	i_InteractionId	nvarchar2	The CIC interaction id of the call.
@i_WrapupCode	nvarchar(255)	i_WrapupCode	nvarchar2	The wrap-up code resulting from the call dispostion.
@i_CallListTableName	nvarchar(255)	i_CallListTableName	nvarchar2	The name of the call list table. This value

				is NOT escaped.
@i_CustomArgument1	nvarchar(2000)	i_CustomArgument1	nvarchar2	The contents of the Custom Data 1 field from the Custom Stored Procedure dialog.
@i_CustomArgument2	nvarchar(2000)	i_CustomArgument2	nvarchar2	The contents of the Custom Data 2 field from the Custom Stored Procedure dialog.

Since Policy Sets can be assigned to multiple campaigns, care should be taken to ensure that the call list used by the campaign actually contains the columns required by the policy.

Disposition behavior type
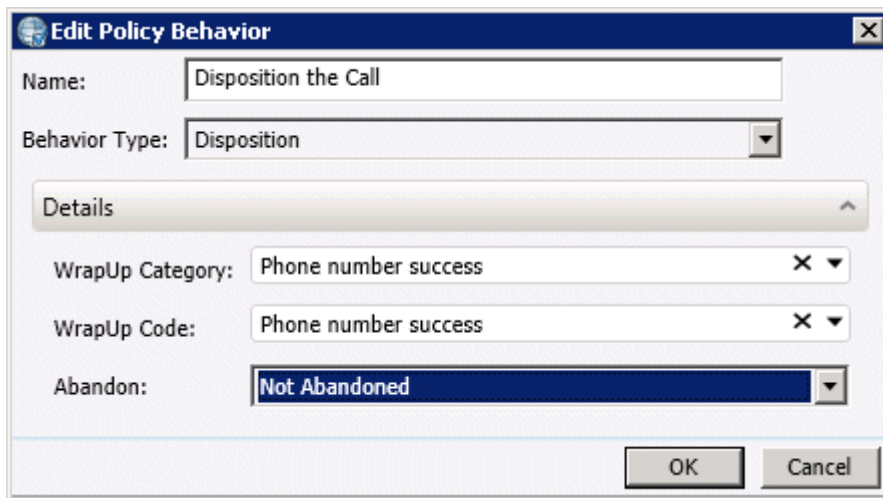
This behavior specifies the wrap-up **Category** and wrap-up**Code** to record for the Contact.

Name

Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

Select "Disposition" to display options that configure this condition.

Details

Wrap-up Category list box

Use this list box to select a category. This reason code will be assigned and the call will be dispositioned.

Wrap-up Code field

Use this list to select a wrap up code.

Abandon

This control determines whether the system considers the contact as an abandoned call.

Related Topics

Wrap-up Codes and Categories

DNC Update behavior type

This disposition-only policy behavior optionally adds a phone number, exclusion value, and expiration date-time to the DNC table. This can be used to DNC exclude a contact number for a specified duration of time, or for a specific account.

Name

Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

Select "DNC Update" to display options that configure this condition.

Details

Phone Number

Adds the phone number to the DNC entry.

Column to Exclude

When checked, DNC processing will exclude by identity, meaning that the identity column in the DNC file will be matched against a similar column in the contact list. These columns might store account numbers, for example. When there is a match, Dialer will not call any phone number in the matching account. The related GUI elements are DNC Excluded Column Identifier on the Contact List tab of a Campaign configuration entry, and Database Column to Exclude on a DNC Source entry.

Expires

Enables options that set an expiration date and time. The Phone Number check box should be checked when this option is used. A use case might be not to call a number again for 30 minutes. The phone number will be added to the DNC table with an expiration of 30 minutes from the time this behavior was executed.

Email behavior type

This behavior sends an Email message to one or more recipients. It runs on all Outbound Dialer servers participating in the campaign. The message includes a subject and body.

Name

> Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

> Select "Email" to display options that configure this condition.

Details

From

> The e-mail address of the sender. Use semicolons to separate multiple recipients.

To

> The e-mail address of the recipient. Use semicolons to separate multiple recipients.

Subject
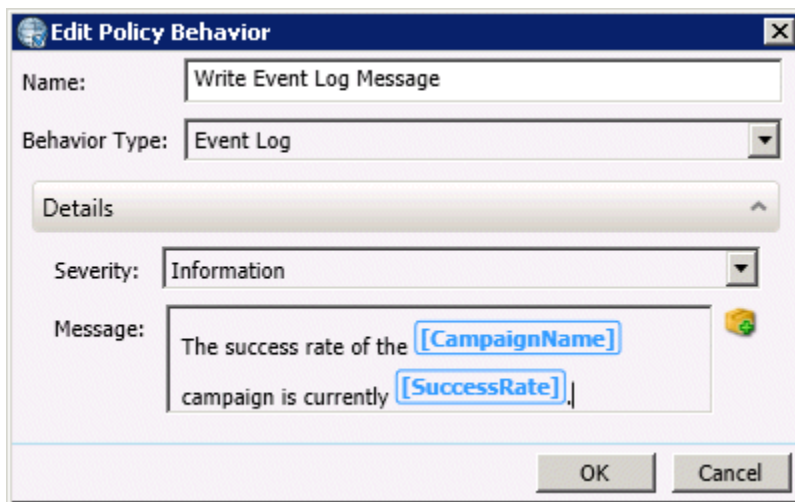
The subject of the message.

Message

The body of the message. If you want to use macros in these fields, click the **Macro** () button.

Event Log Message behavior type

This behavior generates an Event Log message on the Central Campaign server. The message is written to the Central Campaign server's event log, but not to the event logs of participating Outbound Dialer servers. Message entries can be examined in Interaction Supervisor using the Dialer Health view.

Name

Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

Select "Event Log" to display options that configure this condition.

Details

Severity

Select **Error**, **Information**, or **Warning** to set the severity level of the log message. If severity is Error or Warning, the message will show-up in the Dialer Health view as well as in the Event log.

Message

The text typed in this field is written to the log entry. If you want to use macros in the message, click the **Macro** () button.

Number to Dial behavior type

This behavior type changes the number to dial, using any combination of static text and macros. This behavior is available in Pre-Call policies only. Changing a number affects only the number actually dialed. It does not update the current contact column's database value. A related macro [NumberToDial] returns the number that will be dialed.

Name

> Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

> Select "Number to Dial" to display options that configure this condition.

Details

Number to Dial

> Enter the number that you want to dial. If you want to use a macro in this field, click the **Macro (**) button.

Preview Dialing behavior type
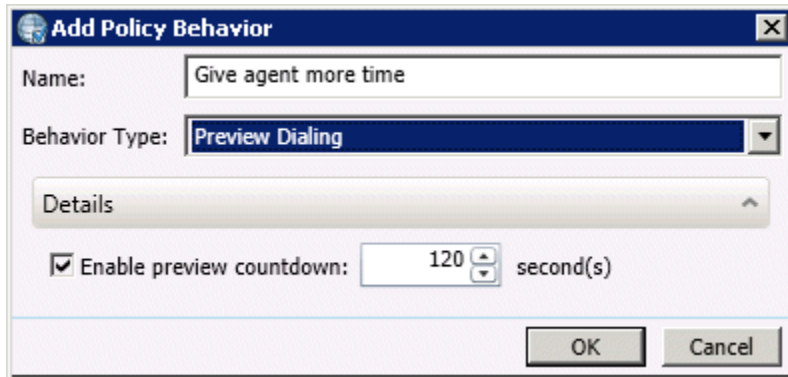
Overrides campaign settings that determine whether or not a countdown timer is applied to preview calls.

Name

Type a name for the new behavior in the *Name* field. This can be anything you like, so long as it is unique within the policy. Try to use of a descriptive name that describes what this behavior does when its condition is true.

Behavior Type

Select "Preview Dialing" to display options that configure this condition.

Details

Enable preview countdown

When checked, the preview campaign will automatically dial the contact if the agent does dial within a configurable number of seconds. When this option is not set, agents on preview calls can remain idle on preview pop as long as they wish. This feature limits preview time without having to code time limits in a custom script.

Unchecking this box disables the timer and allows the agent to preview indefinitely. When unchecked, the seconds are ignored.

Note: If you are running Interaction Dialer using the Manual Calling feature license, then the Preview Countdown feature is not supported.

Second(s)

Sets a value that determines how long agents can remain idle before a call is automatically placed to the contact being previewed.

Edit a Policy Set

1. In Interaction Administrator, expand the **Interaction Dialer** container. Then select the **Policy Sets** container.
2. In the top pane, click to select any item in list of policy set objects. The properties of the selected policy set are displayed in the bottom right pane.
3. Make edits as needed.
4. When you are finished, click **Save**.

Delete a Policy Set

1. In Interaction Administrator, expand the **Interaction Dialer** container. Then select the **Policy Sets** container.
2. In the top pane, click to select any item in list of policy set objects.
3. Click **Delete** (). You are asked to confirm this operation, since it cannot be undone.
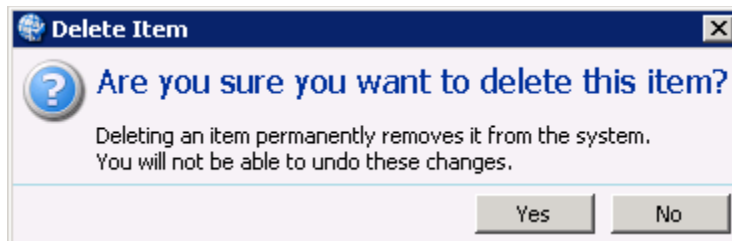
4. Click **Yes** to confirm.

Assign Policy Sets to a Campaign

Policy Sets have no effect until they are assigned to a Campaign and that campaign is running. To assign Policy Sets to a campaign:

1. In Interaction Administrator, expand the Interaction Dialer container. Then select the Campaigns container.
2. Select a campaign entry in the list at the top of the screen.
3. Click the Automation tab.
4. Under *Available Items,* select policies that you want to assign this campaign.
5. Click **Add** to move the selected policies to the *Selected Items* list.
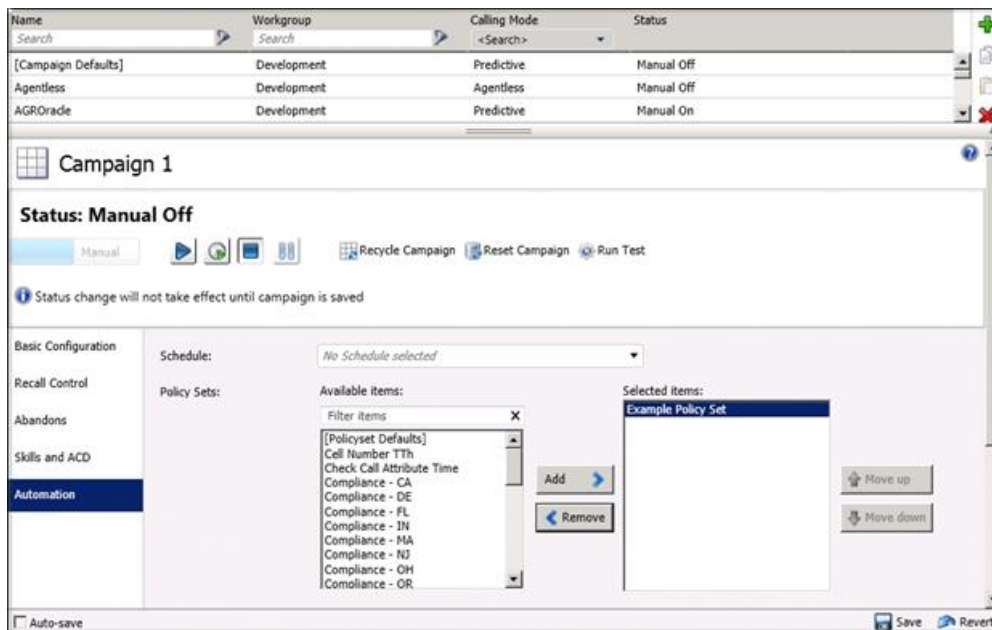
6. Click **Save**.

Using Regular Expressions

Regular expressions can be used to find patterns within text. In Interaction Dialer Manager, regular expressions can be used in Policy Conditions, Policy Behaviors, and to examine string attributes. For example, to create a condition that searches for a phone number, you might use this expression:

((((\([\d]{3}\))|([\d]{3}))-?)?\d{3}-?\d{4}

This expression searches for a pattern that has at least seven digits, optionally including dashes and an area code, with parentheses around the area code optional as well. In a pre-call Policy Condition for example (see figure below), the phone number (123)-555-5555 is a match for this expression, so the condition is satisfied.

Fine Tuning Regex matches

Note that something like "aaaabbc(123)-555-5555absde" is a match as well, since the pattern appears within the text. That can be fixed by adding ^ to the beginning of the expression, and $ to the end. This ensures that the expression will match a phone number only when it is itself the entire text.

These rules are specific to the style of regular expression, of which there are several. Regular expressions in Dialer use Perl syntax. There are many tutorials online if you wish to learn more.

For more information on creating regular expressions, see the Regular-Expressions.info Web site at: http://www.regular-expressions.info/

Using Regex in Policy Behaviors

For Policy Behaviors, three macros correspond to the regular expression condition. To select these macros, create a Policy Set Item Behavior, and then click the *Macros* button to open the Macro dialog. (For more information, see the Macros topic.)
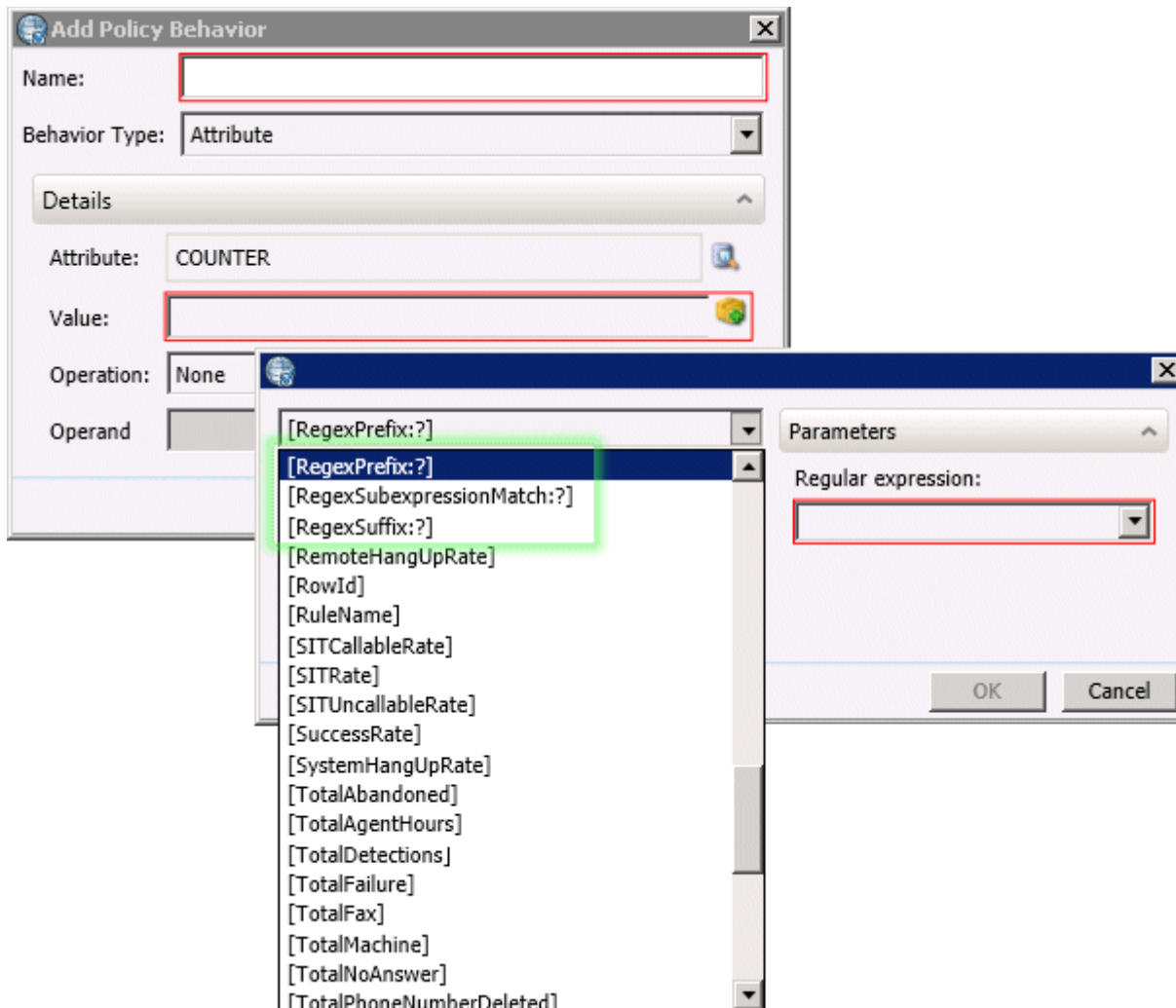
The Regex macros are:

Macro Name	Purpose
RegexPrefix	Returns all the text that comes before a match
RegexSuffix	Returns all the text that comes after a match
RegexSubexpressionMatch	Returns the text that matches a particular sub-expression

Each macro requires a regular expression condition. In the case of RegexSubexpressionMatch, the dialog prompts for the specific sub-expression you wish to return results for. A sub-expression is a part of a regular expression that is enclosed in parentheses.

Using our previous example, the sub-expressions (numbered depth first, or in other words, more nested to less nested, left to right) are:

Expression	Result
(\([\d]{3}\))	Matches area codes with parentheses

([\d]{3})	Matches area codes without parentheses
((\([\d]{3}\))|([\d]{3}))	Matches either of the above
(((\([\d]{3}\))|([\d]{3}))-?)	Matches either of the above with optional dash suffix

Text Substitution Example

A good use of these macros is text substitution. For example, say we have a call attribute with a value as follows: "Regular expressions are great and you know it." Great doesn't describe it well enough, let's use awesome instead. Simply create a behavior with the attribute's value set to:

```
"[RegexPrefix:(great)]awesome[RegexSuffix:(great)]"
```

The new value will be "Regular expressions are awesome and you know it."

Configure Caller ID using a Policy

1. In Interaction Administrator, expand the **Interaction Dialer** container. Then select the **Policy Sets** container.
2. Click **Add** to create a new Policy Set entry.
3. An entry titled **New Item** appears in the list of entries, and properties of the new entry are displayed. Type a descriptive name in the **Name** field. This name will become the name of the Policy Set when the entry is saved, replacing the default "New Item".
4. Select the **Pre Call** tab, since we want to set Caller ID using a behavior before the call is placed.
5. Click **Add** to create a new policy condition.
6. Type "Normal Calls only" or something similar in the **Name** box. In this example, a Call Category condition will be used to set Caller ID name and number for all outbound calls.
7. Select "**Normal Call**" in the *Available Items* list. Then click **Add**.
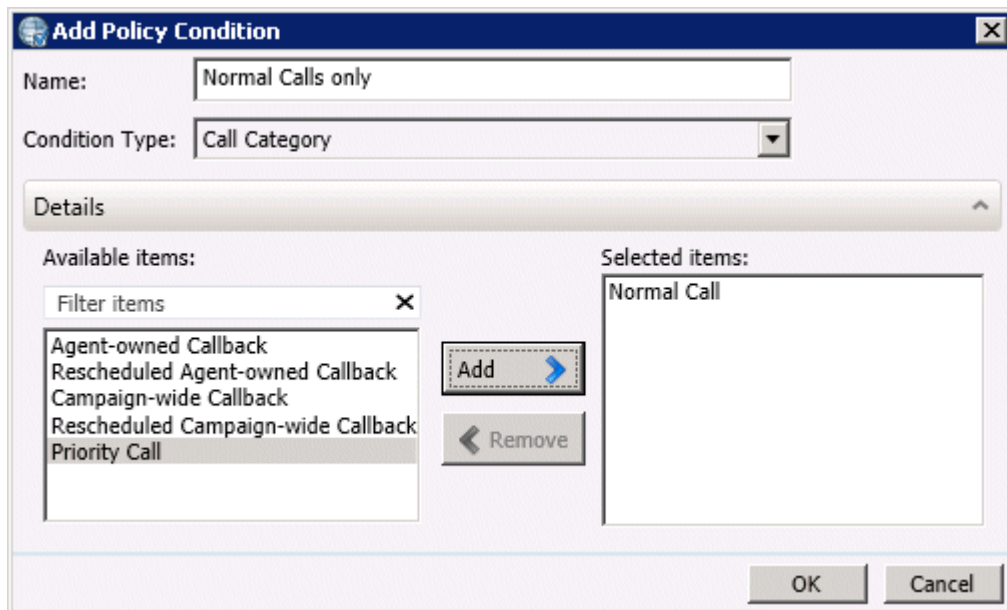
Click **OK** to dismiss the dialog.

8. Select the *Behavior* tab. Then click **Add** to create a new behavior.
9. Name the behavior **Set Caller ID Info** or something similar.
10. Set *Behavior Type* to **Calling Party**.
11. Enter the name to you want contacts to see in the *Name* box.
12. Enter the phone number you want contacts to see in the *Phone Number* box.
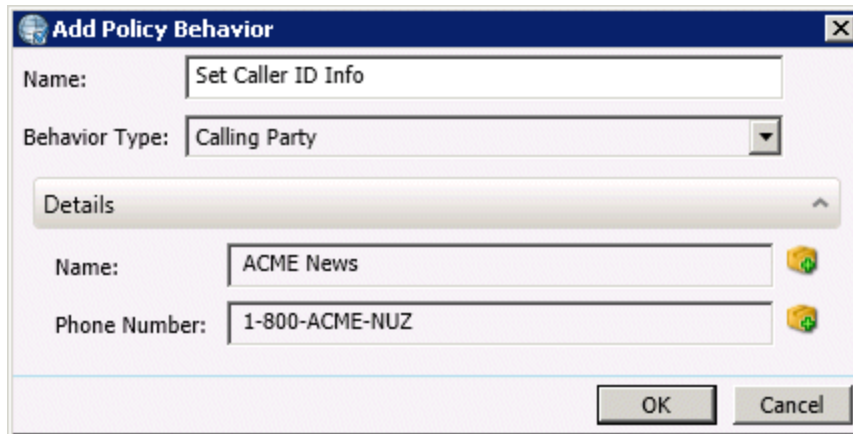
13. Click **OK** to dismiss the *Add Policy Behavior* dialog.
14. Click **Save**.

Related Topics

Calling Party behavior type

Schedules

Schedules view

Overview

This view manages **Schedules**. A schedule is a collection of time settings that determine when campaigns are running (**on**), not running (**off**), or partially on (**placing only scheduled calls**). Schedules are optional, but in practice they are often used. If a campaign has no schedule, it must be turned on or off manually. Schedules automate this task.

Once a schedule has been created, it can be assigned to a campaign. However, an assigned schedule has no effect unless the campaign is configured to dial according to schedule. If the campaign is off, the schedule is ignored.

The fact that a campaign is on does not guarantee that it is dialing. A predictive, power, or preview campaign with no agents logged in will not dial any calls. Dialer will not place calls until at least one agent is logged in. Agentless campaigns dial when the campaign is on. Note also that Zone Sets override schedules. If the Zone Set assigned to a campaign does not permit any dialing for the campaign, no contacts are called.

A schedule can contain two types of time settings:

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- **Weekly Schedules** specify days of the week and hours of the day when the campaign is on or dialing scheduled calls only. A typical weekly setting might match business hours: Monday through Friday between 8:30 a.m. and 6:00 p.m.
- **One-Time Exceptions** specify hourly ranges that apply to individual calendar days or ranges of calendar days. These are often used to turn a campaign off during a holiday. Exception schedules take precedence over weekly schedules.

While adding holiday exceptions to a Dialer schedule is always the safest practice, adding holidays is optional. If agents will not be logged in, dialing will not happen unless the campaign is agentless. See How Schedules are evaluated for information about the method that CCS uses to evaluate schedule entries to determine whether to start or stop a campaign.

Related Topics

Add a Schedule

Assign a Schedule to a Campaign

Configure campaign to Dial according to schedule

Add a Schedule

The procedure explains how to define a weekly schedule and any exceptions that apply to that schedule.

1. In Interaction Administrator, expand the **Advanced Interaction Dialer container**. Then select the **Schedules** container.
2. Click **Add** to create a new schedule entry.
3. An entry titled **New Item** appears. Select the **Details** tab.
4. To define a Weekly schedule:
   a. Expand the **Weekly Schedule** expander.
   b. Move the cursor to the day of approximate week and time of day. Then click the left mouse button. A dialog appears to define a time slot.
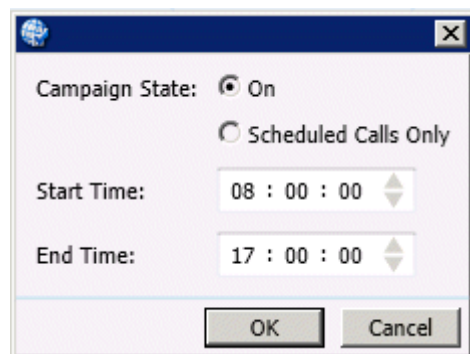
    c.   Select a Campaign State for this schedule to use. To place regular and scheduled calls, select *On*. To place only Scheduled Calls when this schedule is active, select *Scheduled Calls Only*.

    d.   Use the spin controls to change Start and End times as needed. Note that 24-notation is used. To stop dialing at 5 pm. For example, you would select 17:00 as the End Time.

    e.   Click **OK**. The new time slot appears as a green shaded region in the calendar.
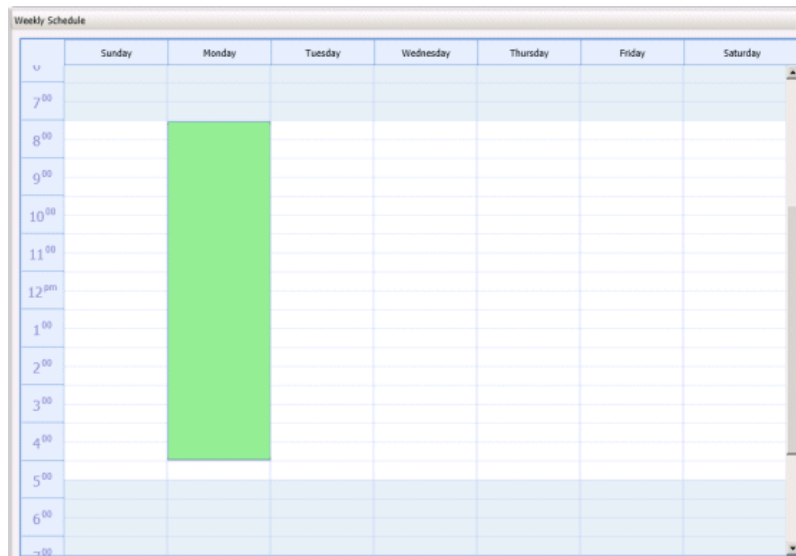
    f.   Repeat steps **4b-4e** to define additional time slots for other days of the week or times of day.

5.   To define a **One-Time Exception** (such as a holiday when your business is closed):

    a.   Click the **One-Time Exceptions** tab.

    b.   Click **Add**. A new exception entry will appear.

    c.   For the entry, you must set campaign state, start date, end date, start time and end time. Campaign State can be **On**, **Off**, or **Scheduled Calls Only**. Most often, you will select Off to prevent dialing when a schedule exception is in effect.
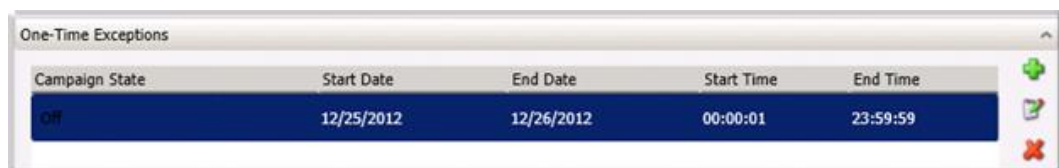
    d.   Repeat steps **5b-5c** to add additional exceptions, as needed.

6.   Click **Save** to save the Schedule.

Assign a Schedule to a Campaign

This procedure explains how to assign a schedule to a campaign.

1. In Interaction Dialer Manager, click Campaigns from the Home page. If using Interaction Administrator, expand the **Interaction Dialer** container and then select the **Campaigns** container.
2. Select a Campaign to edit.
3. Select the **Automation** tab on the Campaign Properties panel.
4. Select a schedule from the **Schedules** drop list. If this list is empty, you should add a schedule before performing this procedure.
5. Click **Save** to save changes.

Please note that assignment of a schedule to a campaign has no effect unless the campaign's status is set to Dial according to schedule.

Configure a campaign to Dial according to schedule

The assignment of a schedule to a campaign has no effect unless the campaign's status is set to Dial according to schedule.

To put the schedule into effect:

1. Open the Campaigns view.
2. On the *Campaign Settings Panel*, click the button that toggles between manual and automatic campaign execution mode:

When the button looks like this, the campaign is configured to run in accordance with its schedule.

Stage Sets

Stage Sets view

Overview

The Stage Sets view manages the **stages of a campaign call**. Stages identify each segment of a call that statistics can be collected upon. Stage names and other attributes are saved in groups (called Stage Sets) that can be assigned by name to one or more campaigns. For background information, see Stages and Stage Sets.

A Stage Set is nothing more than a set of call stages that have been given a name. Each campaign can have its own Stage Set. However, a Stage Set can be assigned to more than one campaign. This screen displays a list of Stage Set entries at the top. Properties of the selected entry appear in the bottom pane.

Stage Sets are dynamically referenced

When the properties of a campaign are configured, the user can optionally select the name of a Stage Set. From then on, that campaign dynamically references the selected Stage Set. If the user adds or removes a stage, this change is immediately adopted by the campaign. Dynamic references make maintenance easier.

However, adding or removing stages from a Stage Set can potentially cause custom campaign scripts to become out of sync with stage numbers defined in a Stage Set. When a Stage Set is updated, changes must be coordinated with script developers.

Name

> Editing this field changes the display name of the Stage Set. The name is just a descriptive label that describes the record, so that you can identify it later when you associate this Stage Set with a campaign. The name can be anything you like, and may contain spaces or special characters; for example "Stages for Newspaper Campaigns".

Stage Name

> Every stage has a *name*. This user-defined label categorizes one or more tasks that agents perform in the course of a campaign call. This name can contain spaces, numbers and special characters.

> **The [Call Connected] stage**

> Since each campaign call must begin in the default stage (stage 0), the user interface automatically creates a stage named "[Call Connected]". This default stage cannot be deleted or renamed. It is a predictive stage, meaning that the Outbound Dialer server will collect agent performance statistics while this stage is active.

Stage Number

> Every stage has a stage number. When an agent transitions to a different stage, the campaign script sends the stage number (an integer value) to the Outbound Dialer server, to indicate that the agent has entered a new stage. Stage numbers are used in campaign scripts to transition an agent from one stage to another.

Is this stage predictive?

> Every stage has a predictive attribute that indicates whether or not the Outbound Dialer server should collect statistics while agents are in that stage. The predictive attribute should be set on stages that lead to a disposition of the call record.

> The Outbound Dialer server tracks the amount of time that each agent spends in predictive stages. While a campaign is active, the Outbound Dialer server monitors agent performance at each predictive stage and maintains statistics that allow it to predict the probability that the call

will complete in the current stage. The server estimates how long each agent will take to complete that stage of the call.

The ODS does not monitor or factor in time that each agent spends in non-predictive stages. Non-predictive stages are ignored by the predictive dialer, but are useful for reporting purposes.

Key Concept—a predictive stage describes an activity that Interaction Dialer's patented staging algorithm measures as part of its predictive algorithm. The predictive algorithm is a calculation that determines if a call should be made. The calculation is based on a number of factors, including agent status, stage completion measurements and contact list quality.

Related Topics

Add a Stage Set

Assign a Stage Set to a Campaign

Add a Stage Set

To define a new Stage Set:

1. At the **Home** screen in Dialer Manager, click **Stage Sets**. If using Interaction Administrator, expand the **Interaction Dialer** container. Expand the **Advanced Interaction Dialer container**. Then select **Stage Sets**.
2. In the topmost pane, click **Add** to create a new Stage Set.
3. The properties of a new entry titled **New Item** appear in bottom pane. Overtype the default "New Item" to type a descriptive name in the *Name* field. This establishes the name you will see later, when you assign a stage set to a campaign./>

   The purpose of each entry is to define one stage of a campaign call. This requires some careful analysis on your part to break down the steps of a campaign call into meaningful segments that can be categorized by name.

   Since stages classify the measurable segments of a campaign call, the overall accuracy of the predictive algorithm is affected by how thoroughly stages have been defined. As a general rule of thumb, it is best to define the ending stages of a call. Those are the stages where a call might be terminated by the agent or the targeted party. This ensures that the Dialer can quickly and accurately make a prediction.

   For example, suppose that a predictive "Callback" stage is defined for use when a party wants to be called back. Disconnect usually occurs in 7 seconds or less. When agents transition into the Callback stage, Dialer can accurately calculate that it must generate a new call, since the agent is likely to become available within a few seconds.

4. Each campaign call must begin in the default stage (stage 0). For this reason the user interface automatically creates a stage named "[Call Connected]" when a Stage Set is created. The default stage cannot be deleted or renamed. The Call Connected stage is a predictive stage, meaning

that the Outbound Dialer server will collect agent performance statistics while this stage is active. This is necessary in the event that no other predictive stages have been defined or implemented for this campaign.

5. In the bottom pane, click **Add** to define a stage. Give the stage a name. Then click **OK**.
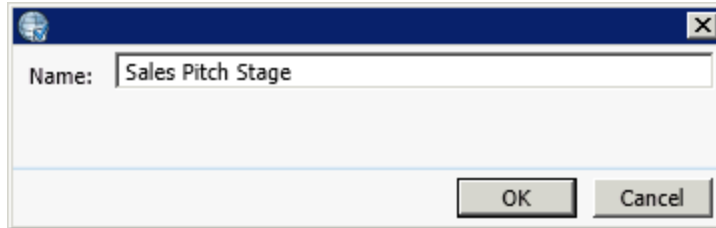
6. Check the *Is this stage predictive* box if this stage describes an activity that Dialer's staging algorithm should keep track of to make better predictions. Non-predictive stages are ignored by the predictive dialer, but are useful for reporting purposes.
7. Repeat steps 5-7 to define other stages of the campaign call.
8. When you are finished, click **Save**.

Assign a Stage Set to a Campaign

Stages help Dialer's pacing algorithm predict when agents will become available. A Stage Set has no effect until it is assigned to a predictive campaign. This procedure explains how to configure a campaign to use a stage set, so that Dialer can better predict when agents will become available, and better estimate when and how many calls to place.

To configure a campaign to dynamically reference a stage set:

1. At the Home screen in Interaction Dialer Manager, click the **Campaigns** command. If using Interaction Administrator, expand the **Interaction Dialer** view and then select **Campaigns**.
2. Select a Campaign in the top pane.
3. Select the **Automation** tab on the Campaign Properties panel.
4. Select a Stage Set from the **Stage Sets** drop list. If this list is empty, you must add a Stage Set first.
5. Click **Save** to save changes. From now on, as each agent progresses through the campaign script, stage transitions will be communicated to Interaction Dialer. Each agent's average time in each stage is tracked. These times are used by the pacing algorithm to estimate the likelihood of an agent ending a call at any given time, thereby optimizing the likelihood of an accurate prediction.

   Each page of the campaign script should set a stage number that matches the number of a stage in the assigned Stage Set. Stage numbers in the script and the stage set must match in order for predictive calculations to work properly.

Zone Sets

Zone Sets view

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Overview

This view manages **Zone Sets**. A Zone Set is a collection of zone *entries*. Each entry specifies when it is appropriate for an Outbound Dialer to call a particular time zone—relative to the local time (system clock) of the Central Campaign server. You cannot create a zone entry until you have created a Zone Set to put it in.

If the **zone** column in your contact list stores each contact's time zone, you can use Interaction Dialer's Time Zone Blocking feature to prevent calls from being placed at inappropriate times.

The *Zone Sets* view manages Zone Sets, which are collections of time zone entries associated with days of week and times of day when calls can be placed to each zone.

> You can name a Zone Set anything you like, but the names of Zone Set entries <u>must match</u> time zone names in the contact list's zone column or zones returned by Time Zone Mapping. Time zone mapping circumvents the requirement to store each contact's time zone in the contact list. Time Zone Mapping obtains the time zone by looking up the initial digits of each telephone number in a time zone map data set.

The name of each zone entry (e.g. EST) corresponds to the name of a zone in the contact list table. You can name a Zone Set anything you like. However, zone entry names must be unique within the set, and must match the names of zones in the contact list table's zone field.

Once a zone set and its zone entries has been defined, it can be assigned to a campaign by selecting the zone set by name in a campaign configuration. Thereafter, based on zones in the contact list and time constraints defined in the zone set, contacts will receive calls only at permitted times.

Related Topics

 Create a new Zone Set

What is the default tab for?

Edit an existing Zone Set

Assign a Zone Set to a Campaign

Delete a Zone Entry

Delete a Zone Set

Create a new Zone Set

Create a new Zone Set

Interaction Administrator: Interaction Dialer container > Advanced Interaction Dialer container> Zone Sets container

Before performing this procedure, you should know the names of time zones stored in the **zone** column of your contact list, so that you can create an entry in the zone set for each zone identifier associated with your contacts.

1. At the **Home** screen, click **Zone Sets**. The Zone Sets view will appear.
2. Click the **Add** button ( ). An entry temporarily named **New Item** will appear in the list of Zone Set objects.
3. Edit the **Name** field to give this zone set a descriptive name, so that you can identify it later when you associate this Zone Set with a campaign.   The name of a zone set can be anything you like. This name may contain spaces or special characters; for example "North American Zones".
4. You are ready to create a time zone entry for each zone identifier in the contact list. Click the **document icon** ( ).
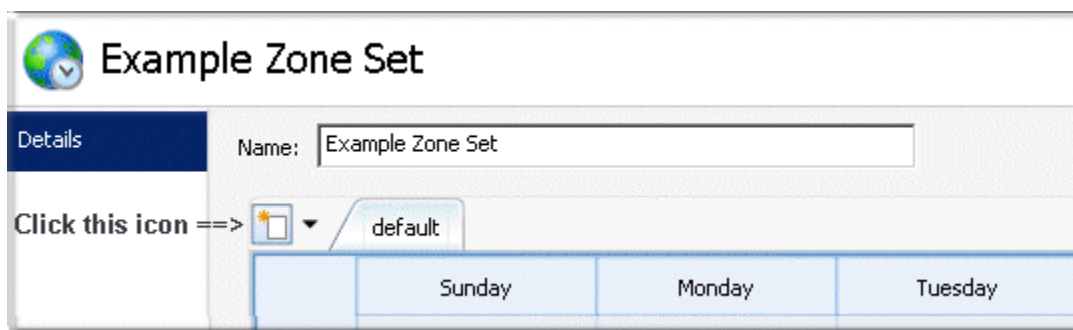
5. You are prompted to name a new zone entry. Type the name of a zone exactly as it is spelled in your contact list.

> The name you type must exactly match a value in the zone column of the contact list table.

6. Click **OK**. A tab page for the zone appears to the right of the Default tab.
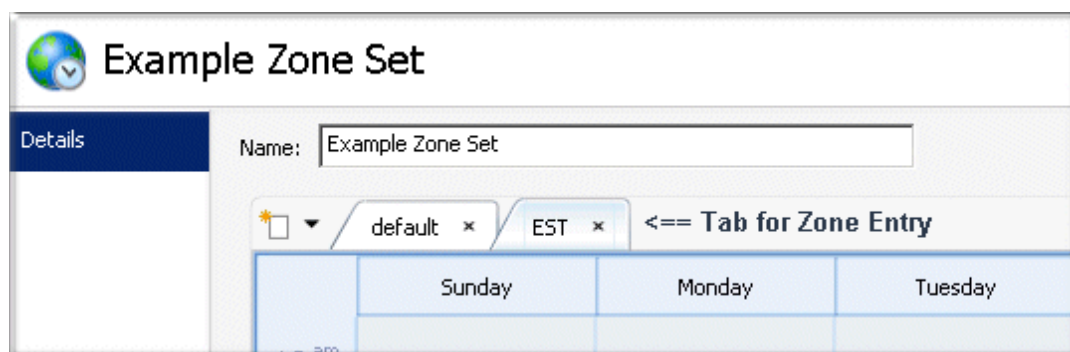
7. You are ready to identify when (in terms of days of the week and times-of-day) when this zone may be dialed. Move the mouse pointer to a day of the week column, at an

intersection of the time when dialing should be allowed.

As you move the mouse over the grid, you are prompted to click to define a **time slot**. You can define as many time slots as are needed to specify when calling can occur.

Click to add a time slot
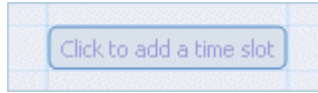
Remember, each time slot in a zone entry defines when calling can occur—not when calling should be blocked. Each time slot entry specifies when it is appropriate for an Outbound Dialer to call a particular time zone—using the local time (system clock) of the Central Campaign server.

8. Click the left mouse button. This opens a dialog for setting a precise interval of time. Adjust the start and end time for this time slot. Then click **OK**.

Start Time: 01 : 00 : 00

End Time: 02 : 00 : 00

OK   Cancel
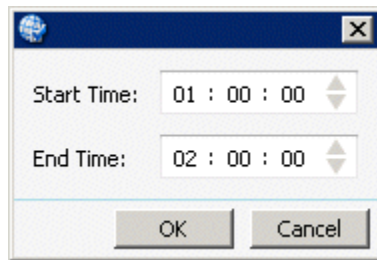
Repeat sets 7-8 to define additional time slots as needed. Each time slot defines a day and time of day when dialing to the zone can occur. Times are expressed in 24-hour notation (military time).

9. Repeat steps 4-8 to define other time zone, as required for the contact list.
10. When you are finished, click the **Save** button to save changes.

What is the Default tab for?

New Item

Details

Name: New Item

default

	Sunday	Monday	Tuesday
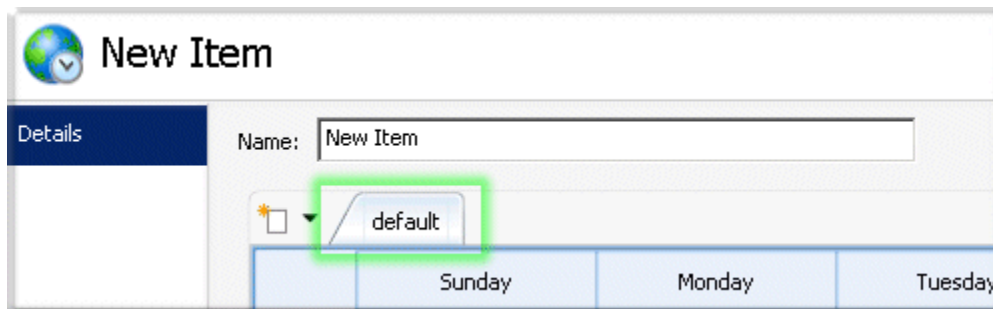
Every Zone Set has a **default tab**. Dialer uses this default zone entry if no time zone entries in the Zone Set match the zone of the contact. A Default tab is added to any newly created Zone Set. You can modify time slots in the Default zone like any other zone entry. The difference is that the Default Zone cannot be copied, deleted or renamed.

By default, this tab defines hours that are acceptable for all zones in North America (Atlantic to PST – ignoring Hawaii). That is GMT-4 to GMT-8 which equates to Noon to 5:00 p.m. based on a 8:00 a.m.—9:00 p.m. allowable calling hours.

Edit an existing Zone Set

1. From the Home page in Interaction Dialer Manager, click the Zone Sets view.
2. In the list zone set entries, click to select a set to edit.
3. Modify the zone set as needed.
4. Click **Save** ( ).

Assign a Zone Set to a Campaign

1. In Interaction Dialer Manager, click Campaigns.
2. Edit a Campaign.
3. Select the **Basic Configuration** tab on the Campaign Properties panel.
4. Scroll down to the **TimeZone Settings** expander.
5. Select a zone set from the Zone Set drop list. If this list is empty, you must first create a Zone Set by selecting the Zone Sets view.
6. Optionally enable Time Zone Mapping for the campaign.
7. Click **Save** to save changes. From now on, Time Zone Blocking will be performed when this campaign is active.

Delete a Zone Entry

To delete a time zone entry in a zone set:

1. Click the "**x**" on the tab for that zone entry.
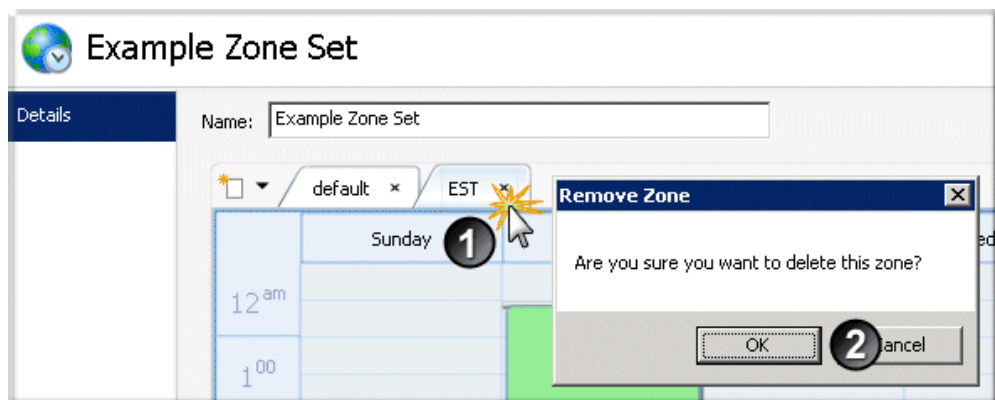
2. Click **OK** to confirm the delete operation. The zone entry is removed.

Delete a Zone Set

Before deleting a zone set, un-assign it from any campaigns that refer to it. If the Zone Set is referenced by a campaign, an alert box will remind you that you cannot delete a zone set that is in use.

To delete a zone set:

1. Select the **Zone Set** to delete.
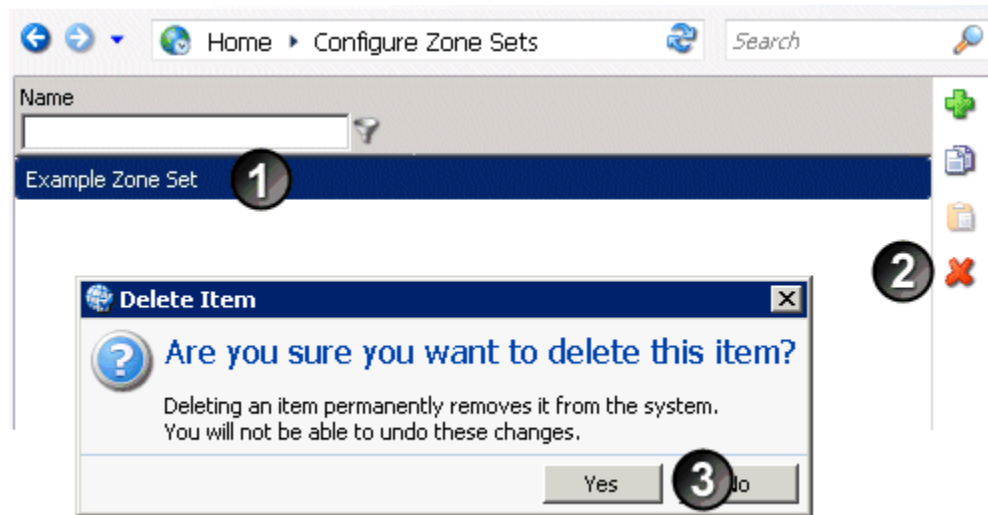
2. Click the **Delete** icon (red 'x')
3. Click **Yes** to confirm the delete operation.

DNC Sources

DNC Sources view

This view manages **DNC Sources**. A DNC Source provides a list of telephone numbers that should not be dialed. Interaction Dialer customers are strongly encouraged to scrub contact lists against do-not-call (DNC) lists. Scrubbing prevents contact numbers from being dialed by a campaign.

Scrubbing can be performed against in-house lists acquired from government entities or by using DNC.com, a third-party list cleansing service provided by the Call Center Compliance Corporation. Dialer integrates directly with DNC.com and also supports custom DNC data sources. The custom data source must be a table that exists in Dialer's database. See DNC Scrubbing of Contact Numbers for additional background information.

Name

Use this field enter the name of a DNC Source entry.

Display Name

This field displays the name of a DNC Source entry.

Type

This option allows you to identify the type of DNC Source. Dialer provides two methods for implementing DNC compliance – integration with DNC.com (Contact Center Compliance Corporation), or a custom DNC data source approach. Both options support an initial, bulk scrubbing of the entire contact list and just-in-time scrubbing of records before they are dialed. Different configuration choices appear in the Source Details section based on the Type selection.

Related Topics

[DNC.Com Source Details](#)

[Custom Source Details](#)

[Configure a Campaign to use a DNC Source](#)

[Bulk Scrub a Campaign's Contact List](#)

DNC.Com Source Details

DNC.Com Source Details

When you select DNC.Com as the Type, the Source Details section displays the following configuration choices.

Account Code

This field prompts for the account code assigned to the customer by Contact Center Compliance Corporation (DNC.com).

Login Id

The login ID assigned to the customer by Contact Center Compliance Corporation (DNC.com).

Use the Master Project

Select this option to use the scrub settings of the Master Project. Each DNC.com account has one project that cannot be deactivated, called the Master Project. Projects have settings (configured at DNC.com).

Use this project field

Select this option to use the scrub settings for a specific custom project.

DNC.com Campaign

Select which DNC.com campaign to use for scrubbing numbers. Only DNC.com campaigns within the selected project are listed. These are DNC campaigns, not Dialer campaigns.

Use Dial Plan

Select this option if the phone numbers in the contact list should be run through Dial Plan before being scrubbed.

Dial without scrubbing if scrubbing fails

Selecting this option will cause Dialer to continue dialing even if scrubbing fails. By default, Dialer will stop placing calls if DNC scrubbing has been configured and it is unable to scrub the contact phone numbers for any reason. For example, a network outage could prevent Dialer from communicating with the DNC.com servers, which would leave Dialer unable to scrub.

Note: Using this option could result in calls to numbers that should have been DNC blocked.

Mark Wireless numbers as Uncallable

When using DNC.com for DNC scrubbing, some telephone numbers may be identified as wireless. This check box controls whether or not wireless numbers are marked as blocked in the Phone Number Detail Table. Blocked numbers are not called.

This option is checked by default, meaning that wireless numbers are given a status of "P" in the Phone Number Detail table, to prevent them from being dialed. Clear this check box if you want to dial wireless numbers that pass DNC scrubbing.

Use secure server

Determines whether the Campaign Server uses a secure https connection when communicating with DNC.com. When enabled, information about contact numbers is exchanged without exposing information to third parties.

Related Topics

Configure a DNC Source for DNC.com

Configure a DNC Source for DNC.com

To configure a source for DNC.Com:

1. In Interaction Administrator, expand the **Advanced Interaction Dialer** container. Then select the **DNC Sources** container.
2. Click **Add** ( ) to create a new entry.
3. Enter a descriptive name in the **Name** field.
4. Set **Type** to *DNC.Com*.
5. Type your DNC account code in the **Account Code** field. This item is provided by DNC.com.
6. Type your login Id in the **Login Id** field. This item is also provided by DNC.com.
7. Each DNC.com account has one project that cannot be deactivated, called the Master Project. Projects have settings (configured at DNC.com). Decide whether to use scrub settings from the Master Project, or for a specific custom project.
8. Click **Save** ( ) to save changes.
9. At this point you have configured a DNC source. The next step is to Configure a Campaign to use a DNC Source.
10. Afterward you can perform an initial bulk scrub of the campaign's contact list.

Custom Source Details

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Custom Source Details

When you select Custom as the Type, the Source Details section displays the following configuration choices.

Connection

> Selects the UDL connection used by database operations.

Table

> Selects the name of the custom table that contains the list of DNC numbers. These are the telephone numbers that will be used later to scrub contact lists.

Phone Number Column

> Selects the column in that table which contains blocked numbers. All the numbers in the DNC data source must be in the same format, e.g. (xxx) xxx-xxxx, and the numbers in the contact list must also be in that same format (Varchar), so that no normalization has to be done.

> The data type of the phone number column of the table used as a custom DNC source must be of type Varchar. If a column of a different data type is used, the bulk scrub will fail and Dialer will warn: "Bulk scrubbing failed due to an internal Dialer error".

Database Column to Exclude

> A campaign can be configured to match a contact list column against an additional column in the custom DNC table. This drop list selects a column in the DNC table that DNC processing will be compare to a similarly named column in the contact list, for the purpose of not dialing matching

records. These columns might store account numbers, for example. When there is a match, Dialer will not call any phone number in the matching account. See also *DNC Excluded Column Identifier* on the Contact List tab of a campaign configuration entry.

Expiration Column

Identifies an *Expiration* date-time column in the DNC table, after which time the DNC entry is ignored or deleted. If a campaign is configured to use this DNC source, the time in the DNC column is compared with the current time.

If the current time is previous to the expiration time, the number is not dialed. It is treated like a traditional do-not-call number.

If the current time is past the expiration time, the number is dialed because the entry has expired.

Related Topics

Configure a Custom DNC Source

Configure a Custom DNC Source

To use a custom table in the Dialer database as a DNC Source:

1. In Interaction Administrator, expand the **Advanced Interaction Dialer** container. Then select the **DNC Sources** container.
2. Click **Add** to create a new entry.
3. Enter a descriptive name in the **Name** field.
4. Set **Type** to *Custom*. This indicates that you want to define the source using a table in Dialer's database that contains do-not-call numbers.
5. Use the *Connection* drop list to select a database connection.
6. Use the *Table* drop list to select the name of the table that contains the list of DNC numbers. These are the telephone numbers that will be used later to scrub contact lists.
7. Specify which column in that table contains the blocked numbers. Use the *Phone Number Column* drop list to select the name of the column that contains telephone numbers. All the numbers in the DNC data source must be in the same format, e.g. (xxx) xxx-xxxx, and the numbers in the contact list must also be in that same format (Varchar), so that no normalization has to be done.

> **Important**: The data type of the phone number column of the table used as a custom DNC source must be of type **Varchar**. If a column of a different data type is used, the bulk scrub will fail and Dialer will warn: "Bulk scrubbing failed due to an internal Dialer error".

8. You must assign a value to "Phone Number Column", "Database Column to Exclude" or both:
   o Select a column from the *Database Column to Exclude* list. A campaign can be configured to match a contact list column against an additional column in the custom

DNC table. This drop list selects a column in the DNC table that DNC processing will be compare to a similarly named column in the contact list, for the purpose of not dialing matching records. These columns might store account numbers, for example. When there is a match, Dialer will not call any phone number in the matching account.

And/Or

o   Select an *Expiration Column*. This identifies an expiration date-time column in the DNC table, after which time the DNC entry is ignored or deleted. If a campaign is configured to use this DNC source, the time in the DNC column is compared with the current time.

If the current time is previous to the expiration time, the number is not dialed. It is treated like a traditional do-not-call number.

If the current time is past the expiration time, the number is dialed because the entry has expired.

9. Click **Save** to save changes.
10. At this point you have configured a DNC source. The next step is to Configure a Campaign to use a DNC Source.
11. Afterward you can perform an initial bulk scrub of the campaign's contact list.

Configure a Campaign to use a DNC Source

Once a DNC source has been defined, you can assign it to a campaign.

1. In Interaction Administrator, expand the Interaction Dialer container. Then select the **Campaigns** container.
2. Select a campaign in the **Campaign Entries** panel.
3. Select the **Contact List tab**.
4. Locate the **DNC Source** list box. Select a previously-configured Do-Not-Call (DNC) source to scrub this Campaign's contact list against.
5. If the selected DNC Source from step 4 has a value for "Database Column to Exclude", then "DNC Excluded Column Identifier" will be enabled and filtered by the same datatype as the DNC Source, since the datatypes must match. It should then be supplied with a column name.
6. Click **Save** to save changes. At this point, you are ready to perform an initial bulk scrub of the campaign's contact list.

Bulk Scrub a Campaign's Contact List

Before a contact list is dialed against, customers are encouraged to bulk scrub the entire list. As a prerequisite, you must configure a DNC source and associate it with a campaign. The campaign being scrubbed cannot be active at the time of the scrubbing, regardless of the DNC source used.

Scrubbing typically removes 30-40% of contacts from being selected for calling, by changing their status to "P" in the campaign's Phone Number Detail table. "P" stands for "purge", to indicate that the number should not be called.

DNC scrubbing does not modify the status field in a contact list, which indicates the overall status of a contact. Instead, it modifies the callable status of individual numbers in the Phone Number Detail table used by the campaign.

To bulk scrub the contact list associated with a campaign:

1. In Interaction Administrator, expand the **Interaction Dialer** container. Then select the **Campaigns** container.
2. Select a **Campaign** entry.
3. If that campaign is currently running, click the **Stop** button.
4. Select the Contact List tab.
5. Click the **Perform Bulk DNC Scrub** button near the DNC Source drop list.
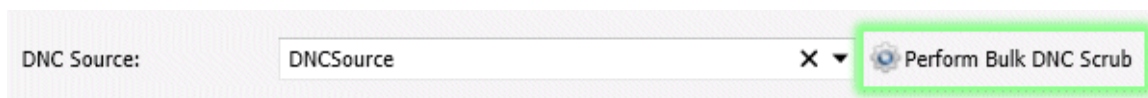
To perform a bulk scrub, DNC Source cannot be blank. This starts a bulk scrub of this campaign's contacts, by passing batches of phone numbers to DNC.com via HTTP RPC calls, or by matching telephone numbers against a list of do-not-call numbers in a custom DNC table.

> During a bulk scrub, Dialer also evaluates the campaign's filter. Contacts that are not allowed by the filter are not scrubbed.

6. When scrubbing ends, counts are displayed:
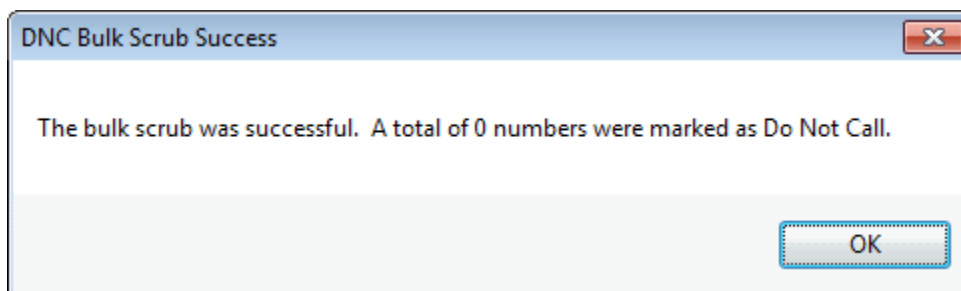
If scrubbing failed, use the *Dialer Health View* in *Interaction Supervisor* (a module of IC Business Manager) to obtain details of the event. The view will contain a message titled "DNC Scrubbing failed for Campaign <campaign name>. To find out why scrubbing failed; double-click the message row to open its properties. The description field will contain additional information about the error. See also *Messages that can appear in a Dialer Health View* in the *Interaction Supervisor Help.*The categories are:

Category	Description

Wireless	Wireless numbers
Invalid	Numbers that are invalid for some reason (e.g. non-existent area code).
Blocked	Numbers that are not covered by the configured DNC.com settings or that are configured as no-call.
Project Blocked	Numbers blocked by the DNC.com project settings.
DNC	Numbers found in the Do Not Call database.

7. Click **OK** to dismiss the scrub counts dialog.
8. If you stopped the campaign before running the scrub, return it to a running state now.

Just-in-Time Scrubbing

At this point, just-in-time scrubbing will be performed automatically whenever the campaign runs, so long as a DNC source is associated with the campaign.

Interaction Dialer will perform just-in-time scrubbing when records are pulled into cache. When Dialer queries contacts from the contact list for its cache, that batch of contacts will be scrubbed before being given to Dialer. For each contact, any callable numbers will be scrubbed and marked appropriately.

Feature Overview

DNC Scrubbing of Contact Numbers

Timezone Map Data

Timezone Map Data view

Overview

This view configures an optional **time zone map data set** for use with Dialer. A time zone map is a file that associates the initial digits of a phone number (area code and exchange in North America, for example) with a time zone.

To get the contact's time zone, Dialer looks up the initial digits of a contact number in the map data set, instead of using the zone column of the contact record to identify the contact's time zone. This feature is called time zone mapping. The use of a time zone map dataset can be enabled to enhance time zone blocking (which prevents contacts from being called at undesirable times) on a campaign by campaign basis. For tutorial information, see Contact Times: Schedules and Zone Blocking.

Dialer supports commercially purchased data sets from:

- Areacodes.com Deluxe Area Codes Database
- Quentin Sager Consulting (Platinum)
- Telcordia TPM or Telcordia TDS
- Zipcode World NPANXX Data (Gold or Premium)
- CIC Locality Data is the only option that does not utilize a database. Instead, it configures time zone mapping to use CIC's *locality lookup* feature, wherein CIC reverse white pages tables are used to obtain information about the caller's location. Contact numbers are compared to area code and exchange mappings for North America. Since this feature uses the North American Numbering Plan, it is appropriate for North America and areas that follow the same numbering convention, but not to other regions. The reverse white page lookup functionality requires that either the standardized number (per the dial plan) be in the +1 format or start with the area code and omit the +1/1 (country code) altogether.

If you choose a third-party data set, you may need to run a vendor-provided install that copies files to the Outbound Dialer Server. The Resources folder is a recommended location to store files on the server. That path is I3\IC\Server\Resources. Refer to vendor documentation for installation instructions.

To set the evaluation priority of a time zone map file, use the Priority control. The priority of entries in the Timezone Map Data container affects the zone mapping results. The lowest numbered entries have the lowest priority. The highest numbered entries have the highest priority. Entries with a higher priority take precedence over entries with a lower priority. For example, a file with priority of 2 takes precedence over a file with priority of 1.

Related Topics

Add a Time Zone Map data set

Enable Time Zone Mapping for a Campaign

Add a Time Zone Map data set

1. At the **Home** screen, click **Timezone Map Data**.
2. Click the **Add** button. An entry temporarily named **New Item** will appear.
3. Edit the **Name** field to give the data set a more descriptive name. This name can be anything you like. It can contain spaces and special characters.
4. Select a third-party data set from the **Type** drop list, or choose **Custom** if you have created your own zone mapping data set in accordance with the open data set format.

5. Selecting an existing file from the **Data File** drop list, or click **Upload New** to locate and upload a file that has not been used before. If you selected *IC Locality Data* in the previous step, you do not need to upload a file, or select an existing one.
6. Use the Priority control to prioritize entries. Entries with lowest numbers are evaluated first.
7. Click **Validate** to ensure that the file type matches the format of the specified data file. Dialer will attempt to read 100 records from the specified file and validate them for conformity with the format of the specified file type. The file is not exhaustively checked – just enough to verify that the file is basically correct. (Dialer displays a message to indicate the test result.)
8. Click **Save**.

> **NOTE:** After a Zone Set is assigned to a campaign, and time zone mapping is enabled for the campaign, Dialer will use this data set to look up the time zone associated with each phone number in the campaign's contact list, ensuring that calls are dialed only at appropriate times of day.

Related Topics

Time Zone Blocking

Time Zone Mapping

Create a new Zone Set

Assign a Zone Set to a Campaign

Validate Test Result Messages

When you select a zone mapping data set from the Type drop list and then click the Validate button, Dialer will attempt to read 100 records from the specified file and validate them for conformity with the format of the specified file type. Dialer will then display an alert to indicate the result of the test.

Message	Description
Timezone Map Data Set validation succeeded.	The file matches the format.
Timezone Map Data Set validation failed because the map data file %s does not exist or can't be found by the Campaign Server.	The file is missing or is not in the correct location, or the path was incorrectly entered. The %s is replaced by the file name entered into Interaction Administrator when the message is displayed.
Timezone Map Data Set validation failed because the map data file %s can't be read by the Campaign Server.	The file exists but isn't readable (usually a file permission problem that the CCS administrator should be able to take care of.) The %s is replaced by the file name entered into Interaction Administrator when the message is displayed.
Timezone Map Data Set validation failed because the map data file %s doesn't conform to the format of type '%s'.	The file exists and is readable, but the format of the lines is incorrect. The first %s is replaced by the file name entered into Interaction Administrator when the message is displayed, while the second %s is replaced by the type of time zone map data set selected in Interaction Administrator.
Timezone Map Data Set validation failed with an unknown validation error.	There was an unexpected validation error.
Timezone Map Data Set validation failed with the error shown below. Either there is a problem with the Timezone Map Data Set information, or the Database server is not responding.\n\n%s	Some other error (generally it's not related to the file itself but something with the communication between the ODS and the CCS) The two \n's indicate that two blank lines will be displayed after the first part of the message, and the %s will be replaced with a specific descriptive error message. This is generally an error that will have to be reported to Genesys Customer Care.

Enable Time Zone Mapping for a campaign

1. From the Home page in Interaction Dialer Manager, click Campaigns.
2. In the list of campaign entries, click a campaign to edit.

3. Click the **Basic Configuration** tab.
4. Scroll down to the **Timezone Settings** expander.
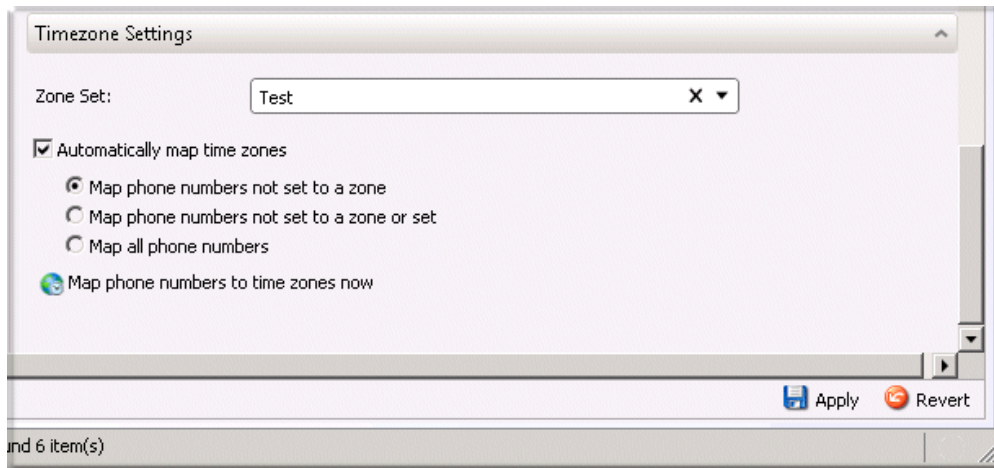
All automatic time zone mapping options are disabled unless a Zone Set is assigned to the campaign. If necessary, assign a zone set to the campaign to enable these options. The Zone Set must contain the same zone entries that are returned by time zone mapping.

5. Check **Automatically map time zones** to enable Time Zone Mapping for the campaign. When automatic mapping is enabled, Dialer provides three options that set how broadly automatic mapping is applied to this campaign. Select the option that best applies to the campaign:

    Map phone numbers not set to a zone. This restricts time zone mapping to telephone numbers that have no zone information. Only phone numbers not associated with a zone will be mapped.

    Map phone numbers not set to a zone or set. This option maps phone numbers that have no zone information <u>and</u> numbers that had previously been automatically mapped. If the time zone map data set has been updated, the latest zone from the data set will be used in place of the zone entry that was previously written to the campaign's PND table. The PND table will be updated with the latest zone for this telephone number.

    Since time zone data sets are often updated quarterly, this option ensures accuracy by automatically updating zone information in PND tables. When automatic mapping is performed, zone data in PND tables is updated if the zone field in the PND table is empty, or if the zone entry does not match the result of the lookup operation.

    If lookup against a time zone map data set returns a different zone from the zone in the PND table, the zone in the data set is presumed to be newer and is used instead. When zone entries match the lookup value, zone data in the PND table is not updated. Zone data is updated only when values change.

Map all phone numbers. This option maps all phone numbers, regardless of their current zone settings. Please use this option with caution, since it will cause all phone numbers to be remapped every recycle, which can take a long time.

6. Click **Save**.

7. Optionally click **Map phone numbers to time zones now**. Time zone mapping is performed automatically when the call list recycles. Since the initial mapping of a call list and PND table data can take a while, customers can press this button to manually initiate time zone mapping. It manually initiates time zone mapping without waiting for a recycle. This reduces the amount of time that time zone mapping will require when the next recycle occurs. When time zone mapping is manually invoked, a dialog is displayed while the mapping takes place, to block further activity until the mapping finishes.

Import/Export Configuration

Import/Export Configuration view

Overview

The Import/Export Configuration view allows you to import or export a Dialer configuration file from one server to another. PureConnect Customer Care personnel can use this feature to create default configuration files to import into a customer's configuration to assist with best practices or to resolve a configuration issue.
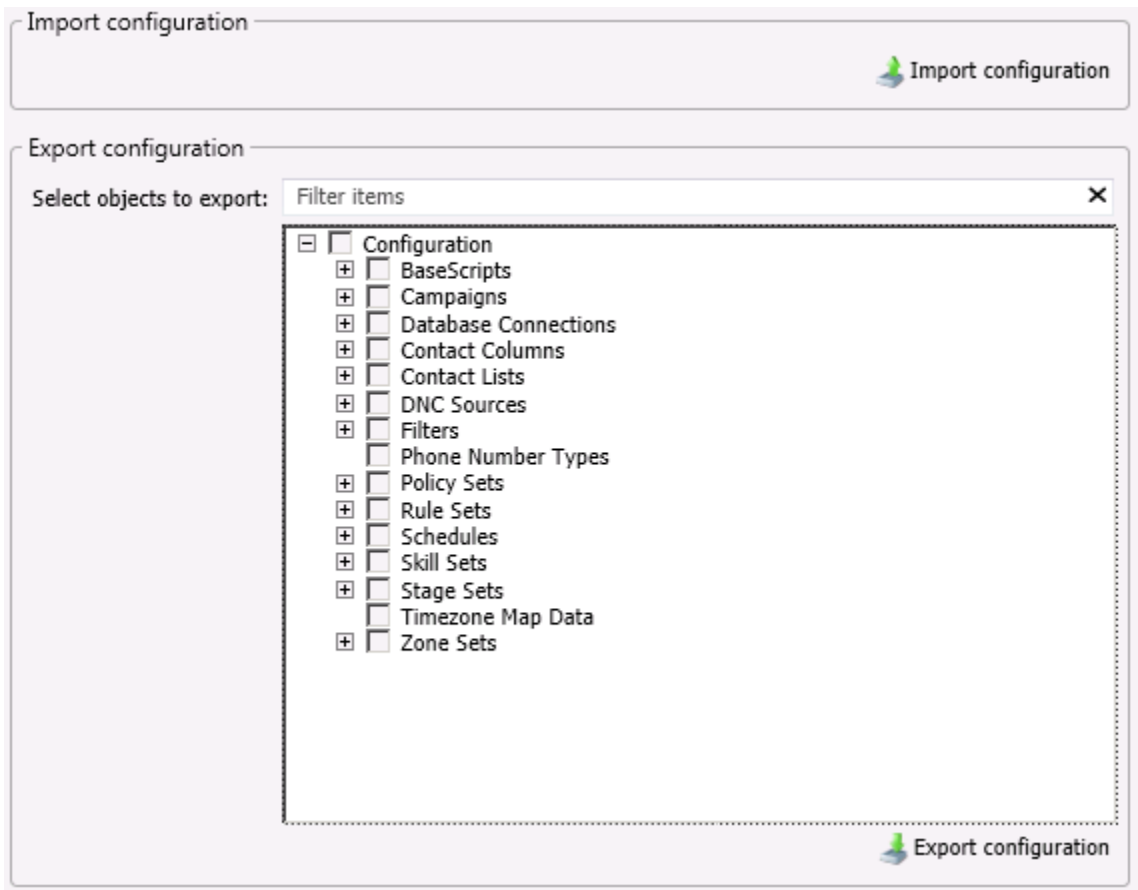
Related Topics

[Export Configuration Data](#)

[Import Configuration Data](#)

Export configuration data

There are several ways that you can go about exporting Dialer configuration data: You can export all objects, you can export a category of objects, or you can export individual objects.

To export all objects

1. Select the **Configuration** check box.
2. Click **Export Configuration**.

To export a category of objects

1. Select the check box next to the object category.
2. Click **Export Configuration**.

To export individual objects

1. Expand the object category.
2. Select the check boxes next to each object that you want to export.
3. Click **Export Configuration**.

> **WARNING: 200 object limit.** When exporting a category of objects or individual objects, be aware that if there are more than 200 objects in any single category, the Export configuration tool is unable to display or export more than 200 objects without manual intervention. If you want to view and select objects in a category that contains more than 200 objects, you must use the Filter items text box to manually append additional objects to the display. You can then select them for inclusion in the export.

To append additional objects:

a. Expand the object category.
b. Select the check box next to the object category to select all the objects.
c. In the **Filter items** text box, type the name of the object that you want to add to the display and press Enter. When you do, the object is added to the bottom of the tree list.
d. Select the check box next to the object category to clear all the check boxes.
e. Again, select the check box next to the object category to select all the objects. When you do, the new object is selected and ultimately included in the export.
f. To add other objects to the list, repeat steps 3-5.
g. Click **Export Configuration**.

> **NOTE:** If there are objects with similar names that you want to add to the list, you can type a partial name in the Filter items text box to add more than one object to the list at a time. This applies to selecting object categories and individual objects. When selecting the entire configuration, all objects are exported regardless of how many objects are in any one category.

To complete the export

8. After you click Export Configuration, you are prompted to name the XML file.
9. Select a folder and type a name in the File name box.
10. Click Save. The XML file is saved at the location specified.
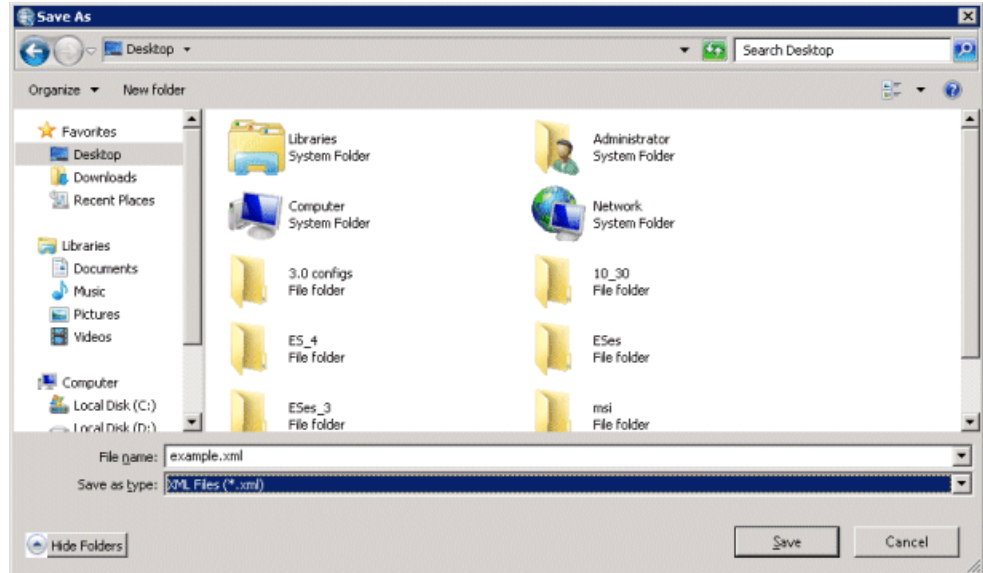
Import Configuration Data

1. Export data as described earlier and then copy the resulting .xml file to a share or to the server on which you will import the data.
2. Open **Dialer Manager** on the server you wish to import into.
3. Click **Import Configuration**.
4. Select the file to import.
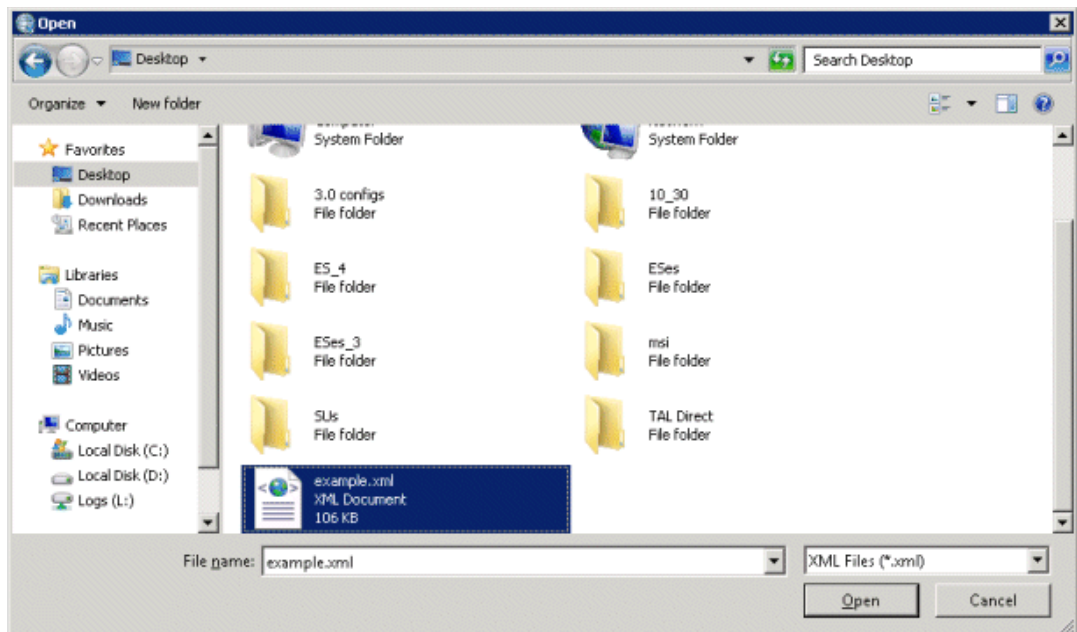
5. Click **Open**. If none of the Dialer configuration objects exist in the destination system, they are recreated on the new server.

If you attempt to import an object that already exists on the destination server, the import process stops with the following message:
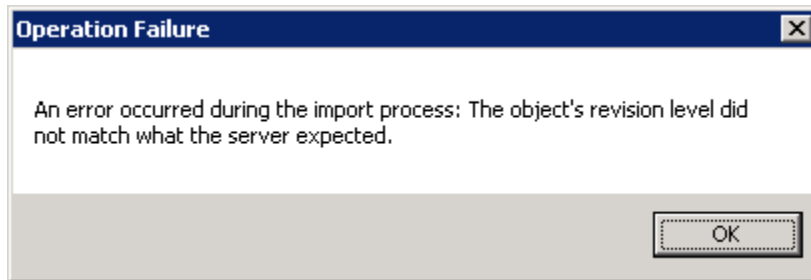
If you see this message, return to the export procedure and export a configuration file that does not contain duplicate objects before attempting the import procedure again.

Server Parameters

Server Parameters

When Interaction Dialer is installed on a CIC server, several required server parameters are created. Interaction Dialer also supports optional server parameters that you can use to alter the way that Dialer works. These parameters are managed using the *Server Parameters* container in Interaction Administrator.

Related Topics

Required Server Parameters

Optional Server Parameters

Required Server Parameters

The following server parameters are established by the Outbound Dialer Server install. Do not change these values unless you wish to prevent Interaction Dialer containers from loading, or need to change the name of your Central Campaign server.

Dialer Campaign Server

Dialer Campaign Server = CampaignServerName. *CampaignServerName* is the name of the Central Campaign server that manages ones or more Outbound Dialer servers. Many Outbound Dialer (CIC) servers may utilize a single Central Campaign server.

Dialer Support

This parameter is used internally by Interaction Administrator, and should not be changed by customers.

Dialer Site Name

The Dialer Site Name is not directly associated to the CIC site name. The Dialer site name is based on the *Dialer Site Name* server parameter. The value of this parameter identifies the Dialer site name display in Interaction Supervisor's Dialer views. This name is also displayed in the Dialer Configuration node when the master dialer is set up. This parameter is also used to identify two Dialer servers in a switchover pair. When the primary starts up, if the server parameter doesn't exist, the site name is used to populate the parameter. The parameter then gets persisted to the backup. When the backup comes online, the server parameter ensures that the DialerTranU process clears its cache of abandoned records.

NOTE: The **Dialer Site Name** server parameter must be unique to each ODS or switchover pair that is connected to a given CCS. Connecting more than one ODS with the same site name to a single CCS server can lead to system instability including mismatched or inaccurate statistics, unpredictable dialing behavior, and Windows Application Event Log spamming.

See also

Optional Server Parameters

Campaign Server Parameters

Optional Server Parameters

Interaction Dialer supports the optional server parameters listed below. These are not set by the install, but you can configure them using the *Server Parameters* container in Interaction Administrator. Keep in mind that parameters identified as Boolean, must have the value specified in lowercase i.e. *true*, *false.*

Apply Custom DNC to PND Lookup

This parameter allows the PND to be filtered by a database-based custom DNC. When Dialer does not have the phone number details (PND) for a contact, it will send an individual lookup request to DialerTran. This lookup request will return the PND regardless of the presence of the phone number in the custom DNC list associated with the campaign. Setting this parameter to a Boolean true (1, y, true) enables the PND lookup to be filtered by the database-based custom DNC. You must also restart the DialerTran subsystem on the CampaignServer.

Dialer Delay Campaign Transition Login

If you are using rule-based Agent Management to transition agents from one campaign to another, you should also be using the Dialer Delay Campaign Transition Login server parameter with the value set to 1. Enabling this server parameter will make sure that Dialer will delay the login to the destination campaign until after it has granted the previous campaign logout request.

Dialer Always Call wrap-up

Boolean. Default=false. This parameter is used to control whether or not Dialer will call the DialerCallWrapUp handler only for agent-dispositioned calls, or for all calls. When set to false Dialer will only call the DialerCallWrapUp handler for agent dispositioned calls, when set to true Dialer will call it for all calls.

Dialer BaseScripter Automatic Disposition Timeout

The time in seconds that base scripts will wait before automatically dispositioning an interaction after it disconnects or leaves the agent's queue.

Dialer BaseScripter Automatic Disposition Wrap-Up Code

The wrap-up code that base scripts will use when automatically dispositioning an interaction.

Dialer Campaign Server Backup

This server parameter is added when CCS Switchover is configured. It stores the name of the CCS that the ODS subsystems should connect to when a CCS switchover is detected.

Dialer Clear Reservation On Breakgranted

When this server parameter is set to "True", Dialer will clear any campaign reservation the agent has when their break is granted. The agent will be free to be reserved for a new campaign when their break ends. Default = "False".

When this parameter is not set, or is False, Interaction Dialer does not clear an agent reservation if the agent goes on break. This could cause long idle time if the agent is reserved for a campaign prior to taking a break, but afterward, the campaign no longer has contacts to dial.

Dialer Preserve Agent Ownership On Max Daily Attempts

By default, Agent-owned scheduled callbacks are converted to campaign-wide callbacks if the contact is continuously rescheduled due to max daily attempts. When this server parameter has a value of "True", Dialer will not increment the attempts rescheduled when an agent-owned callback is rescheduled due to hitting the max daily attempts limit.

Dialer Prevent Autobreak On Workgroup Followup

This parameter resolves an issue caused by email and chat interactions entering Followup status. When an agent's status moves to Followup from a non-fully utilized chat or email interaction, this causes base scripts to put the agent into Do Not Disturb status. An agent who is on a chat or email interaction will remain in the Available status and, therefore, is considered to be Idle by Dialer. When the agent moves from these interactions into a Followup status, Dialer puts the agent on break, since they moved from Idle to a non-ACD status. Because Dialer put the agent on break, base scripts in InteractionScripter.Net move the agent to the Do Not Disturb status, while the agent is still in Followup.

When this parameter is enabled, an agent logged into a base script in InteractionScripter.Net while moving to Followup from an email or chat interaction, will not enter Do Not Disturb status.

Dialer Record All Agent Calls

Boolean. When true, causes all Dialer calls sent to agents to be recorded; Dialer will initiate recording before transferring the call to the agent. This eliminates any possibility of recording delays due to system load.

Dialer Call Custom Sprocs

If you are implementing custom stored procedures, you need to set this parameter to true so that Dialer will run your custom stored procedures when writing data to the CallHistory Table or the AgentStats Table. By default, this parameter is set to false.

NOTE: Be aware that Dialer's local PMQ can get backed up because of transaction and custom SPROC overhead. To circumvent this problem, this server parameter was created and set to false by default in order to prevent custom reporting SPROCs from being called.

Dialer Prepend Priority Contacts

Provides the option to dial the latest import of Priority Dialing (JIT) records ahead of current JIT records in cache. By default when Priority contacts are pulled into Dialer they are added to the end of Dialer's existing cache of Priority contacts. When this server parameter is enabled by setting its value to 1, Dialer will add each new batch of Priority contacts to the front of its existing cache of Priority contacts.

Dialer Disable Tone Detection

When the value is set to 1, provides the option to disable tone detection while waiting for silence. This prevents a barge-in by a lengthy tone after the tone has already been detected. Dialer will still listen for seconds of silence and will restart on an interruption.

Dialer Scripter Use Record Snippet

"Snippets" are ad-hoc recordings generated by a user to record part of an on-going interaction. Historically, Interaction Scripter .Net provided the option to record a call through IceLib to create an ad-hoc wav-based recording that is managed by media servers but not IRServer. But prior to 2018 R1, Scripter did not have a mechanism to initiate snippet recordings from within Interaction Scripter.Net client.

By setting this parameter true, Interaction Scripter.NET will record snippets, provided that:

- The user has the "Snip" security right assigned, which makes the Record option visible in the client. This right is assigned under "Interaction Command Rights" in Interaction Administrator.

- The user has the "Record Interaction Snippet" right to initate recordings in their queue. In Interaction Administrator, this right appears under "My Interaction Rights".

Snippet recordings are managed by IRServer and will generate SASF recordings.

Dialer StartReceivingCalls Per Campaign

There are two situations in which you would want to use the Dialer StartReceivingCalls Per Campaign server parameter:

If you are using the IS_Action_StartReceivingCalls predictive action and want to have this action function on a per campaign basis rather than on a per agent basis, you will need to use the Dialer StartReceivingCalls Per Campaign server parameter with the value set to 1.

If you are using the /nostartreceiving command-line parameter with Interaction Scripter Client or a third-party ICELib application, you will need to use the Dialer StartReceivingCalls Per Campaign server parameter with the value set to 1. If you don't, agents who request a break before the script or application triggers the StartReceivingCalls action will continue to receive calls regardless of their request.

> **NOTE:** The Dialer StartReceivingCalls Per Campaign server parameter only works for agents who have the LogonCampaign right. For more information on the Logon Campaign right, see the Security Rights topic in the Interaction Administrator help system.

For more information on the IS_Action_StartReceivingCalls predictive action, see the Predictive Actions topic in the *Interaction Scripter Developer's Guide*. For more information on the /nostartreceiving command-line parameter, see the Optional Command Line Parameters topic in the *Scripter .NET Client Help*.

Dialer CPA Aggression Level

This parameter allows you to determine how aggressively you want to configure the CPA adjustment level. Valid values are 0-10, where 0 indicates off. A value of 1 is the least conservative while a value of 10 is the most conservative. This parameter can be adjusted in real-time; however, if the campaign is reset, the system will restore the original value that was present when the campaign began.

Dialer Cisco Tone Detection Enable

Boolean. This parameter, when set to true, allows you to create a new tone detector that will allow Dialer to detect the 425Hz tone generated by a standard Cisco PBX.

Dialer Disposition After Call Transfer Delay

The number of minutes to wait before Dialer dispositions a transferred call. Valid values are 3 - 30. The default is 3.

Dialer JIT Query Frequency Override

When assigned an integer value in milliseconds, overrides the Priority Dialing Query Frequency campaign setting for all campaigns running on the Dialer server. Query frequency determines how often (in seconds) that Interaction Dialer should check the contact list for newly inserted priority contact records (records that have a "J" status). Query frequency is normally set on the Contact List tab, but you can override it using this parameter. See also Dialer JIT Query Frequency Override.

Dialer Tone Detection Wait Time

The amount of time in milliseconds for Dialer to sleep after detecting an answering machine tone. With the default of 500 milliseconds, Dialer waits half a second after detecting an answer machine tone before proceeding with the agentless behavior.

Dialer Always Apply Number to Dial

Boolean. If you use the Number to Dial policy behavior for Preview campaigns, you must set this parameter to true so that Dialer uses the value from the Number to Dial policy behavior for the call. The default is false.

Dialer Server HTTP Port

To support the Follow Up Call feature, DialerServer hosts an HTPPS server to communicate PND information to Scripter upon request. By default, Dialer uses port 13151 for this communication. If you wish to use a different port, you can use the Dialer Server HTTP Port parameter to specify a different port.

Dialer Allow Policy to Update Attempts

Boolean. Set this parameter to true so that when a policy updates the Attempts column for a contact, Dialer also updates the internal max attempts counters. By default, this parameter is set to false.

Special Case - Optional Server Parameters

The next two optional server parameters can be used to enhance Dialer's ability to leave automated messages on answering machines and voice mail systems.

Dialer Wait For Silence Timeout

Sets the maximum length of time that Dialer will wait when detecting silence on a call before playing a wave file. The default is 120 seconds. The value is the number of seconds and the valid range is 0 to 600, with the default being 120 seconds.

Dialer Limit Idle Calls

Boolean. Dialer tracks required idle calls as a double rather than an integer, which can lead to cases where Dialer needs to place a fraction of one call. Dialer will always place a minimum of 1 call if it needs to place any, which can cause over-dialing. This server parameter limits the number of idle calls Dialer places. When set to true, it causes Dialer to round down when determining how many idle calls to place, instead of allowing fractional calls.

See also

Required Server Parameters

Campaign Server Parameters

Access and Security Rights

Access and Security Rights

This section is for CIC Administrators who manage user access to Interaction Dialer. It describes granular rights assigned on a per-user basis. An individual user's access to Interaction Dialer is governed by server license allocation and by the assignment of security and access control rights in Interaction Administrator.

Security and Access Control Mechanisms	
Administrator Access Rights	*Administrative Rights* manage who can see and manage Dialer configuration objects in Interaction Administrator.
Access Control Rights	Access Control Rights determine whether the user can view and modify Dialer campaigns and Supervisor views.
Security Rights	Security rights manage the functionality offered by client applications, such as buttons for listening and coaching, or the ability to modify or view settings through an application.

Dialer Administrator Access Rights

Dialer Administrator Access Rights

Administrator Access Rights manage who can grant access—what objects are shown and can be changed in Interaction Administrator. Your CIC Administrator has Dialer administrative rights. Most CIC users do not have administrative rights.

Dialer administrative rights determine whether or not a user, workgroup, or role can view Dialer configuration objects in Dialer Manager.

Category	Group	Description

Dialer	Call Lists	Grants ability to view and manage Contact Lists. Each contact list is a collection of properties that convey to Interaction Dialer details about the table used to store contact phone numbers.
	Campaigns	Grants ability to view and manage Campaigns. Each campaign is a collection of properties that tell Interaction Dialer how to process a contact list.
	Dialer Configuration	Grants the ability to view and manage Advanced Interaction Dialer configuration items in Interaction Dialer. These items include: • Contact List Filters • Global Dialer Settings • Database Connections • DNC Sources • Timezone Map Data • Import/Export Configuration
	Policy Sets	Grants ability to view and manage Policy Sets. Policies define conditions and behaviors that control the processing of individual contact records.
	Rule Sets	Grants ability to view and manage Rule Sets. Rule Sets use conditional logic to automate the run time characteristics of campaigns.
	Schedules	Grants ability to view and manage Schedules. A schedule is a collection of time settings that determine when campaigns are running (on), not running (off), or partially on (placing only scheduled calls).
	Scripts	Grants ability to view and manage Base Scripts in Interaction Dialer Manager. A base script defines the appearance and functionality of the Interaction Scripter Client.
	Stage Sets	Grants ability to view and manage Stage Sets in Interaction Dialer Manager. Stages identify each segment of a call that statistics can be collected upon. Stage names and other attributes are saved in groups (called Stage Sets) that can be assigned by name to one or more campaigns.
	Skill Sets	Grants ability to view and manage Skill Sets in Interaction Dialer Manager. A Skill Set manages skills from a Campaign's point of view, by identifying which CIC skills will be used to select contacts.
	Zone Sets	Grants ability to view and manage Zone Sets in Interaction Dialer Manager. A Zone Set is a collection of entries that specify when it is appropriate for an Outbound Dialer to call a particular time zone
System	Handlers	Grants ability to edit handlers in Interaction Designer. The Dialer–related handlers are: • Custom_DialerCustomHanderRuleActionEvent • Custom_DialerPreCallRuleActionEvent

		• Dialer_AgentCallWrapUp • Dialer_FaxMessageRequest • Dialer_RuleActionEvent • IntAttDialerCompleted
	System Parameters	Grants ability to edit specific server parameters in Interaction Administrator. The default Dialer-related parameters are: • Dialer Campaign Server • Dialer Site Name • Dialer Support

Related Topics

Setting Administrator Access Rights

Setting Administrator Access Rights

To set Administrator Access Rights:

1. Open a user, role, or workgroup configuration record in Interaction Administrator.
2. Select the **Security tab**.
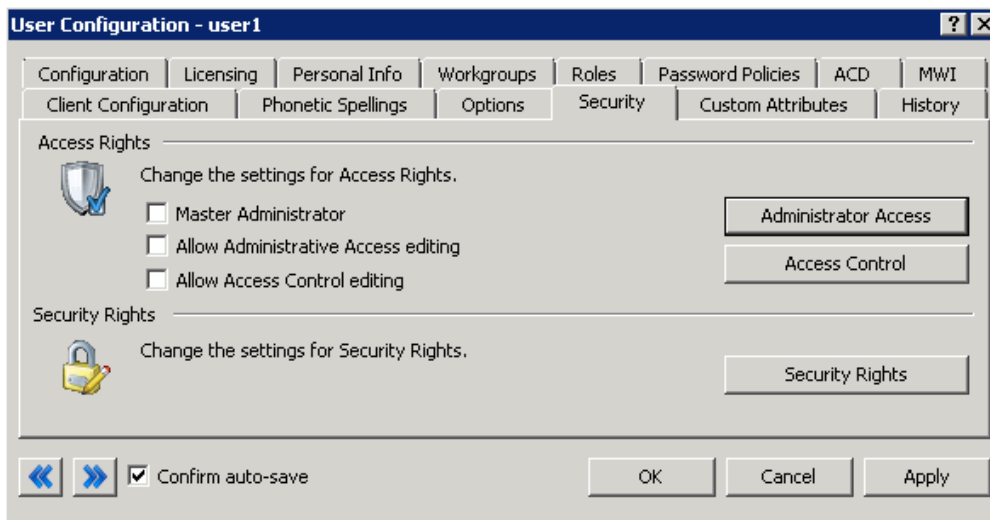
3. Then click the **Administrator Access** button. The Administrator Access dialog appears. This dialog uses categories to organize related settings. Categories are further subdivided into groups of related settings. By default, a category named **<All>** is selected to display access control rights in all categories. To view a smaller set of settings, select from the *Category* list or type search text in the *Search* field. (See Dialer Administrator Access Rights)
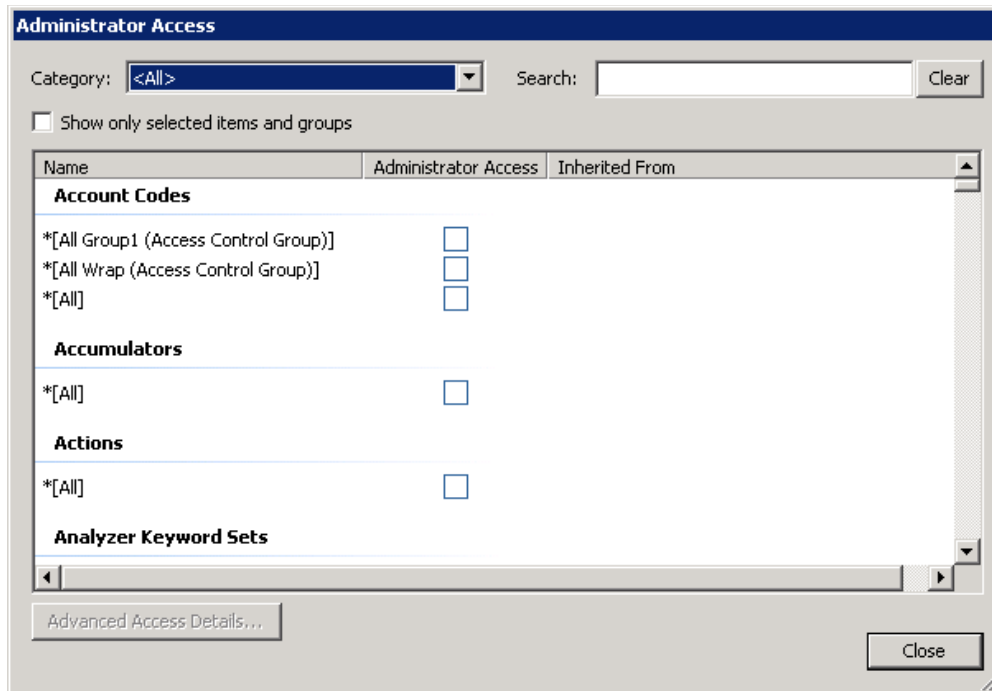
4. Select from the category list as necessary to view Dialer administrative rights. Check rights that you want to assign, or remove rights by clicking to clear an existing check mark. When a list of specific objects is presented, you can grant right to all by checking the *[All] option.
5. Click **Close**.
6. Click **Apply** to save changes to the configuration.
7. Click **OK** to dismiss the configuration dialog.

Related Topics

Dialer Administrator Access Rights

Dialer Access Control Rights

Access Control Rights

Access Control Rights (ACLs) determine whether a user, workgroup or role can view and modify Dialer campaigns and Supervisor views.

Related Topics

Setting Access Control Rights

Setting Access Control Rights

To set Access Control Rights:

1. Open a user, role, or workgroup configuration record in Interaction Administrator.

2. Select the **Security tab**.
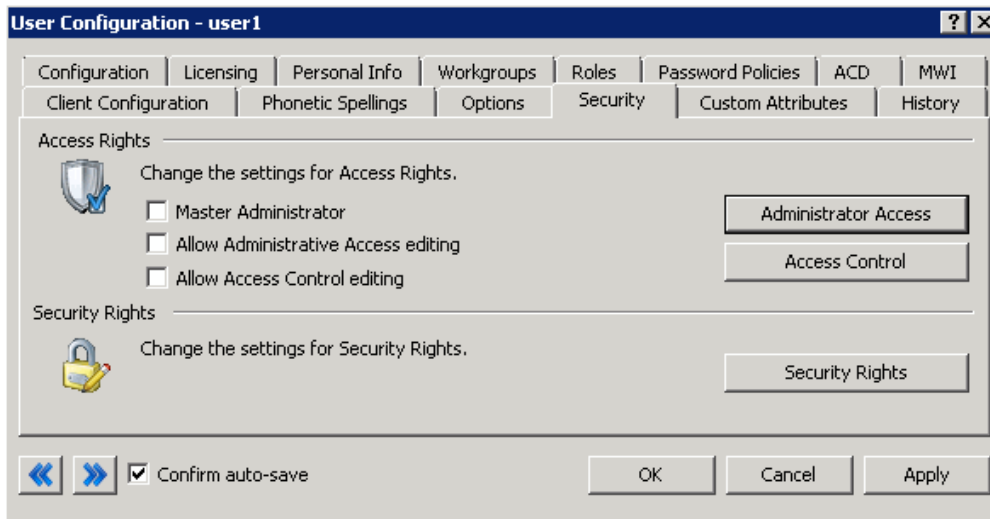
3. Click the **Access Control** button. The **Access Control** dialog appears.
4. Select Interaction Dialer from the Category box.
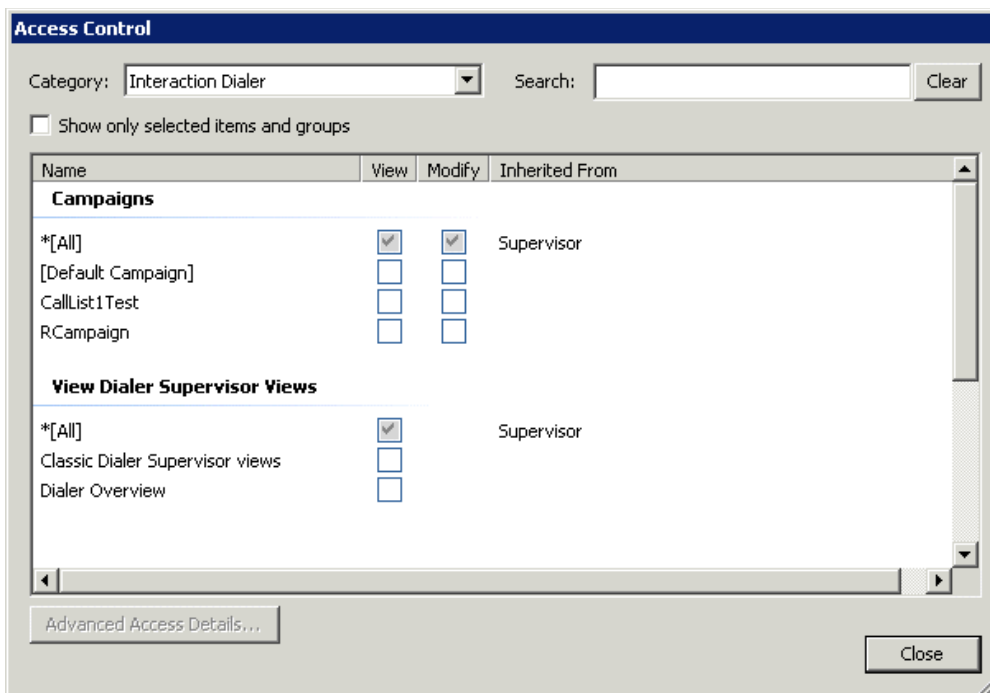
5. Check the **Campaigns** this user, role or workgroup should be allowed to view or modify in Interaction Dialer Manager.
6. Scroll down to the *View Dialer Supervisor Views* group. Check the **Interaction Supervisor views** that this user should be allowed to view in IC Business Manager.
7. Click **Close** to dismiss the *Access Control* dialog.
8. Click **Apply** to save changes to the configuration.

9. Click **OK** to dismiss the configuration dialog.

Related Topics

Dialer Access Control Rights

Dialer Security Rights

Dialer Security Rights

Security rights manage the functionality offered by client applications, including the ability to modify or view settings through an application. Dialer Security Rights appear in the Application Category and are divided into four groups in the Security Rights dialog box.

The four groups are:

Interaction Dialer

Interaction Dialer - Campaigns

Interaction Dialer - Global Dialer Settings

Interaction Dialer - Policy/Rule Sets

Related Topics

Setting Security Rights

Interaction Dialer

The rights in this table appear in the Interaction Dialer group.

Name	Description
Allow Agent Compliance Override	This right allows an agent, who is working from a Base script that uses the Follow Up Call feature, to be able to override a blocked number. There are more granular controls that a supervisor can use to configure individual overrides on the Scripts>Miscellaneous tab. **NOTE:** This right only applies when using the Follow Up Call feature.
Logon Campaign	This right permits the Interaction Scripter user, at login time, to select campaigns to participate in. Agents who do not have this right are logged into all campaigns automatically. This right can be inherited from Agent role.

	NOTE: For more information, see the Start Interaction Scripter .NET Client section in the *Interaction Scripter .NET Client Help*. See *Interaction Connect Help* if you are a user of Scripter in Interaction Connect.
Manually Transition to a Campaign Group	This right allows a user to be able to reconfigure a campaign sequence on the fly by providing access to the Manually Transition Campaign control on the Dialer Campaign Sequence Details view in C Business Manager. Without this right, users will only be able to view the campaign sequence. This right can be inherited from the Supervisor role. **NOTE**: This right only applies when the Advanced Campaign Management license is installed.
Modify Configuration General	Allows user to view and modify two specific settings on the General tab of Global Configuration Settings in Interaction Dialer Manager. The settings are: • Delay in seconds before auto-dispositioning a disconnect interaction • Pause a campaign when the database query failure rate exceeds Without this right, these settings are disabled but visible.
Modify Preview Call Behavior	Grants modify access to specific preview call settings on the General tab of Global Configuration Settings in Interaction Dialer Manager. The settings are: • If a Preview call fails to connect, play this file to the agent • If a Preview call encounters a busy signal, play this file to the agent This right can be inherited from the Supervisor role.
Run Contact List Predefined Actions	This right allows the user to perform the Predefined Actions from the Data Query section of a Contact List. The actions are: • Bulk Edit • Delete • Make Callable • Make Uncallable • Reset Attempts

	• Schedule Calls The View/Modify Contact List Data Query right is required to use the Run Contact List Predefined Actions right.
View Configuration General	Allows user to view, but not modify two specific settings on the General tab of Global Configuration Settings in Interaction Dialer Manager. The settings are: • Delay in seconds before auto-dispositioning a disconnect interaction • Pause a campaign when the database query failure rate exceeds
View Preview Call Behavior	Grants view access to specific preview call settings on the General tab of Global Configuration Settings in Interaction Dialer Manager. The settings are: • If a Preview call fails to connect, play this file to the agent • If a Preview call encounters a busy signal, play this file to the agent This right can be inherited from the Supervisor role.
View/Modify Contact List Data Query	Determines whether or not the Data Query tab of a Contact List object is visible or not. The Data Query tab queries the contact list to display a list of results in a data grid. Query results can be saved as filters. Users may also apply actions to records displayed in the grid, and commit changes back to the database. This right can be inherited from the Supervisor role.

Related Topics

Access and Security Rights

General tab

Predefined Actions

Data Query tab

Interaction Dialer - Base Scripts

The rights in this table appear in the Interaction Dialer - Base Scripts group.

Name	Description
Modify Base Script Compliance Overrides	When creating a Base script, this right allows a supervisor to be able to create a script that uses the Follow Up Call feature. More specifically, this right allows access to and the ability to set the various override options found on the Additional Calls section on the Miscellaneous tab in the Scripts container. **NOTE:** This right only applies when using the Follow Up Call feature.

Interaction Dialer - Campaigns

The rights in this table appear in the Interaction Dialer - Campaigns group.

Name	Description
Contact List Record Ownership Control	When several campaigns share a contact list, you can enable ownership of records from the Contact List>Campaign Ownership tab. This right allows a user to be able to release records that are currently owned by a particular campaign. Without this right, users will only be able to enable ownership of records.
Create/Modify Campaign Group	This right allows a user to be able to create and modify campaign groups on the Campaign Sequence tab in the Campaigns view. Without this right, users will only be able to view existing campaign groups. This right can be inherited from the Supervisor role. **NOTE:** This right only applies when the Advanced Campaign Management license is installed.
Modify Campaign Group Sequence	This right allows a user to be able to modify campaign sequences on the Campaign Sequence tab in the Campaigns view. Without this right, users will only be able to view existing campaign sequences. This right can be inherited from the Supervisor role. **NOTE:** This right only applies when the Advanced Campaign Management license is installed.
View/Modify Agentless Calling type	This right determines whether users can select Agentless dialing mode when setting the Calling mode for a Campaign. This right can be inherited from the Supervisor role.
View/Modify Automatic Time Zone Mapping	Grants right to check "Automatically map time zones and all child options in a Campaign object. Without this right, options are disabled. This right can be inherited from the Supervisor role.

	When granted, enables settings in the Dialer Line Information group box for a Campaign. Options in this frame configure Dialer to adhere strictly to CIC's Dial Plan, or to use one specific line group for campaign calls.
View/Modify Line Settings	
	This right can be inherited from the Supervisor role.
View/Modify Maximum Lines	This right determines whether the Maximum Lines per Campaign setting on the Basic Configuration tab of a Campaign is enabled or not.

This right can be inherited from the Supervisor role. |
| View/Modify Status | When granted, enables the Campaign Execution Panel for a campaign entry. Users who have this right can control the running state of a campaign, whether it runs in accordance with a schedule, or in a manually operated state. Users can also recycle the contact list, recycle the campaign, and test to ensure that campaign settings are valid. When not granted, these controls are disabled.

This right can be inherited from the Supervisor role. |

Related Topics

[Access and Security Rights](#)

[Campaign Execution Panel](#)

Interaction Dialer - Global Dialer Settings

The rights in this table appear in the Interaction Dialer - Global Dialer Settings group.

Name	Description
Modify Change Auditing	Grants right to modify Configuration Change Auditing settings under Global Dialer Settings. When enabled, auditing tracks configuration changes made.

This right can be inherited from the Supervisor role. |
| Modify HTTP Server | Grants right to modify HTTP Server settings under Global Dialer Settings. These settings are used to stream data in and out of a contact list table.

This right can be inherited from the Supervisor role. |
| Modify Outbound Dialer Servers | Grants right to modify settings on the Outbound Dialer Servers tab under Global Dialer Settings. The user can designate an ODS server to send notifications and e-mails when errors or outages occur, and can set threshold values for individual ODS servers, including Maximum Calls and Maximum Call Rate. |

	This right can be inherited from the Supervisor role.
Modify Phone Number Types	Grants right to modify Phone Number Types under Global Dialer Settings. Types are user-defined strings that can be associated with contact columns to identify a type of telephone number. Examples of phone number types might be "Work", "Home", or "Cell". This right can be inherited from the Supervisor role
View Change Auditing	Grants right to view Configuration Change Auditing settings under Global Dialer Settings. These settings are disabled if the user does not have this right. The Configuration Change Auditing feature tracks configuration changes made using Dialer Manager, or an API such as IceLib.Configuration.Dialer. This right can be inherited from the Supervisor role.
View HTTP Server	Grants right to view HTTP Server settings under Global Dialer Settings. These settings are used to stream data in and out of a contact list table. Options on the HTTP Server tab are disabled when this right is not granted.
View Outbound Dialer Servers	Grants right to view the Outbound Dialer Servers tab under Global Dialer Settings. The user can see which ODS server has been selected to send notifications and e-mails when errors or outages occur. When this right is not granted, options on the tab are disabled. This right can be inherited from the Supervisor role.
View Phone Number Types	Grants right to view the Phone Number Types tab under Global Dialer Settings. Types are user-defined strings that can be associated with contact columns to identify a type of telephone number. Examples of phone number types might be "Work", "Home", or "Cell". When this right is not granted, options on the tab are disabled. This right can be inherited from the Supervisor role.
View/Modify Data Connections	Grants right to view and modify Database Connections in Dialer Manager. When this right is not granted, Database Connection options are disabled. This right can be inherited from the Supervisor role.
View/Modify DNC Sources	Grants right to view and modify the DNC Sources view in Dialer Manger. A DNC Source provides a list of telephone numbers that should not be dialed. When this right is not granted, DNC options are disabled. This right can be inherited from the Supervisor role.

	Grants right to view and modify the Timezone Map Data view in Dialer Manger. A time zone map is a file that associates the initial digits of a phone number (area code and exchange in North America, for example) with a time zone. When this right is not granted, options on the view are disabled.
View/Modify Time Zone Map Data	
	This right can be inherited from the Supervisor role.

Related Topics

[Access and Security Rights](#)

[Setting Security Rights](#)

[Configuration Change Auditing](#)

[HTTP Server](#)

[Outbound Dialing Servers](#)

[Phone Number Types](#)

[Database Connections view](#)

[DNC Sources view](#)

[Timezone Map Data view](#)

Interaction Dialer - Policy/Rule Sets

The rights in this table appear in the Interaction Dialer - Policy/Rule Sets group.

Name	Description
Lock Policy Sets	Determines whether or not a user can check the "Locked" check box option for a Dialer policy object, preventing it from being modified, removed, or unlocked by anyone who does not have Master Administrator rights.
	Once a policy is locked, users who are not Master Administrators can view the policy, but they cannot remove or edit it until a Master Administrator removes the lock. Locked policies can be assigned to a campaign, but they cannot be removed from a campaign without Master Administrator rights.

View/Modify Custom Handler Actions	Grants right to run the Dialer_RuleActionEvent handler by setting up a Rule Action or Policy Behavior. A user who does not have this right cannot modify settings that configure a Run Handler rule action. This right can be inherited from the Supervisor role.
View/Modify Event Log	Grants right to configure Rule Set Actions or Policy Set Behaviors that write an event log entry. This right can be inherited from the Supervisor role.

Related Topics

Access and Security Rights

Setting Security Rights

Run handler

Write Event Log Entry - Rule Set Actions

Event Log Message behavior type - Policy Set Behaviors

Setting Security Rights

To set Security Rights:

1. Open a user, role, or workgroup configuration record in Interaction Administrator.
2. Select the **Security tab**.
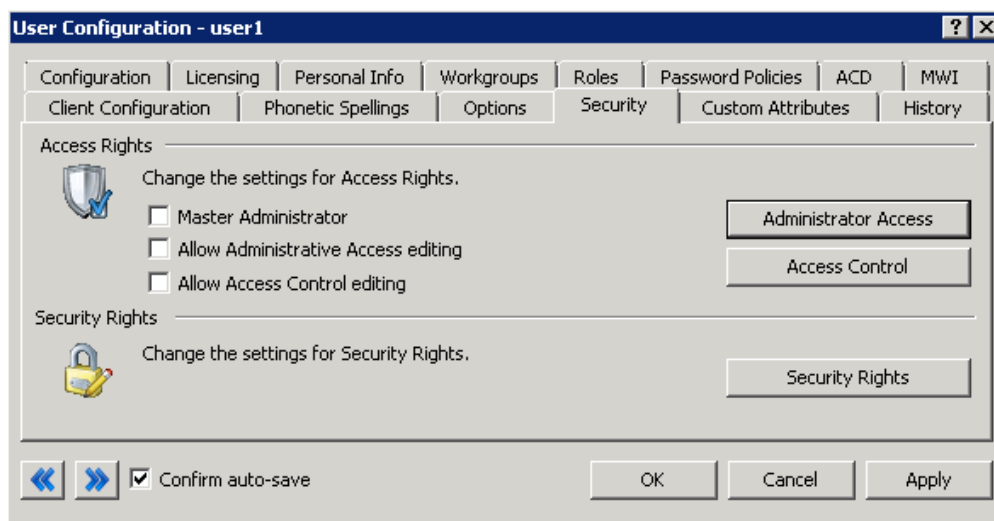
3. Click the **Security Rights** button. The Security Rights dialog appears. By default, <All> categories is selected to display rights in all categories. You can optionally locate rights by typing in the *Search* box.

4. Select **Application** from the *Category* drop down and scroll down to the Interaction Dialer section.
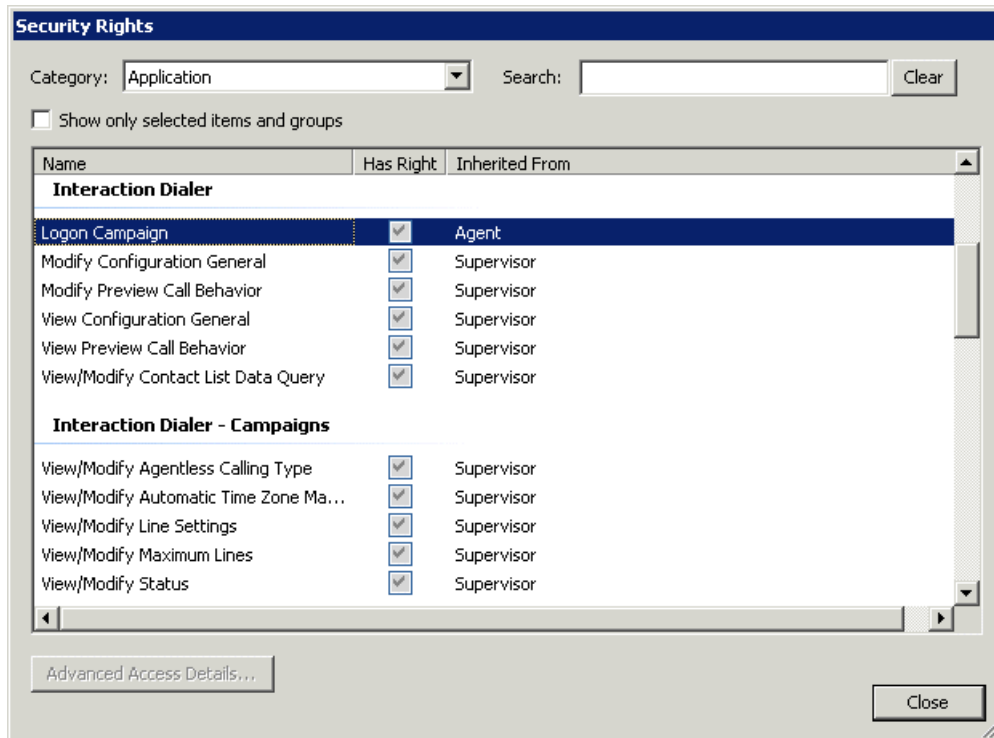
5. Select the check box for each security right you wish to assign.
6. Click **Close** to dismiss the *Security Rights* dialog.
7. Click **Apply** to save changes to the configuration.
8. Click **OK** to dismiss the configuration dialog.

Related Topics

Dialer Security Rights

Dialer Licenses

Dialer Licenses

This section is for CIC Administrators who manage user access to Interaction Dialer. It describes Dialer features licensed at the server level.

Interaction Dialer is fully compliant with CIC's application server license model. Each CIC/Dialer server has a production license that enables use of purchased features. An individual user's access to

Interaction Dialer is governed by server license allocation and by the assignment of security and access control rights in Interaction Administrator.

> **NOTE**: A Dialer server can be configured to be either an Outbound Dialer Server (ODS) or a Manual Calling Server (MCS) depending on which license you purchase and load. See the Dialer Feature Licenses for more information.

- CIC System Administrators order or update server license files using the License Management system at the Genesys license management site. This is always done before installation of add-on software such as Interaction Dialer.
- e server license on each ODS/MCS governs the operational availability of Interaction Dialer and Interaction Scripter. Customers can mix and match any combination of Interaction Dialer and Interaction Scripter for which they have purchased a license. Your authorized reseller can provide details concerning product pricing and applicability.
- Interaction Administrator is the application used by CIC Administrators to manage licenses on the CIC Server and to flexibly allocate those licenses.

Concurrent license allocation

Interaction Dialer uses the concurrent license allocation method, which allows you to allocate licenses to users only and is based on the number of simultaneous users accessing a feature or function. This license method allows users to acquire available licenses during logon instead of based on configuration. In the Concurrent license model, the license still gets configured through the Interaction Administrative interface but the big difference is the license is not allocated until the user logs on to their application. CIC maintains a list of users, and licenses available and in use.

The Concurrent license allocation method offers:

- Flexibility and easier administration.
- Automatic reallocation of licenses based on shift changes.
- Reduction in license counts and management.

License Types

The PureConnect platform supports many types of licenses, but feature and access licenses are most important to Dialer Administrators.

Feature Licenses

Dialer feature licenses determine whether or not Interaction Dialer administration options are visible, enabled, or disabled in CIC administration consoles such as Interaction Administrator.

Access Licenses

Features licensed by user, station, or both (based on the feature) are referred to as Access licenses.

> **NOTE:** Power and Predictive Campaigns use the CIC ACD Server Subsystem. As such, Dialer agents must have an ACD Access License in order for Dialer to be able to route calls to those agents. For more information see *PureConnect Licensing Technical Reference* in the PureConnect Documentation Library.

Dialer Access Licenses

Features licensed by user, station, or both (based on the feature) are referred to as *Access* licenses. Access licenses are assigned using the Licensing tab in Interaction Administrator:
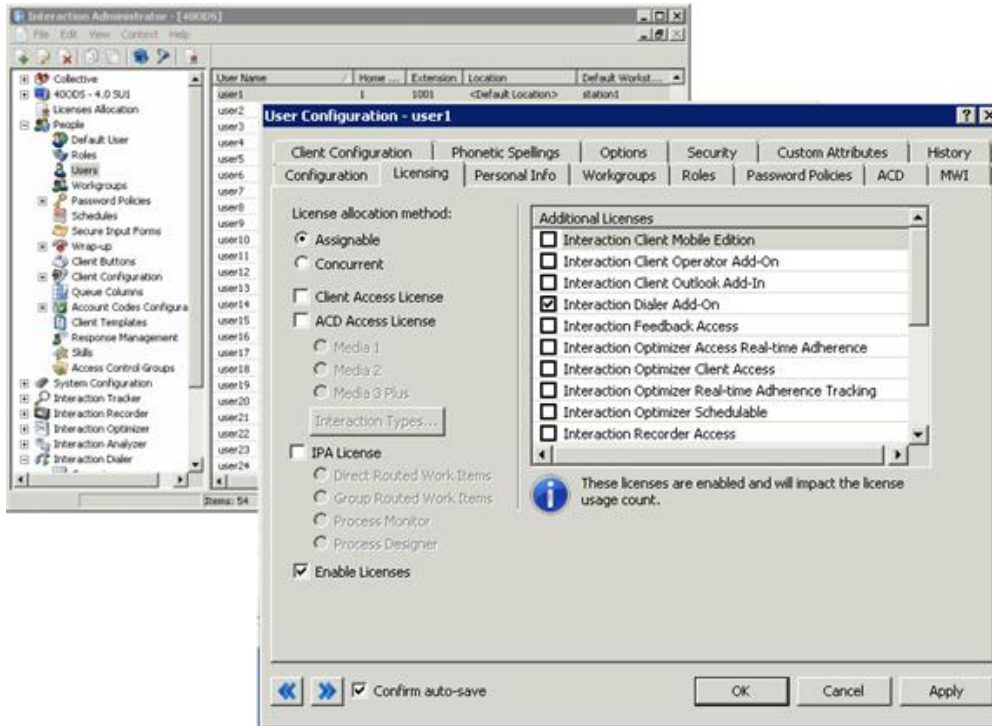
Dialer Access License	Description
Interaction Dialer Add-On	Allows an Agent to login to Interaction Dialer using Interaction Scripter or a custom application created using Dialer IceLib API. The Interaction Dialer Add-On license and the Interaction Scripter license are both required for an agent to run Scripter in Interaction Connect.
Interaction Scripter	Assign this license to persons who use Scripter in Interaction Connect or Interaction Scripter .NET Client. This license allows Dialer agents to logon to any campaign running custom or base scripts. This license is also required to run Scripter in inbound-only environments. Without this license, an Agent cannot run base or custom campaign scripts in Interaction Scripter. The Interaction Dialer Add-On license and the Interaction Scripter license are both required for an agent to run Scripter in Interaction Connect.
Interaction Supervisor Plug-In: Interaction Dialer	Authorizes access to Interaction Dialer views in Interaction Supervisor, a module of IC Business Manager.

> **IMPORTANT:** Power and Predictive dialing modes use CIC's ACD subsystem to route calls. If agents do not have an **ACD Access License**, Dialer will not route calls to those agents. To receive calls in Predictive or Power Dialing modes, your agents must have an ACD Access License assigned to them. Specifically, in Interaction Administrator, the **ACD Access License** box must be checked on the Licensing tab of a user configuration. Additional information about licensing is available online at http://license.inin.com.

Dialer Feature Licenses

Dialer Feature Licenses

Features and functionality which are licensed per server are referred to as feature licenses. Each CIC server has a base server license with add-on server features that can be purchased as a package or individually. You turn on features and functionality on each server with the server feature licenses.

To enable Interaction Dialer, you will purchase one of two server feature license packages. The one that you choose will depend on how you are planning on using the system.

- MCS/ODS Feature License - If you are planning on using Interaction Dialer to *only* make manual calls you will purchase the Manual Calling Server (MCS) feature license.
- Advanced Campaign Management Feature License - If you are planning on using Interaction Dialer as an automated dialing system, you will purchase the standard Outbound Dialing Server (ODS) feature license.

Once you have enabled Interaction Dialer as either a Manual Calling Server or an Outbound Dialing Server, you can choose to configure how you want to process campaigns. By default, Interaction Dialer will process a campaign as a whole entity based on a set of static campaign properties that stay the same for the duration of the campaign. However, if you would prefer to run a more dynamic campaign, one that automatically modifies its properties throughout the day as conditions change, then you will want to install the Advanced Campaign Management feature license.

Related Topics

Dialer Licenses

MCS/ODS Feature License

When Manual Calling Server (MCS) or the Outbound Dialing Server (ODS) feature licenses are present, they are visible when you select License Management from the File menu in Interaction Administrator.

The Manual Calling Server feature license has a single license key:
I3_FEATURE_MANUAL_CALL_ONLY_SERVER.
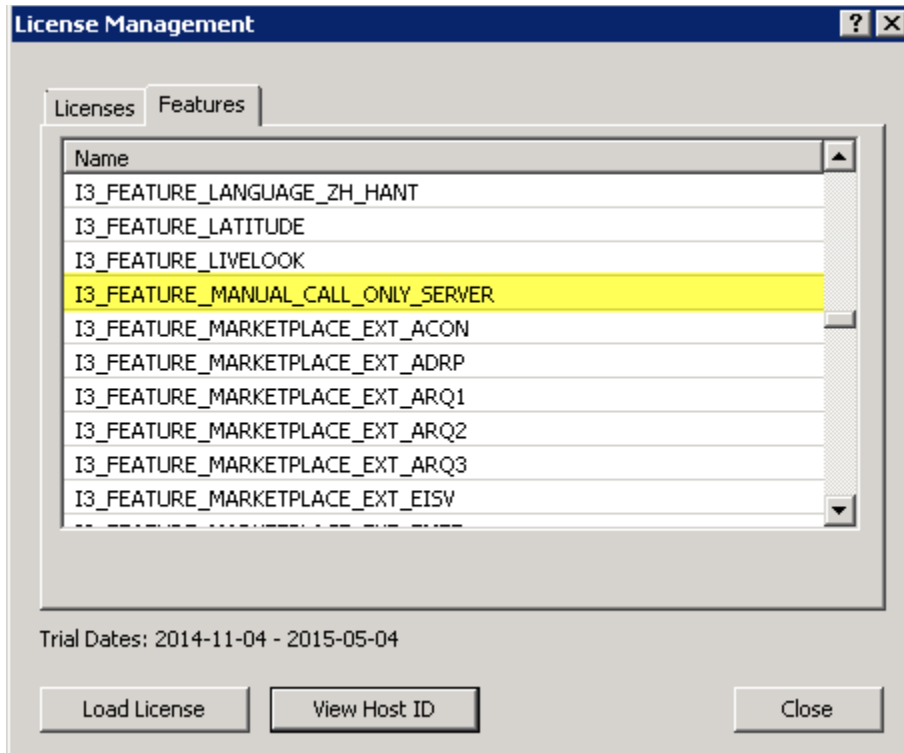
The Outbound Dialing Server feature license actually has two license keys: I3_FEATURE_DIALER_BASE and I3_FEATURE_DIALER_ADVANCED.
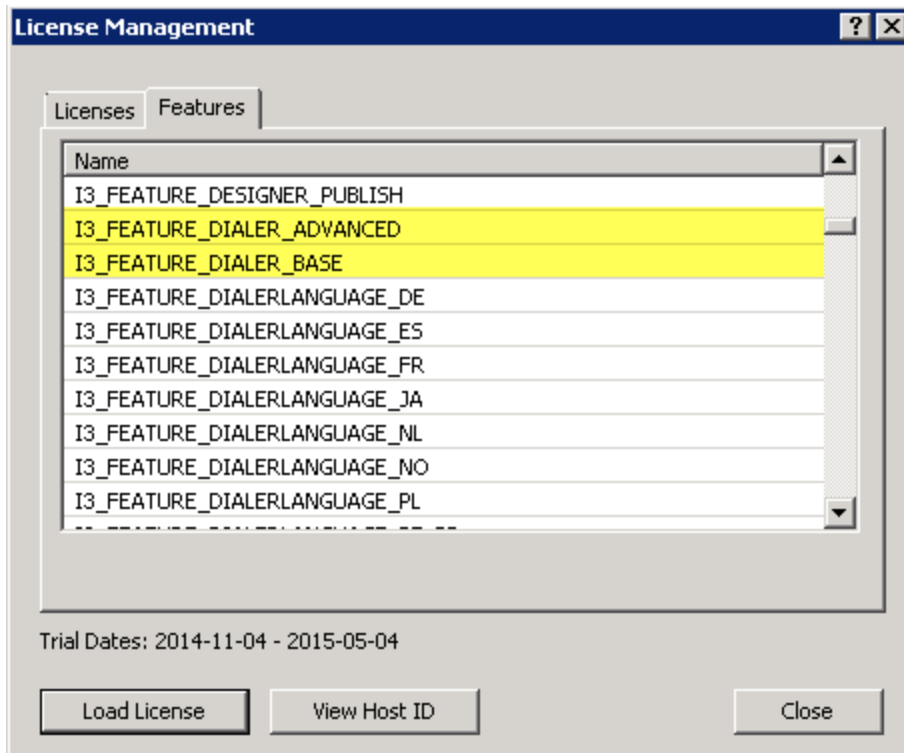
This table indicates which Dialer options are available with each of these feature licenses.

Dialer options	Manual Calling Server Feature License	Outbound Dialing Server Feature License
Dialer administration options in Interaction Administrator	Yes	Yes
Rule Sets	Yes	Yes
Policy Sets	Yes	Yes
Predictive Calling Mode	No	Yes
Power Calling Mode	No	Yes
Precise Calling Mode	No	Yes
Agentless Calling Mode	No	Yes
Preview Calling Mode	Yes*	Yes

* While all the Calling modes are available for selection when using the Manual Calling Server Feature License, the Preview Calling Mode is the only mode that will actually function. Furthermore, the Preview Countdown feature is not supported under the Manual Calling Server Feature License.

Note: The Manual Calling Server and the Outbound Dialing Server feature licenses are mutually exclusive. In other words you can only have one feature license installed at a time. Furthermore, these feature licenses are NOT transposable. For example, you CAN NOT replace the Manual Calling Server feature license with the standard Outbound Dialing Server feature license.

Related Topics

Dialer Licenses

Advanced Campaign Management Feature License

When the Advanced Campaign Management feature license is present, it will be visible when you select License Management from the File menu in Interaction Administrator.

The Advanced Campaign Management feature license has a single
Key: I3_FEATURE_ADVANCED_CAMPAIGN_MANAGEMENT
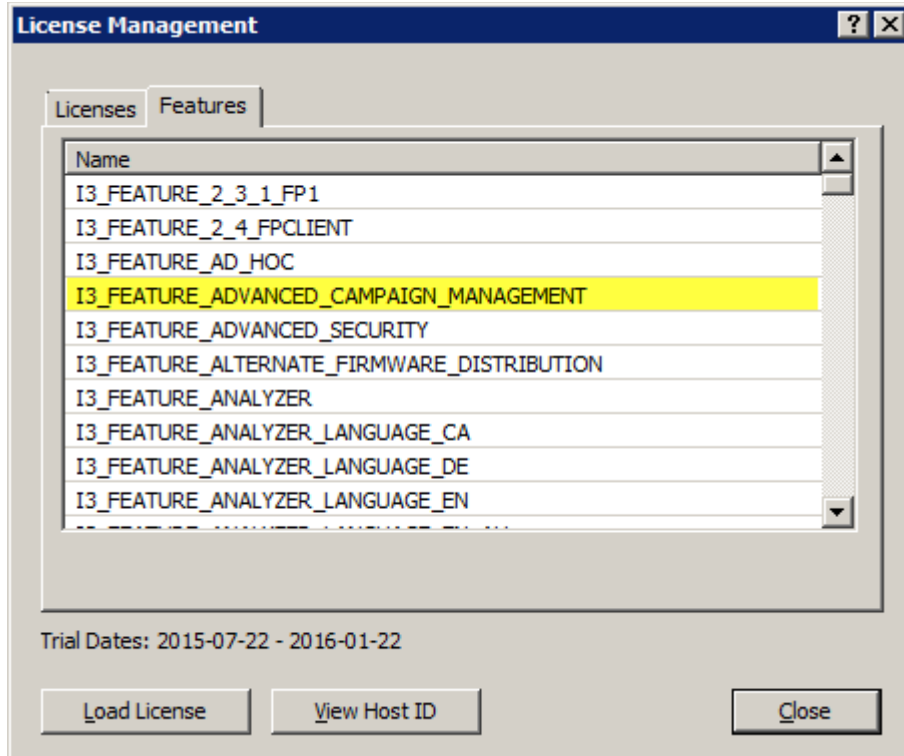
When the Advanced Campaign Management feature license is installed, you will have access to additional functionality in Interaction Dialer. On the Campaigns view in Interaction Administrator, you will find a new tab titled Campaign Sequence. In IC Business Manager>Interaction Supervisor, you will find a new view titled Dialer Campaign Sequence Details.

Related Topics

Dialer Licenses

Dialer in IC Business Manager

Dialer in IC Business Manager

This section describes the features that Interaction Dialer adds to IC Business Manager's Interaction Supervisor component. You'll use the information in this section to learn how to monitor every aspect of an active campaign.

In addition to the Interaction Supervisor component, IC Business Manager hosts Interaction Dialer Administrator, which provides an identical set of configuration controls as found in Interaction Administrator's Dialer container.

Related Topics

Dialer Views

Dialer Views
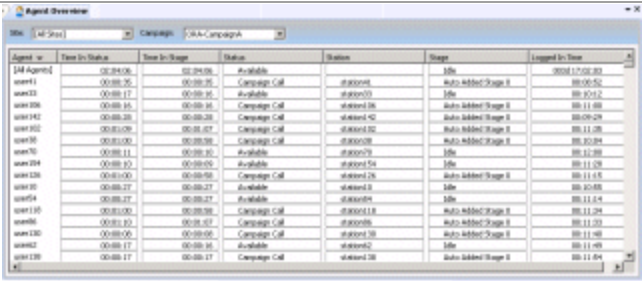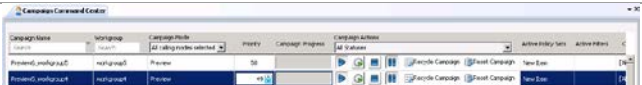
Dialer Views

Interaction Dialer's tight integration with CIC makes it easy for contact center supervisors to use Interaction Supervisor to view campaign statistics in real-time or run reports that summarize call activity and many other metrics.
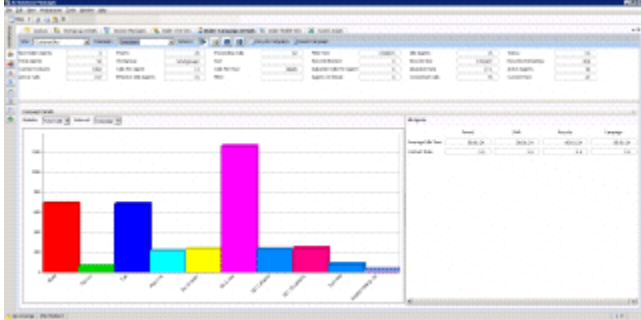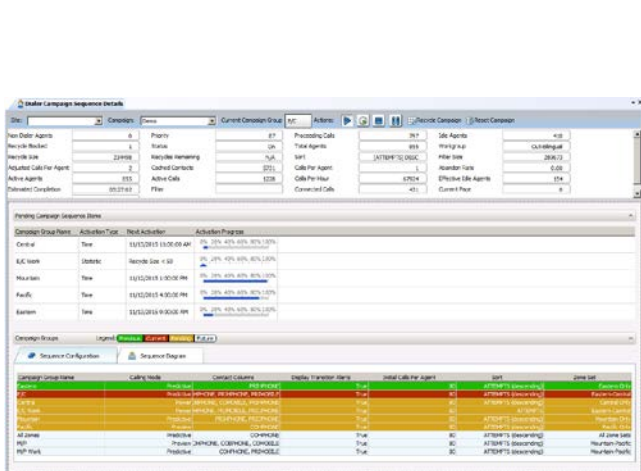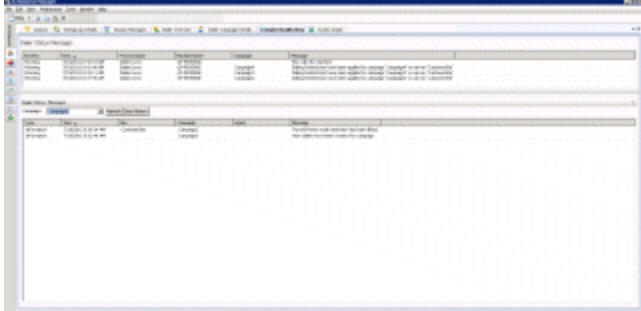
Interaction Supervisor, a module in IC Business Manager, is CIC's real-time performance monitoring system. Interaction Supervisor displays metrics and sends notifications when user-defined thresholds are reached. It satisfies the demanding requirements of executives, supervisors, managers, and IT professionals who need immediate operational information and automatic notification when special events occur.

Views reveal what's going on in a contact center or business, by monitoring an assortment of entities, including Dialer campaigns and agents, queues, processes, and the health of Outbound Dialing Servers. Each view displays a general class of statistics. You can customize a view to include or exclude data items, and set alerts that notify of events triggered by statistical changes.
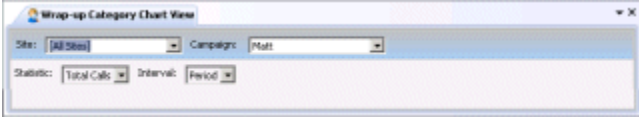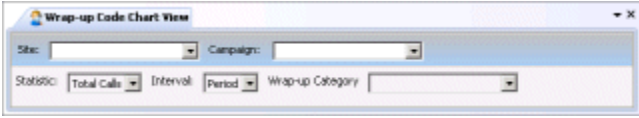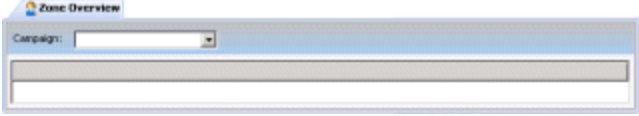
Supervisor views indicate the performance of workgroups and activity in their associated queues, by displaying average wait times, talk times, calls currently in queue, and many other metrics. Since Supervisor is event-driven, its information is always up-to-date. Alerts enhance Interaction Supervisor's ability to report real-time information. An alert notifies when a statistic enters a user-defined threshold, is within bounds, or is no longer within a range of values. Alerts are immensely useful to contact center supervisors.

Installation of Interaction Dialer adds additional views to IC Business Manager. Views in the Interaction Dialer category include:

Icon	View Details	Appearance
	Agent Overview Statistical information for Dialer Agents broken down by Dialer campaigns.	
	Campaign Command Center	

	This view displays a roll-up of campaigns and their status. It allows an administrator to sort and filter the campaigns displayed in the view, alter the campaign's priority, and even start, stop, pause, recycle, or reset a campaign.	
	Dialer Campaign Details Shows detailed statistics about a campaign.	
	Dialer Campaign Sequence Details View Shows detailed information on the status of the campaign sequence as well as provides a way to manually transition campaigns. Note: In order to access the Dialer Campaign Sequence Details view, the Advanced Campaign Management feature license must be installed.	
	Dialer Health View Shows the health and status of campaigns and Interaction Dialer in general.	

	Dialer Overview Shows statistics and an overview of the Dialer campaigns and their agents.	
	Dialer Real-time Agent Management This view makes it easy for Call Center Supervisors to move or remove logged on Agents from a Campaign if they are logged on without Login Campaign Security rights.	
	Penetration Rate view Gives detailed information about Dialer penetration rates.	
	Phone Number Type Overview Displays Phone Number Type summary statistics for the site, campaign and interval selected.	
	Skill Overview Statistics broken down by skill per each Dialer campaign.	
	Stage Overview Displays overview statistics for Stages for a specific Dialer campaign, site and agent.	

	Wrap-up Category Chart View Shows wrap-up category statistics in a chart.	
	Wrap-up Code Chart View Shows wrap-up code statistics in a chart.	
	Zone Overview Displays callable records grouped by time zone.	

Alerts

When an alert becomes active, it can play a sound, change the color of text or an icon, send an E-mail, start a custom handler or display a Supervisor message. The *Interaction Supervisor Help* provides comprehensive background information about alerts and procedures for setting them. To open this help system in IC Business Manager, select **Interaction Supervisor** from the **Help** menu. Then click **Manage Alerts** in the help table of contents.
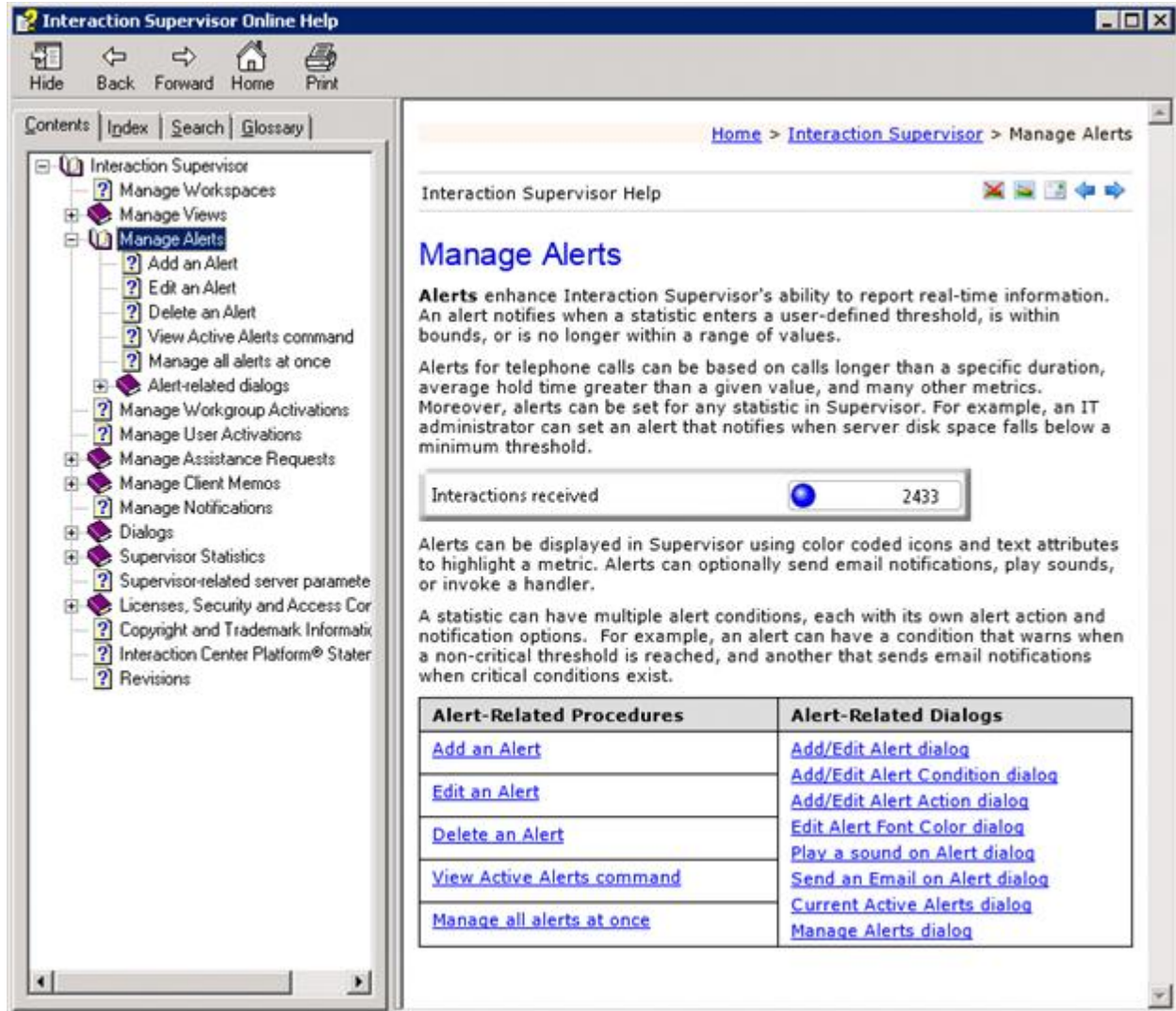
Related Topics

Add a Dialer view in IC Business Manager

Add a Dialer view in IC Business Manager

1. Start IC Business Manager and logon.
2. Select an existing workspace from the **Workspaces** tab, or create a new workspace to host the view.
3. Select **New** > **View** from the **File** menu. The *Create New View* dialog appears, listing views by category or product.
4. Select **Products** from the *Group By* drop list. Then click **Interaction Dialer**. A list of Dialer views appears in the list on the right.
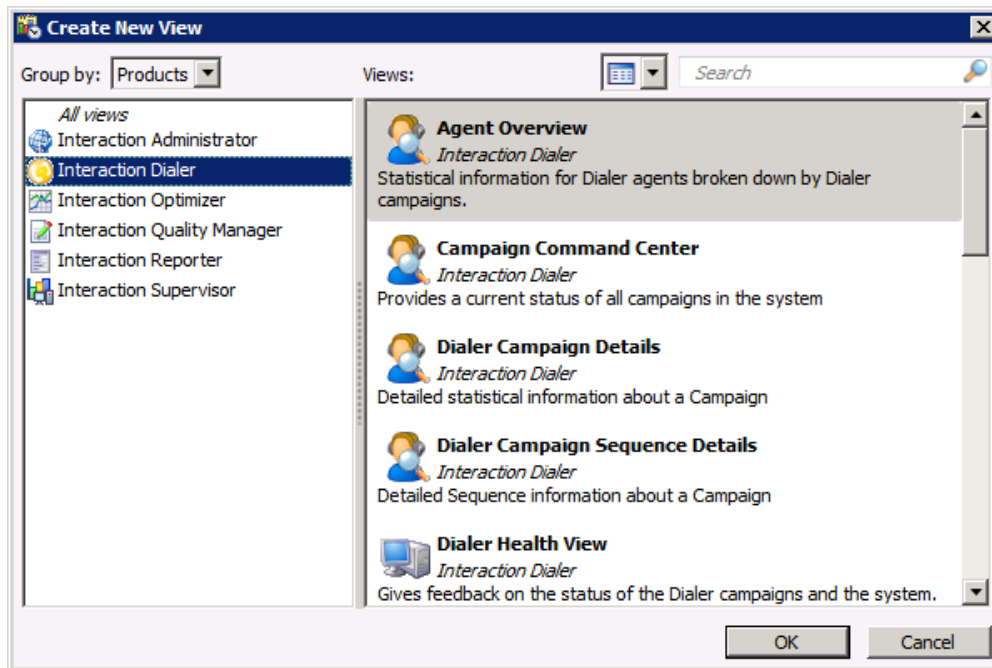
5. Select a view to add by clicking an item in the *Views* list.
6. Click **OK**.
7. If the view requires parameters to be set, other dialogs appear at this time to prompt for view settings.
8. When you finish selecting parameters, the view will appear in the workspace.

Views are automatically disabled if the connection with CIC server goes down for any reason. A 'spinner' cursor is shown in all Supervisor views, indicating that no data is being received. Views are automatically enabled once the connection is restored.

The *Interaction Supervisor Help* for IC Business Manager explains how to work with views and alerts. To open this help system in IC Business Manager, select **Interaction Supervisor** from the **Help** menu.

Agent Overview

The **Agent Overview** compares the performance of multiple agents across sites and campaigns. This view displays the current activity of agents, such as each agent's current status, current stage, time in status, and other Dialer Agent Statistics, such as time in stage. As with most views, you can click a column header to sort by that column.

View Options

Site

> This control allows you to select agents from a single ODS server, or all sites. The view is automatically updated when you make a selection.

Campaign

> This control changes the currently monitored campaign. When clicked, it displays a drop list of campaigns to choose from. The view is automatically updated when you make a selection.

Shortcut Menu Commands

Shortcut menu items appear if you right-click a data row in the grid.

Edit alerts…

> Adds or edits an alert. An alert notifies when a statistic is in or out of a chosen range, based on statistical items or values on the CIC Server. An active alert can change the color of the display, play a wave file, display an icon in your system tray, send electronic mail, or invoke a handler.

> Selecting this shortcut command opens the *Edit Alerts* dialog, which is customized for the type and combination of statistics currently selected.

Add/Remove statistics...

Opens a dialog allowing the selection of statistics in the current view to be changed.

Campaign Command Center

Campaign Command Center

The Campaign Command Center view displays a list of all your campaigns and their status. It allows an administrator to filter and sort the campaigns displayed in the view, alter the campaign's priority, as well as the ability to change a campaign's status. To make this possible, the Campaign Command Center view employs a number of features.
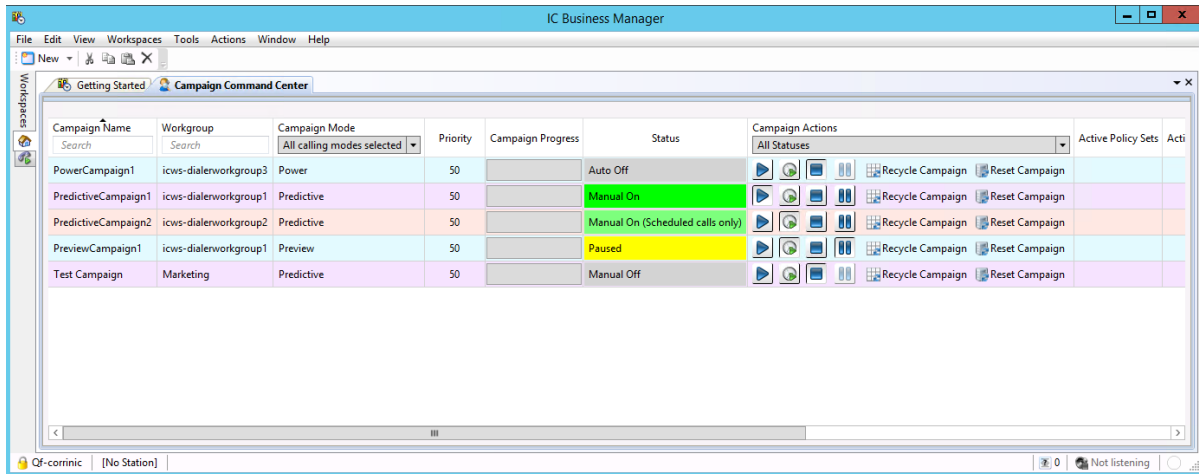
Campaign Name

> This column displays the name of each campaign.

Workgroup

> This column displays the name the workgroup.

Campaign Mode

> This column displays the dialing mode that determines how contacts are dialed.

Priority

> This column displays the campaign's current priority setting. (See Changing Priority)

Campaign Progress

> This column displays a progress bar that indicates overall campaign progress. Progress is calculated by subtracting from 100% the number of recycle items remaining divided by the number filter items.

Status

> The current status of each campaign is listed in the Status column and is color coded to make it easy to identify the various status' at a glance. (See Checking Status)

Campaign Actions

> In the Campaign Actions column, you'll find a set of buttons that will allow you control the execution of a campaign. (See Changing Campaign Status)

Active Policy Sets

List of Policy Sets assigned to the campaign that are enabled. A Policy Set is a top level Dialer object composed of one or more contact policies. A policy is a per-contact rule. Contact policies provide low-level control over the processing of individual contact records. A policy is made up of conditions and behaviors. Conditions determine when the policy applies. Behaviors define the work performed when a policy condition is true.

Active Filters

List of Filters assigned to each campaign. Filters are predefined SQL statements that select a subset of records to process from a contact list.

Contact Columns

List of columns in the campaign's contact list that contain telephone numbers.

Active Rule Group

This column lists the Rule Group that is currently active. Rules evaluate a statistic, time, or event to determine whether to carry out an Action that affects the processing of a campaign. Rule Groups identify subsets of rules in a Rule Set that can be activated (turned on or off) together by an action.

Active Agents

The number of agents who are currently active in a campaign. This number corresponds to the number of agents that are logged on and not on break.

Recycle Contacts Remaining

The number of contacts left in the current recycle for this campaign. This value indicates the number of records in the Contact List that must be processed before the list is recycled. In other words, this is the number of phone calls that must be placed before the next recycle of the Contact List can occur. This number will decrease as the numbers of calls placed for the current recycle increases. This includes only records that are callable when considering both the active Filter and the Zone Set associated with the campaign.

Recycles Remaining

The number of recycles that need to be carried out in order for the campaign to complete. The maximum number of recycles is configured for each campaign and dictates how many times the dialer will go through the list before completing or moving on to the next campaign. If a campaign is configured to recycle indefinitely then the remaining recycles statistic is not used; the dialer will continually reprocess contacts from the list.

NOTE: When you are viewing your existing campaigns, you need to be aware that the Campaign Command Center is unable to display more than 200 campaigns at any one time. If

you have more than 200 campaigns, you can use the <u>filtering and sorting features</u> built into the Campaign Command Center to reduce the size of and reorganize the campaign list.

Related topics

<u>Filtering and Sorting</u>

<u>Changing Priority</u>

<u>Checking Status</u>

<u>Changing Campaign Status</u>

Sorting and Filtering

If you have a multitude of campaigns listed in the Campaign Command Center view, it can be difficult to find the campaign(s) you are looking for. To make it easier to pinpoint a particular campaign or a set of campaigns, the Campaign Command Center provides you with a number of features for sorting and filtering the list of campaign. The sorting feature allows you to reorganize the campaigns that display in the view and the filtering feature allows you to reduce the number of campaigns that display in the campaign list.

Sorting

You can sort by any column in the Campaign Command Center by clicking the column header.

1. When select a column header, an arrow appears in the column header that indicates whether the sort in ascending or descending order.
2. To make the campaigns in a sorted list even easier to discern, the Campaign Command Center groups the results in color coded rows.

For example, if you sort by Campaign Mode, you'll see that all of the rows containing a particular campaign mode, such as Predictive, are highlighted with the same color in the list. If you sort by Priority, all of the rows containing the same priority will be highlighted in the same color. This sort enabled color coding applies to the all columns in the Campaign Command Center.

Filtering

There are five columns on which you can filter the list of campaigns and two types of filters. When you use any one of these filters individually, you hide all campaigns except those that match your selection. When you combine any of the filters, you can create more refined views of the campaign list.

If you enter keywords in two or more text boxes or select items from the two drop-down lists, you can broaden the view to include all campaigns containing any of the keywords/items or all of them. If you enter a keyword into a text box and select an item from a drop-down list, you can narrow the search to include only those campaigns that contain both the keyword and the item.

Text box filters

A text box filter provides you with a text box into which you can type any relevant keyword text you want. The following column headers contain text box filters:

- Campaign Name
- Workgroup
- Active Rule Group

Drop down filters

A drop down filter provides you with a drop-down list from which you can select a specific keyword item. The Campaign Mode and Campaign Actions column headers contain drop-down filters:

- Campaign Mode
    - All calling modes selected
    - Agentless
    - Power
    - Predictive
    - Preview

- Campaign Actions
    - All Statuses
    - Active Campaigns
    - Inactive Campaigns
    - Paused Campaigns
    - Unpaused Campaigns
    - Schedule Only Campaigns

Changing Priority

The Priority column not only displays a campaign's current priority setting but also allows you to alter the campaign's priority.
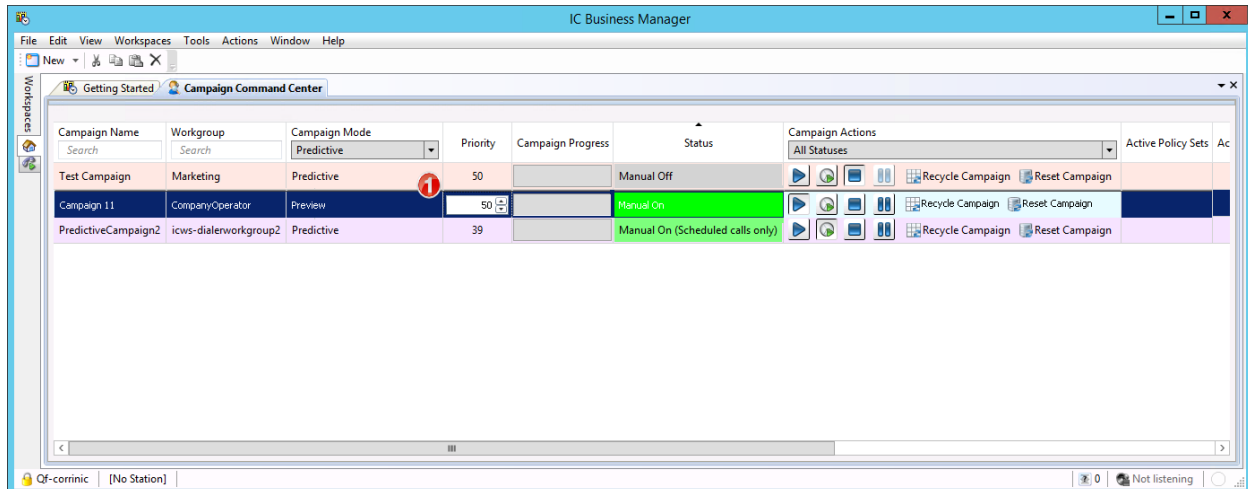
To alter a campaign's current priority setting, double click in any cell in the Priority column (1) to activate the edit capabilities. Then, type or select a new value.

Checking Status

Each campaign's current status is listed in the Status column and is color coded to make it easy to identify the various status' at a glance.
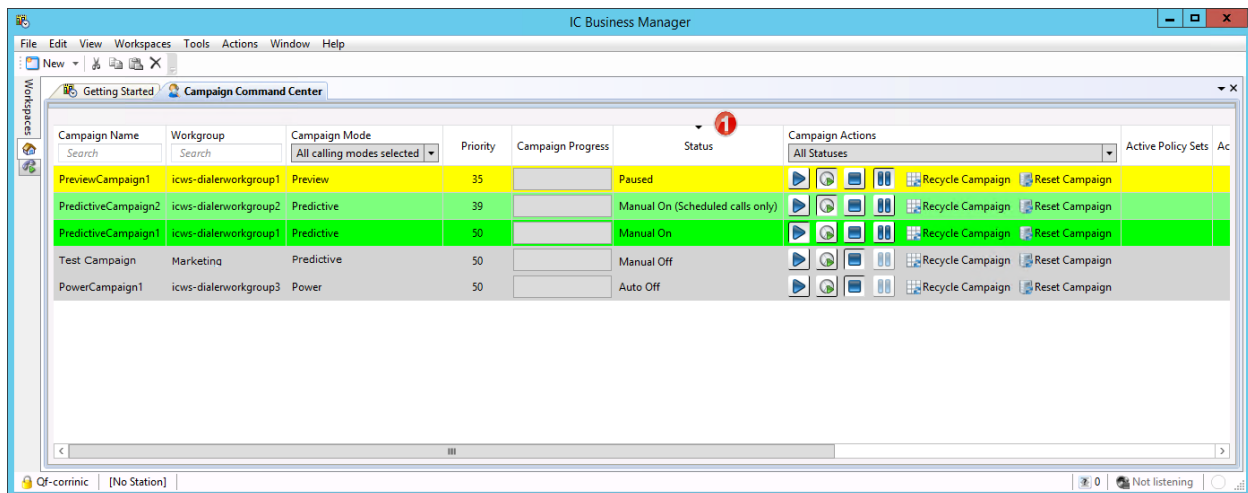
- The Status field for campaigns that are in an On status are Green
- The Status field for campaigns that are paused are Yellow.
- The Status field for campaigns that are in an Off status are Grey.

When you sort by the Status column (1), the entire row takes on the Status color.

Changing Campaign Status

In the Campaign Actions column, you'll find a set of buttons that will allow you control the execution of a campaign. As described in the table, these buttons will allow you to start, stop, pause, recycle, or reset a campaign.

Button	Action	Description
	Start	Turns on the campaign.
	On for Scheduled Calls Only	Turns on the campaign for scheduled calls only and only places agent-scheduled calls. Ignores the campaign schedule. • Auto-scheduled calls are not placed. • Priority dials are still made. • No regular calls are placed. • When this campaign state is switched to, any cached contacts that the campaign will no longer call (regular calls, queued precise calls) are flushed from the cache back to the database.
	Stop	Stops outbound dialing once the cache is empty. Ignores the campaign schedule. If you stop a campaign (by selecting Stop), rather than by clicking Pause, agents must log on when the campaign is restarted by clicking this button again. If you click the Pause button, you can resume the campaign by clicking Pause again, and agents won't need to log on. Outbound calling will resume once agents change to available status.
	Pause/Resume	Temporarily stops all outbound dialing activity for the campaign. All active calls complete, but no new calls are generated. This command is used to temporally halt a campaign without requiring agents to log back in once processing resumes. When a campaign is Paused, no calls are placed, but the record cache is maintained. To resume the campaign, press Pause again. Agents will not need to log on when the campaign resumes.
	Recycle Campaign	Recycle refers to the process of restarting the call selection process at the beginning of the contact list. This can happen automatically after all records are processed or manually in response to a Reset Campaign command. A recycle period is the time that Interaction Dialer needs to process all records in a contact list.
	Reset Campaign	Resets a running campaign, The contact list will be processed from the top to reach parties that were not contacted in a previous pass. If major settings have been changed (DSN, Sorting or Filters, and so on), the campaign is reset and restart with the new configuration. This command also sets the count of recycles back to zero.

Dialer Campaign Details

Dialer Campaign Details view
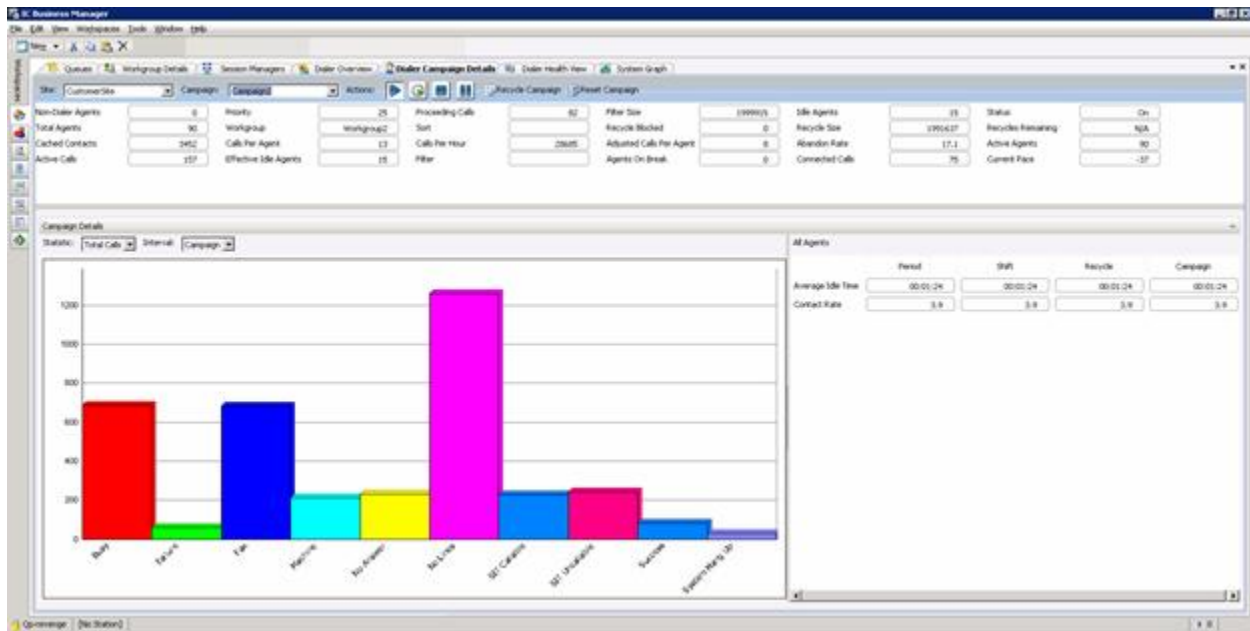
This view displays operational statistics about any single campaign, a configurable graph of campaign details, and live information about agents by period, shift, recycle and campaign. Presented are statistics per campaign including agent rollup statistics and Wrap-up Category summary statistics.

Campaign Performance Statistics

Statistics at the top of the view are updated in real-time to indicate the overall performance of the campaign. See Dialer Campaign statistics for information about these statistics. Site and Campaign drop lists work together to allow selection of a single campaign to report on. A set of campaign execution controls make it easy to change the state of a campaign. For example, you can Start, Stop, or pause a campaign from this view, without having to open a campaign configuration in Interaction Dialer Manager.

Campaign Details Graph

The graph displays Dialer wrap-up statistics once you select a statistic (total time, total calls, percent calls, average time, or percent time) and an interval (period, shift, recycle, or campaign).

Agent Statistics

The lower right section part of the view displays Dialer agent statistics for all agents. You cannot display statistics for a single agent, since the view is scoped to summarize the overall status of the campaign and site.

Interval Definitions

In several of the Dialer views in IC Business Manager, you can select an Interval, which specifies the length of time for the collection of statistics. An interval can be measured as Period, Shift, Recycle, or Campaign.

Period

Any user-defined interval delimited by specific start and stop times.

Shift

An interval defined in Interaction Administrator to represent a standard work day.

Recycle

An interval defined by the amount of time that has elapsed between when the Contact List was last recycled and the present.

Campaign

An interval defined by the amount of time that has elapsed between when the active campaign began running and the present. While Recycle can be designated as an Interval, it actually refers to the process of restarting the call selection process at the beginning of the contact list. This can happen automatically after all records are processed, or manually in response to a Reset Campaign command. A Recycle period is the time that Interaction Dialer needs to process all records in a contact list.

Dialer Campaign Sequence Details View

Dialer Campaign Sequence Details View

If you have installed the Advanced Campaign Management feature license, you'll have access to the Dialer Campaign Sequence Details view. This view allows you to monitor the current state of the running campaign sequence.

For example, you'll be able to see what campaign group is currently active in the sequence, keep an eye on campaign statistics, and even determine how long to the next campaign transition. When a campaign transition occurs, you'll be able to see it happen in real time. Furthermore, if you have the proper security rights, you can also manually initiate a transition in the campaign sequence.

NOTE: If you miss a campaign transition, you can track it by checking the entry that Dialer adds to the Dialer History Message panel in Dialer Health View.

Campaign Details

Along the top of the screen you find details about the current campaign and well as a set of campaign execution controls.

Site

> Selects the name of the Outbound Dialer Server - the Site ID.

Campaign

> Selects the name of the campaign - this is the campaign from which the campaign sequence are created.

Current Campaign Group

> Displays the name of the currently active campaign group in the campaign sequence.

Actions

This set of campaign execution controls make it easy to change the state of a campaign sequence.

Campaign Performance Statistics

This section shows all of the relevant statistics about the currently running campaign group in the campaign sequence. If you have a campaign sequence item that is configured to transition based on the state of a particular statistic, you can monitor that statistic as the campaign sequence runs. See Dialer campaign statistics

> **NOTE**: Because campaign sequence transitions occur on a fairly regular basis, certain statistics may behave differently than you might expect. See Campaign Sequence Statistics for more information.

Pending Campaign Sequences

This section lists the next possible campaign sequences. Depending on how the campaign sequence is set up, there could be more than one campaign sequence item in this list.

Campaign Group Name

> The name of the campaign group in the sequence

Activation Type

> The action that is going to activate the next transition (Event, Time, Statistic)

Next Activation

> A description of when the next transition activation will occur. For example, for an Event activation type, the description could be when the Contact List is Recycled, the Campaign is restarted or when the Campaign is stopped. For a Time activation type, the description will provide the date and time that the next activation will occur.

Activation Progress

> Here you will see an activation appropriate gauge that will provide you with a relatively accurate representation of the progress moving toward the activation of this particular campaign group. Each gauge shows a percentage scale from 0 to 100 in 20 percent increments. See Activation Progress Gauges

> **NOTE:** Circumstances in the progress of the campaign can change causing one campaign group transition to occur before what appears to be the next likely candidate. For instance, a time activation trigger could occur before an event activation trigger.

Campaign Groups

This section provides a list view as well as a diagram view of all the campaign groups that make up the current running campaign sequence. Campaign groups in the list are color coded to help you identify which groups are where in the current campaign sequence. The Campaign Groups section header provides you with a Legend to help you identify the color coded groups.

Color	Description
Green	Previously active campaign sequence item(s).
Red	Currently active campaign sequence item.
Yellow	Pending campaign sequence item(s). Any of these has the potential to be the next active campaign sequence item.
White	Future campaign sequence items. These are part of the campaign sequence and will eventually move up as the campaign sequence progresses.

Sequence Configuration tab

On the Sequence Configuration tab, you'll find a list view of all the campaign groups that make up the currently running campaign sequence.

Campaign Group Name

Lists the name of each campaign group on the campaign sequence.

Properties

The columns that follow the campaign group name will show each campaign property in the group and the value of that property.

Sequence Diagram tab

On the Sequence Diagram tab you'll find a flowchart that graphically shows the organization of a currently running campaign sequence. Each item in the sequence is represented with a box displaying the campaign group name. Arrows representing the campaign transition connect each box. Color coding and tool tips aid in the visualization and understanding of how of the campaign sequence is configured. See Sequence Diagram

Manual Transition

If you have the Manually Transition to a Campaign Group security right enabled for your user account and wish to alter the specified campaign sequence on the fly, you can initiate a manual transition from either the Sequence Configuration tab or the Pending Campaign Sequence Items section. Performing a manual transition will circumvent the specified activation trigger, and immediately transition from the current campaign group to the whatever campaign group in the campaign sequence you choose. See Manually transition a campaign

Related Articles

Dialer campaign statistics

Activation Progress Gauges

Sequence Diagram

Manually transition a campaign

Activation Progress Gauges

The Pending Campaign Sequence Items section shows you all Campaign Groups that have the potential to run next; each with an Activation Progress gauge that provides you with an *approximation* of the progress moving toward the activation of this particular campaign group. Each gauge shows a percentage scale from 0 to 100 in 20 percent increments. There are three Activation Progress gauges:

Event Activation Progress

Event Activation Progress gauges use a floating arrow head to mark progress toward the activation of this particular campaign group. This arrow head can move both forward and backward depending on circumstances within the currently running campaign sequence. Keep in mind that a variety of circumstances within the campaign itself can influence the progress and cause the gauge to fluctuate erratically.

Statistic Activation Progress

Statistic Activation Progress gauges also use a floating arrow head to mark progress toward the activation of this particular campaign group. This arrow head can move both forward and backward depending on circumstances within the currently running campaign sequence. Keep in mind that a variety of circumstances within the campaign itself can influence the progress and cause the gauge to fluctuate erratically.
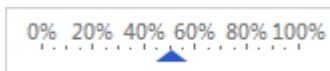
Time Activation Progress

Time Activation Progress gauges use a bar that always moves forward as the current time approaches the time specified as the moment of activation.
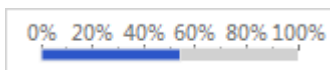
NOTE: We use the term *approximation* when discussing progress gauges because a variety of circumstances within the campaign can influence the actual progress.

Related Topics

Sequence Diagram

Sequence Diagram

A Sequence Diagram is essentially a flowchart that graphically shows the organization of a campaign sequence and is designed to help you visualize your campaign sequence as it is running. When you select the Sequence Diagram tab, you'll see that each item in the sequence is represented with a node displaying the campaign group name. Arrows representing the configured campaign transition connect each node. Color coding and tool tips aid in the visualization and understanding of how of the campaign sequence is working as it runs. As the campaign sequence runs, the system will update the sequence diagram in real time allowing you to monitor the campaign while it is running.
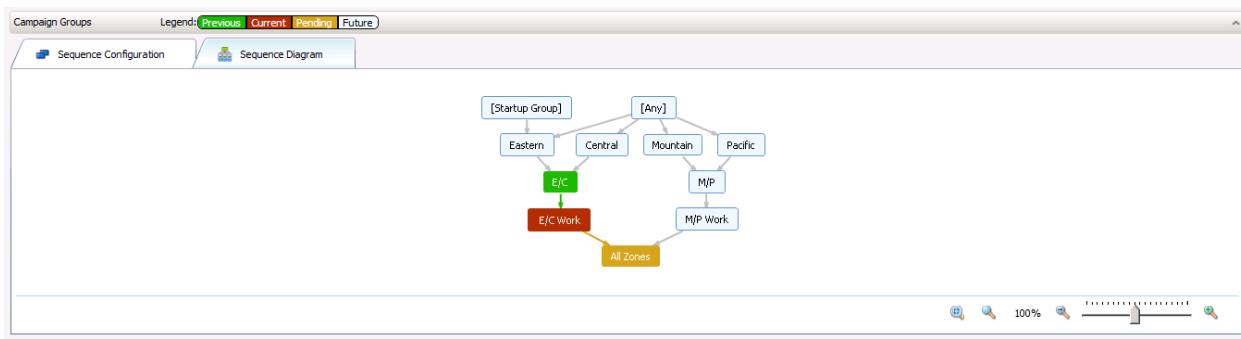
Features

The Sequence Diagram employs a number features and controls to help you visualize a campaign sequence as it is running.

[Startup Group]

> Every campaign sequence with have a [Startup Group] item that appears at the top of the diagram. The [Startup Group] item is essentially a place holder that is by default set up as the first group in the campaign sequence and will appear at the top of the diagram.

[Any]

> If a campaign sequence item needs to be able to transition regardless of which campaign sequence item is currently active, its parent will be configured as the [Any] item. When this type of configuration is employed in the campaign sequence, the [Any] item will appear at the top of the diagram and arrows will indicate which campaign sequence items are configured with the [Any] item as the parent.

Arrows

The arrows indicate the direction of the campaign transition. When you hover your mouse pointer directly over any arrow that connects two campaign sequence items, a tool tip appears and displays a description of the trigger that will activate that particular transition.

Color coding

Color coding provides you with at a glance information about where in the campaign sequence each item belongs.

Drag and drop

By default, the diagram illustrates the campaign sequence with a tightly grouped set of icons. To make it easier for you to visualize the campaign sequence, you can use drag and drop to spread things out a bit. Just click a campaign sequence item icon and drag it to where you want it to be. As you do so, the arrows will follow.

Zoom level controls

You can use the zoom level controls at the bottom to adjust the size of the diagram. There are five controls that you can use to adjust the zoom level.

- Fit the entire content area into the viewport
- Scale the content to 100%
- Zoom out from the content
- Zoom in on the content
- Use the slider to manually adjust the zoom level

> **NOTE:** Keep in mind that the Advanced Campaign Management feature actually has two separate diagram views - one in the Campaigns Sequence tab in Interaction Administrator and one in the Dialer Campaign Sequence Details view in IC Business Manager. The version in the Campaign Sequence tab is designed for viewing a campaign sequence as you are building it while the one in the Dialer Campaign Sequence Details view is designed for monitoring a running campaign sequence. As such, there are slight differences when it comes to color coding.

Related Topics

Color Coding

Arrow Tooltips

Color Coding

When you access the Sequence Diagram from the Dialer Campaign Sequence Details view in IC Business Manager, you are monitoring a running campaign sequence and as such, the Campaign Sequence Diagram's color coding works a bit differently.

To begin with, this version of the Sequence Diagram is designed to work in conjunction with the information displayed on the Campaign Sequence Configuration tab. You'll also see that there is a Legend on the section header that identifies the color coding.

In this mode, the initial view uses the color codes to indicate the current state of the campaign sequence. The currently active item shows in red, the item that was previously active is green, and the items that are next up in the sequence, are pending, show up as yellow. All other campaign group are white until you hover over them.

Color	Description
Red	Currently active campaign sequence item.
Green	Previously active campaign sequence item(s).
Yellow	Pending campaign sequence item(s). Any of these has the potential to be the next active campaign sequence item.
White	Future campaign sequence items. These are part of the campaign sequence and will eventually move up as the campaign sequence progresses.

While you are in monitoring mode, you can still perform what-if analysis on your campaign sequence. Just point to any item in the sequence and be able to see how the sequence will play out when that item is the active item in the campaign sequence.

Note: When a campaign is turned off, the Campaign Sequence Diagram will only show the [Startup Group] item.

Related Topics

Sequence Diagram

Arrow Tooltips

Arrow Tooltips

The arrows indicate the direction of the campaign transition. When you hover your mouse pointer directly over any arrow that connects two campaign sequence items, a tooltip appears and displays a description of the trigger that will activate that particular transition.

Dialer_Manager_Help
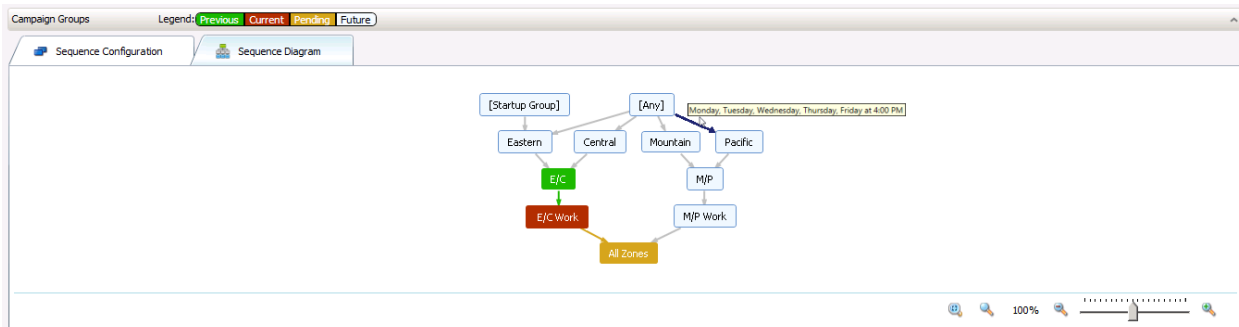
Related Topics

Sequence Diagram

Color Coding

Transition Campaign

If you have the Manually Transition to a Campaign Group security right enabled for your user account and you wish to alter the specified campaign sequence on the fly, you can do so very easily. Doing so will circumvent the specified activation trigger, and immediately transition from the current campaign group to the whatever campaign group in the campaign sequence you choose.

To perform a manual campaign transition:

1. In either the Pending Campaign Sequences section or the Campaign Groups section, select a row displaying the campaign group to which you want to immediately transition.
2. Right click on the row and select the Transition Campaign command.
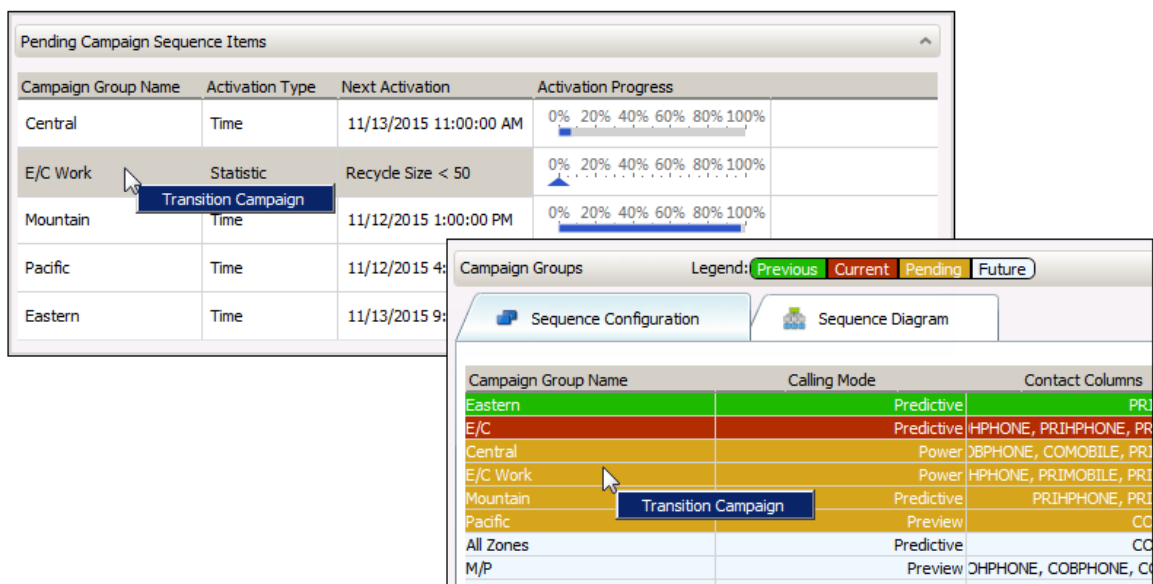
3. Wait a moment and you'll see the Dialer Campaign Sequence Details screen update as it loads data and completes the transition.
4. When the transition is complete, you'll see that campaign group is now listed as the Current Campaign Group in the Campaign Details section at the top of the view. You'll also see the new current campaign group indicated on the Sequence Configuration tab and the Sequence Diagram tab using color codes. In addition, the previous campaign group will be indicated with a special color code.

> **NOTE:** When you manually transition a campaign, Dialer adds an entry to the Dialer History Message panel in Dialer Health View.

Related Topics

Interaction Dialer

Dialer Health View

Dialer Health View

The Dialer Health View displays the health and status of campaigns and Interaction Dialer in general, thus providing you with a tool that you can use to troubleshoot and track various issues that occur in Dialer. Dialer Health view presents information in the Dialer Status Messages and the Dialer History Messages panels.

> **NOTE:** The top and bottom panels are not related. The top panel displays diagnostic information about current conditions. The bottom panel is a historical log of past events

Dialer Status Messages

> In this panel, you'll find diagnostic information about the current condition of campaigns. Dialer dynamically updates the information in this panel to display new messages and to remove messages that no longer apply.

Dialer History Messages

> In this panel, you'll find event and status messages that were logged by the Central Campaign Server, Outbound Dialer Servers, and by other internal processes such as DialerTran. You must manually update the information in this panel by clicking the Refresh button. When you do, the most recent messages posted to Dialer history will appear in the panel.

You can double-click a line in either panel and you'll see the Message Details window, which will provide more detailed information about a particular message.
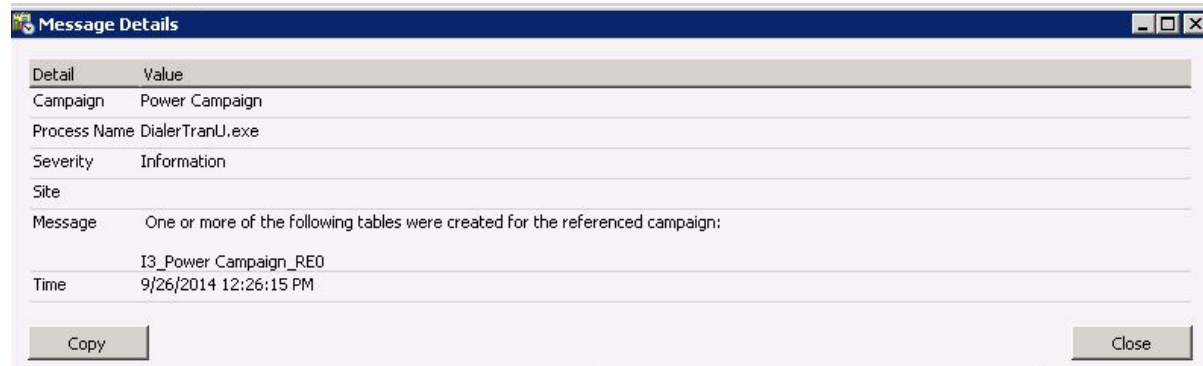
Related Topics

Dialer Status Messages

Dialer History Messages

Dialer Status Messages

In the Dialer Status Messages panel, you'll find diagnostic information about the current condition of campaigns. Messages are added to this list when:

- Global Maximum calls have been hit.
- Line group with little or no lines.
- Running campaigns in predictive mode with < 5 agents.
- The Line group specified does not exist.
- Current abandon rate has been exceeded (10% over for target, absolute threshold for strict).
- Dialer isn't dialing because it is waiting for something: (waiting on dialerTranU / recycle / get contacts, and so on.)
- The Pace is manually adjusted.

Dialer dynamically updates the information in this panel to display new messages and to remove messages that no longer apply.

Columns

The Dialer Status Messages panel contains the following columns. You can sort the messages by any column in either ascending or descending order by clicking the column header.

Severity

The value in this column indicates the seriousness of the event condition. For example:

353

Error indicates a significant problem, such as loss of data or loss of functionality.

Warning indicates an event that is not necessarily significant, but may indicate a possible future problem. For example, when disk space is low, a Warning will be logged.

Information describes the successful operation of an application or subsystem.

Time

Time stamp that indicates when the event occurred.

Process Name

Name of the server process that sent the status message.

Machine Name

Name of the ODS associated with this message.

Campaign

Name of the campaign associated with this message - if known.

Message

Text of the message entry.

Messages

The following table lists all of the messages, in alphabetical order, that you might see in the Dialer Status Messages panel. The *{xxx}* indicates content that will be filled in by Dialer at the time the message is generated.

Dialer Status Messages	Details	Additional Information
Automatic time zone mapping is unavailable for campaign {xxx}	Automatic time zone mapping is unavailable for campaign {xxx} because the time zone source data could not be initialized.	This message occurs when the system cannot validate (for example, because of invalid files) the time zone map data or CCS dial plan. Insure that the files exist, are accessible, and valid.
Automatic time zone mapping source data file {xxx} is not accessible	Missing map data set file. Mapping will be attempted, but some phone numbers may not get mapped properly.	

	OR No CCS dial plan is available for phone number standardization.	
Campaign {xxx} contact cache has been depleted on server {xxx}	The server {xxx} has depleted its contact cache for campaign {xxx}. This condition is caused by the following conditions: - Undersized database server hardware - Excessive load caused by external applications or reporting programs - Poor call list connect rate (high contact consumption rate) See {xxx} for more information. OR The Dialer Tran Server has not responded to a request for contacts in over {xxx} seconds. This symptom is caused by the following conditions: - Undersized database server hardware - Excessive load caused by external applications or reporting programs - Poor call list connect rate (high contact consumption rate) See {xxx} for more information. OR The server {xxx} has depleted its contact cache for campaign {xxx}. This condition is caused by the following conditions: - Undersized database hardware Excessive load caused by external applications or reporting programs - Poor call list connect rate (high contact consumption rate). See {xxx} for more information.	
Campaign {xxx} is using a Policy Set that contains one or more invalid Contact Column Behaviors.	Campaign {xxx} is using a Policy Set that contains one or more Contact Column Behaviors that reference contact columns not used by the campaign. The invalid contact columns are: {xxx}	This message occurs when the policy is changing or ordering the contact columns that the campaign uses.
Campaign max lines reached	This campaign has reached its configured maximum lines: {xxx}. This indicates that the dialing rate is being limited. If this message occurs frequently and the connect rate is normal then	

	consider increasing the maximum lines setting on this campaign.	
Campaign Statistics, Call History, and Agent Activity inserts are accumulating in PMQueue.	The number of Campaign Statistics, Call History, and Agent Activity inserts en-route to the database are increasing. Average insertion time is {xxx} milliseconds. The number of pending inserts is {xxx}. This condition is caused by the following circumstances: - The database server hardware is undersized - Applications running on the CCS are consuming CPU - Reporting applications are locking the campaign stats, call history, or agent stat tables.	
Contact List updates are accumulating in PMQueue.	The number of Contact List updates en-route to the database is increasing. Average insertion time is {xxx} milliseconds. The number of entries pending updates is {xxx}. This condition may cause interruptions in dialing activity. This symptom is caused by the following circumstances: - The database server hardware is undersized - Applications running on the CCS are consuming CPU - Reporting applications are locking the contact list table. See {xxx} for more information.	
Dialer Configuration load error	Unable to load Dialer config XML file. Dialer will switch to use the backup file.	This message occurs due to an XML read error while loading the existing Dialer config XML file. This error can result from a corrupted file or data added to the config file that corrupts the XML. Restore the Dialer config XML file from a trusted backup to resolve this issue.
Dialing Restrictions have been applied to all campaigns on server {xxx}	Dialing activity for all campaigns on server {xxx} currently requires a line capacity greater than the specified number of lines. The specified maximum number of lines is {xxx}. See {xxx} for more information.	This message occurs when the Dialer subsystem reaches the maximum number of lines for the Outbound Dialer server. Campaigns cannot place additional calls until lines become available. To resolve this issue, you can:

| | | Limit campaigns to not reach the server maximum. To limit the server maximum for a campaign, set the Max Lines per Campaign setting on the under Dial Settings on the Basic Configuration tab.

Increase the maximum calls for the server to allow all campaigns to dial at the maximum rate for the campaign. To increase the maximum calls for a server, set the Maximum Calls in Interaction Administrator under Advanced Dialer Configuration. |
|---|---|---|
| Dialing Restrictions have been applied to campaign {xxx} on server {xxx} | The current abandonment rate {xxx} exceeds the configured abandonment rate target {xxx} for campaign {xxx}. The dialer will reduce pacing aggression until abandons have subsided. If this condition persists, add Attempts to the sort criteria for the campaign. Alternatively, set Max Lines per Campaign on the campaign configuration to a lower value. See {xxx} for more information.

OR

The campaign {xxx} has fewer than 6 active agents. Dialing predictive campaigns with less than 6 agents may cause decreased agent utilization and increased abandon rate. Use preview mode for smaller workgroups. See {xxx} for more information.

OR

The current abandonment rate {xxx} exceeds the configured strict abandonment rate {xxx} for campaign {xxx}. The dialer will reduce pacing aggression and switch to power mode | |

	until abandoned calls have subsided. If this condition persists, add Attempts to the sort criteria for the campaign. Alternatively, set Max Lines per Campaign on the campaign configuration to a lower value. See {xxx} for more information.	
Disposition Custom Stored Procedure calls are accumulating in PMQueue.	The number of Disposition Custom Stored Procedure calls en route to the database is increasing. Average insertion time is {xxx} milliseconds. The number of entries pending updates is {xxx}. This condition may cause delay or loss of work required by the custom stored procedure(s). This symptom is caused by the following circumstances: - The database server hardware is undersized - Applications running on the CCS are consuming CPU - Reporting applications are locking the contact list table. See {xxx} for more information.	In addition, this issue can result when the custom stored procedures take a significant amount of time and cause the system to back up. Currently, the system batches call list updates and does not display this message.
DNC Scrubbing failed for campaign {xxx}	DNC Scrubbing failed for campaign <{xxx}> using DNC Source <{xxx}>. The error was: <{xxx}>	This message passes the error from the DNC source. For example, this message can occur when Dialer cannot reach DNC.com or received an error from the custom DNC table in the database. To help resolve this issue, use the error given by the DNC source and the type of DNC source.
High non-Dialer agent reservation for campaign {xxx}	Campaign {xxx} is reserving a high percentage of its active agents for non-Dialer calls. This can cause dialing to slow down and in some cases stop completely.	This message occurs when 50 percent or more of the agents for a campaign are on non-Dialer calls. To resolve this issue, create business practices to ensure that agents are not on non-Dialer calls when agents log on to the campaign.
Incorrect database provider specified in connection {xxx}	The database provider {xxx} is not recommended for use with dialer. Please use Microsoft OLE DB Provider for SQL Server or Oracle Provider for OLE DB. See {xxx} for more information.	

Max call rate reached	Dialing is being restricted by the configured Dialer Maximum Call Rate setting. If this situation persists, consider increasing that limit.	This message occurs when Dialer attempts to place more calls per second than allowed by the Max Call Rate setting. Adjust the max Call Rate value in Interaction Administrator under Advanced Interaction Dialer in Global Dialer Settings.
No automatic time zone mappings are present	No automatic time zone mappings are present. Automatic time zone mapping will be unavailable for all campaigns.	This message occurs when no time zone mappings exist in the time zone map data source. A problem exists retrieving the time zone data from a data provider, accessing the file, or data does not exist in the file. To correct this issue, verify that the area code mapping data exists.
No time zone map data sets configured for automatic time zone mapping	No time zone map data sets configured for automatic time zone mapping. Automatic time zone mapping will not be performed.	To correct this issue: Configure time zone mapping by adding time zone map data sets. Turn off automatic time zone mapping for the campaign by using the Timezone Settings on the Basic Configuration tab of the Campaign Properties Panel.
Recycle in progress for campaign {xxx}	Campaign <{xxx}> is recycling its contact list. Dialing performance may be affected until the recycle operation completes.	
The agent {xxx} logged into campaign {xxx} on server {xxx} has none of the required skills.	The agent {xxx} logged into campaign {xxx} on server {xxx} has none of the required skills, so no calls will be placed for this agent.	This message occurs when the skills for an agent do not meet the skills that a campaign requires. To correct this issue, log the agent out of the campaign or correct the skills available for the agent. See Configure Skills-Based Dialing.
The agent {xxx} logged into campaign {xxx} with a	The agent {xxx} logged into campaign {xxx} with a persistent connection, but no persistent connection wav file was	

persistent connection, but no persistent connection wav file was specified in the campaign.	specified in the campaign. Defaulting to silence.	
The campaign {xxx} contains no callable contacts.	The configured Zone Set {xxx} specified for Campaign {xxx} is blocking all callable contacts. Callable records being blocked: {xxx}. See {xxx} for more information. OR There are no callable contacts available for Campaign {xxx}. No contact records are in a callable status. Records may not be callable because: - Contacts have been scheduled to be called at a later date. - Contacts have been completed with a contact reason code - Contacts are being cached by one or more dialers. See {xxx} for more information.	
The campaign {xxx} on server {xxx} has been paused.	The campaign {xxx} on server {xxx} has been paused because TS API calls are failing. The most likely cause of the TS API failures is that TS Server is not running.	
The campaign {xxx} will not be started on server {xxx}	The line group {xxx} selected for dialing on campaign {xxx} is invalid or contains no lines on server {xxx}. Please select another line group. See {xxx} for more information. OR The workgroup {xxx} selected for campaign {xxx} is invalid or contains no agents. Please select another workgroup. See {xxx} for more information.	
The connection {xxx} does not have a default database or is not a udl file that can be used by dialer.	The connection {xxx} does not specify a default database or is not a valid udl file. The connection must include a udl file and specify a default database. See {xxx} for more information.	

The connection {xxx} has a collation type that does not match the collation type of the TempDB database.	The connection {xxx} references database {xxx} which has a collation type {xxx}. The collation type of tempdb is {xxx}. These collation types must be identical. See {xxx} for more information.	
The user {xxx} has been placed on break from campaign {xxx} on server {xxx}.	The user {xxx} has been placed on break from campaign {xxx} on server {xxx}, because a TS API call failed. Campaign {xxx} will continue dialing (up to the pause error threshold) for other agents if this TS problem is specific to this user.	
Unknown status message received.	A status message reported by one or more of the Dialer subsystems could not be displayed. Client support libraries may be out of sync with server components. DialerStatusMessage m_ID:{xxx}. See {xxx} for more information.	

Related Topics

Dialer Health view

Dialer History Messages panel

In the Dialer History Messages panel, you'll find event and status messages that were logged by the Central Campaign Server, Outbound Dialer Servers, and by other internal processes, such as DialerTran. You must manually update the information in this panel by clicking the Refresh button. When you do, the most recent messages posted to Dialer history will appear in the panel.

Columns

The Dialer History Messages panel contains the following columns. You can sort the messages by any column in either ascending or descending order by clicking the column header.

Type

This value in this column identifies the type of message. For example:

Error indicates a significant problem, such as loss of data or loss of functionality.

Warning indicates an event that is not necessarily significant, but may indicate a possible future problem. For example, when disk space is low, a Warning will be logged.

Information describes the successful operation of an application or subsystem.

Time

>   Time stamp that indicates when an event occurred.

Site

>   Name of the ODS associated with this message.

Campaign

>   Name of the campaign associated with this message - if known.

Agent

>   Name of the call center agent associated with this message - if applicable.

Message

>   Text of the message entry.

Messages

The following table lists all of the messages, in alphabetical order, that you might see in the Dialer History Messages panel. The *{xxx}* indicates content that will be filled in by Dialer at the time the message is generated.

Dialer History Messages	Details	Additional Information
A COM exception occurred	A COM exception has occurred. Error: {xxx}	
A Notifier request failed	A Notifier request failed. Error: {xxx}	
A system status message was removed from the status view	The following system status error was removed from the status view: {xxx}	
A warning error was reported by a Policy	A warning was reported by Policy: {xxx}. Message: {xxx}	The policy generates this message to report the error. The EventLog action creates this message.
A Win32 exception occurred	A Win32 exception has occurred. Exception: {xxx}	
ACD workgroup not active on server	The ACD workgroup {xxx} is not active on this CIC server. Please add or enable this ACD workgroup before trying to start the campaign.	

Active Group Change	Active group changed from {xxx} to group {xxx}	
Active station lookup failed	An error occurred while trying to lookup the active station for Agent: {xxx}. Error: {xxx}. The error may indicate a problem with Client Services, please check the event log on the CIC server for further errors.	
Agent Active Group Change	Agent set active group from {xxx} to {xxx} If you are using Advanced Campaign Management feature, you will see these messages appear whenever someone manually transitions a campaign sequence. The message will list the name of the user who initiated the transition, the date and time the transition occurred, as well as the campaign groups involved in the transition. Agent {xxx} transitioned active group from {xxx} to {xxx}	
Agent not active, action ignored	A requested action will be ignored because the associated agent is not active in the campaign.	This message occurs when the system attempts to set the agent to Awaiting Callback status or process a break request when the agent is not logged on or active.
Agent not found in cache	The listed agent could not be located in the dialer cache. This may be due to the agent recently logging off or being forced out of the campaign after a connection failure. Please ensure that the agent is logged into the campaign or that they are logging out correctly. If the errors persist please contact PureConnect Customer Care.	

Agent not logged in, Action ignored	A requested action will be ignored because the associated agent is not logged into the campaign.	Dialer no longer displays this message.
Agent Ping Failed	The listed agent has been automatically logged out of the campaign. The automatic logout was due to the loss of connection between the agent's scripter application and the Dialer process. If the agent exited the application without logging out then these errors should be expected, otherwise there may be network or custom application problems. If the errors persist please contact PureConnect Customer Care.	Dialer no longer displays this message.
An agent has attempted to disposition an interaction that the agent does not own.	An agent dispositioned a call that the agent does not own. This may be because the agent is not answering or the agent has transferred the call to another agent logged into the campaign. The action that was attempted on Call ID {xxx} will be ignored.	
An error occurred validating a table.	An error occurred validating a campaign table. Error: {xxx} Table: {xxx}	On certain events, Dialer attempts to test that the database tables in the Dialer database remain valid. If the validation fails, this message appears.
An error was reported by a Policy: {xxx}	An error was reported by Policy: {xxx} Message: {xxx}	The policy generates this message to report the error. The EventLog action creates this message.
An event log message was reported by a rule action.	An error was reported by a rule action. nRule: {xxx} nRule Action: {xxx} nError Message: {xxx}	
An exception has occurred.	An exception has occurred. Error: {xxx}	

An information message was reported by Policy {xxx}	An information message was reported by Policy: {xxx}. Message: {xxx}	The policy generates this message to report the error. The EventLog action creates this message.
An unknown exception has occurred.	An unknown exception has occurred while performing operation: {xxx}	
Behavior item failed to complete without error	The behavior: {xxx} failed to run properly. The error that was encountered: {xxx}	This message occurs when the system encounters an error with a Policy behavior.
Blended pause lifted for campaign	The blended pause for the listed campaign has been lifted.	Dialer no longer displays this message.
Call ID not found within contact attributes.	Call Id attribute is not present in the attributes to be updated to the database. The Call Id is needed to find the contact data associated with this interaction. Unable to process completion for campaign.	This message occurs when the system attempts to complete the interaction. If this message continues to appear, contact PureConnect Customer Care.
Campaign has started	The listed campaign has started.	
Call List has recycled	Call List has recycled. Number of recycles remaining: {xxx}. Contact records for new recycle: {xxx}.	
Campaign group has transitioned	If you are using Advanced Campaign Management feature, you will see these messages appear whenever a transition occurs in a campaign sequence. The message will list the campaign groups involved in the transition, the reason for the transition, the date and time the transition occurred, and the condition that caused the transition. Campaign group transitioned from {xxx} to {xxx}. Reason: {xxx} Item: {xxx} Parent: {xxx} Condition: {xxx}	
Campaign has been paused due to an error.	Campaign {xxx} has been paused because the contact columns could not be loaded.	

	Ensure that the Campaign Server is running and then set the campaign's status to Manual On. If this error occurs frequently please contact PureConnect Customer Care.	
Campaign has been reset.	Campaign has been reset. The reset action occurs when an Administrator manually selects 'Reset Campaign' from the administrative plug-in or automatically via a Rule Action associated with the running campaign.	
Campaign ID not found within contact attributes	Contact data does not contain a Campaign Id attribute.	Dialer no longer displays this message.
Campaign is now in a forced power dialing mode	The campaign is now in forced power dialing mode. Current abandon rate of {xxx} has exceeded max rate of {xxx}	When a Predictive campaign that uses a strict abandon rate reaches that percentage of abandons, Dialer forces the campaign into Power mode. Power mode reduces the abandons until the rate drops below the strict abandon rate. This message appears when Dialer forces the campaign into power mode.
Campaign not found in cache	The listed campaign could not be located in the dialer cache. Please ensure that the campaign is turned on. If the errors persist please contact PureConnect Customer Care.	
Campaign Pause	The campaign has been paused. Dialing will continue only when the pause has been lifted.	
Campaign Pause lifted	The campaign pause has been lifted from Interaction Administrator and dialing for the campaign will now resume.	
Campaign paused due to Blended activity	Predictions made for the listed campaign will now be paused. The number of inbound calls {xxx} is greater than the	

	configured maximum {xxx} for workgroup: {xxx}.	
Campaign Server access to the management object failed	The campaign server management interface pointer could not be obtained. Restarting the Interaction Center service may be required to correct this error. If this error persists please contact PureConnect Customer Care.	The Campaign Server subsystem cannot find the interface to store objects.
Campaign Server failed to access the configuration file	The Campaign Server was not able to read or write the xml configuration file 'dialer_config.xml'. Ensure that this file exists, is not read-only, and is parsable by Internet Explorer. Also ensure that there is adequate disk space to write to this file. If this error persists please contact PureConnect Customer Care.	
Campaign Server has reached the maximum number of threads allowed	This typically means that all processing threads are hung. Contact PureConnect Customer Care immediately. A restart of the Interaction Center Service may be required.	PureConnect Customer Care recommends that you set trace logging for the Campaign Server to Verbose or All to help diagnose this issue. For more information, see Control Log Verbosity in the Log Viewer help.
Communication with the Campaign Server failed	A failure occurred while registering this Dialer site with the Campaign Server. This typically means that the Campaign Server is not started or active. Please ensure the CIC service has been started and is active on the Central Campaign Server Machine.	
Contact does not have a valid Phone Number	The contact associated with Row ID {xxx} does not have a callable phone number.	
Database connection error	A connection to the database could not be established. Please verify that the connection: {xxx} is valid	

	before using with any campaign. Typically, this error means that an invalid UDL file has been used or the file that was in use has been deleted.	
Date Format could not be parsed	The data passed in for a date value could not be parsed. Date value: {xxx}	Dialer no longer displays this message.
Dialer Tran Server has started	The Dialer Tran Server has started successfully	
Dialer Tran Server not started	The Dialer Tran Server could not start due to an error connecting to Notifier.	
Dialer Tran Server restarting	The Dialer Tran Server is restarting because too many processing threads are hung.	Contact PureConnect Customer Care immediately. Customer Care recommends that you set trace logging for the Campaign Server to Verbose or All to help diagnose this issue. For more information, see Control Log Verbosity in the Log Viewer help.
Dialing Compliance	Attempt blocked - Automated calls may not be attempted on Manual Calling Server	This message occurs when an agent attempts to place an automated call from a Dialer server with the Manual Calling feature license.
Dialing has been paused due to high CPU utilization	All campaigns have been paused due to a High-CPU utilization issue. Once the CPU utilization drops below the configured point, campaign dialing will continue.	This message occurs when Remoco notifies Dialer of high CPU usage. This issue can result from CPU utilization of Dialer or of all processes.
Dialing has continued due to drop in CPU utilization	All campaign dialing has continued due to the CPU utilization dropping below the configured maximum.	
Enabling Period Stats Failed	An error was received while trying to enable period stats for the Workgroup:<{xxx}>. Please ensure this workgroup is active and defined as ACD-enabled.	Dialer no longer displays this message.

Error threshold exceeded	The configured error threshold for a campaign has been exceeded.	A campaign can have up five errors within a short period. If a campaign exceeds this limit, the system pauses the campaign and displays this message.
Event interface not found in GIT	An event interface object was not found in Global Interface Table. Typically this indicates problems with Interaction Administrator. Additional Information: {xxx}	Dialer no longer displays this message.
Forced Power mode restriction has been lifted	Normal dialing has been restored for the listed campaign. The forced power dialing restriction has been removed. Current Abandon rate {xxx} Max Abandon rate of {xxx}	
Initialization of campaign '{xxx}' failed.	Campaign Server was unable to commit table properties to the configuration file. Initialization for campaign: {xxx} has been aborted. Error: {xxx}	If this message appears, contact PureConnect Customer Care.
Insert / Update contains no Data	Insert or update operation was aborted because there was no data to process.	This message occurs when an update to a call list fails. Contact PureConnect Customer Care.
Interaction not found in cache	The interaction could not be located in the dialer cache. This may be due to multiple completions being sent from a single scripter for a single call. The action that was attempted on Call ID {xxx} will be ignored.	
Line group not active on the server	The line group {xxx} is not active on this CIC server. Please add or enable this line group before trying to start the campaign.	This message occurs when a campaign uses a line group but the line group is disabled or missing for the server. This issue can occur more prominently in environments with multiple Dialer servers and active line groups.
Malformed call list update	A call list update was badly formed: {xxx}	

Marking call as Ambiguous	A call that was placed and routed to an agent was not completed. Marking the Interaction as Ambiguous.	
Memory allocation failed	A memory allocation failed while trying to create a new object. Please check the memory use on this machine via the Task Manager or Performance Monitor.	
New tables have been created for campaign	One or more of the following tables were created for the referenced campaign: {xxx}	This message occurs when Dialer creates database tables in the Dialer database for a campaign.
No Lines Available	There are no lines available for Line group: {xxx}. The current request will be ignored.	Dialer no longer displays this message.
Object identifier not found	Object Identifier was not found while attempting the requested operation. Object Identifier: {xxx}. The operation will be ignored.	
Policy Set failed to load	A policy set could not be loaded by the campaign server. The evaluation of this policy will be ignored.	
Property load failed	An error occurred while trying to load the property: ('{xxx}') from the Campaign Server. This may indicate that the Campaign Server is down, there is a versioning problem with the dialer binaries or the ODS is not running as the same user as the CCS.	
SQL operation failed	An SQL Operation failed to complete. Please check the configuration of the campaign and associated connection.	Check the status of the Dialer database.
Statistics request failed for the following column or statistic: {xxx}	Campaign Server request for statistics data failed for the following column or statistic: {xxx}. Ensure that the DialerStatRepeater subsystem is running and not reporting any errors. Evaluation of this	Verify connectivity between ODS and CCS.

	statistic will be ignored for 30 seconds. If this error persists please contact PureConnect Customer Care.	
Status for agent '{xxx}' changed to an ACD available status before a disposition was received for Callid '{xxx}'. Scripting applications should prohibit agents from becoming available prior to dispositioning outbound calls.	Agent {xxx} has changed to an ACD available status prior to call disposition.	Dialer no longer displays this message.
Table validation failed	The table {xxx} could not be initialized or validated. Ensure that the table structure has not been altered and that it is accessible to Interaction Dialer.	
The campaign has recycled	The campaign was recycled by Rule {xxx} of RuleSet {xxx} OR The campaign was recycled by user {xxx} using application {xxx} on workstation {xxx}.	
The campaign has reset.	The campaign was reset by Rule {xxx} of RuleSet {xxx} OR The referenced campaign was reset by user {xxx} on workstation {xxx} using {xxx}.	
The campaign pace has been adjusted manually.	The campaign pace was adjusted manually. The new pace was set to {xxx}. Enable configuration change auditing and execute the Audit Report to view configuration changes applied to the system.	Dialer no longer displays this message.
The Query for contacts left in recycle failed	The query to return the number of contacts returned an empty record set.	This message indicates a database error.
The scheduled date is invalid	The scheduled date passed in from the script was invalid.	This message can indicate a bad date format from a

	The scheduled time value was equal to {xxx}. Setting the callback for 24 hours from now.	custom script or application. Verify that the date format uses ISO 8601 format.
Unable to evaluate a rule set item.	An error occurred while attempting to evaluate rule item {xxx} for rule set {xxx}	
Unable to retrieve the number of contacts left in the current recycle.	Unable to retrieve the number of contacts left in the current recycle.	Dialer no longer displays this message.
Warnings occurred while processing database update.	Warnings were generated while processing a database update. Error(s): {xxx}	Dialer no longer displays this message.
Workflow status is not 'On' or 'Manual On'. Workflow will not be started.	Campaign status is not 'On' or 'Manual On'. Campaign will not be started.	Dialer no longer displays this message.

Related Topics

[Dialer Health view](#)

Dialer Overview
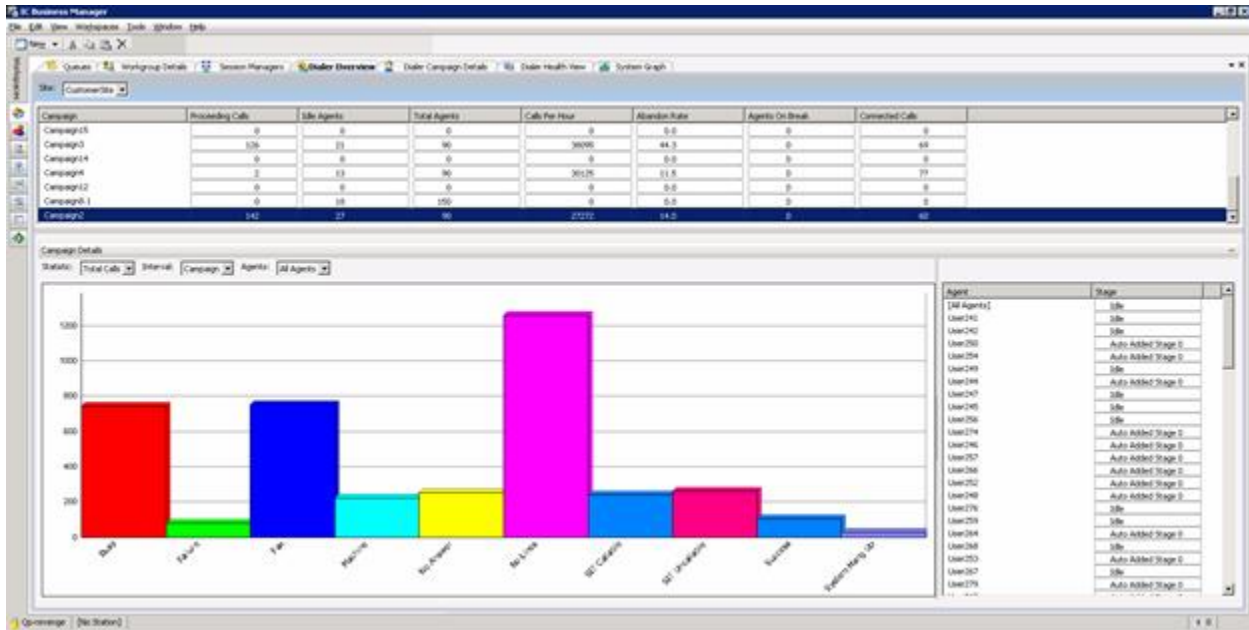
This view displays information about campaigns, wrap-up categories per campaign, and agents per campaign. The top pane shows important [campaign statistics](#). In addition, you can control campaign execution directly from this pane by selecting a row for a campaign, and then right-click to display a context menu. See [Campaign Execution Control](#) for more information.
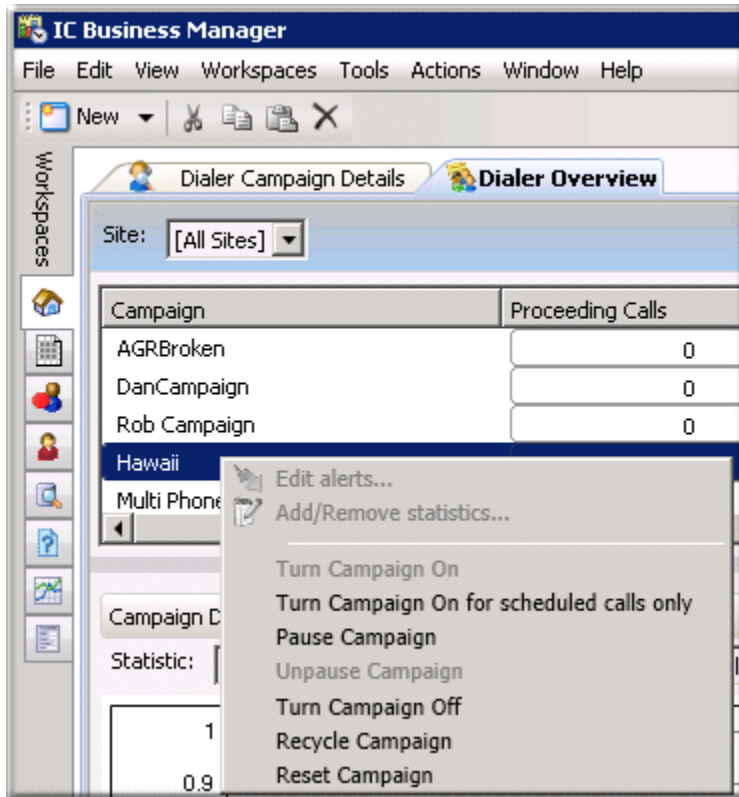
The graph pane displays Dialer wrap-up statistics for a time interval (period, shift, recycle, campaign) and agent(s) selected. The pane in the lower right displays information about the stage an agent is currently in. You can use this to compare the performance of multiple agents across sites and campaigns in a workflow.

The Interaction Supervisor Help for IC Business Manager explains how to work with views and alerts. To open this help system in IC Business Manager, select Interaction Supervisor from the Help menu.

Dialer Real-time Agent Management

Call Center Supervisors can use this view to move agents between campaigns in order to optimize the use of available agents. Supervisors can select a campaign, see what agents are logged into the campaign, see what agents are available and then log Agents into or out of a campaign. This gives Supervisors the ability to alter the agent pool participating in a campaign.

It is important to keep in mind that if a Supervisor wants to be able to log agents in and out of campaigns, the agents themselves cannot have the Logon Campaign right.

NOTE: For more information on the Logon Campaign right, see the Security Rights topic in the Interaction Administrator help system.

Campaign

> Selects the campaign whose agent participation you want to manage.

Available Agents

> Lists names of agents and the active campaigns they are currently receiving calls for.

Logged On Agents

> Lists the names of agents participating in the currently selected campaign.

Log On

> Logs any agents selected in the Available Agents list into the campaign.

Log Off

> Logs off any agents selected in the Logged On Agents list out the campaign.

Penetration Rate view

The Penetration Rate view provides details about Dialer penetration rates.

View Options

Contact List

This control allows you to select a contact list to view data about.

Phone Number column

Use this control to select a single column in the contact list that contains phone numbers. You may optionally select [All Phone Number Columns] to select all columns designated as storing phone numbers.

Uploads

Allows selection of penetration rate data for records uploaded to the contact list. If you uploaded records to the contact list, you can select from this list.

Penetration Criteria

Click *Select* to open the *Penetration Criteria* dialog. This dialog allows you to filter the selection of penetration rate records based on wrap-up codes, calling modes, and campaign, or report any attempt to dial contact records. When you finish making selections, click OK to dismiss the dialog.
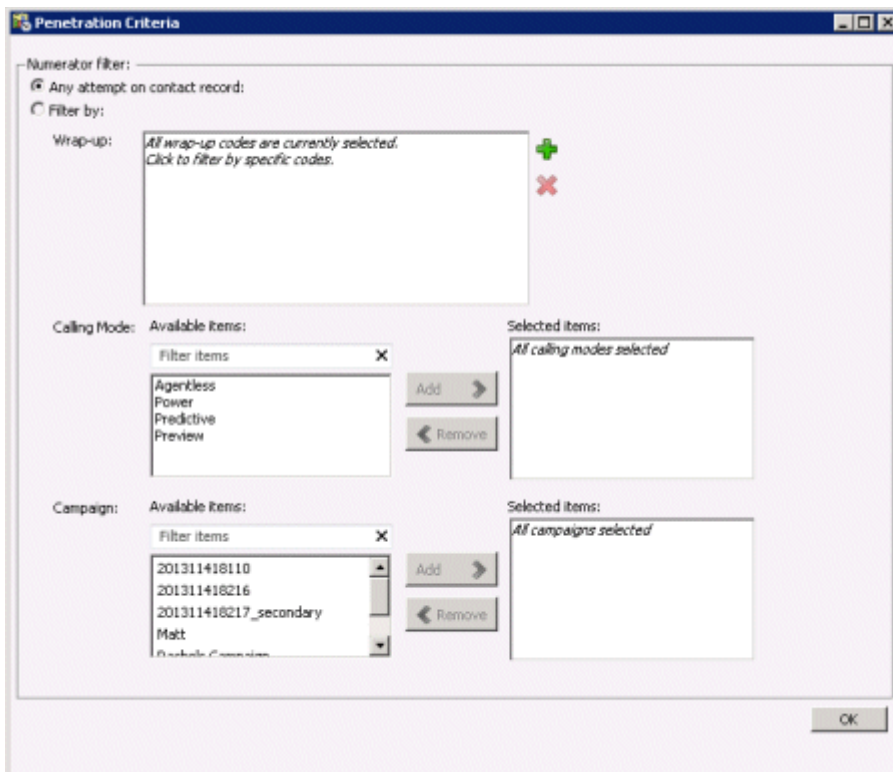
Start Date

Sets a date and time used to select penetration rate records. The drop list down arrow displays a calendar. The up and down buttons increment or decrement the day, month, day of month, year, hour, minute, or second selected.

Frequency

Scopes the frequency of data to hourly, weekly, daily, or monthly intervals.

Calculation Mode

Selects the method used to calculate penetration. Selections include Call List Penetration, Phone Number Penetration, Call List Saturation, and Phone Number Saturation.

Calculation Mode	Use Case	Formula
Call List Penetration	Ensure all records in a given list have been attempted at least once.	Count of Unique Attempts / Count of Call List Records Maximum Value = 100%
Phone Number Penetration	Ensure at least 1 dialing attempt for every phone number on every record.	Count of Unique Phone Attempts / count of Phone Numbers Maximum Value = 100%
Call List Saturation	Show average penetration level of records. 500% would indicate that each account had been attempted 5 times on average.	Count of Total Call Attempts / Count of Call List Records Maximum Value = None.
Phone Number Saturation	Show average penetration level of phone numbers. 500% would indicate that each phone number had been attempted 5 times on average.	Count of Total Call Attempts / Count of Phone Numbers Maximum Value = None.

Penetration Rate (result)

Displays penetration data returned by the query. Columns include Time, Penetration count, Total Records, and Percentage.

Related Topics

Penetration Rate Report Data.

Phone Number Type Overview
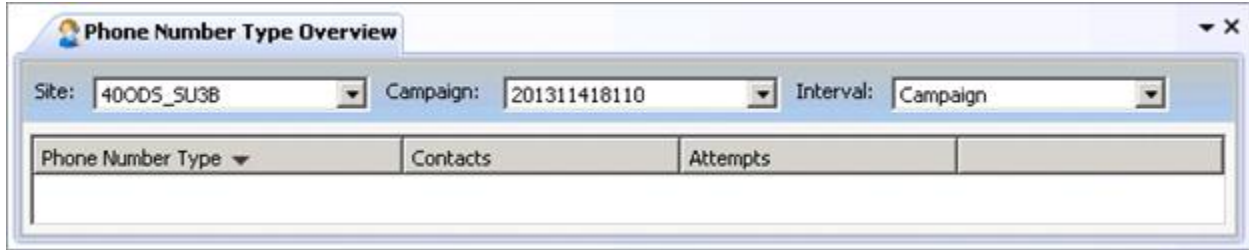
This view displays Phone Number Type summary statistics for the site, campaign and interval selected.

Site

Selects the name of the Outbound Dialer server or [All sites].

Campaign

Selects the name of a Campaign.

Interval

Selects a statistic collection interval.

Phone Number Type

A customer-defined phone number type (home, cell, work, etc.). See Define Phone Number Types.

Contacts

The total number of contacts that have been made to this phone number type.

Attempts

The total number of times this phone number type has been attempted.

Skill Overview

The **Skill Overview** displays skill summary statistics. This view helps supervisors manage skills-based dialing in predictive, power, and preview modes. It displays contacts by Skill Set to indicate which agent skills are needed. As with most views, you can click a column header to sort by that column.

NOTE: Only skills that are assigned to the selected campaign will appear in the grid.

View Options

Site

> This control allows you to select agents from a single ODS server, or all sites. The view is automatically updated when you make a selection.

Campaign

> This control changes the currently monitored campaign. When clicked, it displays a drop list of campaigns to choose from. The view is automatically updated when you make a selection.

Shortcut Menu Commands

Shortcut menu items appear if you right-click a data row in the grid.

Edit alerts…

> Adds or edits an alert. An alert notifies when a statistic is in or out of a chosen range, based on statistical items or values on the CIC Server. An active alert can change the color of the display, play a wave file, display an icon in your system tray, send electronic mail, or invoke a handler. Selecting this shortcut command opens the *Edit Alerts* dialog, which is customized for the type and combination of statistics currently selected.

Dialer_Manager_Help

Add/Remove statistics…

Opens a dialog allowing the selection of statistics in the current view to be changed.

Stage Overview

This view displays overview statistics for Stages for a specific Dialer campaign, site and agent. See Dialer stage statistics.

Site

> Selects the name of the Outbound Dialer server or [All sites].

Campaign

> Selects the name of a Campaign.

Interval

Selects a statistic collection interval.

Agent

Selects a single agent or [All Agents]

Wrap-up Category Chart View
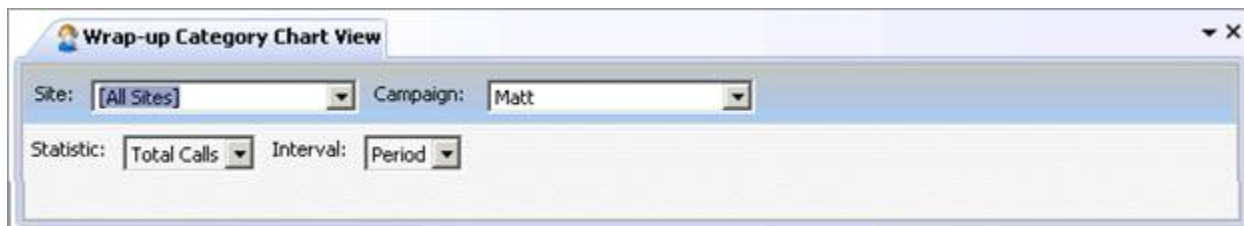
This view shows wrap-up category statistics in a chart. Wrap-up categories classify the result of a contact attempt. Unlike wrap-up codes, which are user-defined, the same standard wrap-up category codes are mapped to all campaigns. See also: Wrap-up Codes and Categories

Site

Selects the name of the Outbound Dialer server or [All sites].

Campaign

Selects the name of a Campaign.

Statistic

Selects a Dialer wrap-up statistic.

Interval

Selects a statistic collection interval.

Wrap-up Code Chart View
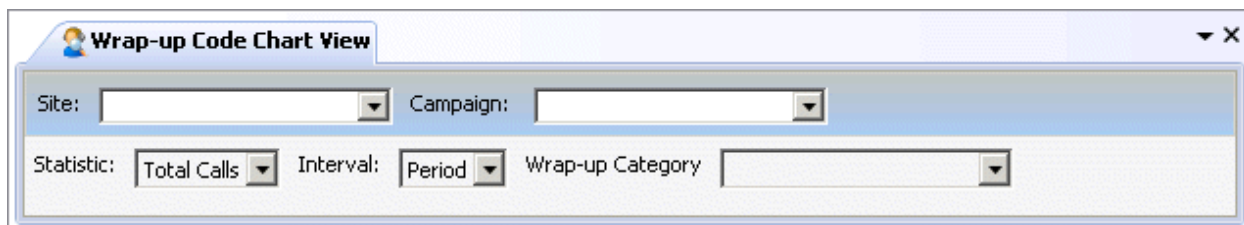
This view shows wrap-up code statistics in a chart. Wrap-up codes are strings that indicate the completion status of a call step. Wrap-up codes are the disposition options that agents see in a script.

Site

> Selects the name of the Outbound Dialer server or [All sites].

Campaign

> Selects the name of a Campaign.

Statistic

> Selects a Dialer wrap-up statistic.

Interval

> Selects a statistic collection interval.

Wrap-up Category

> See Wrap-up Codes and Categories

Zone Overview

This time zone view displays callable records grouped by time zone. It summarizes dialing operations across multiple time zones to see how many contacts remain by zone. This is important for staffing at the start and end of days.

Supervisors can use this view to monitor whether Dialer has enough leads to dial for a particular zone. It indicates whether enough records per zone are available to keep the Outbound Dialer busy. It displays counts for each zone in the Zone Set assigned to campaigns. The campaign must be active in order for this view to show data. Zone Overview does not show data for a campaign that is inactive.

Campaign

> Selects which campaign to show callable records grouped by time zone.

Zone

The name of each time zone in the Zone Set. Each Zone Set is a collection of time zone entries that specify when it is appropriate for an Outbound Dialer to call a particular time zone— relative to the local time of the Central Campaign server

Status column

This column indicates whether or not time zone blocking is in effect for a zone. If a zone is unblocked, Dialer can dial records for that zone.

Callable Records column

The number of records in the call list that have a "C" (callable) or blank Status column.

Scheduled Records column

The number of records in the call list that Dialer has sent back as scheduled. These calls will be placed according to call schedule times. The status for these records is "S", "O", "R", or "T".

Cached Records column

The number of records that are currently held in memory by the Outbound Dialer. This is an assortment of records that were pulled from the schedule table or standard campaign calls that have been pulled to dial.

Total Records column

The sum of callable, scheduled, and cached records.

Dialer Statistics

Dialer Statistics

The categories of dialer statistics are:

Dialer agent statistics	Summarize the activity of a specific Dialer agent.
Dialer campaign statistics	Totals that pertain to a campaign or site.
Dialer overall statistics	Summarize Dialer's performance as a whole.
Dialer phone number detail statistics	Summarize the details of a specific phone number.
Dialer skill statistics	Summarize the details of a specific skill.
Dialer stage statistics	Summarize the activity for a specific Dialer stage.
Dialer wrap up statistics	Summarize the dispositions of Dialer calls

Related Topics

Dialer Views in IC Business Manager

Statistic Condition Type (Contact Policy)

Dialer agent statistics

These statistics summarize the activity of a specific Dialer agent.

Abandon Rate (by calls)

> The percentage of total Dialer calls handled by this agent which were classified as abandons.

Abandon Rate (by contacts)

> The percentage of total Dialer calls handled by this agent which were contacts and were classified as abandons.

Abandon Rate (by detections)

> The percentage of Dialer calls handled by this agent which reached a live party and were classified as abandons.

Average Break Time

> The average amount of time this agent spends on break.

Average Dialer Talk Time

> The average amount of time this agent spends on each Dialer call.

Average Idle Time

> The average amount of time this agent spends idle.

Average Non-Dialer Talk Time

> The average amount of time this agent has spends on each non-Dialer call.

Average Talk Time

> The average amount of time this agent has spent on each call.

Contact Rate

> The percentage of total Dialer calls handled by this agent which were classified as contacts.

Contacts Per Hour

The number of Dialer calls resulting in a contact which this agent handles per hour.

Dialer Calls

The number of Dialer calls this agent has completed.

Idle Periods

The number of times this agent has been idle.

Logged In Time

How long the agent has been logged into the campaign.

Non-Dialer Calls

The number of non-Dialer calls this agent has completed.

Percent Break Time

The percentage of this agent's time which has been spent on break.

Percent Dialer Talk Time

The percentage of this agent's time which has been spent on Dialer calls.

Percent Idle Time

The percentage of this agent's time which has been spent idle.

Percent non-Dialer Talk Time

The percentage of this agent's time which has been spent on non-Dialer calls.

Stage

The stage the agent is currently in.

Station

The station this agent is logged into.

Status

The agent's current status.

Successes Per Hour

The number of successful Dialer calls this agent handles per hour.

Successes Rate (by calls)

The percentage of total Dialer calls handled by this agent which were classified as successes.

Successes Rate (by contacts)

The percentage of Dialer calls handled by this agent which were contacts and were classified as successes.

Time in Stage

How long the agent has been in the current stage.

Time in Status

How long the agent has been in the current status.

Total Abandons

The number of calls this agent has completed that were classified as abandons.

Total Break Time

The total amount of time this agent has spent on break.

Total Breaks

The number of times this agent has been on break.

Total Contacts

The number of calls this agent has completed that were classified as contacts.

Total Detections

The number of calls this agent has completed that were detected as a live speaker.

Total Dialer Talk Time

The total amount of time this agent has spent on connected Dialer calls.

Total Idle Time

The total amount of time this agent has spent idle.

Total Non-Dialer Talk Time

The total amount of time this agent has spent on connected non-Dialer calls.

Total Successes

The number of calls this agent has completed that were classified as successes.

Total Talk Time

The total amount of time this agent has spent on Dialer and non-Dialer calls.

Dialer campaign statistics

Campaign statistics pertain to a campaign or site. These statistics are sometimes special values which represent "roll up" statistics across all entries of a type. When a campaign is reset, Dialer campaign statistics are reset to 0. Afterwards, its statistics reflect data collected in the duration of time since that reset occurred.

Abandon Rate

The current abandon rate for this campaign. This is the ratio of system-identified abandons to system-detected live persons, as was determined by call analysis, for the period. The formula is (system-calculated abandons / system-detected live people) * 100. For more information, see How Call Analysis detections affect Abandon Rate.

Active Agents

The number of agents currently active in this campaign. This number corresponds to the number of agents that are logged on and not on break.

Active Calls

The number of calls active within Dialer. This includes pending calls, outstanding calls, and connected calls.

Adjusted Calls Per Agent

The number of calls Dialer needs to place on average, at this moment, to get a connection, adjusted by the pace.

Agents on Break

The number of agents logged into this campaign that are currently on break.

Cached Contacts

The number of contacts currently in Dialer's cache.

Calls Per Agent

The number of calls Dialer needs to place on average, at this moment, to get a connection.

Calls Per Hour

The number of calls this campaign will place in an hour.

Connected Calls

The number of calls currently connected in this campaign. This statistic includes calls that are connected and calls that are disconnected but are awaiting completion information to be sent by agents who are currently in a follow-up state.

Current Pace

This value reports the current pace of a campaign. The aggression level (pace) determines the speed with which the predictive algorithm tells the server to place outbound calls. The faster the pace, the more rapidly the Outbound Dialer server places calls. For example, if the pace level is high, the predictive algorithm tells the server to place calls very quickly.

This value may have been adjusted in response to "Max Abandon Rate" settings, and other criteria, such as Contact List quality. Pace ranges from -100 (not aggressive) to +100 (very aggressive). When the pace setting is 0, the pace is entirely determined by the predictive algorithm's statistical averaging. The Outbound Dialer server may change this pace setting at any time, if a maximum abandon rate is not set.

Effective Idle Agents

The number of idle agents with campaign priority taken into account.

Estimated Completion

The estimated length of time it will take this campaign to complete the current recycle. More specifically, Estimated Completion time is the value representing the number of seconds remaining in the campaign. The value is calculated using the formula: (recycle size * 3600)/(calls per hour). The number of seconds remaining is then added to the current UTC time to create a *future duration value*.

In some cases, this future duration value cannot be accurately calculated and as such the Estimated Completion will not display a value. The rules for the Estimated Completion value are as follows:

- When the first agent logs in and a call is completed, Estimated Completion will update if an estimation can be made.
- If a campaign is estimated to complete in 60 seconds or less, Estimated Completion will display N/A since this time isn't significant enough for an estimation.
- When a campaign is completed, Estimated Completion will display N/A for that campaign.
- When all agents log out of a campaign, Estimated Completion will display N/A for that campaign.

Filter

The SQL Filter configured for a campaign, specifying which Contact List records should be dialed.

Filter Size

The number of callable contacts in the contact list for this campaign. Specifically, the number of records in the Contact List that are callable after application of a Filter, but ignoring the Zone Set settings. This is used to diagnose the effect the Filter has on the number of callable records. This statistic is also used to determine how effectively the list has been penetrated (regardless of recycle) left in the list. Once this number becomes small, the list has been sufficiently penetrated and a new filter should be applied, or a different campaign should be started.

Idle Agents

The number of agents logged into this campaign that are currently idle.

Last Error

The most recent error associated with this campaign.

Last Warning

The most recent warning associated with this campaign.

Non-Dialer Agents

The number of agents in this campaign that are currently on non-Dialer calls.

Priority

The configured priority of this campaign.

Proceeding Calls

The number of calls currently proceeding in this campaign. These are calls that are currently being dialed or in the process of call analysis. Once a live speaker has been found (based on whether call analysis and answering machine detection has been enabled) the call will be routed

to an agent via ACD. A Proceeding call will be considered Connected once an agent is physically connected to the call.

Recycle Blocked

The number of contacts that will not be dialed because they are currently zone blocked. This can be used to diagnose the effect the Zone Set is having on the number of callable records. Once a time zone becomes active (calls can be placed to this zone) the count of records in this zone will be subtracted from this value and added to the Recycle Size (no recycle is required in order for the newly active records to be picked up).

Recycle Size

The number of contacts left in the current recycle for this campaign. This value indicates the number of records in the Contact List that must be processed before the list is recycled. In other words, this is the number of phone calls that must be placed before the next recycle of the Contact List can occur. This number will decrease as the numbers of calls placed for the current recycle increases. This includes only records that are callable when considering both the active Filter and the Zone Set associated with the campaign.

Recycles Remaining

The number of recycles that need to be carried out in order for the campaign to complete. The maximum number of recycles is configured for each campaign and dictates how many times the dialer will go through the list before completing or moving on to the next campaign. If a campaign is configured to recycle indefinitely then the remaining recycles statistic is not used; the dialer will continually reprocess contacts from the list.

Sort

The sort order used by a campaign. Specifically, the SQL sort criteria configured for a campaign that specifies the sort order in which Contact List records should be dialed. Sort Criteria contains comma-separated values that indicate the current sort order of the Contact List and works exactly like the ORDER BY clause of an SQL selection statement.

Status

The running status of a campaign.

Total Agents

The number of agents currently logged into this campaign.

Workgroup

The workgroup used by this campaign.

Dialer overall statistics

These high-level statistics summarize Dialer's performance as a whole.

Active Agents

The number of agents currently active in Dialer, across all campaigns.

Calls Per Agent

The number of calls Dialer needs to place on average, at this moment, to get a connect.

Calls Per Hour

The number of calls Dialer will place in an hour.

Connected Calls

The number of calls currently connected in Dialer, across all campaigns.

Proceeding Calls

The number of calls currently proceeding in Dialer, across all campaigns.

Total Agents

The number of agents currently logged into Dialer, across all campaigns.

Dialer phone number detail statistics

Statistics summarizing the details of a specific phone number.

Attempts

The total number of times this phone number type has been attempted.

Attempts Abandoned

The total number of attempts to this phone number type which have been classified as abandons.

Attempts Answering Machine

The total number of attempts to this phone number type which have been classified as answering machines.

Attempts Busy

The total number of attempts to this phone number type which have been classified as busy.

Attempts Fax

The total number of attempts to this phone number type which have been classified as fax.

Attempts No Answer

The total number of attempts to this phone number type which have been classified as no answer.

Attempts Remote Hangup

The total number of attempts to this phone number type which have been classified as remote hangups.

Attempts Rescheduled

The total number of attempts to this phone number type which have been rescheduled.

Attempts System Hangup

The total number of attempts to this phone number type which have been classified as system hangups.

Contact Rate

The contact rate for this phone number type. The rate is calculated using the number of contacts and the total number of attempts.

Contacts

The total number of contacts that have been made to this phone number type.

Dialer skill statistics

These statistics summarize the details of a specific skill. Skill statistics help supervisors manage skills-based dialing in predictive, power, and preview modes.

Finishing Agents

The number of finishing agents active in the campaign with this skill combination.

Cached Contacts

The number of contacts requiring this skill combination which are currently in Dialer's cache. This is an assortment of records that were pulled from the schedule table or standard campaign calls that have been pulled to dial.

Callable Contacts

The number of contacts requiring this skill combination which are callable. These records in the call list have a "C" (callable) or blank Status column.

Idle Agents

The number of idle agents active in the campaign with this skill combination.

Total Agents

The number of agents active in the campaign with this skill combination.

Outstanding Contacts

The number of contacts requiring this skill combination which are currently being called. These calls are proceeding (i.e. dialing).

Scheduled Contacts

The number of contacts requiring this skill combination which are scheduled. These calls will be placed according to call schedule times.The status for these records is "S", "O", "R", or "T".

Total Contacts

The total number of contacts requiring this skill combination. This is a sum of callable, scheduled, and cached records.

Dialer stage statistics

Statistics summarizing the activity for a specific Dialer stage.

Average Time

The average time a call spends in this stage.

Completed Calls

The number of calls that were completed while in this stage.

Percent Completed

The percentage of the calls that enter this stage that are completed in this stage.

Total Calls

>The number of calls that entered this stage.

Total Time

>The total time calls have spent in this stage.

Dialer wrap up statistics

Statistics summarizing the dispositions of Dialer calls.

Average Time

>The average amount of time this agent spends on Dialer calls with this wrap-up category and code.

Percent Calls

>The percentage of the total calls this agent has completed which they completed with this wrap-up category and code.

Percent Time

>The percentage of the time this agent has spent on calls for this wrap-up category and code to the total time the agent has spend on calls.

Total Calls

>The number of calls this agent has completed with a specific wrap-up category and code.

Total Time

>The total time this agent has spent on Dialer calls with a specific wrap-up category and code.

How Call Analysis detections affect Abandon Rate

This topic provides supplemental information about Call Analysis Detections as they affect calculation of the Abandon Rate statistics. The method used to calculate Abandon Rate can directly affect agent idle time and the speed of outbound dialing. The *Detections* option calculates abandon rate in a way that plans for less-than-perfect Call Analysis. The best way to understand this option is to consider a real-world scenario.

Suppose that 250 numbers are dialed, and that 150 of those calls are auto-dispositioned. The remaining 100 calls are classified as live people by Call Analysis. Dialer routes those 100 calls to agents, but 3 of those 100 calls are abandoned because there are no available agents to take the call. Of those 3 abandoned calls, 2 were actually live people and 1 was really an answering machine.

The other 97 calls are dispositioned by agents. Of the 97 dispositioned by agents, 78 calls were actually live people and 19 are not live people and are marked as such by agents (17 answering machines, 2 SITs). Agents almost always correctly identify a live person versus an answering machine, so their "call analysis" is very accurate.

Using the standard mapping of what is a contact and what is not (as configured in Interaction Administrator), the number of contacts is 81 (78 plus the 3 abandoned calls, since System HangUp is a wrap-up Category). In this case the abandoned rate as calculated by Dialer is (3 / 81) * 100 = 3.7%.

This is not the actual abandon rate, since Call Analysis is not perfect. If it were perfect, no answering machines would go to agents or get abandoned. So, the actual abandon rate is (actual live people abandoned / actual live people detected) or (2 / 78) * 100 = 2.6%.

Poor call analysis at a Dialer site affects abandon rate, since the number of contacts decreases while the possibility of an abandoned call from calls routed stays the same. This can cause contact rate to decrease and abandon rate to increase, leading to slower dialing and more agent idle time.

To alleviate this situation, use the "Based on Detections" option to make the "best effort" calculation possible with current technology. This approach considers that the system thought that 100 calls were live people, and 3 of those system-detected live people were abandoned. It recognizes that the system has no way to know that 1 of those 3 system-detected live people that were abandoned was really an answering machine. Therefore, due to a computer's less-than-perfect ability to detect live people, the best calculation of abandon rate in Dialer would be:

```
(system-calculated abandons / system-detected live people) * 100
```

or

```
(3 / 100) * 100 = 3%.
```

The *Detections* calculation returns a value (3%) that is lower than the abandon rate that would usually be calculated by Dialer (3.7%), and which is closer to a perfectly calculated abandon rate (2.6%) which cannot be determined, due to less-than-perfect ability to detect live people.

Dialer Reports

Dialer Reports

Dialer reports run in IC Business Manager's Interaction Reporter module. Interaction Reporter allows managers to run pre-defined reports, using filters to configure report parameters. Report Filters can be saved to run reports again. Users can annotate, print, and export any report.

> **NOTE:** For more detailed information about Dialer reports, see Interaction Reporter Help in the PureConnect Documentation Library.
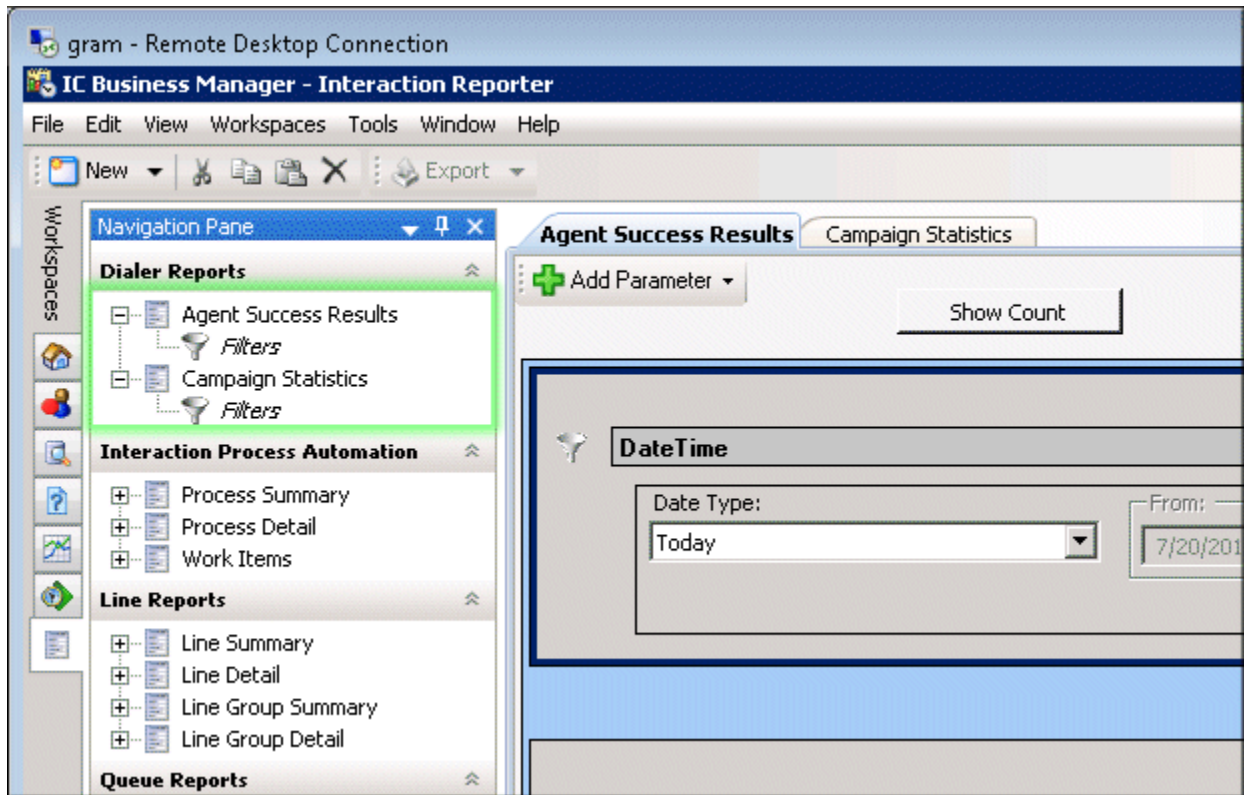
Dialer reports use the same IC Data source as all other reports in Interaction Reporter, which is **IC Report Logs**. This data source is already configured for CIC using the IC Data Sources container in Interaction Administrator. No additional configuration is required to run Dialer reports.
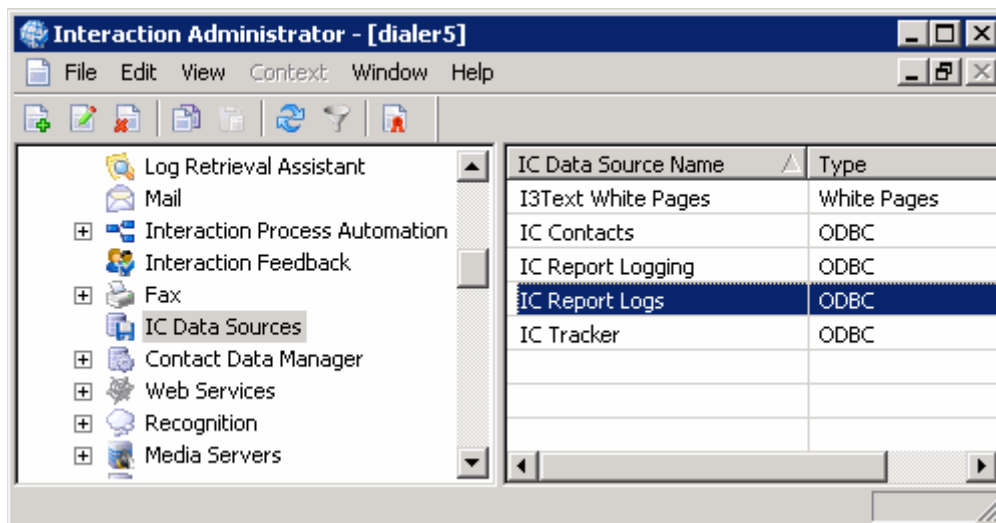
Dialer Reports in Interaction Reporter

The Dialer reports available in Interaction Reporter include:

Agent Success Results

This report displays detailed information about an Agent's success on Dialer calls that were routed to the agent.

Call History

This report displays detailed information for all dialing results from call history.

Campaign Disposition Summary

This report contains an analysis of call dispositions, by Agent-assigned dispositions and Dialer-assigned dispositions, with wrap-up category and wrap-up code breakdown.

Campaign Statistics

This report displays dialing algorithm statistics by interval including record and agent counts,pace, and campaign events.

Campaign Success Results

This report displays a campaign analysis by interval, including: Agent, Dials, Contacts, Successes, Right Party Contacts (RPC), and actual results.

Call Analysis

This report displays a breakdown of call analysis results in summary, by hour of day, and by detailed result.

Agent Utilization

This report displays time usage information by agent across all campaigns, including: talk, ACW, non-Dialer, idle, break, preview.

Agent Disposition Summary

This report displays detailed information about agent-assigned call dispositions, with an analysis of call counts and call lengths by disposition.

Agent Utilization by Campaign

This report displays time usage information for agents, by campaign, on Dialer-related tasks.

Best Time to Call Analysis

This report displays an hourly breakdown of contacts, right party contacts, and success rates for one or multiple campaign groups. The report consists of a main report with summarized data per Site ID, Campaign name and Campaign Group. This data is followed by a line chart that allows comparison of Contacts, RPC and Success based on number of Dials.

Call Answer Distribution

This report displays summary data and a graph with analysis on the number of seconds it takes for Dialer calls to be answered. This data provides guidance for setting the no-answer timeout value.

Penetration Rate Report Data

Feature Overview

Customers can develop penetration rate reports to show the number of contacts that were contacted (the numerator) contrasted with a number of records in a contact list (the denominator). The penetration rate calculation is simple but input criteria must be carefully considered.

For instance, there are several ways to define what a "penetrated" contact is. This could mean one of a contact's phone numbers had been dialed, the contact was reached, and Dialer obtained a final disposition (Success or Failure) or the call was dispositioned with a given wrap up code or category or a set of them. That's for the numerator. Likewise, the denominator might be more complicated than the number of contacts. Some customers may desire to use the number of entries in a given contact column, the number or *unique* entries in a given contact column, or even a range of values in an arbitrary contact list column.

Requirements

It is necessary to uniquely identify each contact list upload to group contacts that were uploaded together. This establishes a correspondence between the state of a contact list at a certain point in time and call completion data. This identifier, called **UploadId** hereafter, is a sequential number stored in the contact list. A new UploadId is created each time new contact columns are assigned to a contact list. (By default, the UploadId identifier is assigned a value of -1.) Each contact in a contact list is assigned an UploadId. Contact lists are scanned regularly to ensure that all contacts have an UploadID. This covers contacts that were added manually or by priority dialing; the Just In Time (JIT) stored procedure.

The **denominator** can be:

- The number of contacts in a contact list table.
- The number of non-null, non-empty phone numbers in a given contact column of a contact list table.
- The number of non-null, non-empty and unique phone numbers in a given contact column of a contact list table.
- Ranges of values in an arbitrary column of the contact list, combined with any of the above (to be implemented in a future SU)

The **numerator** can be the number of contacts that:

- Had been dialed
- Had been dialed by a given campaign or set of campaigns
- Had been dialed by a given site or set of sites

- Had been dialed and calls were completed with a given set of wrap up categories
- Had been dialed and calls were completed with a given set of wrap up category/code pairs
- Any combination of the above

Example Reports

The example below uses "pseudo-SQL" to illustrate a simple report that calculates penetration rate by comparing the number of dialed contacts to all contacts:

```
SELECT count(1) FROM numerator WHERE UploadId = @N / SELECT NumItems FROM I3PenetrationData WHERE
UploadId = @N AND PenetrationType = 'Contacts'
```

Another report might compare the number of successes to all contacts:

```
SELECT count(1) FROM numerator WHERE UploadId = @N AND WrapUpCategory = 'Success' / SELECT
NumItems FROM I3PenetrationData WHERE UploadId = @N AND PenetrationType = 'Contacts'
```

A more complicated report could be created for an administrator who wants to know how many unique contact home phone numbers had penetrated with wrap up categories 'Success' or 'Failure' assuming that the column name of the home phone number is 'PHONENUMBER':

```
SELECT count(1) FROM numerator WHERE UploadId = @N AND WrapUpCategory IN ('Success', 'Failure')
AND PhoneNumberColumn = 'PHONENUMBER' /

SELECT NumItems FROM I3PenetrationData WHERE UploadId = @N AND PenetrationType = 'Unique Phone
Number' AND PenetreationSubType = 'PHONENUMBER'
```

Upload Identifier (UploadId)

The *upload identifier* (UploadId) is a sequential number created every time a new contact list is uploaded or contacts are added to an existing contact list using the *Import Contact List* wizard. Upload ID is then assigned to the new contacts. This assignment is performed using a column named "i3_upload_id" in the contact list. In parallel, a new row is added in the Upload table. Whenever a new contact column is added using the contact list configuration, it is associated with all existing upload IDs associated with the current table name/contact list ID pair. The numerator and the denominator data must reside in the same DBMS. See .

DialerTranServer is responsible for storing call results and for managing penetration data tables using the same database connection as the one used for the contact list. The call results are stored in a new table called I3_*<ContactList>*_PEN. This table resides in the same database as the contact list. It contains a subset of the current CallHistory table. A new row is added in this table for every call completion. This makes it possible to base reports on actual observation or experimental data.

Penetration Rate Tables ERD

The Entity Relationship Diagram (ERD) below shows all tables involved with penetration rate and their relationship.

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Legend:

PK = Primary Key

FK = Foreign Key

Bold = Character Fields. Required columns cannot be NULL.
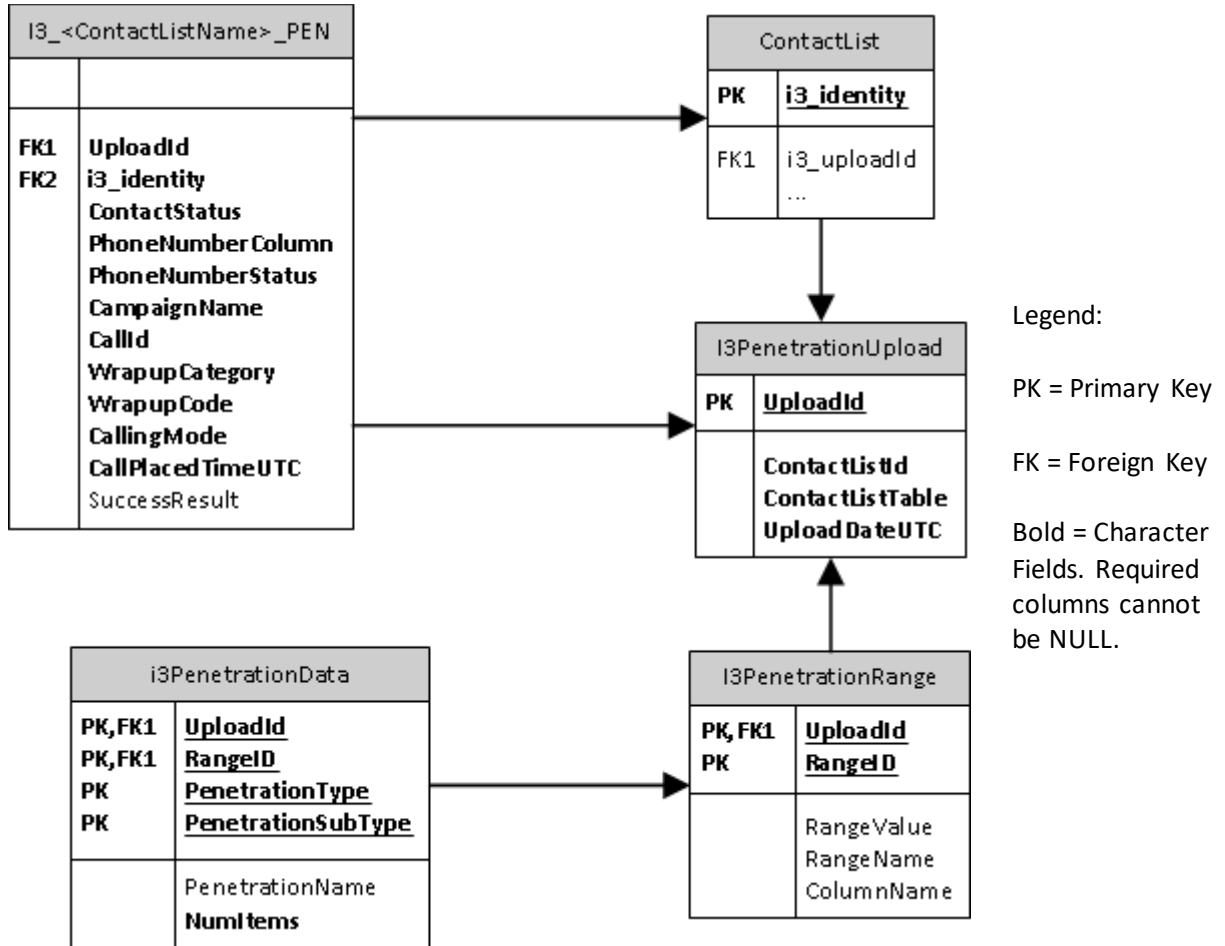
Penetration Rate Table	Description
Contact List table	The contact list is listed to show its relationship with the other tables and the existence of the new column named i3_upload_id. Most contact list columns are not shown for brevity sake.
I3_<ContactList>_PEN table	This is the numerator. It contains one row for each completed call of the corresponding contact list table.
I3PenetrationUpload table	An integer value in this table is incremented every time a new row is added in this table. That occurs when contacts added to a contact list.
I3PenetrationRange table	This table is reserved for future use.
I3PenetrationData table	This table contains the actual penetration data, specifically two rows per contact column (one for all values and one for unique values) plus one row per contact list to account for all contacts. The fields are:

To ensure the integrity of penetration data, Dialer polls Contact list tables every 30 minutes. If any Upload IDs are assigned a value of -1 (the default value), new Upload IDs are created and assigned to those contacts. This helps ensure that priority calls have Upload IDs.

Interaction Dialer Administrator

In addition to configuring Interaction Dialer from Interaction Dialer Manager (IDM), a plug-in for Interaction Administrator, you can also configure campaigns and features using Interaction Dialer Administrator, which is a plug-in for IC Business Manager. While the host application (Interaction Administrator or IC Business Manager) is different, the controls and features in Interaction Dialer Manager and Interaction Dialer Administrator are identical. Both provide access to each of the main Interaction Dialer views: Campaigns, Scripts, and Contact Lists. They also provides access to the Advanced Interaction Dialer container, which provides access to a host of specialized Interaction Dialer views. The majority of this documentation will focus on configuring Interaction Dialer from within Interaction Administrator.
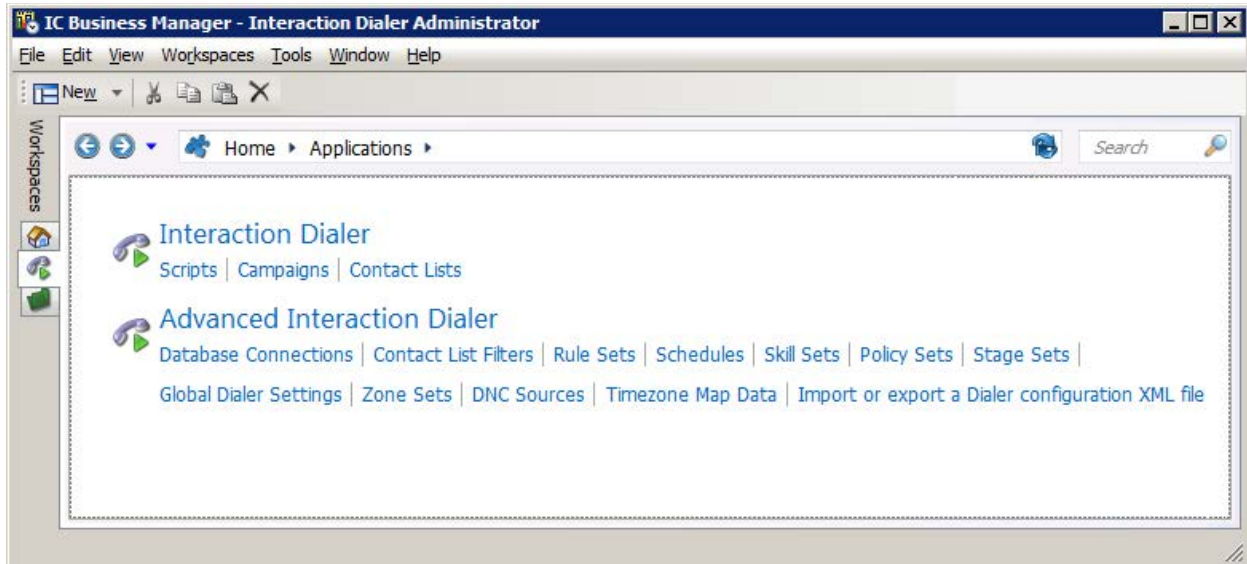
This table describes the options available in Interaction Dialer Administrator and links to detailed information about each one.

Interaction Dialer	
Campaigns	Manages Campaign entries. Each entry is a collection of properties that tell Interaction Dialer how to process a contact list.
Scripts	Manages the base scripts that pop on agent desktops when calls are routed to agents.
Contact Lists	Manages contact list entries. Each contact list entry is a collection of properties that convey to Interaction Dialer details about the database table where contact phone numbers are stored.
Advanced Interaction Dialer	
Database Connections	Manages database connections that allow a campaign to specify a contact list, without specifying any details concerning the location of that file.
Contact List Filters	Manages Filter entries. Each entry defines the WHERE clause of a SQL statement that selects a subset of records from a contact list. Filters are optional.

Rule Sets	Manages Rule Sets that automate campaigns. Rules evaluate a statistic, time, or event to determine whether to carry out an Action that affects the processing of a campaign. Rule Sets are optional.
Schedules	This view manages Schedules. A schedule is a collection of time settings that determine when campaigns are running (on), not running (off), or partially on (placing only scheduled calls). Schedules are optional, but in practice they are often used.
Skill Sets	This view manages Skill Sets. Each Skill Set maps a skill column in the Contact List to skills defined in CIC . A Skill Set manages skills from a Campaign's point of view—by identifying which CIC skills will be used to select contacts to dial. See Skills-based Dialing for more details. Skill Sets are optional.
Policy Sets	This view manages Policy Sets, which provide low-level control over the processing of individual contact records. Policies control dialing/routing on a contact-by-contact basis before or after dialing. Business logic in a policy decides whether to place a call, and can set attributes that affect recording and post-call processing. Policies can also send notifications such as email messages. Policy Sets are optional.
Stage Sets	The Stage Sets view manages the stages of a campaign call. Stages identify each segment of a call that statistics can be collected upon. Stage names and other attributes are saved in groups (called Stage Sets) that can be assigned to one or more campaigns. For background information, see Stages and Stage Sets. Stage Sets are optional, but in practice they are often used.
Global Dialer Settings	This view manages settings that apply to all Outbound Dialer Servers known to the Central Campaign Server.
Zone Sets	This view manages Zone Sets. A Zone Set is a collection of zone entries. Each entry specifies when it is appropriate for an Outbound Dialer to call a particular time zone—relative to the local time of the Central Campaign server. Zone Sets are optional, but in practice they are frequently used.
DNC Sources	This view manages DNC Sources. A DNC Source provides a list of telephone numbers that should not be dialed. Interaction Dialer can scrub contact lists against Do-Not-Call (DNC) lists to prevent contact numbers from being dialed by a campaign. DNC Scrubbing is optional, but strongly encouraged.
Timezone Map Data	This view manages time zone map data sets for use with Dialer. When a campaign is configured to use a zone set, use of a time zone map dataset can be enabled to enhance time zone blocking, a feature that prevents contacts from being called at undesirable times. See Time Zone Mapping for details. Timezone Map data is optional.
Import/Export Configuration	Exports the Dialer_Config.xml file to a development server or imports sections of Dialer_Config.xml from a development system to a production server.

Related Topics

Interaction Dialer Manager

Dialer Administration Concepts

Dialer Administration Concepts

This section explains concepts and detailed information that you must know to manage Interaction Dialer effectively. Topics are sequenced to introduce concepts while building on familiarity with the system.

Dialer Administration Concepts

Dialer Architecture and Database

Objects in Interaction Dialer Manager

Contact List Management

Contact Times: Schedules and Zone Blocking

Automation: Rules and Contact Policies

Skills-Based Dialing and Routing

Campaign Management

Campaign Management Features and Controls

Campaign Creation

Properties of a Campaign Object

Campaign Execution Controls

Regulatory Compliance

Federal Do Not Call Registry

State Do Not Call Lists

Internal Do Not Call Lists and Additional DNC Resources

Managing DNC in Interaction Dialer

Filters and Sort Criteria

Compliance in the Outbound Collections Contact Center

Common Compliance Challenges and Additional Considerations

Screen Pop, Scripting, and Staging

Screen Pop and Agent Scripts

Campaign Scripts

Stages and Stage Sets

Supervisory Tools

Dialer views in IC Business Manager

Dialer Statistics

Dialer Reports

Dialer Architecture and Database

Dialer Architecture and Database

Introduction to Interaction Dialer

This section explains what Interaction Dialer is, and the benefits it brings to an organization. You will learn the difference between automatic and predictive dialing, and how connections are analyzed to determine whether a person answered. Modes of outbound calling are discussed, along with Dialer's client/server architecture and integration with CIC. In addition, you will learn about Dialer's Manual Calling feature.

What is Interaction Dialer?

Interaction Dialer is a set of client/server extensions that add predictive dialing or manual calling along with campaign management features to the Customer Interaction Center (CIC) platform. When Interaction Dialer is installed on a CIC server, that server is called either an Outbound Dialer Server

(ODS) for automatic, predictive dialing or a Manual Calling Server (MCS) for manual calling. For more information, see the Automatic Dialing vs. Manual Calling topic.

Interaction Dialer conducts **campaigns**. During a campaign, calls are placed to contacts based upon information read from a contact list. *Campaign* is a generic term that describes the process of contacting a list of people according to a prescribed list of rules.

Campaigns can place outbound telephone calls, play .wav files to answering machines, send faxes to fax machines, and route calls answered by a live person to an Interaction Attendant profile or Dialer agent.
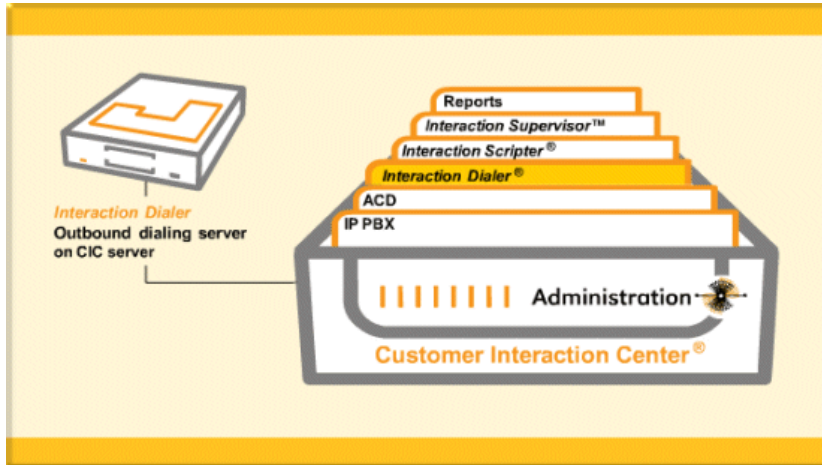
Interaction Dialer provides full control over campaign definition and execution. It provides everything a contact center needs to conduct campaigns without the expense of predictive dialer hardware.

Since Interaction Dialer is a CIC application, it uses CIC's architecture, feature set, and event processing engine. Dialing is performed by CIC subsystems. CIC provides PBX, IVR, ACD, and other services for inbound, outbound, and blended interactions.

Campaigns can scale to hundreds of agents at one site or thousands at multiple sites. Remote agents are supported. Campaigns can run simultaneously at multiple sites while being administered centrally.

Scalability

A single Interaction Dialer Outbound Dialing Server (ODS) has a throughput of approximately 180,000 calls per hour. Optimizations in Dialer to database access, database update, and placing of calls will increase this number and will be an ongoing process in new releases. It is already possible to host large outbound operations on a single Interaction Dialer ODS machine.

Advantages of all-in-one approach	Scales campaigns to meet any requirement
• Simpler to administer • Reduces contact center costs • Works with other CIC applications	• Hundreds of agents at one site • Thousands across multiple locations • Remote agents are fully supported

Related Topics

Agent Management

Dialer Database Concepts

Dialer Tables

Introduction to Interaction Dialer

How is Dialer used?

Interaction Dialer provides outbound campaign management in the context of an all-in-one, multi-channel communications suite.

It can boost telephony services capabilities, fill sales pipelines, streamline collections, and aid in telemarketing and fund raising efforts.

It is part of a unified communications platform that provides PBX, ACD, IVR, FAX, call recording, and outbound predictive dialing, without the integration headaches and middleware associated with multi-vendor solutions.

Interaction Dialer can:

Increase **revenue**

Decrease **labor costs**

Increase **customer service capabilities**

Increase **contact coverage**

Optimize **calling order**

Record **results** consistently

Manage **callbacks** effectively

Manage **inbound and outbound traffic** at the same time.

Interaction Dialer's integration with CIC provides versatility:

- **Build goal-oriented outbound campaigns**—target distinct customer groups and specific times of the day or week, without forcing agents to log in to and out of individual campaigns.
- **Blend outbound and inbound call activities**—optimize agent resources and elevate productivity.
- **Conduct agentless campaigns**—play messages, automatically gather customer input, or connect called parties to agents. You decide how each type of call should get treated before the call is actually placed.
- **Conduct campaigns in a pure SIP-based "all-software" VoIP environment**—deploy the Interaction Edge network appliance for digital trunk-to-SIP conversion in the CIC/Interaction Dialer solution as part of your overall VoIP strategy.
- **Scale campaigns**—use hundreds of agents at one site or thousands across multiple locations, including remote agents.
- **Use agents effectively**—take advantage of Interaction Dialer's patented predictive algorithm to keep agent productivity high and idle time low.

- **Comply with regulations**— manage abandon rates, issue appropriate caller IDs, log data to prove compliance, play safe harbor messages, or prevent dialing restricted numbers.
- **Monitor campaigns in real-time, and analyze after-the fact**—configure tabular and graphical views in IC Business Manager to manage the CIC/Interaction Dialer solution in real-time.

Automatic Predictive Outbound Dialer

Interaction Dialer's primary purpose is efficient placement of outbound calls. Interaction Dialer is both an automated dialer and a predictive dialer. It supports supplemental dialing modes for added flexibility.

Automatic Dialing

It can take up to 30 seconds for an agent to manually place an outbound call. The agent must look up a number, dial, and wait for an answer. After the number is dialed, the agent spends time listening to rings, phone company intercepts, busy signals and answering machines. Additional time is required to update records at the end of each call.

Interaction Dialer automates this process by automatically selecting the person to call, dialing the number, and routing the call to an agent if a live person answers. Productivity gains are achieved by screening out answering machines, busy signals, non-completed calls, and operator intercepts.

1. Interaction Dialer retrieves telephone numbers from a call queue.
2. It obtains an outbound line from a configurable list of lines, dials the number, and waits for the call to be answered. Interaction Dialer reliably detects ring/no-answer conditions, busy signals, fax tones, and answering machines.
3. Agents receive only telephone calls that reached a contact.

Agents in a manual dialing center are usually connected to targeted parties for less than 15 minutes per hour. Using Interaction Dialer, agents connect to targeted parties for as much as 50 minutes per hour. Since each agent's time is more effectively used, the productivity and profitability of the call center is increased.

Predictive Dialing

Predictive dialing refers to the process of placing outbound calls, based upon the prediction that an agent will be available at some time in the future once a connection with a person is achieved.

Interaction Dialer uses an advanced predictive algorithm to forecast when agents will become available. It automatically adjusts the pace of dialing to keep agents busy while maintaining abandon rate goals.

A *predictive algorithm* is a calculation that determines when to make a call. This calculation analyzes a number of factors, including agent status, stage completion measurements, and contact list quality. The predictive algorithm uses real-time statistics to estimate when each agent will finish the current call. The system queues and places multiple outbound calls while agents are busy, to ensure that a targeted party is answering at the moment that the agent becomes available. Options for less aggressive dialing, such as preview dialing, are also available. See Dialing Modes.

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Some of the factors that Dialer's predictive algorithm analyzes are:

- Number of available lines
- Number of available agents
- Probability of getting no answer, a busy signal, a disconnected number, operator intercept or an answering machine

- Time between calls required for maximum operator efficiency
- Average length of each conversation
- Average length of time agents need to enter data from the call

Automatic dialing and predictive calculations work together to improve the efficiency of outbound call centers. The rate of outbound calling is adjusted dynamically as factors change. Agent productivity, in terms of time spent talking to customers and prospects can approach 100% utilization.

Dialing Modes

Dialing Modes

Interaction Dialer has several **dialing modes** that determine how contacts are dialed. A different Dialing mode can be selected for each campaign, and the dialing mode for a campaign can be changed on the fly in many cases.

> **NOTE:** If you are running Interaction Dialer using the Manual Calling feature license, then the only dialing mode that will be available to you is the Preview Dialing Mode. However, the Preview Countdown feature is not supported on a Manual Calling Server.

The dialing modes are:

◀ Most Aggressive			Least Aggressive ▶	
Predictive	**Power**	**Precise**	**Agentless**	**Preview**
Predicts when agent will be available	Waits for agent to become available	Used within Predictive and Power Dialing	Play messages, send faxes, use outbound IVR	Agent is presented with contact's info for review
Dials multiple numbers <u>before</u> agent becomes available	Dialers multiple numbers <u>when</u> agent becomes available	Sets agent aside for call to assure the call is not abandoned	Can transfer from IVR to inbound Queue	Agent presses dial when ready
Uses call analysis to detect live person	Uses call analysis to detect live person	Uses call analysis to detect live person	Uses call analysis to detect live person	Agent performs call analysis

> **IMPORTANT:** Power and Predictive dialing modes use CIC's ACD subsystem to route calls. If agents do not have an **ACD Access License**, Dialer will not route calls to those agents. To receive calls in Predictive or Power Dialing modes, your agents must have an ACD Access License assigned to them. Specifically, in Interaction Administrator, the **ACD Access License** box must be checked on the Licensing tab of a user configuration. See Dialer Access Licenses and information available online at http://license.inin.com.

Predictive Dialing Mode

- Predicts agent availability and number of calls needed to keep agent busy

- Places calls in parallel before agent becomes available

- System uses call analysis to determine dial result

In predictive dialing mode, the server predicts agent availability and places calls based on internal statistics. The server predicts the number of calls that must be made in order to provide each agent with a targeted party at the moment the agent becomes available.

Predictive mode is similar to Power mode, except that Dialer tries to predict when an agent will be idle and places calls before that, so that by the time the call has been answered by a customer, a Dialer agent will be just becoming available.

Predictive mode tracks how long agents spend on calls, so it can make an accurate prediction. This mode requires at least 7 agents to be logged on, preferably more than that. The larger the agent pool, the more accurate the predictions can be, minimizing idle time even further than in Power mode and decreasing the likelihood of an abandon.

Power Dialing Mode

- Predicts number of calls needed to keep agent busy
- Places calls in parallel once agent become available
- Uses call analysis to determine dial result

Preview mode dials from the campaign list only when an agent is available to process the call. This mode waits for an agent to become available before placing outbound calls. It calculates the number of calls to place in order to reach a live party.

When an agent becomes available, Dialer sends a number of calls to Telephony Services to be placed from the system queue. The number of calls to place is determined by a calculation that Dialer makes based on previous calls, with the goal of one of the initiated calls being answered by a live person. This number can be limited by the Dialer configuration. For example, if Dialer calculates that the current campaign has a 20 percent connect rate, it will try to place 5 calls for every idle agent to ensure a connection. Once a live caller is returned by Telephony Services, Dialer hands the call off to an ACD queue or an ACD group, to be routed to an agent who is logged into the campaign. Note that the call is

not necessarily assigned to the agent whose idle event caused the call to be placed. This mode requires at least 5 agents to be logged into a campaign for best effect and to minimize idle time and abandons.

Precise Dialing Mode

- Used within predictive or power campaign via contact policy
- Sets agent aside while placing call to assure call is not abandoned

Used within Predictive or Power campaigns, Precise mode is entered per call via a contact policy. This mode sets an agent aside for that call to guarantee that the call cannot be abandoned. Once the call is finished, places agent back in pool of all idle agents.

Agentless Dialing Mode

- Does not require call center agents
- System uses call analysis to determine dial result

Agentless campaigns do not connect parties with an agent. Instead, Agentless campaigns can play a .wav file to answering machines; send faxes to fax machines, and route calls answered by live recipients to an Attendant profile.

Interaction Attendant is an easy-to-use graphical interface used for inbound IVR and auto-attendant menus and for outbound IVR and messaging applications. Using an Interaction Attendant profile allows in-house development of simple messaging applications or more complex outbound IVR menus, giving called parties the option to talk to an agent, remove their name from a list, and so on.

Agentless campaigns respond appropriately to live persons, to answering machines, and to fax machines by playing an audio file, transferring the call to an Attendant profile, sending a fax, or by hanging up.

NOTE: Interaction Dialer Manager does not allow a campaign's calling mode to be changed from agentless to another mode, while the campaign is active.

Preview Dialing Mode

- Presents contact to agent before dialing
- Agent dials call and performs call analysis

Preview dialing mode presents agents with information about the targeted party before the call is actually placed. When ready, the agent manually starts the call by clicking a button in the predictive client application. The agent can be given the option to reschedule the call, or skip to the next data pop.

In Preview Mode, Dialer presents a Scripter pop to an available agent and places a call object in an Initializing state on the agent's queue. The agent will then review the information for the customer

record and decide whether to place the call or skip to the next record. Once the call is placed, it is placed from the agent's user queue and no call analysis is done (the agent will hear all pre-connect audio). This is the slowest of the Dialing methods, but it prevents any chance of an abandon. This mode is typically used for high value contacts.

Special considerations apply to contact policies in this dialing mode. See Policies in Preview dialing mode.

> **NOTE:** Preview Dialing is a non-ACD dialing mode. When preview dialing is used in a blended ACD environment, there is a chance that agents will be routed an ACD interaction at the same time a Preview call is assigned to the agent's queue. Once the agent is placed into a *Campaign Call* status, ACD server will not route ACD calls to that agent. However, that small window of time the agent is available could be enough time to receive a Dialer and ACD interaction at the same time. For this reason, it is not advised to run a Preview dialing mode campaign with blended ACD agents.

To configure Dialing Mode for a campaign

Dialing mode is selected using the **Calling Mode** drop list, on the Basic Configuration tab of a campaign entry. Dialing modes are predefined by Dialer and cannot be modified.

Blending

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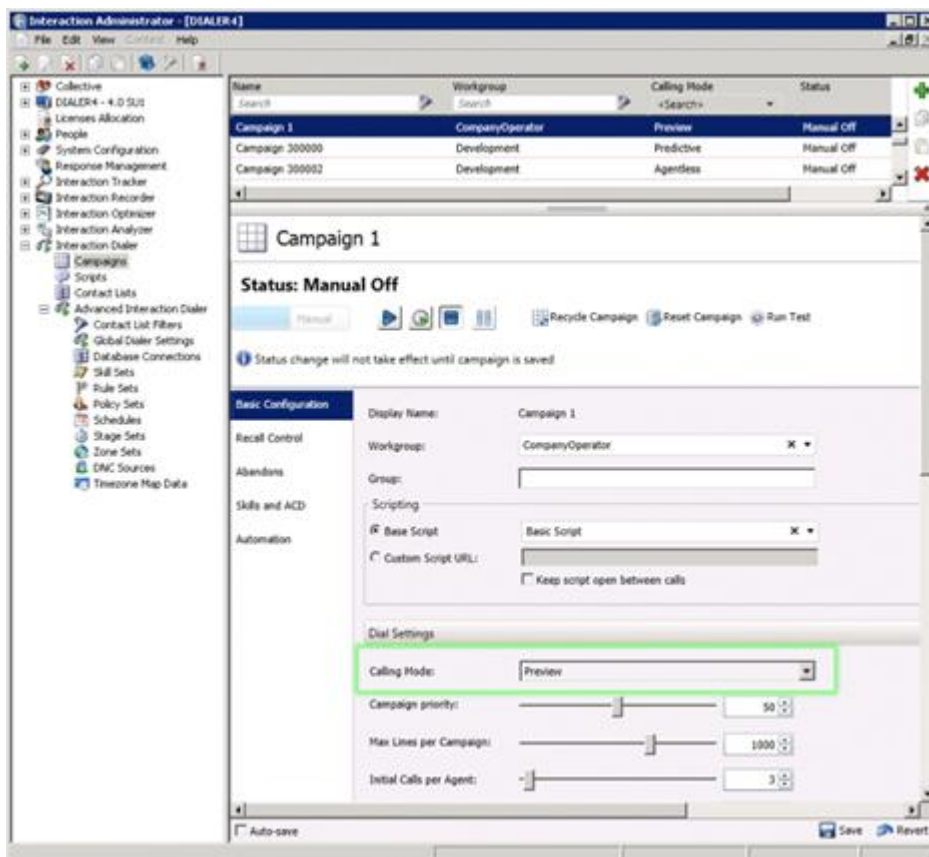
Interaction Dialer supports *call blending*—the coordinated delivery of both inbound and outbound calls to the same set of agents.

- Dialer monitors inbound load and adjusts outbound accordingly
- Agents can receive calls from multiple inbound queues while handling outbound calls
- Blending is supported in all agent-based dialing modes

Feature Overview

Whether following up on a conversation with an agent or responding to a message left on an answering machine, called parties sometimes call back—outbound operations by nature generate inbound calls. Interaction Dialer provides blended inbound and outbound centers with a flexible platform for managing a variety of outbound applications.

Outbound agents are often the best skilled resources to handle the resulting inbound calls. This need to efficiently handle inbound calls in outbound operations illustrates a great strength of the PureConnect platform upon which CIC and Interaction Dialer exist.

Since Interaction Dialer is an add-on to CIC, it can take advantage of key functionality within CIC including CIC's feature-rich, inbound automatic call distribution (ACD) capabilities. When a live person is detected by Interaction Dialer, CIC's ACD is used to route that call to the most appropriate agent using the same routing functionality as is used with an inbound call.

The system knows about both inbound and outbound calls and delivers both calls as appropriate to the same agent using the same phone and screen pop/call control capabilities. Because agents can belong to multiple inbound workgroup queues in CIC, agents can seamlessly move between inbound only, outbound only, or blended. Agents can receive outbound calls from one outbound campaign at a time along with inbound calls from any number of inbound workgroup queues.

Typically, inbound calls take priority over outbound calls. However, this bias toward inbound calls can be modified for an outbound campaign. In addition, the Disable Non-Dialer statistics campaign setting can be enabled to allow more time between outbound calls for agents to process inbound interactions.

When a blended agent completes a call (inbound or outbound), the agent becomes available for waiting ACD calls – either inbound or outbound. If no waiting ACD calls are appropriate for that agent, the agent is idle and the agent is added to the pool of agents needing another outbound call.

Interaction Dialer's pacing algorithm dynamically reserves a percentage of agents for inbound calls based on the recent history of inbound calls for that outbound campaign. As inbound increases, outbound decreases and vice versa.

Pacing

Interaction Dialer's pacing algorithm has been improved over many years of real-world experience and, in head-to-head tests, has proven itself to be a top performer in keeping agents busy while maintaining abandoned rate goals.

- Pacing algorithm keeps agents as busy as possible while maintaining abandon rate goals
- Pacing can take advantage of staging for better predictions

Feature Overview

A **pacing algorithm** is a calculation that determines the timing and number of outbound calls. The calculation analyzes a number of factors including agent status, stage completion measurements per agent, and call list quality. The pacing algorithm uses real-time statistics to estimate when each agent will finish the current call. The system queues and places multiple outbound calls while agents are busy, to ensure that a targeted party is answering at the moment that the agent becomes available.

Factors analyzed by the predictive algorithm include:

- Number of available telephone lines
- Number of available agents
- Skill requirements of the contacts and skills of the available agents
- Probability of getting no answer, a busy signal, a disconnected number, an operator intercept (SIT) or an answering machine
- Time between calls required for maximum operator efficiency
- Average length of each conversation
- Average length of time the agents need to enter the data from the call
- Current versus configured abandoned rate
- Recent history of inbound and other non-outbound interactions handled by agents

Call Analysis

Call Analysis is a CIC process that analyzes a connection to determine if the call reached a live person, a fax machine, or an answering machine, and whether or not an agent is available to process the call. Call Analysis can be activated at the campaign level (see Call Analysis setting) or at the policy level (see Call Analysis Behavior type).

Depending upon the dialing mode, Interaction Dialer can take the actions listed in the table below after call analysis has figured out what is at the other end of a placed call:

Call Analysis Result	Dialing Mode			
	Predictive	**Power**	**Preview**	**Agentless**
Live Person	Connect to Agent	Connect to Agent	No Action Available	Hang Up File Attendant Profile

No Available Agent	Hang Up File Attendant Profile	Hang Up File Attendant Profile	No Action Available	No Action Available
Answering Machine	Hang Up File Attendant Profile Connect to Agent	Hang Up File Attendant Profile Connect to Agent	No Action Available	Hang Up File Attendant Profile
Fax	Hang Up File Attendant Profile Connect to Agent	Hang Up File Attendant Profile Connect to Agent	No Action Available	Hang Up File Attendant Profile

Configurable Actions based on Call Analysis Results

You can configure a campaign to take one of the actions below after call analysis has figured out what is at the other end of a placed call:

Action

Hang Up

Disconnects when a live person, answering machine, or fax machine answers the call.

Connect to Agent

Routes the call to an available ACD agent.

File

Plays a wave audio file to the contact, or sends a fax file to a fax machine. Any standard wave audio (.wav) file can be used, such as files created using Windows Sound Recorder. However, the G-711 .wav format is recommended, since it uses the fewest resources and does not need to be translated to another format by the system.

A fax document consists of one or many pages of data contained in a file created using the Interaction Fax application.

The path to fax and wave files must be the same on any Outbound Dialer server that will run the campaign. In other words, the file must exist in the same location on each participating server, or all servers must point to the same network location and each Outbound Dialer must have read access to the specified path.

Attendant Profile

Passes the call to an Outbound Interaction Attendant profile. Interaction Attendant is PureConnect's IVR solution. Outbound Interaction Attendant profiles are created by running the outbound version of Interaction Attendant.

> **NOTE:** To manage outbound profiles in Interaction Attendant, you must start Interaction Attendant using the **/outbound** command line parameter. This tells the application to display outbound call flows. Typically inbound call flows are displayed by default. For more information, refer to Interaction Attendant Help > Procedures > Start Interaction Attendant > Optional Command-Line Parameters > Call Flow Configuration Switches.

Benefits

Interaction Dialer's tight integration with CIC allows it to take full advantage of call analysis and Automatic Call Distribution (ACD). When call analysis detects a live person, that connected outbound call is routed to the most appropriate agent using the same ACD routing that CIC uses for inbound calls. When call analysis detects an answering or fax machine, Dialer receives this information and uses it to play messages or send faxes appropriately.

Both TDM (ISDN, EuroISDN, T1/CAS) and SIP trunking are supported for outbound call analysis. The Interaction Media Server performs call analysis on IP audio coming from Interaction Edge, third-party gateways, or SIP trunks from the carrier.

Call analysis capabilities include:

- Industry-leading detection accuracy leveraging speech recognition-like pattern matching and advanced audio analysis in the Interaction Media Server.
- Configurable automatic disposition of calls (for example: busies, no answers, SITs).
- Post-connection detection including live speaker, answering machine, and fax machine detection.
- Special Information Tone detection; differentiating between temporary (all circuits busy for example) and permanent failures such as bad phone numbers.
- Adjustable balance between answering machine detection and live person detection, to reduce accidental hang-up on a live person.
- Continuous monitoring during message playback to restart playback should additional audio or a machine's beep can be detected to assure complete message playback to answering machines.
- Control of call analysis on a campaign or per-call basis; for example turning on answering machine detection for a home number and turning it off for a work number.

- You can turn Live Speaker Detection (LSD) on/off dynamically per call (for example home vs. work numbers) using Policies. The same is true for Answering Machine Detection (AMD).
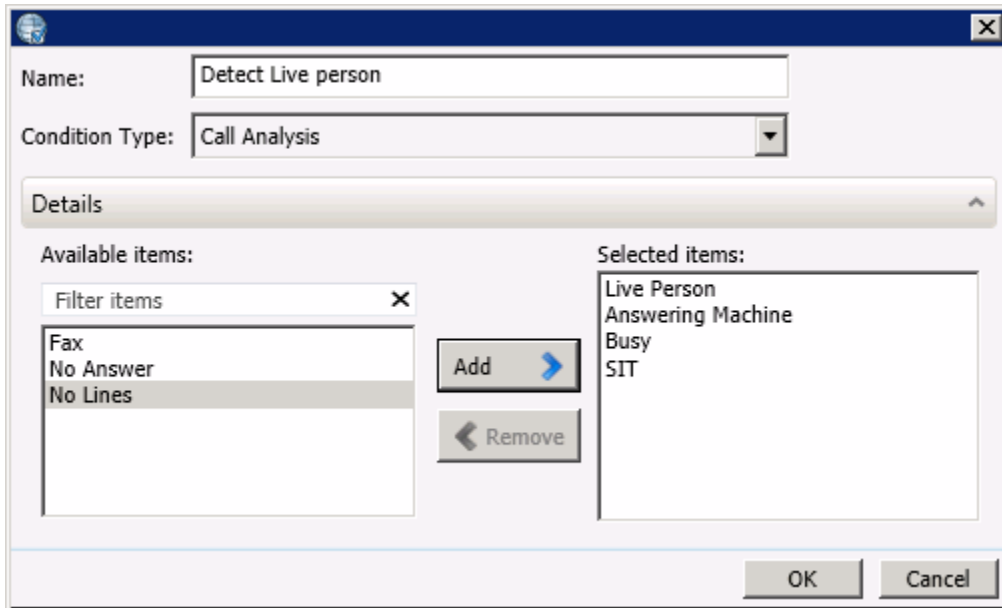
- Call Analysis differentiates special information tones for numbers that are bad due to a temporary problem (all circuits busy for example) and permanently bad numbers. It correctly detects common network messages such as "the number you have dialed is no longer in service".

Dialer integration

A key advantage of Interaction Dialer is its interoperability with CIC services, applications, and add-on products. Interaction Dialer is completely assimilated with CIC. This eliminates the compatibility problems that plague other CTI systems.

For outbound, inbound or blended interactions, CIC supplies the PBX, IVR, ACD, web gateway and more.

Interaction Dialer, on the CIC server, provides outbound and inbound/outbound contact centers and teleservices providers with a fully integrated solution to create outbound campaigns of every kind without having to add expensive predictive dialer hardware.

Dialer campaigns are managed using a "single-point" administration utility: Interaction Dialer Manager. This makes outbound efforts more manageable.

Integration with services

Interaction Dialer takes full advantage of CIC features, including but not limited to:

ACD   Screen pop

IVR	Multimedia interactions
Database integration	Reporting
Skills-based routing	Supervisory control
Call blending	Call Analysis

For example, outbound dialing for Dialer is performed by CIC subsystems. When a live person is detected by call analysis, that call is routed to the most appropriate agent using the same ACD routing that CIC uses for inbound calls. If call analysis detects an answering or fax machine, Dialer receives this information and uses it to play messages or send faxes appropriately.

Integration with applications

Interaction Dialer adds plug-in application modules to familiar application frameworks. Installation of Interaction Dialer adds **campaign management** features to CIC. For example, call center supervisors can define any number of campaigns, and control their execution manually or run campaigns in accordance with schedules. Campaigns can be automated, using Rules that run in response to changing campaign conditions, or Policies that provide low-level control over the processing of individual contact records.

Dialer also adds **contact list management** features, such as the ability to scrub contact numbers against Do-Not-Call data sources. Administrators can import or export contact records, add contact records on the fly, and manage other contact list settings, such as record selection filters, sorts, outbound caller ID, and much more.

> The user interface used to configure Interaction Dialer is called **Interaction Dialer Manager** (IDM). IDM is an application module that plugs into **Interaction Administrator**. IDM manages campaigns, contact lists, and scripts. It also configures the optional building blocks of campaigns, which are zones, stages, skills, policies, schedules, and rules.

Subject to access rights and license restrictions, IDM's administration functionality is identical in all application contexts, except that top-level commands conform to the visual metaphor of the framework hosting the IDM plug-in. IDM configuration settings are stored centrally on the Central Campaign Server (CCS). The administrator of each Outbound Dialer Server can update configuration settings used by all participating servers in the network.

Dialer adds **Interaction Supervisor** views to **IC Business Manager**, for the purpose of monitoring campaign and agent statistics in real-time. Users can set **alerts** that notify when conditions exceed user-defined thresholds such as a campaign goal met, queue backing up, and so forth. IC Business Manager users can run Dialer **reports** in the **Interaction Reporter** module.

Integration with add-on products

The table below lists add-on products that work with Interaction Dialer:

Interaction Dialer interoperability with PureConnect platform

Requirement	Product	Usage
Agent Scripting Ensure that agents receive exactly the information and options they need to process each call.	Base Scripts Interaction Scripter API IceLib.Dialer API CallScripter™	Interaction Dialer supports scripting options that make it easy for developers and non-developers to create scripts that guide agents through the stages of a campaign call. Every campaign has a script that pops on the agent desktop when a call is sent to an agent. Scripts ensure that Agents receive exactly the information and options they need to process each call. Non-programmers can create base scripts by setting options in Interaction Dialer Manager. To create custom scripts, web developers can use HTML and JavaScript with the Interaction Scripter API. Non technical users can use CallScripter™, a drag-and-drop script development environment. If you do not want to run Interaction Scripter Client on Agent desktops, you can develop your own custom client application using the IceLib.Dialer API.
Screen Pop When a call is delivered to an agent, "pop" the appropriate script containing information about the customer and step by step call processing instructions.	Interaction Scripter .NET Client Custom IceLib.Dialer client applications Interaction Connect	Interaction Scripter .NET Client and Interaction Connect run base scripts configured in Interaction Dialer Manager. Interaction Scripter .NET Client runs custom scripts developed using Interaction Scripter API. Interaction Scripter .NET Client and Interaction Connect populate the agent's display with information pertaining to the call, the customer, and the campaign, based on behavior defined in a script. Information collected or modified by agents is routed back to campaign database tables.
Outbound IVR Creation Route connected contacts to IVR interactions.	Interaction Attendant	Using the agentless dialing mode, Interaction Dialer allows campaigns to play dynamic messages to answering machines or people, and send faxes to fax machines. These messages can be notifications; for example appointment reminders, service updates, product ready, and so on. It can

| | | provide the option for the live party to interact with Interactive Voice Response (IVR). This process is often called Outbound IVR.

Outbound IVR campaigns can combine automated, dynamic messaging with text-to-speech to read contact-specific information back and speech recognition. The live contact on the other end can choose to speak to an agent or do anything else enabled in the IVR menu.

The call can then be transferred to an appropriate inbound queue based on information about the called party, the time of day, and so on for handling by an agent.

Outbound IVR and messaging, ranging from simple messages to complex interactions, is configured using Interaction Attendant, the powerful, yet easy-to-use tool employed by CIC customers for inbound IVR and auto-attendant configuration. |
|---|---|---|
| **Real-time Supervisory Control**

Monitor campaigns and agents, manage workforce resources, and control the execution of campaigns, based on real-time statistics and alerts. | Interaction Dialer views in IC Business Manager | Call center supervisors can view real-time statistics about agents and campaigns in Interaction Supervisor, an application module of IC Business Manager.

Agents can be monitored and coached while the supervisor keeps watch over campaign goals, and workforce resources. Supervisor allows alerts to be set on any statistic, so that when user-defined thresholds are reached, special processing or notification actions can occur.

Based on real-time information, call center supervisors can start, stop, pause, recycle, and reset campaigns in Supervisor and Interaction Dialer Manager. |
| **Call and Screen Recording**

Meet compliance requirements and monitor agent effectiveness. | Interaction Recorder | Dialer calls and agent's on-screen interactions can be recorded using Interaction Recorder. |

Customization	Interaction Designer	Handlers are visually designed programs that allow customers to customize and control internal CIC operations. Predefined entry points in handlers make it possible to insert custom logic into the flow of control, should special needs exist. Handlers are managed using Interaction Designer, the visual development tool included with CIC. By the way, no handler development is required to implement Interaction Dialer.
Modify CIC processing behaviors to meet any need.		
Reporting	Interaction Reporter	CIC provides standard reports that summarize queue and blended call activity. Interaction Dialer builds upon the open reporting architecture of the CIC by adding predictive reports to Interaction Reporter. Predictive reports describe the performance of campaigns and agents. Interaction Reporter is an IC Business Manager application that makes it easy to run pre-defined reports by using filters to configure report parameters. Report Filters can be saved to run reports again. You can view Interaction Reports on-screen, annotate, print, and export each report.
View, annotate, print, or export performance information about campaigns and agents.		

Client/Server Architecture
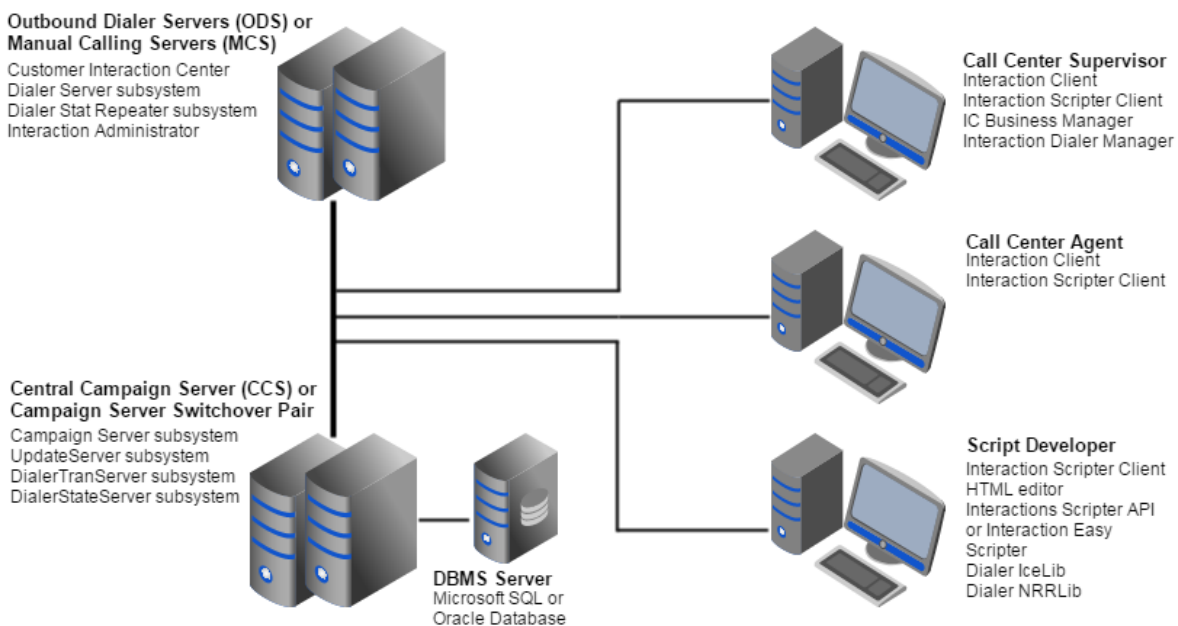
Interaction Dialer is a client/server system—its software components run on different hardware devices. The figure above shows the subsystems that run on ODS/MCS and CCS servers, and desktop applications used by agents, administrators and developers. The Central Campaign Server is depicted in a Campaign Server Switchover Pair, but can be a single CCS. The DBMS is depicted on dedicated hardware, but in some cases the database can exist on same server as the CCS.

Dedicated Server Hardware

Since the CIC's system architecture is event-driven, hardware devices are isolated from command and control subsystems. This allows the CIC to support a wide range of telephony hardware with minimal system integration overhead.

Because Interaction Dialer uses client/server architecture, the software is deployed across servers and workstations that collectively make up the system. Two to three dedicated servers are required to implement Interaction Dialer:

- **Outbound Dialer Server** (ODS)/**Manual Calling Server** (MCS). This is a CIC server with Interaction Dialer installed. An ODS performs automatic outbound dialing for agents in that location. An MCS provides agents with a structured mechanism for manually making outbound calls. Multiple ODS/MCS servers can participate in the same campaign.
- **Central Campaign Server** (CCS). The Central Campaign Server sends campaign configurations, threshold alerts, and other notifications to the Dialer Server subsystem, which in turn communicates with Interaction Processor to control processing.

The CCS provides ODS/MCS servers with campaign configurations, control messages, statistics, and contact list data. Each ODS/MCS communicates with a controlling CCS to obtain its current configuration and control messages that signify campaign property changes, campaign starts, stops, or error conditions. This arrangement makes it easy to implement an Interaction Dialer solution in complex multi-site environments.

A Central Campaign Server can be set up in a Campaign Server Switchover Pair configuration for redundancy. If the primary CCS goes down, the backup CCS will take over.

> **NOTE**: The Campaign Server Switchover feature requires special installation steps. For more information, see the CCS Switchover Setup Assistant section of the *Interaction Dialer Installation and Configuration Guide*, which you can find in the PureConnect Documentation Library.

- A **DBMS Server**. Interaction Dialer supports either Oracle Database or Microsoft SQL Server. Each campaign has a set of database tables that are created and managed automatically by Interaction Dialer. History tables are consolidated, such that there is one set of history tables (agent statistics, call history, and campaign statistics) in the CIC database for all campaigns. Customers are responsible for managing contact list and do-not-call tables only. All other tables are created and managed automatically by Interaction Dialer.

  While the CCS and DBMS can reside on the same physical server, it may not practical for all situations.

  - For environments that have a high call volume, having the DBMS server reside on dedicated hardware will provide better overall Dialer performance.
  - For environments that employ the CCS Switchover feature, having the DBMS server reside on dedicated hardware will ensure that the backup CCS will still have access to the DBMS even if the physical server running the primary CCS goes down completely.

Desktop Components

CIC Administrators, Call Center Supervisors, Dialer Agents, and Script Developers all use client software on desktop PCs.

- Interaction Dialer is configured using **Interaction Dialer Manager**, a plug-in module for Interaction Administrator. Configuration data is stored on the Central Campaign server.
- Dialer reports, statistics, and views are available in **IC Business Manager**.
- Agents run **Interaction Scripter Client** to participate in campaigns. At the desktop level, campaign scripts run inside the Interaction Scripter predictive client application.
- **A CIC client,** which is available to all CIC users.
- Developers can use **Interaction Scripter API** (licensed separately from Dialer) to develop custom campaign scripts for the Interaction Scripter .NET Client. Application programmers can use the *IceLib.Dialer* API to create custom clients (like Interaction Scripter .NET Client) and even applications that arbitrate between contact list data and the Dialer system.

Hosted Dialer Processes

CCS and ODS servers host software processes, called *servers*. The distinction between hardware and software servers is important, since the term *server* commonly refers to both *hardware devices and software processes.* The table below shows hardware devices and the software processes that run on each.

Hardware Server	Hosted Process	Description
Central Campaign Server (CCS) Coordinates database operations. Provides ODS servers with contacts to dial. Acquires data collected by agents for posting to the database. Sends campaign configurations, alerts, and other notifications to Outbound Dialer servers.	CampaignServer	CampaignServer is responsible for Rule Set processing and management of object configuration and storage.
	UpdateServer	UpdateServer maintains a Notifier connection with each Outbound Dialer server. Its role is to acquire database updates that have been generated by call center agents. UpdateServer passes this data to DialerTranServer, so that it can be posted to database tables. Each Outbound Dialer server uses PMQ to send database updates to the UpdateServer process. These messages contain updates for the Contact List, CallHistory, CallRecordSchedule and AgentHistory tables. The UpdateServer passes these

		updates to the DialerTranServer process, which starts the actual database updates by communicating with the database management system.
	DialerTranServer	DialerTranServer uses a database connection to start database operations. It passes data to the DBMS whenever data is received from UpdateServer. DialerTranServer commands the DBMS to update the CallRecordSchedule, CallHistory, Contact List, and Agent Statistics tables. The database management system does the low-level file management work. DialerTranServer uses a Notifier connection to notify Outbound Dialer Servers whenever a campaign should be started or stopped.
	DialerStatServer	DialerStatServer is the central hub for relaying and caching of statistic updates for Interaction Supervisor and statistic rules.

| **Outbound Dialer Server (ODS)**

Performs automatic outbound dialing for agents in that location.

Makes intelligent predictions, places calls and routes connected calls to agents.

Logs call outcomes.

Tracks the number of agents available, and dynamically adjusts pace.

Caches statistics and relays them to monitoring applications | Customer Interaction Center | Interaction Dialer works with the following CIC subsystems:

Notifier: Acts as "traffic cop" for CIC subsystems and hardware. ODS and CCS both use Notifier connections to communicate.

Interaction Processor (IP): IP controls which handlers carry out.

Client Services: Client Services communicates with agent workstations to keep track of agents' availability status—on the phone, available for a call, and so on. The ODS depends on agent status information it receives from Client Services.

Telephony Services: Since Interaction Dialer is tightly coupled with CIC, it places an outbound call by directly calling the CIC's Telephony Services subsystem. This process is highly efficient. |

		ACD: Routes incoming ACD calls to the appropriate agent. Once an outbound call placed by Dialer has connected to a targeted party, ACD is used to route the call to the intended agent. Other: E-mail Services, Fax Services, Paging Server perform their customary functions.
	DialerServer	DialerServer is the predictive algorithm that forecasts when an agent will be available to take the next outbound call. It initiates outbound calls. It detects when no lines or ports are available to prevent Dialer from over-dialing. It logs call resolutions, tracks the number of agents available, and dynamically adjusts the pace of campaigns. DialerServer also provides statistics to monitoring applications.
	DialerStatRepeater	DialerStatServer is the central hub for relaying and caching of statistic updates for Interaction

		Supervisor and statistic rules. It relays statistic updates to and from DialerStatServer and DialerServer. It works with DialerStatServer to regenerate statistics during network outages.
Database Server Processes database updates and selects contact records for CCS.	SQL Server / Oracle	No special processes are used. The DBMS communicates with CCS using standard OLE DB connections.

Processes use **PMQ** and **Notifier** protocol to communicate. PMQ is used to pass database updates. Notifier is used to send control messages between process servers.

PMQ

PMQ (Persistent Message Queuing) provides loosely coupled communications using a store and forward model. Updates to call center databases and control messages are stored temporarily in queues, so that transactions and messages that pass between machines are not lost in the event of a network or computer failure.

To send a message or data object to another server, the source server passes the message to Persistent Message Queue—a subsystem that handles all low-level tasks of delivering a message from one point to another. Destination servers read this data without involving the sending server in any way. For example, the Outbound Dialer server sends information about processed calls to PMQ, for eventual pickup by the Central Campaign server. PMQ uses a proprietary Notifier protocol (which is based upon IP) for network transmissions. See PMQ guarantees delivery of database updates for more details.

Notifier Services

Notifier is a proprietary protocol used to communicate between subsystems across a network. In the case of Dialer, Notifier Services provide a connection between Notifier on the Outbound Dialer Server and Notifier on the Central Campaign Server. This connection serves as the core message transport mechanism between servers.

CCS Process Servers

A single Central Campaign Server coordinates the activities of multiple Outbound Dialer servers. This means that a campaign can run concurrently in distributed call centers, using a shared set of database tables. Each ODS communicates with a controlling CCS to obtain its current configuration and control messages that signify campaign property changes, campaign starts, stops, or error conditions.

CampaignServer

CampaignServer is responsible for Rule Set processing and management of object configuration and storage. CampaignServer maintains all the settings associated with campaigns. It is also responsible for sending out notifications to control processing. CampaignServer uses a Notifier connection to signal Outbound Dialer servers whenever a campaign should be started or stopped. It sends threshold alerts, manual resets, campaign start/stop notifications, active campaign IDs, and configuration updates as needed to control processing. Control messages are not routed through PMQ. Instead, CampaignServer sends Notifier messages directly to the DialerServer process, to tell an Outbound Dialer server to start, stop, or reset campaigns.

UpdateServer

UpdateServer maintains a Notifier connection with each Outbound Dialer server. Its role is to acquire database updates that have been generated by call center agents. UpdateServer reads data from ODS message queues and passes these updates to DialerTranServer, which starts the actual database updates by communicating with the database management system. The tables updated are CallHistory, CallRecordSchedule, and AgentHistory.

DialerTranServer

Each Outbound Dialer server receives contact list records from the DialerTranServer process using a Notifier connection. DialerTranServer uses an OLE DB database connection to start database operations. It passes data to the DBMS (SQL Server or Oracle) whenever data is received from UpdateServer. DialerTranServer commands the DBMS to update the CallRecordSchedule, CallHistory, Contact List, and Agent Statistics tables. The database management system does the low-level file management work.

DialerStatServer

DialerStatServer is the central hub for relaying and caching of statistic updates for Interaction Supervisor and statistic rules. This process caches updates and relays them to other servers. DialerTranServer maintains an OLE DB connection to a database server. It handles SQL processing and starts database operations whenever it receives data from UpdateServer. It passes the data to the DBMS and commands it to update the CallRecordSchedule, CallHistory, Contact List, and Agent Statistics tables.

The database management system does the low-level processing. If the database accepts the update, the message is deleted from the input queue. If the DBMS rejects the database update for some reason, the message doesn't stay in the input queue. If DialerTranServer cannot update the database, the UpdateServer process moves the message to an error queue.

A database may reject messages for a variety of reasons. For example, a message may refer to a field that has been removed or renamed from a table, or the format of the data may be inappropriate for the data type defined in the table.

ODS Process Servers

DialerServer

Each Outbound Dialer server runs the *DialerServer* process, which predicts agent availability. The ODS initiates predictive calls by sending requests to the Telephony Services component. It tracks outbound events, the number of agents available, logs call resolutions, and dynamically adjusts the pace of dialing after analyzing factors such as agent availability, stage completion, the number of calls currently placed, the number of lines available, the number of agents logged on, the number of currently available agents, and the number of calls to place at a time.

The DialerServer process server uses PMQ to send database update messages to the UpdateServer subsystem. These messages contain updates for the Contact List, CallHistory, CallRecordSchedule and Agent Statistics tables.

DialerStatRepeater

DialerStatRepeater relays statistics between DialerStatServer on the CCS and DialerServer on the ODS. It is the central hub for relaying and caching of statistic updates for Interaction Supervisor and statistic rules. ODS sends live updates to Interaction Supervisor (via DialerStatServer and DialerStatRepeater) so that campaign statistics can be displayed in real-time.

Data flow between process servers

The data flow between software servers is illustrated below.

Outbound Dialer server

DialerServer process

Call Records

The Outbound Dialer server places calls, predicts agent availability, tracks outbound events, and adjusts the pace of campaigns.

Updates to the CallList table

Updates to the AgentStats table

Updates to the CallHistory, and CallRecordSchedule tables

DialerServer uses a Notifier connection to pull campaign start/ stop notifications, threshold alerts, error messages, and configuration updates from CampaignServer.

Write Data

Notifier Connection

PMQ

Read Data

UpdateServer process

Error Messages

The UpdateServer sends data to DialerTranServer.

PMQ Error Queue

PMQ

If DialerTranServer cannot update the database, UpdateServer will move the message to an error queue for eventual dispositioning.

DialerTranServer process

DialerTranServer connects to data sources using OLE DB. It initiates database operations.

ODBC

Database Server
(Microsoft SQL Server or Oracle)

Write Data / Read Data

CallList Table | PND Table | AgentStats Table | CallHistory Table | CallRecordSchedule Table | Recycle Table | Audit Table | Audit Table | JIT Table

Central Campaign server

How processes interact during a call

The interaction between major processes during a campaign call are:
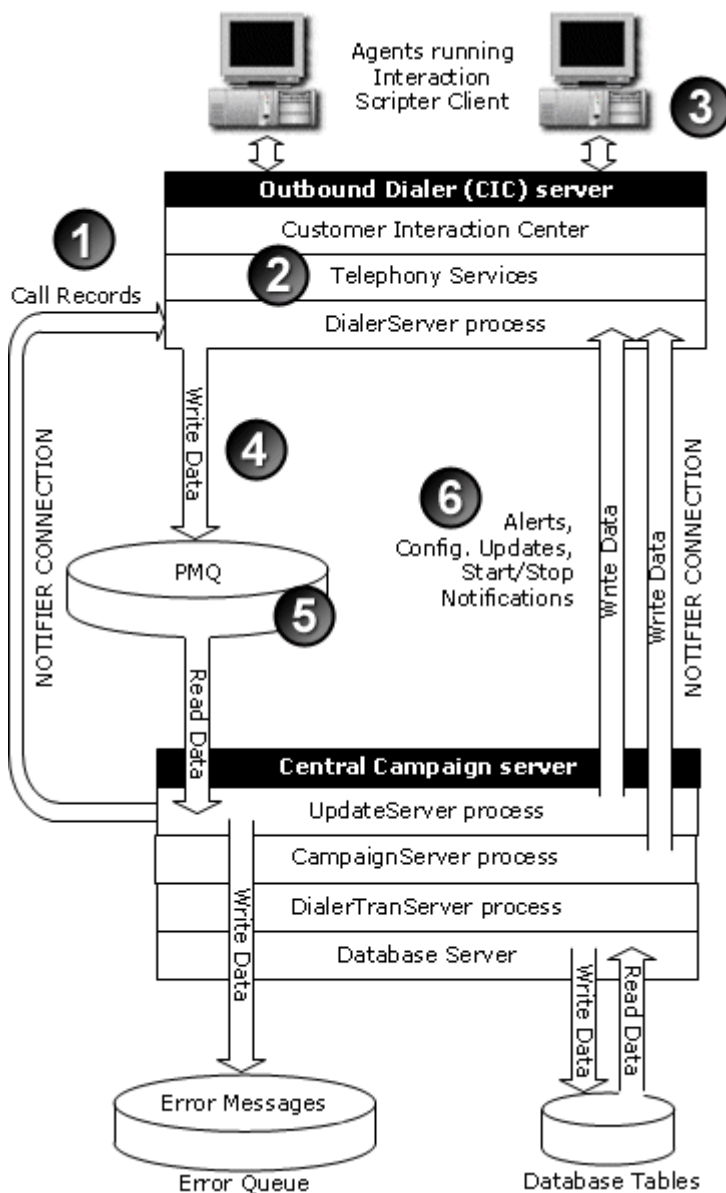
1. DialerServer requests and receives a configurable number of call records from the CCS, using a Notifier connection.

    To do this, DialerServer requests records from the contact list via DialerTranServer without going through the CampaignServer for the information. Database operation results are requested from DialerTranServer.

2. DialerServer tells the Telephony Services subsystem to place campaign calls and to route connected calls (via the ACD process) to the next available agent.

3. The campaign script pops on the screen of the agent's computer. It guides the agent through stages of the call. When the call ends, Interaction Scripter sends data collected by the agent and a call completion code to the ODS.

4. The ODS data received from agents to PMQ, for delivery to the CCS. Configuration change events originate from CampaignServer.

5. UpdateServer receives messages from Outbound Dialer servers and stores them temporarily in a PMQ

queue for ensured delivery.UpdateServer passes this data to DialerTranServer, which in turn passes it to the database management system.

The Contact List, AgentStatistics, CallHistory, and CallRecordSchedule databases are updated at this time. If the DialerTranServer encounters an error while writing to a database, UpdateServer logs the message in the Error Queue.

6. Steps 1-5 are repeated while the contact list is processed. Along the way, the CampaignServer writes threshold alerts, configuration updates, and responds to campaign status requests from ODS servers.

PMQ guarantees delivery of database updates

Interaction Dialer uses an advanced proprietary messaging subsystem known as **PMQ**. PMQ stands for **Persistent Message Queuing**. Records are always stored and transmitted in FIFO (first-in-first-out) order, to ensure reliable transaction processing. PMQ offers guaranteed FIFO delivery and store-and-forward capabilities. Interaction Dialer uses PMQ to transport information between services and data stores. PMQ is reliable, efficient, and fast.

As contact lists are processed, Outbound Dialer servers accumulate information that needs to be propagated back to databases managed by the Central Campaign Server. These updates are written to Persistent Message Queues on each ODS for pickup by the CCS. For example, an agent might collect information from a customer. Instead of attempting to directly update the master database by means of a direct SQL connection, the local CIC server writes this information to a queue and continues processing.

PMQ is then responsible for delivering this information to the Central Campaign Server where it is applied against the database. PMQ protects against the loss of database updates caused by network or hardware failures.

PMQ "users" are applications that send data to one another. Each application implements a PMQ object and passes data to it. The object handles the task of sending data to another PMQ-compatible application on the network.

For example, each Outbound Dialer server uses PMQ to send data collected by agents to the Central Campaign server. PMQ guarantees that all data eventually arrives at the database. If the database cannot process an incoming message for some reason, PMQ writes the data to an error queue.

> PMQ guarantees delivery of data between networked applications, by saving the working state of data. When a software process or network path is unavailable, PMQ queues information in a way that allows running applications to continue. PMQ automatically resumes communication when services are restored.

 PMQ support is built directly into Interaction Dialer. PMQ queues have an .I3P extension, and are called *I3 Persistent Files*. Interaction Dialer creates persistent files dynamically, and takes care of all setup and configuration details. PMQ objects pass data from the application to a back end entity in real-time. PMQ provides an efficient method of caching and storing messages until they can be processed. If for some reason PMQ cannot deliver data, or data cannot be delivered fast enough, data is written to local disk files until a reliable connection is reestablished with the remote application.

PMQ queues reside in memory most of the time. Persistent files (queues) are written to disk if PMQ cannot deliver data fast enough, or not at all.

In the event of an outage, PMQ caches data to disk until the remote connection is re-established, or until all free storage space is exhausted. If storage falls below 10% available free space, the oldest data is discarded to make room for incoming data. In the event of a sustained outage, PMQ will discard data rather than fail for lack of storage space.

PMQ cannot send data to an application that is not running. Likewise, network outages and hardware failures can prevent PMQ from connecting to a remote entity. PMQ attempts to reconnect with the entity it is configured to log to—which may be Notifier, a logging client, database application, wave file compression engine, or other process—whatever the receiving entity is defined to be.

When the connection is broken, PMQ writes data to disk and enters an idle state. It retries the connection every few seconds and automatically resumes delivery when the connection is re-established.

Flow of PMQ messages in Interaction Dialer

Agents collect information during the course of a campaign. Each ODS uses PMQ to deliver these database updates to the Central Campaign server for processing. PMQ guarantees delivery of data across machine, network, and process boundaries.

To understand how PMQ works in the Dialer environment, let's step through the messaging process. The diagram below illustrates the flow of PMQ messages between Outbound Dialer servers and the Central Campaign server.
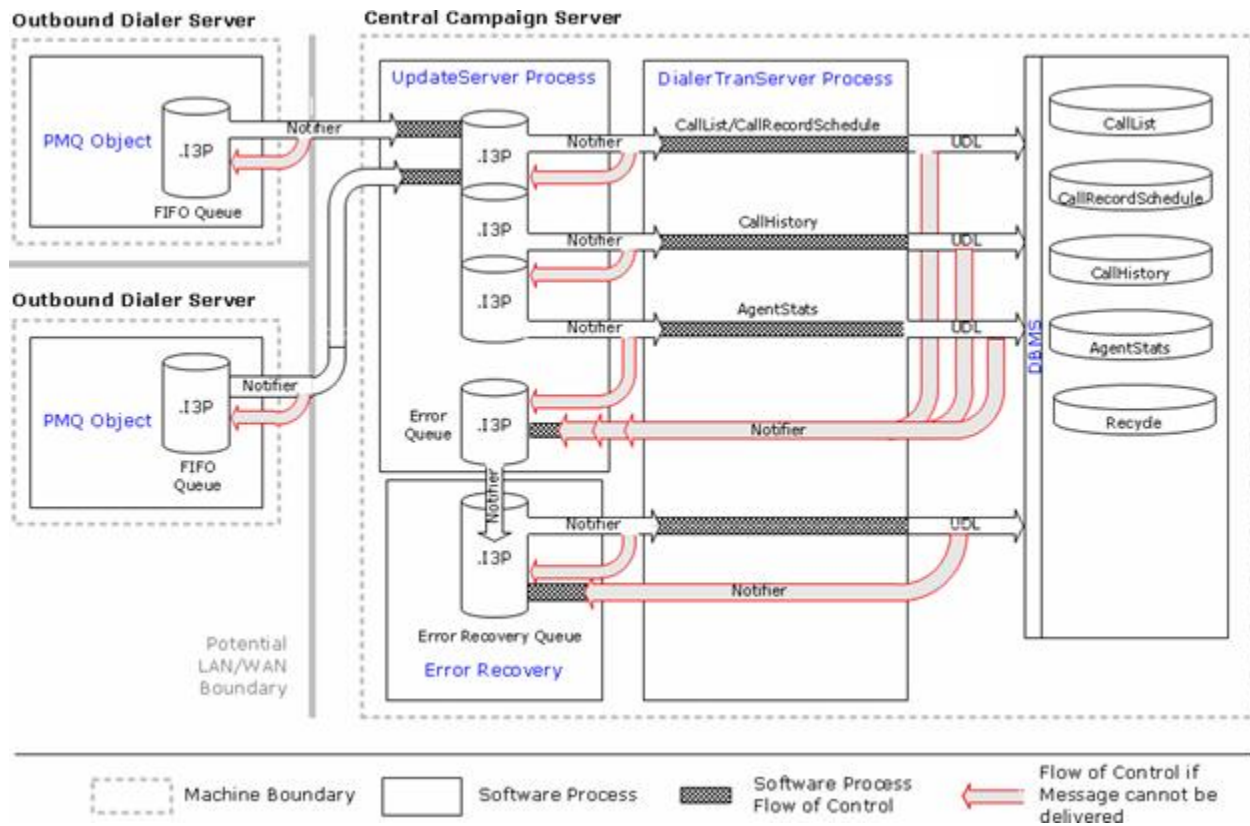
Each Outbound Dialer server creates a PMQ object in memory. The object knows how to communicate with the Central Campaign server to deliver PMQ messages. Each message is a chunk of binary data that represents an item of work. PMQ doesn't care what a message contains—its only role is to store and forward messages efficiently.

1. The PMQ object creates an I3 persistent file to store messages in FIFO order. FIFO ensures that transactions arrive in order.

2. The object invokes a method that attempts to send data to the UpdateServer process on the Central Campaign server. If the server cannot be contacted using Notifier protocol, if the UpdateServer subsystem is not running, or if the transaction cannot be completed quickly enough, the method returns an error code. When errors occur, the message stays in the FIFO queue until PMQ can successfully send it. Under typical conditions, PMQ messages cross network and machine boundaries in near real-time.

3. Next, PMQ sends messages between processes on the Central Campaign server. Messages received by the UpdateServer process are in turn passed to the DialerTranServer process, which starts database operations. Messages that cannot be delivered to the DialerTranServer are retained in the UpdateServer's input queue.

4. When messages arrive at the DialerTranServer, they are prepared for submission to the database management system (DBMS). DialerTranServer uses a UDL connection to send an update notification to the DBMS. The notification contains the message data. Most messages are written to database tables without incident. When this happens, a successful return code is passed back to PMQ, and it removes the processed message from the input queue.

5. If the DBMS rejects the data for some reason, it doesn't stay in the input queue. Instead, rejected messages are written to an error queue. A database may reject messages for a variety of reasons. For example, a message may refer to a field that has been removed or renamed from a table, or the format of the data may be inappropriate for the data type defined in the table.

CCS Switchover

As you know, the Central Campaign Server (CCS) plays a key role in Dialer. It coordinates database operations, provides Outbound Dialer Servers (ODS) with contacts to dial, sends campaign configurations, alerts, and other notifications to the ODS, and acquires data collected by agents for posting to the database. To protect this key role, Interaction Dialer provides failover support for CCS servers. Using the CCS Switchover Setup Assistant, you create a switchover pair known as the Primary CCS and a Backup CCS. Once this pair is created, the Backup CCS will create and maintain a mirror image of the Primary CCS's configuration.

If the Primary CCS fails, in less than 30 seconds the system can switch control to the Backup CCS with minimal disruption. In addition, the switchover scheme allows administrators to manually switch the active CCS at any time with minimal disruption.

Note: The Campaign Server Switchover feature requires special installation steps. For more information, see the CCS Switchover Setup Assistant section of the *Interaction Dialer Installation and Configuration Guide*, which you can find in the PureConnect Documentation Library.

Related Topics

Campaign Server Switchover

CCS Switchover FAQ

CCS Switchover FAQ

If the Primary CCS fails, in less than 30 seconds the system can switch control to the Backup CCS with minimal disruption. In addition, the switchover scheme allows administrators to manually switch the active CCS at any time with minimal disruption. However, you may be curious about what exactly happens in the Dialer environment with a CCS Switchover event occurs.

Will running campaigns continue to function normally and all records remain intact?

Yes, running campaigns will continue to function normally as Dialer keeps a set of records in it cache, which is isolated from the CCS Switchover event. No records will be lost or skipped.

What happens if a campaign recycle is initiated just prior to the CCS Switchover event?

A recycle operation that occurs prior to a CCS Switchover event will be safely moved to the database and will continue operation there. Once the CCS Switchover event is complete, the campaign will start normally. Worst case scenario would be that a second recycle occurs.

What happens if a contact list is being imported or updated at the time a CCS Switchover event occurs?

The answer here depends on how far along in the process the import/update is and what caused the CCS Switchover event to occur.

- If the CCS Switchover occurred due to the physical server powering down, then any data in the cache will be lost and the import/update operation will have to be restarted from scratch.
- If an import is running at the BCP (Bulk Copy Program) stage, the process will continue normally.
- If an import hasn't yet reached the BCP stage, all data will be lost and the import operation will have to be restarted from scratch.
- Updates go though the PMQ (Persistent Message Queuing), which means that in most cases an update will continue normally after a CCS Switchover event occurs.

What happens with real time stats in ICBM Dialer views?

Real time views should be unaffected by a CCS Switchover event. The backup CCS will immediately query for all of the stats and it should pick up right where it left off.

What happens with historical data – is everything written to CIC DB or some data can be missed?

Historical data exists in the CIC DB, which is completely isolated from a CCS Switchover event.

What happens if changes to a campaign's configuration were made in IA, but not yet saved?

Any campaign changes made in IA and not yet saved, will be lost. IA will recognize that a new CCS connection has been established and display a message dialog to that effect. As soon as you click OK, a refresh will occur and any unsaved data will be lost.

What happens in Scripter if an agent has a record open and the call has not yet been dispositioned?

Scripter is completely isolated from a CCS Switchover event. From an agent's perspective everything will continue functioning normally. In fact, an agent will not even be aware that a CCS Switchover event occurred.

Agent Management

Agent Management

- Dialer agents are CIC Users.
- ID, password, extension, name, station, preferred language, contact information, roles, workgroup membership, access rights, and licensing are all configured in Interaction Administrator
- CIC containers manage ACD, skills, auto-answer, whisper tone level, agent greeting wav file, and more

Feature Overview

Administration and configuration of CIC is performed in Interaction Administrator, the common administrative interface used to manage inbound, recording, workforce management, and all other aspects of an CIC system. This includes the management of agents who are Dialer agents. Agents are managed using the *User*, *Workgroup* and other containers in Interaction Administrator. Interaction Dialer does not replicate CIC's agent management features. Instead, it takes advantage of them.

For **CIC configuration assistance**, refer to the **Interaction Administrator Help.** It explains how to customize and configure Interaction Center users and resources (agents, lines, stations, security, and so on.) This document (Dialer Manager Help) covers the features that Interaction Dialer adds to CIC.

Campaign Management and Contact List Management is performed in **Interaction Dialer Manager** (IDM). Dialer Manager adds views for managing everything else involved with outbound dialing campaigns.

How Dialer installation changes CIC roles for Administrator, Supervisor and Agent

Installation of Dialer modifies three CIC roles so that they can be assigned to Interaction Dialer system administrators, call center supervisors, or Dialer agents:

	Agent	Supervisor	Administrator
Logon Campaign	✓		
View Dialer Supervisor Views		✓	
View Dialer Campaign List		✓	
Modify Dialer Campaign List		✓	
View Change Auditing			✓
Modify Change Auditing			✓
View Configuration General			✓
Modify Configuration General			✓
View HTTP Server			✓
Modify HTTP Server			✓
View Outbound Dialer Servers			✓
Modify Outbound Dialer Servers			✓
View Phone Number Types			✓
Modify Phone Number Types			✓
View Preview Call Behavior			✓
Modify Preview Call Behavior			✓
View Dialer Campaign List			✓
Modify Dialer Campaign List			✓

Agent Greeting

Agent Greeting, also called *smile* is an agent's pre-recorded greeting played to callers before the call is connected to that agent. Agents can record smiles in the CIC client. See *Record Agent Greeting* button on the *Personal Prompts* configuration page). Agent Greeting is configured in Interaction Administrator on the *Options* section of the *ACD* tab of a user configuration:
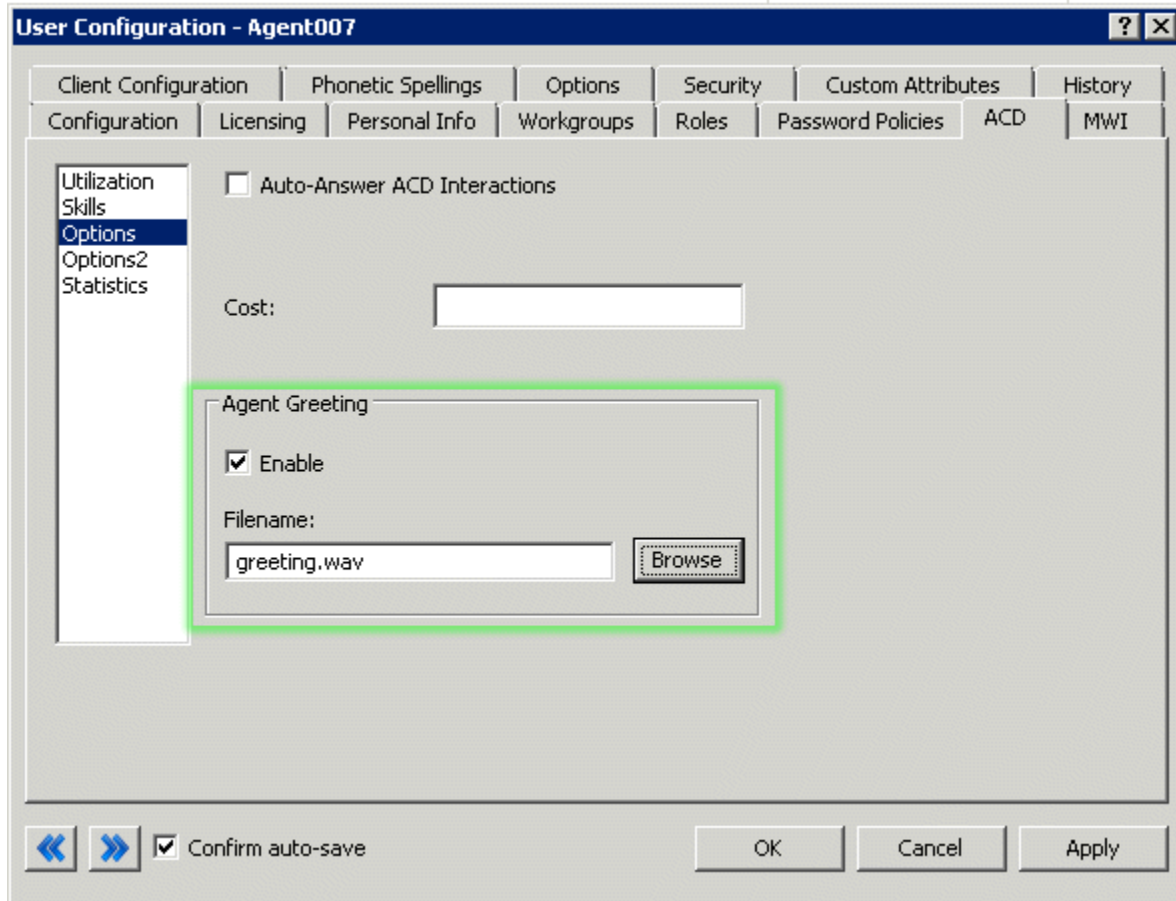
Check the **Enable** box to activate the Agent Greeting feature. Next, select the agent's prompt (.wav) file, by clicking the Browse button. Navigate to the directory containing the recording, and select a .wav file (for example, \\ICServer\IC\Resources\AgentGreeting_MarkM.wav).

Whisper Tone and Whisper Tone Level

Whisper tone is similar to an Agent Greeting, except that the recording is played to the agent to announce a new call. Whisper tone requires modification of system handlers to set up. When whisper tone is configured in Interaction Designer, you can adjust its playback volume in Interaction Administrator on the Options2 section of the ACD tab of a user configuration.
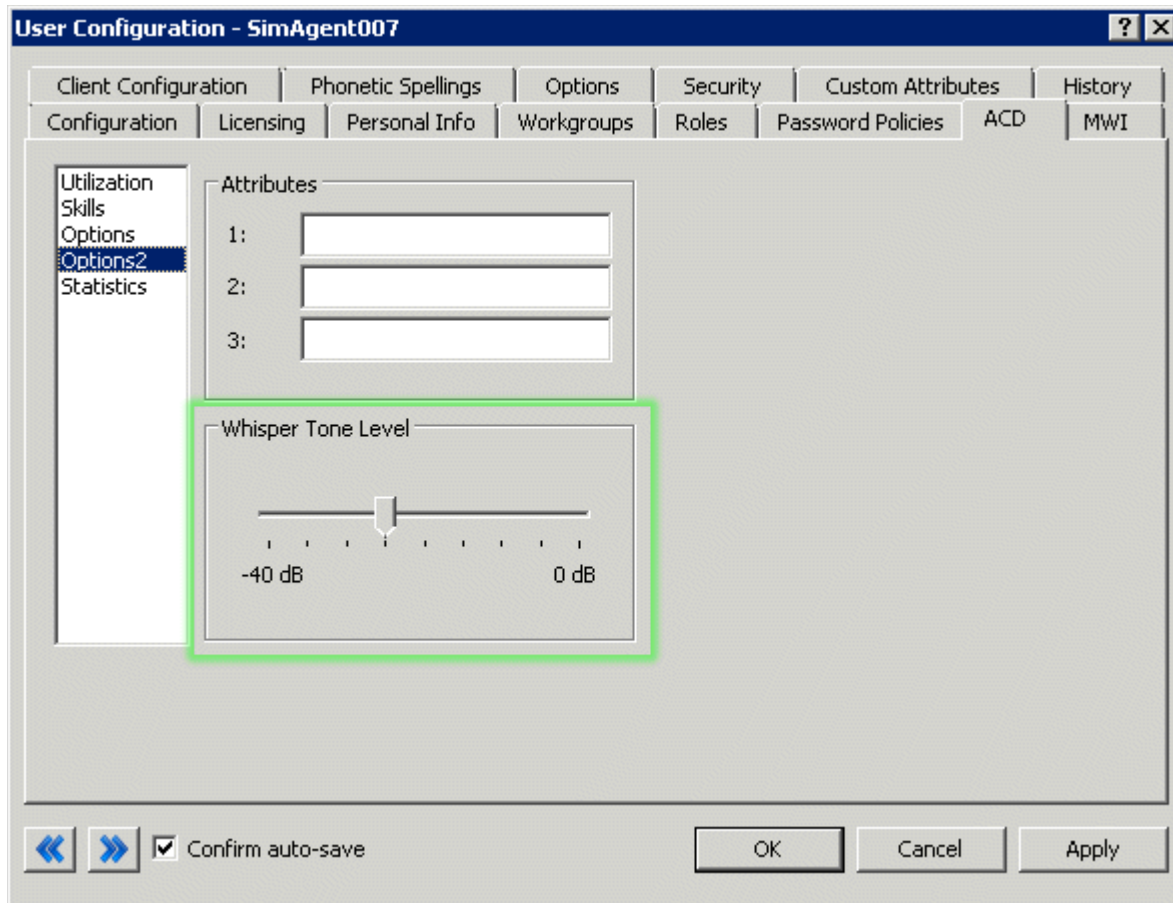
For more information about configuring whisper tones, see the *Alert tool* documentation in Interaction Designer help.

Remote Agent Support

- A persistent connection keeps the voice connection open between calls.
- Campaigns can audibly notify remote agents when a persistent connection is established.

Feature Overview

Call center agents can participate in campaigns while working at home or from other locations away from the call center. These *remote agents* can run Interaction Scripter from any location that has access to the Internet and a telephone.

Remote agents can connect to the Outbound Dialer Server in a number of different ways. The requirement is determined by the accessibility of the CIC server—whether or not it is completely behind a firewall at the corporate network. If the server protected by a firewall, remote agents may need a VPN (Virtual Private Network) connection. If the corporate network permits the server to be accessed from outside a firewall, a simple IP connection may be used.

Interaction Scripter Client users who are working as Remote Agents can establish a **persistent connection at logon time**. A persistent connection allows agents to disconnect one call, keep the receiver off hook, and place or receive the next call via the client, using the same connection between their telephone and the server. The Interaction Center automatically reconnects new calls using the existing phone connection.

When a persistent connection is effect, your remote phone stays connected if you leave your remote phone off hook, and disconnect via the client. The CIC server does not dial your remote phone again. It will connect new calls using the existing audio path. A persistent connection with the CIC server remains in effect until you log off the system or place your phone on-hook.

When a persistent connection is not used, the CIC server closes its connection to the remote phone whenever either party disconnects. This can reduce long distance expenses and free up lines.

Related Campaign setting

Campaigns can be configured to play a wave audio file when Scripter Client users logon to establish a persistent connection. This wave file should play a tone, or say something such as "connection established" to inform the agent that a persistent connection has been established. See the Persistent Connection campaign setting.

Dialer Database Concepts

Dialer Database Concepts

Interaction Dialer makes effective use of database technology such that customer and prospect records, including telephone numbers, agent statistics, call histories, and statistics are all stored in database tables. To allow for maximum customization, Interaction Dialer does not include any pre-configured data for the database. Customers are responsible for creating and populating the table that holds contact records, and for optional tables that store Do-Not-Call records. Dialer automatically creates and manages all required tables except contact list and DNC tables.

Customers can easily integrate their own specialized data with the columns that Interaction Dialer uses by default. For example, additional fields can be added to a contact list table, in addition to the required fields that are described in this topic. A contact list can be shared by multiple campaigns, provided that each campaign selects a distinct subset of the list using filters. An individual call record should not be shared by more than one campaign. As a best practice, the tables used by Interaction Dialer are for Interaction Dialer's exclusive use. If you allow an external application to select, update, or insert data, you could slow down or halt the usual processing of campaign data.

No databases are included with Dialer

Customers are responsible for populating the contact list table. The easiest method to do so is by using Dialer's Contact Import Wizard. If desired, you may use the expertise of in-house database administrators in your organization to create your contact tables manually.

Contact Import Wizard provides an easy to use interface for importing contact data from common data sources. These sources include Microsoft SQL Server, Oracle, Microsoft Access, Microsoft Excel, and CSV files.

Customers can integrate their own data

Customers can easily integrate their own specialized data with the columns that Interaction Dialer uses by default. Additional fields can be added to a contact list table to store special information collected during a campaign. A contact list table may not exceed 2 million records. Up to 200 new fields can be added using Contact Import Wizard or database management tools, so long as the data type is char, varchar, or nvarchar. These string data types define a "lowest common denominator" data type that is used when passing data through the system.

Custom fields can be passed to Interaction Scripter when the call record is popped on the agent's machine.

Related Topics

Supported Database Servers

The Dialer Database

Database Connections

Custom Stored Procedures

Global Dialer Settings

Supported Database Servers

Interaction Dialer simplifies server management by supporting industry-standard database systems and by using database connections to define OLE DB providers that link Dialer to data sources. Interaction Dialer uses external data sources for contact Lists and campaign tables. All database tables must be managed by a database management system (DBMS). Oracle Database and Microsoft SQL Server are the only DBMS systems supported at this time.

While the CCS and DBMS can reside on the same physical server, it may not practical for all situations.

- For environments that have a high call volume, having the DBMS server reside on dedicated hardware will provide better overall Dialer performance.

- For environments that employ the CCS Switchover feature, having the DBMS server reside on dedicated hardware will ensure that the backup CCS will still have access to the DBMS even if the physical server running the primary CCS goes down completely.

About Collation and Language settings in SQL Server

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CampainServer processes access the Dialer database to store contact lists and associated data. The DialerTran process requires the default collation for this database. For SQL Server, that is Latin. Other collations will cause failed queries, which will prevent the retrieval of data, causing Dialer to not dial any records.Collation settings define rules telling SQL Server how to sort and compare characters in a database. Collation setting affect code pages used to physically store non-Unicode data, such as column types of char, varchar, or text. This impacts how dates are displayed, sorted, and (most importantly) compared. It makes the difference between Dec 31, 2017 being displayed as: 2017-12-31 versus 2017-31-12.Overall, this causes problems with date comparisons used in Dialer for items such as DNC lists, last call timers, an so on.In addition to collation, the Language set in SQL Server can affect the output results of SQL Server. This has less impact on the system, but if you import contact list data, the results may be displayed incorrectly.

Related Topics

[Campaign Server Switchover](#)

The Dialer Database

The CIC database is built during the installation process. This is different from the way that Interaction Dialer operates. A key phase of CIC installation is running Setup Assistant, which automatically creates and configures the CIC database. As such, little more than identifying the database server and providing credentials to authenticate that connection are required.

The Dialer database is provided by the customer. The customer must also provide connections to the database in the form of UDL files. Furthermore, each contact list entry is associated with a database connection that allows Interaction Dialer to manipulate data without working directly with the DBMS or massaging a file format.
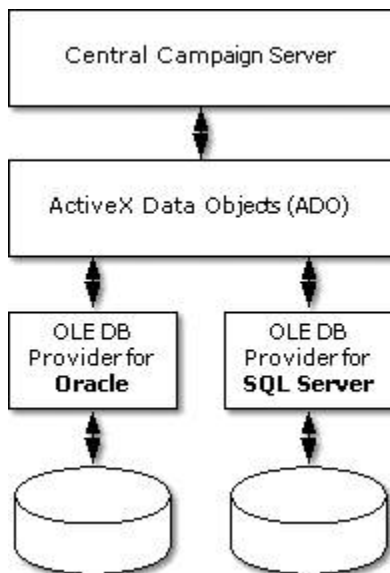
Internally, Interaction Dialer uses an application-level programming interface named ADO (ActiveX Data Objects) to handle database operations. ADO provides standard methods that Dialer uses to work with database objects such as tables, queries, and records. Consequently, Interaction Dialer is not hard-coded to support Oracle or SQL Server databases. Instead, it passes generic requests to ADO, and relies upon ADO to handle the task of interfacing with database systems efficiently and reliably.

Behind the scenes, layers of software called OLE DB service providers connect ADO to DBMS systems. OLE DB service providers are available for the leading DBMS systems: SQL Server and Oracle.

Although Microsoft provides a generic service provider for ODBC, it is not supported for use with Interaction Dialer.

- OLE DB Service Providers perform the low-level task of database interfacing.
- OLE DB connections are defined by creating UDL Universal Data Link (.UDL) files.
- UDL files are uploaded to the Central Campaign server, so that they can be used by multiple ODS servers.

Database Connections

Database connections are important, because they allow a campaign to select a contact list, without specifying any details concerning the location of that file. To make this connection, Dialer makes use of a Universal Data Link (UDL) connection.

Since Interaction Dialer reads and updates campaign tables using UDL, UDL files must be defined before contact lists or campaigns are configured in Dialer. A UDL file encapsulates everything that a DBMS server needs to know to integrate with an application such as Interaction Dialer. More specifically, UDL connections provide a software layer that an application (such as Dialer) can use to communicate with a DBMS. The Central Campaign server uses UDL to connect to OLE DB data sources, such as the contact list, which are under control of a DBMS. Each UDL defines data sources in a generic way that allows conforming applications to work with data.

- You cannot define UDL connections in Dialer Manager. Fortunately UDL files are easy to create, using Microsoft's Data Link Properties utility. See Create a UDL File.
- Dialer does not support ODBC connections. Dialer uses OLE DB providers.
- Any number of campaigns can share the same connection. Campaigns can use different connections but don't need to in most cases. The Default Connection is commonly used for all campaigns.

Default Connection

A default database connection object is created when Interaction Dialer is installed. It is called [Default Connection]. In many cases, [Default Connection] provides all of the database connectivity that a call center needs to run campaigns. While each campaign might use a separate contact list table, typically these tables are stored in only one database. If this is the case, the Default Connection may be used exclusively. You cannot delete the default connection object, but you can modify it or define your own custom connection settings.

Related Topics

Create a UDL File

Add UDL as a Dialer Database Connection

Associate a Database Connection with a Contact List

Database Connections

Custom Stored Procedures

By default, any time data is written to either the CallHistory Table or the AgentStats Table, Dialer runs a stored procedure (SPROC): CallHistoryInsert_1 or spid_exec_tran_batch respectively. If you, as a DBA/Developer, would like to run custom SQL code when Dialer inserts data into the CallHistory Table or the AgentStats Table, you can do so by creating and enabling Custom SPROCs.

Creating Custom SPROCs

Dialer provides you with two custom stored procedures called Custom_CallHistoryInsert_1 and Custom_AgentStatsInsert. By default, these two SPROCs are just blank shells into which you can add any SQL code that you wish.

Using these custom stored procedures has two main benefits: 1) Once Custom SPROCs are enabled, they will be run automatically from Dialer's default SPROCs. 2) When you perform an upgrade, they will remain intact-they will not be overwritten during the upgrade procedure.

Note: Keep in mind that while you can indeed add custom SQL code directly to Dialer's default SPROCs, it is not recommended. During an upgrade, Dialer's default SPROCs will be overwritten and you will have to recreate your custom code.

Enabling Custom SPROCs

In order for the custom SPROCs to run when data is written to the CallHistory Table or the AgentStats Table, you must enable them via a special server parameter called Dialer Call Custom Sprocs. To enable your custom SPROCs, set the parameter value to true. For more information, see Server Parameters.

Dialer Tables (Data Dictionary)

Dialer Tables (Data Dictionary)

Tables in the CIC Database

The following tables exist in the CIC database for use by Interaction Dialer. These tables are not created by Dialer, but by CIC during Setup Assistant if the CIC license contains the licensed Dialer features.

Table Name	Description
ININ_DIALER_40.CallHistory	Holds call-completion information for every call placed. This table is updated in the CIC Database.
ININ_DIALER_40.AgentStats	Stores information about agent performance for all campaigns.
ININ_DIALER_40.CampaignStats	Contains summary statistics for each campaign running in Dialer. Each row will contain a set of statistics averaged over a configurable sample period.

NOTE: For brevity, the ININ_DIALER_40 prefix is often omitted from table names in the documentation. For example, we may use "AgentStats" instead of "ININ_DIALER_40.AgentStats".

Tables in the Dialer Database

These tables in Dialer's database are created and managed by Dialer on a SQL server apart from CIC databases. In high volume environments, SQL server runs on dedicated hardware. Many customers install SQL server on their Central Campaign Server instead.

Table Name	Description
I3_<ContactList>_PND	Phone Number Detail (PND) table tracks time zones, attempts, call rescheduling, and DNC status for each phone number associated with a contact record, for each campaign.
I3_<CampaignName>_RE0	Holds sequencing for the current recycle. It is used internally by Interaction Dialer when Contact List records are selected for processing.
I3_<ContactList>_CS	Maintains the list of parties who are scheduled for callbacks. This table is created by the system when you create a campaign.
I3_AuditConfigChanges40	Tracks changes made to configurations.
I3_<ContactList>_JIT	Priority Dialing records are tracked using this table auto-created by Dialer. For performance reasons, Dialer watches this secondary table for inserted records, not the Call List itself.
I3_<ContactList>_CCD	Tracks the contact columns chosen for a contact list and the contact column ids assigned to those contact columns. The contact column ids tracked in the contact column details tables correspond to the i3_ccid field in the phone number details (PND) table, making the new table useful when customizing the PND table.

Tables created by the Customer

Customers are responsible for creating and managing list of contact numbers, and optionally for managing lists of numbers that are never to be called.

Table Name	Description
Contact List table - required (managed and named by customer)	This table stores the list of people who will be called in a campaign, along with customer-defined fields that are displayed to the agent by Interaction Scripter. The customer is responsible for creating and populating this table, whether through Contact Import Wizard or client tools for the particular DBMS.
Do Not Call (DNC) table - optional (named by customer)	Customers can optionally create a table in Dialer's database that stores telephone numbers that are never to be called. This information can come from state and local sources, or from a third-party cleansing service. Once the table is set up as a DNC Source assigned to a campaign, Dialer can use the table to perform DNC Scrubbing. Scrubbing prevents contact numbers from being dialed by a campaign. An initial bulk scrub is performed once, to flag matching records in the contact table to prevent

them from ever being dialed. During campaign execution, just-in-time scrubbing scrubs batches of numbers just prior to placing the calls.

The DNC table must contain one column that contains telephone numbers. There is no restriction on the format of contact numbers except that numbers should conform to the format generated by Dial Plan if Dial Plan is used. Otherwise, the format of telephone numbers should be (xxx) xxx-xxxx. The data type of that column must be varchar.

The DNC table may contain an additional Expiration column in DATETIME format, after which the DNC entry is ignored or deleted. If the DNC contains a populated Expiration column, that time is compared with the current time.

If the current time is previous to the expiration time, the number is not dialed. It is treated like a traditional do-not-call number.

If the current time is past the expiration time, the number is dialed because the entry has expired.

Generally speaking, a DNC table stores telephone numbers that are never to be called. For background information and procedures, see DNC Scrubbing of Contact Numbers.

Tables used for Penetration Rate Reporting

Customers can develop penetration rate reports to show the number of contacts that were contacted (the numerator) contrasted with a number of records in a contact list (the denominator). The penetration rate calculation is simple but input criteria must be carefully considered. Penetration Rate tables store data that customers can use to generate custom penetration rate reports. See Penetration Rate Report Data and Penetration Rate Tables ERD.

Table Name	Description
I3_<ContactList>_PEN	This table stores the numerator used to calculate penetration rate. It contains one row for each completed call of the corresponding contact list table.
	Penetration rate records are not inserted into the _PEN table after each call. Instead, data about penetrated calls is accumulated in RAM and written to the _PEN table 100 records at a time per database connection. This improves performance by reducing the number of round trips to the database, eliminating the overhead of individual RDMS transactions.
	When call volume is low, fewer than 100 records are written. A scheduled job is triggered every two minutes to ensure that calls older

	than 5 minutes are flushed to the database. As a consequence, calls in RAM can never be older than 7 minutes.
I3PENETRATIONDATA	This table contains the actual penetration data, specifically two rows per contact column (one for all values and one for unique values) plus one row per contact list to account for all contacts.
I3PENETRATIONRANGE	This table is reserved for future use.
I3PENETRATIONUPLOAD	An integer value in this table is incremented every time a new row is added in this table. That occurs when contacts added to a contact list.

ContactList Table

ContactList Table

Unlike most tables used by Dialer, the ContactList is created by the customer. The ContactList table contains all the phone number records that will be called during the campaign, along with the current status of each record. These phone number records can come from any source and can be entered into the table manually or imported. You can add additional columns to the ContactList table which will provide more information about each record that can be accessed and worked with by the script.

For example, you could add columns that list the first and last name of the person associated with each phone number record in the ContactList table. This column, when integrated in a script, would allow the agent to address the customer by his/her name. Similarly, you could add additional telephone number fields to support multiple phone numbers per contact.

Note: Do not use SQL Views for the ContactList table. Dialer cannot update this table if it is a SQL View.

If you already have data stored in a separate database (or perhaps in a comma separated value list delivered from a phone list supplier), you can import that data into your Dialer database using Dialer's Contact Import Wizard.

Adapting existing tables as Contact Lists

Customers can use any existing contact list table with Interaction Dialer. When a table is associated with a Campaign (via Interaction Dialer Manager), Dialer adds these required columns to the table if they do not exist:

attempts	i3_attemptssitcallable
i3_activecampaignid	i3_attemptssystemhangup
i3_attemptsabandoned	i3_campaignownerexpiration
i3_attemptsbusy	i3_campaignownerid

i3_attemptsdaily	i3_campaignownername
i3_attemptsfax	i3_identity
i3_attemptsmachine	i3_lastcalled_utc
i3_attemptsnoanswer	i3_siteid
i3_attemptsremotehangup	i3_uploadid
i3_attemptsrescheduled	status
	zone

Dialer automatically adds the i3_identity column, which does not need to be a primary key.

Inserting Additional Fields

You can add up to 200 additional fields to a ContactList table before performance degrades appreciably. The only restriction is that the data type for new fields must be one of the following:

- char
- nchar
- dateTime
- int
- bigint
- money
- nvarchar
- varchar

String data is the "lowest common denominator" data type that passes through the system most easily. Custom fields can be passed to Interaction Scripter when the call record is popped on the agent's machine. Additional telephone number fields can be added to support multiple phone numbers per contact.

Other data types such as float and binary are not supported. Custom fields can be passed to Interaction Scripter when the call record is popped on the agent's machine. Additional telephone number fields can be added to support multiple phone numbers per contact. Phone number columns should be a string type such as varchar.

Note: Do not use spaces when naming custom contact list columns. Interaction Dialer does not support contact fields that have spaces in the field name.

Reserved column names

When constructing a contact list, customers should keep in mind not to use columns already reserved for use by CallRecordSchedule tables. The Dialer Transaction Server performs a join operation on the schedule table and the contact table. Using the reserved column names listed below will result in syntax errors and will prevent dialer from dialing scheduled contacts. Avoid columns with the following names:

- campaignname
- siteid
- i3_identity
- schedtime
- agentid
- status
- schedphone

Importing Records

Interaction Dialer offers a tool called Contact Import Wizard to simplify the process of populating contact lists for campaigns. Contact Import Wizard walks the administrator through a step by step process to populate contact lists from existing databases and flat files.

If you determine that additional fields are needed in the ContactList, the field property, when using strings, must be defined with a data type of char, varchar, nvarchar or nchar.

Additional Considerations for Contact List Management

- **Contact List Updates**. The contact list table is a dynamic data source. As your business demographic or customer base changes, so must your contact list. This includes adding contacts and revising existing records.
- **Real-Time Updates**. Interaction Dialer may be configured to regularly schedule contact list updates, but often there is the need to add on-the-fly records to be dialed immediately. For example, if your organization generates customer inquiries through a website form, the most effective marketing may occur if that inquiry is called as soon as possible, nearly immediately following the request.
- **Managing Do-Not-Call Lists**. DNC lists are a critical consideration of any dialer system. Like the contact list table itself, this is not a "set it and forget it" item. Updates based on internal do-not-contact requests and governmental registries must be conducted based on regulations for the location in which your company exists, and for locations where your customers reside. Regulatory compliance is discussed in detail later in this document.

- **Don't use quoted identifiers in table names**: to comply with both SQL and Oracle platforms, Interaction Dialer does not support contact list tables that use names enclosed by quotation marks.
- **Do not exceed 200 columns or 2,000,000 records**. To maintain optimal performance, a single ContactList table should not exceed 200 columns (fields) nor contain more than 2 million records.

Preserving Performance

As a best practice, customers are advised not to run queries or other database operations against the call list table when it is in use by Dialer. This can cause performance problems.

Custom Columns

See Custom Contact List Columns.

Importing Records

See Import Contact List.

ContactList Schema

The **contact list** table stores the list of people who will be called in a campaign. The number of columns in a ContactList table should not exceed 200 columns. Testing indicates that performance remains acceptable with up to 200 columns.

Column	Details	Description
ATTEMPTS	int, null	The number of times that Dialer attempted to call this party. This cumulative total is never reset. This column is managed by Dialer. Customers can populate the attempts column before uploading a call list, but this column is optional and not required.
I3_ACTIVECAMPAIGNID	varchar(80), null	GUID of the last campaign that this record was selected for. I3_ACTIVECAMPAIGNID holds the Id of the active campaign associated with this contact—the campaign that has this contact cached.

		When a campaign stops, its active contacts are reset in the contact list (status changed from 'I' to 'C'), and the active campaign's GUID (i3_activecampaignid) is used by a stored procedure to ensure that only contacts associated with this campaign are cleared.
I3_ATTEMPTSABANDONED	int, null	The total number of times that this party was abandoned (disconnected before an agent could speak with the party).
I3_ATTEMPTSBUSY	int, null	The total number of calls to this party that returned busy signals.
I3_ATTEMPTSDAILY	int, null	Number of contact attempts today.
I3_ATTEMPTSFAX	int, null	The total number of calls to this party that were answered by a Fax machine.
I3_ATTEMPTSMACHINE	int, null	The total number of calls to this party that reached an answering machine.
I3_ATTEMPTSNOANSWER	int, null	The total number of calls to this party that were not answered.
I3_ATTEMPTSREMOTEHANGUP	int, null	The number of contact attempts that resulted in remote party hang up.
I3_ATTEMPTSRESCHEDULED	int, null	The number of times that this contact was rescheduled due to agent unavailability.
I3_ATTEMPTSSITCALLABLE	int, null	The number of contact attempts that failed with SIT tones. This also helps indicate how many times the record has been placed. This column can be used with policies or filters to stop dialing records that have exceeded a customer-defined threshold of SITCallable results.
I3_ATTEMPTSSYSTEMHANGUP	int, null	The number of contact attempts that resulted in System Hang Up.
I3_campaignownerexpiration	datetime, null	The time that the ownership expires.
I3_campaignownerid	varchar(80), null	The ID of the campaign that owns the record.
I3_campaignownername	varchar(80), null	The name of the campaign that owns the record.
I3_IDENTITY	PK, bigint, not null	I3_IDENTITY is an integer value that uniquely identifies each row in the contact list. This column is managed for the customer. Customers may insert records that contain I3_ROWID, but they cannot and should not modify I3_IDENTITY columns. Although I3_ROWID is deprecated from Dialer's point of view, it was retained for backward compatibility purposes.

I3_LASTCALLED_UTC	datetime, null	UTC time of the last contact attempt.	
I3_ROWID	varchar(80), null	I3_ROWID is a customer-managed field used to uniquely identify a row. Dialer no longer uses this column. I3_ROWID is superseded by I3_IDENTITY, a Dialer-managed field. I3_ROWID is not a required field. However, I3_ROWID is supported in the contact list and is propagated to the CallRecordSchedule and CallHistory tables. I3_ROWID is also available in Scripter and in policies for backwards compatibility.	
I3_SITEID	varchar(80), null	The name of the Outbound Dialer server that last called this contact.	
I3_UPLOAD_ID	int	Upload Id is a sequential number populated when contacts are added or uploaded to a contact list. For details, see Penetration Rate Report Data and Penetration Rate Tables ERD in this document. In Dialer 4.0 SU3 and later, null values are no longer supported. I3_UPLOAD_ID has a default value of -1.	
STATUS	char(1), null	This field contains a one-character alphabetical flag that indicates the overall status of a contact in a campaign. Interaction Dialer uses this flag to determine whether to select a record for processing. The status column in the contact list indicates the overall status of a contact, not the callable status of individual numbers, which is maintained in the Phone Number Detail table. This approach allows a DNC status to be maintained in the PND table for individual telephone numbers associated with a contact.	
		A	"A" indicates that maximum retry attempts for busy, answering machine, no answer and so on have been reached for the record. It will never be called again. This status is also assigned when "max attempt" thresholds have been reached for auto-schedule options or

			the total attempts to dial the record.
		C	"C" indicates a callable record.
		F	"F" indicates that all of a contact's numbers are uncallable, and that the record has been "flagged" for customer review.

For example, if all attempts to dial phone numbers for a contact fail with SIT wrap-up Category, then that contact is essentially uncallable until a new contact column is added or some of the existing numbers are changed. Rather than mark the contact as uncallable, it is flagged with "F" so that customers can change the status back to "C" after they have added a new contact column, or updated contact numbers. |
| | | I | "I" stands for *In Process.* The record selection process has selected this record for processing, and the record has been passed to an Outbound Dialer server. However, the record may not have been dialed yet, and it has not been dispositioned by an agent.

When a campaign stops, its active contacts are reset in the contact list (status changed from 'I' |

			to 'C'), and the active campaign ID (I3_ACTIVECAMPAIGNID) is used by a stored procedure to ensure that only contacts associated with this campaign are cleared. This process takes into account the active campaign so that if the contact list is in use by multiple campaigns, the queued flag will be cleared on all contacts when the campaign stops (even ones queued by Dialer for other campaigns). This prevents contacts from being called back once they are completed or processed.
		J	"J" identifies a record inserted into the contact list table for Priority Dialing.
		O	"O" stands for auto-scheduled call. When the system schedules a call back according to the defined auto-schedule settings, Status is set to O to indicate that a callback has been scheduled, but has not been attempted yet.
		P	"P" indicates that the record is to be purged and will not be dialed. The "P" status is set by DNC scrubbing.
		R	"R" is used for records that have been rescheduled because the

			designated agent was not logged on to take the call. If these are campaign wide calls, then if no agents are logged on, calls will be rescheduled with "R" in the status field.
			If 'ignore recycles' is checked, auto scheduled calls will be distinguished from agent scheduled campaign wide calls and own agent callbacks.
			The contact list status will appear as 'C' for auto-scheduled and rescheduled auto-scheduled calls if ignore recycles is not checked.
		S	"S" stands for Scheduled call. When an agent schedules a call back, Status is set to S to indicate that a callback has been scheduled, but has not been attempted yet.
		T	"T" stands for auto-rescheduled call (scheduled call that was rescheduled by dialer, not an agent). This status is assigned to a scheduled callback that failed to reach a contact, and the maximum number of callback attempts has not been reached. When it is, the status will be changed to "A".
		U	"U" stands for *unusable* call record. This status

		flag designates that the contact will not be called again. Items are given a "U" status when the assigned wrap-up category code indicates Success, SIT Uncallable, Failed, or Wrong Party.
SUCCESSRESULT	float, null	SUCCESSRESULT is a customer-managed column in both the ContactList and CallHistory tables. Customers can use SUCCESSRESULT to maintain running counters, such as a money counter for example. The value of SUCCESSRESULT can be NULL when records are added or updated. The value of SUCCESSRESULT in a CallHistory row will contain whatever was in the SUCCESSRESULT column of the associated contact at the time the history row was written. Its value in this table can be incremented by the customer as need to manage a running total of some sort.
ZONE	varchar(25), null	The time zone when this contact can be called.

Callable records are records with callable status in database.

Scheduled records are 'status' column records with a value of S, O, R, or T.

Cached records are records in progress that have been cached by Dialer (I).

Note to Oracle Users
Oracle documentation highly discourages use of quoted identifiers for table names. In accordance with the stance that Oracle has taken with regard to quoted identifiers, Interaction Dialer does not support contact list tables whose names are enclosed in quotes.
For this reason, Dialer does not create tables with spaces in the name.
DialerTranServer removes all special characters, including spaces, from the campaign name when it creates tables. The following special characters are removed automatically:

'`|#*?[].!$ -&*()=+:;/\\

PND Table

PND Table

The Phone Number Detail (PND) table tracks time zone, contact attempts, and rescheduling attempts for each phone number associated with a contact record. The PND table also stores Do-Not-Call

(DNC) status of individual phone numbers in the table. Customers should not modify PND tables as they are automatically created and maintained by Interaction Dialer.

- Interaction Dialer automatically creates a separate PND table for each contact list in use. As it does so, Dialer adds a separate row to the PND table for each contact column, for each contact in the list.
- Interaction Dialer also automatically maintains the contents of the PND table, which also includes a periodic clean up operation to prevent the PND table from getting too large. After midnight each day, DialerTran deletes any PND entries that have no corresponding call list entry or that are for a column that is no longer used.

Tracing in the DialerTran log records the SQL that was run during this cleanup operation. As such, you can determine what was removed from the PND table by searching for the trace entries labeled DeleteOrphanedPNDRecords.

Relationship between Contact List and PND

- Dialer creates one PND table per Contact List.
- Each PND table is a child table of a Contact List.
- Each PND has an entry for each contact column in the Contact List.
- PND tables manage the details associated with each individual phone number in the Contact List.
- The Phone Number Type for each contact column in the PND table is read from the Dialer configuration file.
- A PND table tracks time zone, contact attempts, and rescheduling attempts for each phone number associated with a contact record.

PND/Contact List Status fields and DNC

DNC scrubbing marks entries in a PND table with a status of "P" if a number should not be called. However, DNC scrubbing does not modify the status field in a Contact List.

The status column in the Contact List indicates the overall status of a contact, not the callable status of individual numbers, which are maintained in the PND table. This approach allows a DNC status to be maintained for individual telephone numbers associated with a contact. If all of the numbers for a contact are flagged not to be called, then Dialer will never dial the contact, since the contact has no callable numbers.

Related Topics

PND Schema

Status Codes

Contact Column Details Table

Managing DNC in Interaction Dialer

PND Schema

Dialer creates one PND table per contact list. Each PND has an entry for each contact column in the Contact list. The Phone Number Type for each contact column is read from the Dialer configuration file. A PND table tracks time zone, contact attempts, and rescheduling attempts for each phone number associated with a contact record.

Column	Details	Description
I3_IDENTITY	PK, bigint, not null	I3_IDENTITY is an integer value that uniquely identifies each row in the contact list.
I3_CCID	PK, bigint, not null	Contact Column ID (CCID) is the unique id of the corresponding contact phone number in the Contact list table. When a contact column is chosen, if it does not already exist in this list then it is added, and a new CCID is assigned. Items are not removed from this list when a contact column is removed from a campaign.
I3_STATUS	char(1), null	If the DNC scrub indicates that the number is blocked for an undetermined time period, the status will be set to "P" If the DNC scrub indicates that the number is blocked by a calling time restriction (i.e. it is temporarily blocked), the status will be set to "B"
I3_SUBSTATUS	char(1), null	As Dialer works through the records in the PND table, it flags (with an "F") each phone number associated with a contact record as it is dialed. Using these flags allows Dialer to keep track of which numbers have been dialed. This flagging technique is designed to allow Dialer to pick up where it left off in the event that a recycle occurs before all the phone numbers in a particular record have been dialed. Once all the numbers in a record have been dialed, Dialer will clear the I3_SubStatus flags and move on to the next record.
I3_ZONE	nvarchar(25), null	The time zone when this contact can be called.
I3_ATTEMPTS	int, not null	Number of attempts to call this contact.
I3_ATTEMPTSABANDONED	int, not null	Number of attempts that were abandoned, meaning that the call was ended by the contact

		before a conversation with the agent could take place.
I3_ATTEMPTSBUSY	int, not null	Number of attempts that resulted in a busy signal.
I3_ATTEMPTSFAX	int, not null	Number of attempts that reached a Fax machine.
I3_ATTEMPTSMACHINE	int, not null	Number of attempts that reached an answering machine.
I3_ATTEMPTSNOANSWER	int, not null	Number of call attempts that were not answered.
I3_ATTEMPTSREMOTEHANGUP	int, not null	Number of attempts that were hung up by the remote party.
I3_ATTEMPTSRESCHEDULED	int, not null	Number of attempts that were rescheduled.
I3_ATTEMPTSSYSTEMHANGUP	int, not null	Number of attempts that were disconnected by the system due to no available Agents, high CPU utilization, and so on.
I3_ATTEMPTSSITCALLABLE	int, not null	The number of contact attempts that failed with SIT tones. This also helps indicate how many times the record has been placed. This column can be used with policies or filters to stop dialing records that have exceeded a customer-defined threshold of SITCallable results.
I3_DNCCOMEXPIRATION	datetime, nul	When the I3_STATUS field is B, indicating that the number is temporarily blocked by a calling time restriction, this field will contain the date and time when the number will no longer be restricted. i.e. it will become callable.

Meta Table

Meta Table

If the DNC Metadata Tracking feature is enabled on the DNC Metadata tab, Dialer creates a special metadata table that tracks all blocked phone numbers after a DNC.com scrub operation. More specifically, the Meta table contains detailed information provided by DNC.com as to why the phone number was blocked.

- When Dialer creates a Meta table, it is associated with the contact list as well as the PND table. For example, if the name of the contact list is CList, the Meta table will be I3_CList_META and the PND table will be I3_CList_PND.
- While the Meta table is essentially a history table, the data it contains can be cleaned up on a regular basis if the Enable Automatic Table Cleanup toggle is enabled on the DNC Metadata tab.

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- You can search the Meta table and export the results from the DNC Metadata tab.
- When the Meta table is created, Dialer adds data to the associated record in the PND table to indicate that the number is temporarily blocked as well as how long the temporary block will remain in effect.

Related Topics

Meta Schema

DNC Metadata tab

PND Table

Meta Schema

Dialer creates one Meta table per contact list and it contains metadata provided by DNC.com about blocked numbers.

Column	Details	Description
DateTime	datetime, not null	This is the data and time that the record was added to the Meta table.
Campaign	varchar (255), not null	The name of the Campaign.
Phone	varchar (50), not null	The phone number.
ResultCode	varchar (1), not null	A single character code that is used to determine whether or not to block the phone number. (See the Result Codes topic.)
DateField	varchar (30), null	The date that the EBR expires.
Reason	varchar (255), null	The reason the call was blocked
RecionAbbrev	varchar (2), null	The 2-letter postal abbreviation of the US state or territory or Canadian province corresponding to the phone number.
Country	varchar (2), null	The 2-letter ISO 3166-1 code for the country corresponding to the phone number's area code.
Locale	varchar (80), null	The geographic region (usually the city) served by the rate center associated with the area code and prefix of the phone number.
CarrierInfo	varchar (255), null	This field is actually comprised of three sub-fields (separated by semicolons) describing the carrier responsible for the area code and prefix of the phone number.

NewAreaCode	int (3), null	If the area code of the phone number has been reassigned in the process of an area code split, this field lists the new 3-digit area code that should be used in place of the old one. If this field is blank, there is no change to the area code.
tzCode	int (3), null	This field will contain a 1 to 3-digit numeric code referencing a lookup table of Time Zone UTC (GMT)Offset and Daylight Savings Times (DST) observance. Dialer will use this code to determine the contact's local time.
CallingWindow	varchar (50), null	This field is actually comprised of three sub-fields (separated by semicolons) and indicates the time during which the phone number is available for telemarketing calls based on federal and state laws. The time is always in the time zone of this phone number. Each field is in the format H:MM-H:MM where H is the 1 or 2 digit hour in 24-hour format. In the case where telemarketing is prohibited on a particular day of the week (Sunday for example) the calling window will be designated with zeros (0:00-0:00). The first sub-field shows the calling window on weekdays (M-F) The second sub-field shows the calling window on Saturdays The third sub-field shows the calling window on Sundays
UTCOffset	int (5), null	This field contains a signed integer of the number of minutes to add to current UTC (GMT) time to obtain the current time at the phone number's location.
DoNotCallToday	int (1), null	This field will contain a 1 on the days where the state in which the phone number resides has a holiday or a state of emergency declaration.
Calling TimeRestrictions	int (1), null	This field will contain code that Indicates if there are any calling time restrictions for the phone number at the time of the scrub. (See the Calling Time Restrictions Codes topic.)
EBRType	varchar (1), null	Indicates whether there is an Existing Business Relationship Permission. (See the EBR Types topic).
isWireless	int (1), null	Indicates whether the phone number is a wireless number or a VoIP (1) or not (0).

Related Topics

Result Codes

EBR Types

Calling Time Restrictions Codes

EBR Type Codes

Most state and Federal DNC rules provide some form of exemption for numbers that appear on the applicable Do Not Call list if you have an existing business relationship (EBR) with a person at that number.

The Meta table will contain EBR Type codes that are returned from DNC.com. (Not all of these codes will appear in the Meta table.)

Code	Description
S	Sale/Purchase
I	Inquiry
P	Permission
R	Recent Sale
N	Newspaper Trial

Related Topics

Meta Schema

Result Codes

The Meta table will contain ResultCodes that are returned from DNC.com. (Not all of these codes will appear in the Meta table.)

Code	Description
B	Blocked
C	Clean
D	Do not call database match
E	EBR, existing business relationship, number can be called
F	Valid EBR and wireless number in a US state that does not allow telemarketing to wireless numbers even if manually dialed
G	Valid EBR and US Wireless Number, not on any DNC database, still cannot be called from a predictive dialer as EBRs do not constitute an exemption to those rules.
H	US Wireless Number that is also a Valid EBR overriding an otherwise DNC number, still cannot be called from a predictive dialer as EBRs do not constitute an exemption to those rules.
I	Invalid phone number such a number for an area code not in use
L	Wireless number in a US state that does not allow telemarketing to wireless numbers even if manually dialed (see W for more details); not on any DNC list; not an EBR.

M	Malformed, i.e. not a 10-digit number. Never reported
O	EBR override was applied to an otherwise do-not-call number (including an explicit EBR overriding a number in Project DNC) – number can be called
P	Project DNC or DNF database match
R	Expired EBR. Number used to be a valid EBR, not on a do-not-call list – umber can be called
S	Disconnected
T	Tier C phone company
V	Valid EBR overriding otherwise DNC number that is also a Wireless number in a US state that does not allow telemarketing to wireless numbers even if manually dialed (These states are WY, NJ, TX, LA, and AZ.)
W	US Wireless number – number is not in any DNC database (or it is but has been overridden by an industry exemption) but it cannot be called from a predictive dialer. (Note: in version 1, WY, NJ, TX, LA and AZ wireless numbers are always reported as D as long as you choose to scrub against Wireless as these states don't allow any wireless telemarketing calls regardless of Aggressive vs. Conservative settings in Scrub Options.
X	Industry exemption applied to an otherwise do-not-call number. Number can be called.

Related Topics

Meta Schema

Calling Time Restrictions Codes

The Meta table will contain Calling Time Restrictions Codes for calls that are blocked. (Not all of these codes will appear in the Meta table.)

Code	Description
0	In State Window, no Exemptions, State has window – can call
1	Out of State Window, no Exemptions, State has window – cannot call (i.e. not callable now)
2	In Federal Window, Exemption Available, State's window overridden – can call
3	Out of Federal Window, Exemption Available, State's window overridden – cannot call (i.e. not callable now)
4	In Federal Window, State does not specify window or you are exempt – can call
5	Out of Federal Window, State does not specify window or you are exempt – cannot call (i.e. not callable now))

Related Topics

Meta Schema

Recycle Table

At runtime, Dialer creates a recycle table that helps it select the next batch of ContactList records for processing. The recycle table holds sequencing for the current recycle. Recycle tables are named as follows: **I3_ CampaignName_RE0**. For example, the recycle table for a GlobeNews campaign might be named: I3_GlobeNews_RE0.

Recycle Table Schema

The Recycle table consists of only two fields, one of which (i3_Identity) is used as the join with the ContactList. The second field, i3_SeqNo, stores the processing sequence number of each specific record within the recycle. i3_SeqNo reflects the processing order of records within the ContactList based on filter and sort criteria provided by the customer.

Column	Details	Description
I3_IDENTITY	bigint, not null	Used to join the contact list with the Recycle Table
I3_SEQNO	PK, int, not null	I3_seqno stores the processing sequence number of each specific record within the recycle.

The sequence id is a unique number that identifies the order in which records should be processed. Each sequence number indicates where each record falls in the recycle based on the current filter and sort criteria.

Contents of recycle table:

A recycle table is automatically created by the system when you create a campaign. The table is named I3_<CampaignName>_RE0.

Record Selection Process

Dialer invokes a stored procedure to select contact list records for processing. It preps the contact list before every recycle. The procedure runs quickly since it is precompiled and resides in the database. When a campaign is started, reset, or recycled, the conceptual process is as follows:

1. The procedure clears the contents of the recycle table.
2. It reorders the contact list to apply sort criteria defined for the campaign.
3. It queries the contact list to obtain a list of all contacts that can be called, based upon the Status of each record and the Campaign filter.

4. The resulting row IDs are stored in the status table. The order in which the records are returned is used to populate the sequence ID field.

5. Records are processed in i3_seqno order. Only records that are not blocked by Zones at this point are pulled. As records are pulled for processing, they are removed from the recycle table. The recycle table contains only records that are left to process in the current recycle.

6. When a contact list record is routed to an Outbound Dialer server, its status is set to "I" to indicate that the record is in-process (for example: the record is being dialed or awaiting completion from the agent.) This prevents future selects from pulling the record and double-dialing a contact. The Status field is updated again when the contact record is dispositioned. This eliminates the need to maintain a cache of records that are currently active within the system.

CallRecordSchedule Table

The CallRecordSchedule table maintains the list of parties that are scheduled for callbacks. Although this table does collect data on both the agent and the customer, this table is not intended to act as historical data. Entries are removed from the CallRecordSchedule table when they are passed to the Dialer Server.

Interaction Dialer automatically creates a CallRecordSchedule table (**I3_<ContactList>_CS**) for each call list. No customer maintenance is required.

CallRecordSchedule Schema

Column	Details	Description
CAMPAIGNNAME	varchar(255), not null	Name of the Campaign.
SITEID	varchar(80), null	Name of the Outbound Dialer server that will call back the party.
I3_IDENTITY	PK, bigint, not null	An integer value that uniquely identifies each row in the contact list. This field is managed for the customer by Dialer. Customers may continue to insert records that contain I3_ROWID, but they should not populate I3_IDENTITY fields.
SCHEDTIME	datetime, not null	The scheduled callback date and time.
AGENTID	varchar(80), null	This field contains the name of an agent if an agent owns the callback; otherwise the AGENTID is blank.
SCHEDPHONE	varchar(50), not null	This column contains the phone number that will be dialed when this contact is called back. It stores the last phone number dialed to reach the contact—the number that reached a contact who asked to be called back at a later time, or the last number dialed when the system auto-scheduled the callback, due to no answer, busy, or another condition. When the scheduled call matures, the number in this field is always called, even if there are multiple phone numbers per contact.

		If there is no specific phone number to dial, then this field can be an empty string and the entire contact will be scheduled. Each contact number will be called per the same rules used when a contact comes up for normal calling (for example phone number order, and so on)
SCHEDCCID	bigint, not null	The default is -1, which indicates that 'schedphone' is not in the PND table. Otherwise, this column contains a valid ccid from the Phone Number Detail (PND) table. 'ccid' stands for Contact Column ID—the unique id of the corresponding contact phone number in the Contact list.

Columns that do not allow NULL values must have a value when records are added or inserted.

CallHistory Table

CallHistory Table

The **ININ_DIALER_40.CallHistory** table holds call-completion information for every campaign call placed. The Outbound Dialer Server populates the CallHistory table as it progresses through the contact list during the course of a campaign. This table indicates who was called and the completion result of the call. No customer maintenance is required. The CallHistory table is in the CIC database. It is shared by multiple campaigns.

Related Topics

CallHistory Schema

Wrap-up Categories and Codes

Status Codes

How Wrap-Up Categories affect Status columns

Dialer-Assigned Wrap-Up Codes

SIT Codes

CallHistory RuleGroup Table

CallHistory RuleSet Table

CallHistory Schema

The **CallHistory** table holds call-completion information for every call placed. This table indicates who was called and the completion result of the call.

Column	Details	Description
campaignname	varchar(255), not null	The name of the Campaign.
siteid	varchar(80), not null	The name of the Outbound Dialer Server / Manual Calling Server that processed the call.
i3_identity	bigint, null	i3_identity is an integer value that uniquely identifies each row in the contact list. Dialer manages this field for the customer. Customers may insert records that contain i3_rowid, but they cannot and should not populate i3_identity fields. Although i3_rowid is deprecated from Dialer's point of view, it was retained for backward compatibility purposes. When using the Follow Up Call feature, you'll see the same integer value in multiple rows - one for each additional call. To help you track each additional call, the phone numbers will appear in the corresponding phonenumber column. The label assigned to the phone in the contact record will appear in the corresponding phonenumbertype column.
i3_rowid	varchar(80), null	i3_rowid is a customer-managed field used to uniquely identify a row. i3_rowid is no longer a required field, since it was superseded by i3_identity, a Dialer-managed field. However, i3_rowid is supported in the contact list and is propagated to the CallRecordSchedule and CallHistory tables. i3_rowid is also available in Scripter and in policies for backwards compatibility.
callid	char(11), null	The callid number of this call attempt. For more information, see the discussion of callid in the Reporting Data Dictionary.
callidkey	char(18), null	This internal, site-unique key identifies a call in the system. It is an 18 character alphanumeric strings whose format may change from release to release, though the values will always be unique. This field is not referenced in any report, but can be used by customers to cross-reference Dialer calls with the standard call data stored in the CIC database. For more information, see the discussion of callidkey in the Reporting Data Dictionary.
wrapupcategory	varchar(80), not null	A code that generally identifies the completion status of the call. Used to provide standardized reporting

		across multiple campaigns. See Wrap-up Codes and Categories. If you create a custom wrap-up category, this column will contain a GUID that is associated with the display name of the custom wrap-up category. To match the GUID to the display name for reporting purposes, you will have to use the WrapupCategory lookup table. See WrapupCategory Table
wrapupcode	varchar(80), not null	A code that more specifically indicates the outcome of the call. Wrap-up codes add granularity to reporting, while wrap-up Categories provide for standardized reporting across multiple campaigns. See Wrap-up Codes and Categories. If you create a custom wrap-up code, this column will contain a GUID that is associated with the display name of the custom wrap-up category. To match the GUID to the display name for reporting purposes, you will have to use the WrapupCode lookup table. See WrapupCode Table
callingmode	tinyint, null	The value in this column identifies the Dialing Mode. Value Meaning 0 Non-Dialer Call 1 Predictive 2 Power 3 Preview 8 Agentless
phonenumber	varchar(50), null	The telephone number dialed for this attempt.
phonenumbertype	varchar(80), null	The customer-defined phone number type associated with the phone number dialed. This is used for reporting purposes. When using the Follow Up Call feature, you will find the term "NULL" in the phonenumbertype column if this was an ad-hoc call where the number was manually entered.
agentid	varchar(80), null	The CIC User ID of the Agent who processed the call, as it is defined in Interaction Administrator.
calledpartyoffset	int, null	Offset in seconds used to adjust UTC times based on the called party's time zone.

odsoffset	int, not null	Offset in seconds used to adjust UTC times based on ODS's time zone.
previewpoptimeUTC	datetime, null	In Preview mode, the time when the call record popped for the Agent to review. This is the time that Preview call data was presented to an Agent (not the actual call time.)
callplacedtimeUTC	datetime, null	The time when the call was placed by Telephony Services.
callansweredtimeUTC	datetime, null	The time when the call was answered by the remote party or a device.
messageplaytimeUTC	datetime, null	The time that a message was played to the contact, due to the campaign type or due to the absence of available agents.
callconnectedtimeUTC	datetime, null	The time that the call was connected to the Agent.
calldisconnectedtimeUTC	datetime, null	The time when Dialer stopped tracking the call. This can occur when the call is disconnected or the call is completed upon a disposition being received from either by an agent or the system.
length	int, null	Length of the call in seconds. The `length` column in the Call History table does not always match the call duration. The `callplacedtimeUTC` and `calldisconnectedtimeUTC` accumulators are tracked internally by Dialer and may not match Interaction Summary information for the call. The length field is calculated from the Completed time minus the Start time. The completed time is set when the call is completed and the wrapup code is written. That happens after policy evaluations and agent finalization. The start time occurs when the call is placed. The length field can match the (Disconnected - Placed) time when the disconnect was a result of the wrapup and finalization of the interaction. This can occur if you disposition an interaction while the call is still live.
caresult	tinyint, null	See also the description of the cadetail column. This integer number that indicates the result of call analysis. Null values are allowed. The other possible values are listed below. Value Meaning 0 Represents an unknown call result. Call analysis could not determine what the remote party was, but the call did

		succeed and connect. Dialer treats this as live voice.
	1	Voice detected. A human answered the call.
	2	The carrier sent a SIT tone or a SIT message.
	3	A Fax machine answered.
	4	An Answering Machine answered the call.
	5	The call failed with an ISDN Cause Code returned from the carrier.
	6	Failure. The call failed in Telephony Services for some reason other than the above.
cadetail	varchar(255), null	Call Analysis results for each call are written to the CallHistory table along with the other information about the call, such as Wrap-up Codes and Categories, call id, and so forth. This allows reporting to be done not just on disposition, but also on call analysis results. This is important for customers whose call analysis is performed by Media Servers. Two columns in CallHistory table facilitate this: • caresult indicates the result of call analysis. • cadetail provides a textual description of the call analysis result. The cadetail (call analysis detail) column is text field up to 255 characters in length that contains extra information that supplements the caresult value. For example, if caresult is 2 (SIT), cadetail would contain a description of the SIT tone/message. For a caresult of 5 (ISDN Cause Code) cadetail would contain a description of the ISDN cause code. For caresult 6 (Failure) cadetail would contain a description of the error returned from MakeCall. Null values are allowed, since some caresult codes do not generate detail information.
isabandoned	bit, null	This flag indicates whether the call was abandoned (1=Yes, 0=No). This value can be set by Dialer or by a

		script. See *Interaction Scripter Developer Guide* for details.
iscontact	bit, null	This flag indicates whether the call reached a live contact (1=Yes, 0=No). Contacts are defined in the Dialer configuration. Specifically, the "Interaction Connected to an Actual Person" checkbox in Wrap Up Categories affects the "iscontact" field.
isdetect	bit, null	Signifies whether call analysis detected that the call was answered by a person. If call analysis is turned off, the value will always be 1 (true) since those calls are treated as live voice.
isrpc	bit, null	Signifies whether the call was a right party contact.
issuccess	bit, null	Signifies whether the campaign result was achieved, governed by the "interaction was successful" setting on the wrap-up Category.
successresult	float, null	This column is populated with the value of the successresult column on the contact. Successresult is a customer-managed column in both the ContactList and CallHistory tables. Customers can use successresult to maintain running counters, such as a money counter for example. The value of 'successresult' can be NULL when records are added or updated. The value of successresult in a CallHistory row will contain whatever was in the successresult column of the associated contact at the time the history row was written (when the record was dispositioned).
customdata1	varchar(255), null	Provided for customer use. Not used by Dialer.
customdata2	varchar(255), null	Provided for customer use. Not used by Dialer.
campaignfilterid	smallint, null	The ID assigned to the filter that is applied to the campaign.
previewtimerinit	bit, null	This flag indicates whether a Preview call was initiated manually or automatically through a campaign configured preview timer. • If it is a 1, then the call was initiated automatically through a campaign configured preview timer. • If it is a 0, then the call was initiated manually.

		• If it is null, then the call was made using a dialing mode other than Preview.
rulegroupid	smallint, null	The ID assigned to the Rule Group that was set. You can find more details about the RuleGroupID, such as the name of the Rule Group, in the CallHistory_RuleGroup table.
callscheduletime	datetime, null	When a scheduled callback occurs, this field will show the date and time that the call was scheduled. (Based on CCS time) More specifically, when a call results in a scheduled callback, a record is added the CallHistory table for that call and both the wrapupcategory and wrapupcode entries will contain the word Scheduled. The callscheduletime entry will be set to NULL at this point. When the scheduled callback actually occurs, a second record will added to the CallHistory table for that call; only this time the callscheduletime entry will show the date and time when the call was scheduled and the wrapupcategory and wrapupcode entries will contain appropriate values. Keep in mind that the callscheduletime entry will NOT indicate when the actual call occurred - just the time that the call was scheduled to occur. If you wish to determine the elapsed time between when the call was scheduled and when the call was actually made, you will need to check the callplacedtimeUTC entry in the record.
IsAdditionalCall	bit, not null	This flag indicates whether the call is one of the additional calls made to the same contact using the Follow Up Call feature or an standard call. • If it is a 1, the then call was one of several additional calls made to the same contact. • If it is a 0, then the call was a standard call.
agentoverride	tinyint, null	If the agent chose an override option while using the Follow Up Call feature, there will be a code number in this column that indicates what type of override that occurred. To find out what type of override the code number indicates, you'll need to check the AgentComplianceOverrides table. By performing an

		SQL join of the CallHistory table and the AgentComplianceOverrides table, a database administrator can extract the pertinent data.

Wrap-up Categories and Codes

Wrap-up Categories and Codes

Wrap-up categories and codes are defined using the Wrap-up container in Interaction Administrator. Later, wrap-up classifications are assigned to a script, which is in turn assigned to a campaign. Agents use wrap-up categories and codes to record the outcome of each call. Wrap-up categories are general classifications. Wrap-up codes more specifically identify why a call finished.

Wrap-up Categories

Wrap-up Categories generically classify the result of a campaign call for reporting purposes. The standard wrap-up Categories and default wrap-up Codes used by Dialer are listed in the table below.

Wrap-up Codes

Wrap-up Codes are strings that indicate the completion status of a call step. Wrap-up codes are the disposition options that agents see in a script. For example, a user-defined wrap-up code might be "doesn't read the newspaper". Wrap-up codes allow agents to disposition calls by choosing a call outcome tailored for the campaign. Under certain conditions (as when Dialer detects SIT tones) Dialer will assign a wrap-up Code to the call. But in most cases, wrap-up codes are assigned by agents.

For reporting purposes, custom wrap-up codes are always mapped to standard wrap-up Categories. For example, in a newspaper subscription campaign, the wrap-up code "doesn't read the newspaper" would be mapped to "Failure" (a wrap-up category). Likewise, "Not Interested" would also be mapped to "Failure". Wrap-up codes add granularity to reporting, while wrap-up Categories provide for standardized reporting across multiple campaigns.

NOTE: Custom wrap-up codes and categories can be defined in Interaction Administrator. For more information, see the People topic in Interaction Administrator Help in the PureConnect Documentation Library.

Keep in mind that if you do create custom wrap-up codes and you have more than ODS sharing the same DialerConfig, you will need to make sure that exact copies of the custom wrap-up codes exist on both ODS systems. If you do not have exact copies on both servers, calls will be dispositioned as Ambiguous. Creating the copies is a manual procedure as there isn't currently an automated synchronization routine for wrap-up codes.

Wrap-up Category	Default wrap-up Codes (user-defined)
Default Wrap-up Category	None

Ambiguous	Ambiguous
	Agent Connection Broken
	Agent Logout
	Agent Received a New Call
Busy	Busy - Busy
	Busy - Busy Signal
	Busy - Disconnect before Analysis
	Busy - Not Reached
	Busy - Remote Busy
Deleted	Deleted
	Deleted - Do Not Call
Failure	Failure
	Failure - Timeout
Fax	Fax
	Fax - System Hang up on Fax
Machine	Machine - Answering Machine
	Machine - Failed to play recording
	Machine - Machine
	Machine - Recording played to Fax
	Machine - Recording played to Machine
	Machine - System Hang up on Fax
	Machine - System Hang up on Machine
Navigate	This special disposition allows agents to navigate to another script page.
No Answer	No Answer
	No Answer - Answering Machine

	No Answer - Disconnect before Analysis
	No Answer - No User Responding
	No Answer - Timeout
	No Answer - User Alerting No Answer
No Lines	No Lines
	No IP Response
Non-Dialer Call	Non-Dialer call
Not Reached	Not Reached
	Not Reached - Disconnect before Analysis
Phone number deleted	Phone number deleted
Phone number success	Phone number success
Policy Scheduled	Policy Scheduled
Remote Hang Up	Remote Hang Up
	Remote Hang Up - Contact Hang Up
	Remote Hang Up after Transfer
	Remote Hang Up in Attendant
Rescheduled	Rescheduled
Scheduled	Scheduled
	Scheduled - Callback
SIT	SIT
SIT Callable	SIT Callable - Disconnect before Analysis
	SIT Callable - Ineffective Other. See note that follows table.
	SIT Callable - No Circuit
	SIT Callable - No Route to Destination
	SIT Callable - Normal
	SIT Callable - Protocol Error
	SIT Callable - Reorder
	SIT Callable - Temporary Failure

SIT Uncallable	SIT Uncallable - Bad Number
	SIT Uncallable - Disconnect Before Analysis
	SIT Uncallable - Ineffective Other (see note that follows table)
	SIT Uncallable - Invalid Number Format
	SIT Uncallable - No Circuit
	SIT Uncallable - No IP Response
	SIT Uncallable - Number Changed
	SIT Uncallable - Reorder
	SIT Uncallable - Unassigned Number
	SIT Uncallable - Unknown tone
	SIT Uncallable - Vacant Code
Skipped	Skipped - Agent Skip
	Skipped - Do Not Dial
	Skipped - Policy No valid Phone Number
Success	Failed to play recording
	Success
	Success - Recording played to Fax
	Success - Recording played to Live Voice
	Success - Recording played to Machine
	Success - System Hang up on Fax
	Success - System Hang up on Live Voice
	Success - System Hang up on Machine
System Hang Up	System Hang Up
	System Hang Up - Agent not available for callback

	System Hang Up - Attendant Transfer failed
	System Hang Up - Failed to play recording
	System Hang Up - Failed to route call to agent
	System Hang Up - Failed to send fax
	System Hang Up after Transfer
	System Hang Up in Attendant
Transferred	Transferred
Wrong Party	Wrong Party
	Wrong Party - Wrong Number

Default wrap-up codes are also called *system* wrap-up codes, because these codes are installed by default when Dialer is installed on the CIC server. Additional wrap-up codes and categories are added later by system administrators. System wrap-up codes are automatically assigned when the system, rather than an agent must decide how to disposition a contact attempt.

What is Ineffective Other?

Ineffective Other is the special information tone returned if a call attempt does not complete due to improper user action. Improper user actions include:

- Dialing the wrong prefix or access code
- Inserting an incorrect amount of coins in a pay phone
- Screened line access denial
- Dialing irregularity

When this error occurs, announcements are played to indicate that the call cannot be completed as dialed, with instructions that tell the caller how to correct the problem.

Administrators should configure the system to automatically wrap-up calls if any agents use Scripter in Interaction Connect

Dialer administrators should configure the system to automatically assign a wrap-up category and wrap-up code if any agents use Scripter in Interaction Connect. Scripter in Interaction Connect automatically assigns wrap-ups based on the disposition button pressed by each agent. For each possible disposition, Administrators can control the category and code assigned. See Configure wrap-up mapping for Scripter in Interaction Connect.

It is possible to correlate wrap-up categories and codes with ISDN Cause Codes?

No. PureConnect's call disposition business logic is more sophisticated than a one-to-one mapping of cause codes to wrap-up codes. When the system must make a decision to assign a wrap-up code and category, that decision is based on both call analysis results and information sent to Interaction Dialer by the TSServer subsystem.

To make the most granular assignment possible, Dialer analyzes all of the information it receives, not just cause codes. It then assigns a system wrap-up code, which is one of the default wrap-up codes installed when Dialer itself was installed.

Since ISDN cause codes are logged to the "cadetail" column in the Call History table, it is possible to query that table to see what ISDN codes were received. For example, a query of the CallHistory table:

```
SELECT top 100  wrapupcategory, wrapupcode, cadetail
  FROM [I3_IC_Kodiak].[ININ_DIALER_40].[CallHistory]
  WHERE cadetail is not null
```

might return information similar to the example data shown below:

wrapupcategory	wrapupcode	cadetail
No Answer	No Answer	Normal Call Clearing (ISDN Cause Code 16)
Not Reached	Not Reached	Normal Call Clearing (ISDN Cause Code 16)

But it is not possible to predict how the system will assign wrap-up codes solely based on a cause code.

Related Topics

How Wrap-Up Categories affect Status columns

Dialer-Assigned Wrap-Up Codes

WrapupCategory Table

WrapupCode Table

Configure wrap-up codes for Scripter in Interaction Connect

Configure wrap-up mapping for Scripter in Interaction Connect

Dialer administrators should configure the system to automatically assign a wrap-up category and wrap-up code when agents disposition a call using Scripter in Interaction Connect. Agents who use Interaction Scripter .NET Client must manually assign wrap-ups after dispositioning a call. Scripter in Interaction

Connect makes this process easier for agents. It assigns wrap-ups automatically based on the disposition button selected by the agent. The administrator's responsible for creating sets of wrap-up categories and codes, and for mapping those to dispositions.

To map wrap-up categories and codes to dispositions in Interaction Administrator:

1. Login to Interaction Administrator using Dialer administration credentials.
2. The first task is to define wrap-up categories used by campaigns. Select the **People** container.
3. Select **Wrap-up**. Then select **Wrap-up Categories**. The top pane lists wrap-up categories. The bottom pane allows properties of a selected category to be edited. Use this page to define new wrap-up category codes and their properties.
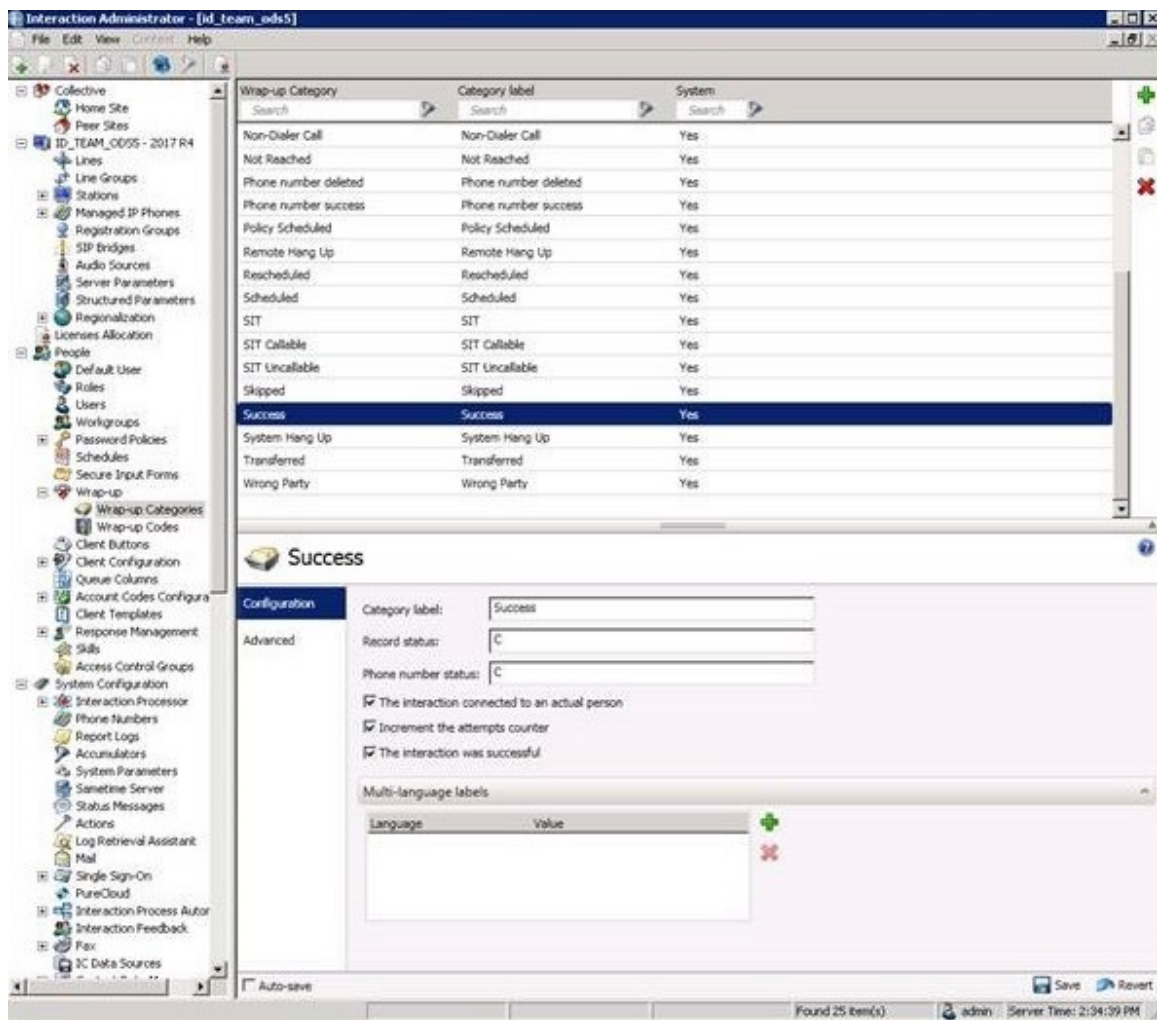
If you need assistance using this container, press **F1** to open its help topic.

4. Next, create wrap-up codes. Select the **People** > **Wrap-up** > **Wrap-up Codes** container.
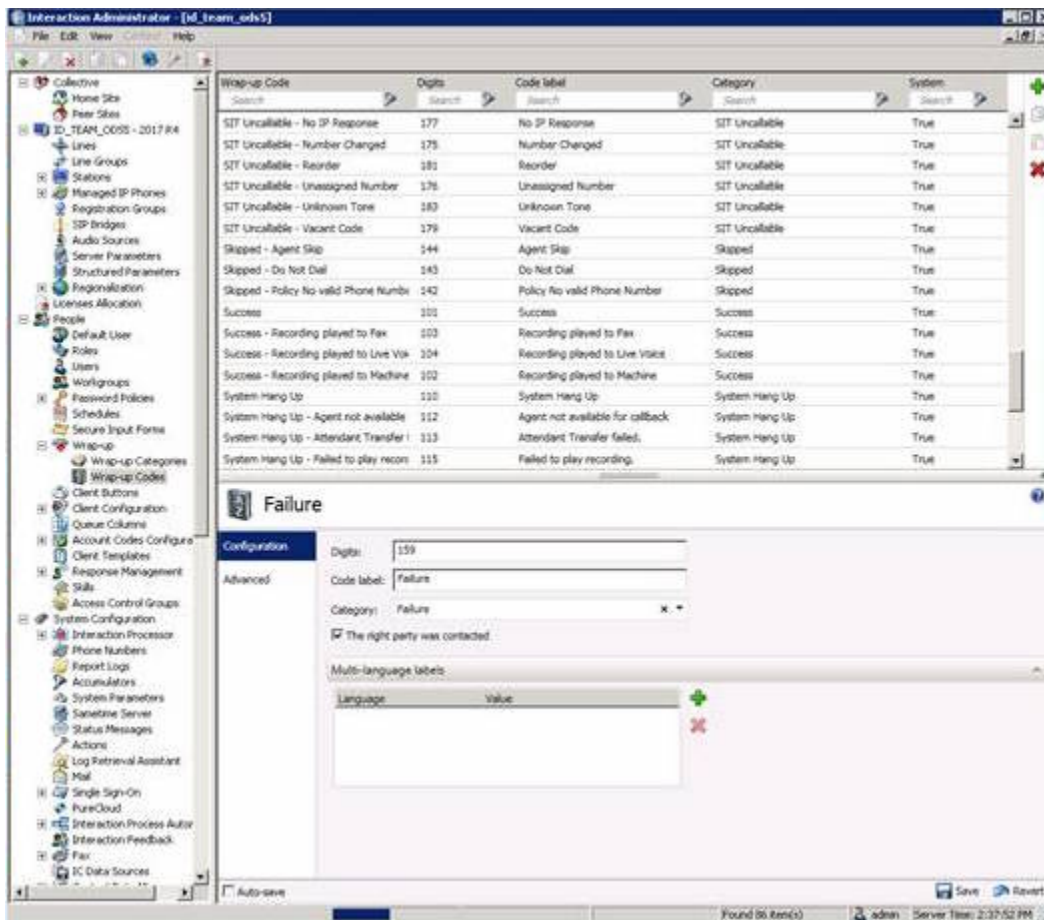
5. As before, the top pane lists existing codes, and allows you to add new ones. Use the bottom pane to set the properties of each code you create. For help using this page, press **F1** to open Interaction Administrator Help.

6. Next, associate wrap-up codes with Workgroups used by the campaign. Select **People** > **Workgroups**. Then select the **Wrap-up Codes** tab.
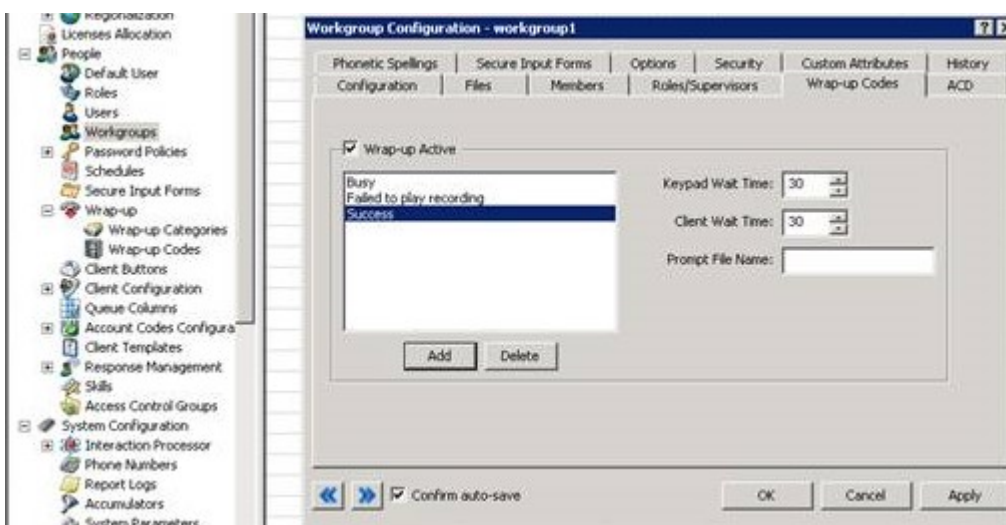
7. Click **Add** to add all wrap-up codes that agents using this workgroup may need to use to classify campaign call outcomes. Be sure to check the **Wrap-up Active** box for each code. For help using this page, press **F1**.

8. Select the **Interaction Dialer** > **Scripts** container.

9. Open the campaign script. On this page, you will map dispositions an agent can select in the script, to wrap-ups the system will assign.

10. Scroll down to the **Page Dispositions** section. If you need assistance using this container, press **F1** to open its help topic.
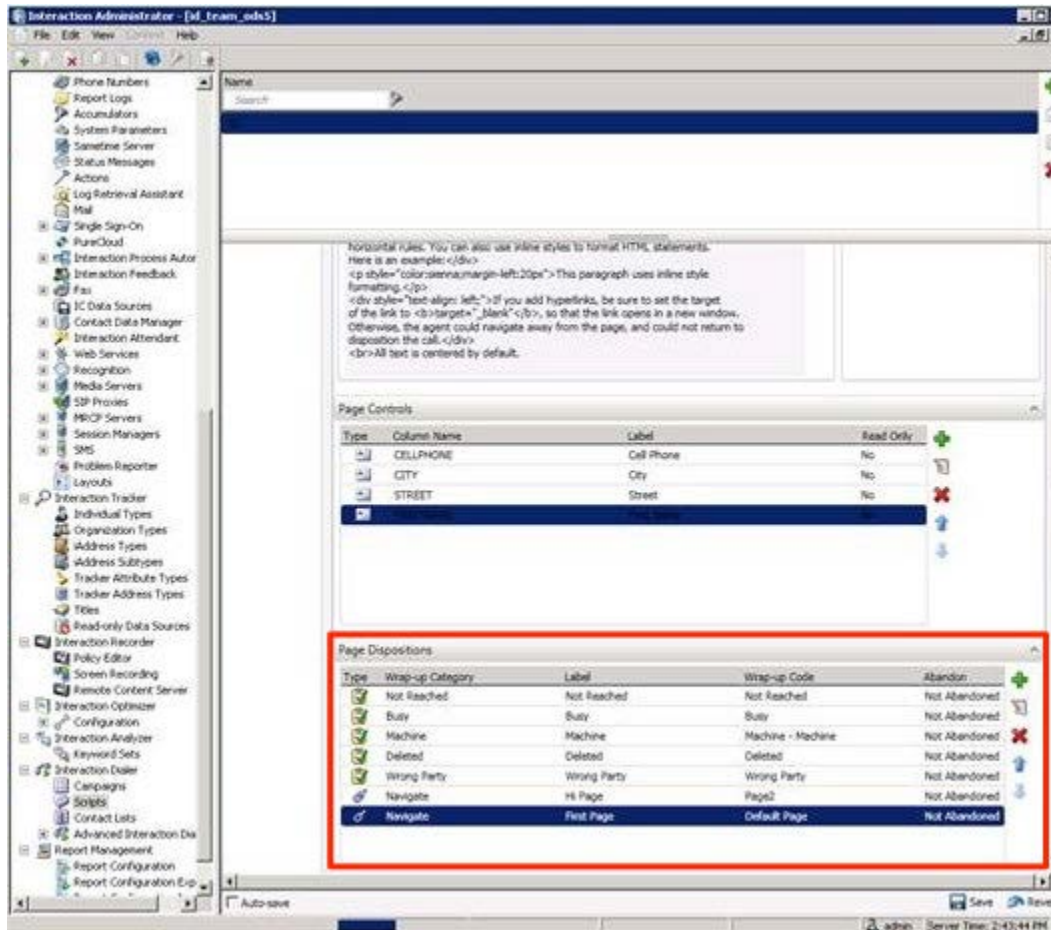
11. Click **Add** to a create page disposition item. A dialog will prompt for details you need to provide.

Enter the following information:

Label—the name of the call disposition option displayed to the agent.

Wrap-up Category—select the generic category that best classifies the call outcome for reporting purposes.

Wrap-up Code—select the specific wrap-up code that best signifies the reason behind this call outcome.

Abandon—select Abandoned if the contact disconnected the call before it could be completed. Otherwise select Not Abandoned.

12. Click **OK**.
13. Repeat to define additional page disposition items, as needed.

Related topics

Wrap-up Categories and Codes

How Wrap-Up Categories affect Status columns

Here is how status is set in Contact List and PND tables for each wrap-up category.

Wrap-Up Category	Description of Wrap-Up Category	Status written to Call List	Status written to PND	Live Party	Inc. Attempts	IsSuccess
Ambiguous	No return code was returned by the client application. This may result from a script that sets Agent status to available before the call is dispositioned, or by a client application crash. This Wrap-Up Category code is assigned by Dialer.	U	U		Yes	
Busy	Line is busy. This Wrap-Up Category code is usually assigned by Dialer.	C	C		Yes	
Deleted	"Take my name off of your list". This Wrap-Up Category code is usually assigned by the Agent who removes the number from the Contact List so it is not called again.	U	C	Yes	Yes	
Failure	Call was not successful in reaching the campaign	U	C	Yes	Yes	

	goal. This Wrap-Up Category code is usually assigned by the Agent.					
Fax	Fax Machine detected. This Wrap-Up Category code is usually assigned by Dialer.	C	C		Yes	
Machine	Answering Machine detected. This Wrap-Up Category code may be assigned by Dialer or by an Agent.	C	C		Yes	
Navigate	This special Wrap-Up Category code creates a button that navigates to another script page. This Wrap-Up Category code is assigned by Dialer, and should only be assigned by Dialer. When Navigate is selected, the Add New Disposition dialog prompts for a Script page to jump to, instead of for a Wrap-Up Category code.					
No Answer	No answer to the call. This Wrap-Up Category code is usually assigned by Dialer.	C	C		Yes	
No Lines	No Lines were available to place the call. This Wrap-Up Category code is assigned by Dialer, and should only be assigned by Dialer.	C	C			
Non-Dialer Call	This Wrap-Up Category code is assigned by Dialer, and should only be assigned by Dialer. It indicates that the Agent received an inbound workgroup call or a DID call that was not	C	C	Yes	Yes	

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	generated by Interaction Dialer.					
Not Reached	This code indicates that the Central Office was unable to connect the call. This Wrap-Up Category code is assigned by Dialer, and should only be assigned by Dialer.	C	C		Yes	
Phone Number Deleted	Indicates that a call was dispositioned as a 'Do not call' number. This Wrap-Up Category code can be used to mark a phone number as "U" (Unusable) to indicate that the call outcome was unsuccessful. This Wrap-Up Category code can be used when a particular phone number is a wrong number, but the whole record should not be marked un-callable.	C from U	U from blank			
Phone Number Success	Indicates that the call was successful. Phone Number Success can be used to mark a phone number as "U" (Unusable) to indicate that the call outcome was successful. This Wrap-Up Category code can be used for activities such as playing a WAV file once to every phone number on a record.	C from U	U from blank	Yes	Yes	Yes
Policy Scheduled	This code indicates that a policy behavior for the workflow rescheduled the call for a later date. This Wrap-Up Category code is	S	C	Yes	Yes	

	assigned by Dialer, and should only be assigned by Dialer.				
Remote Hang Up	Call was abandoned by the remote party.	C	C		Yes
Rescheduled	This Wrap-Up Category code is assigned by Dialer. It identifies a scheduled call that could not be placed, since the campaign was stopped or the specific Agent was not available to take the call.	R from T	C	Yes	Yes
Scheduled	Callback has been scheduled. This Wrap-Up Category code may be assigned by an Agent or by Dialer.	S	C	Yes	Yes
SIT	The SIT Wrap-Up Category code is generated by Predictive Dial COM applications. SIT appears in the list of Contact Wrap-Up Category codes and in the lists of Wrap-Up Category codes for Policy Disposition Conditions and Behaviors. When creating disposition policies, the only option available is SIT (SIT Callable and SIT Uncallable are assigned by Interaction Dialer). Selecting SIT will catch both SIT Callable and SIT Uncallable return results.	C	U		
SIT Callable	SIT Callable is a Wrap-Up Category set by Interaction Dialer. Interaction Dialer examines the attributes of calls passed to it by	C	C		

	Telephony Services and then determines an appropriate Wrap-up code.					
SIT Uncallable	SIT Uncallable is a Wrap-Up Category set by Interaction Dialer. Interaction Dialer examines the attributes of calls passed to it by Telephony Services and then determines an appropriate Wrap-up code.	C	U			
Skipped	A preview call was skipped using Interaction Scripter. This Wrap-Up Category code is usually assigned by the Agent.	C	C			
Success	Call was successful as relates to the campaign goal. This Wrap-Up Category code is usually assigned by the Agent, to indicate successful completion of the campaign goal.	U	C	Yes	Yes	Yes
System Hang Up	This category indicates that the call was terminated by the system due to no available Agents, high CPU utilization, etc. When Dialer places a call and then ACD processes the call, and there are no available agents to take the call the system disconnects the call before the remote party hangs up. This Wrap-Up Category code is assigned by Dialer, and should only be assigned by Dialer.	C	C		Yes	
Transferred	This category indicates that the call was	U	C	Yes	Yes	

	transferred by the Agent. This Wrap-Up Category code is usually assigned by the Agent.					
Wrong Party	Call has reached the wrong party. This Wrap-Up Category code is usually assigned by an Agent.	C From U	U	Yes	Yes	

Dialer-Assigned Wrap-Up Codes

The table below lists *only* those Wrap-Up Codes that Dialer sets, along with the Wrap-Up Category and the situation in which it is set. For a full list of categories and codes, see Wrap-up Categories and Codes.

Wrap-Up Category	Wrap-Up Code	Situation
Ambiguous	Ambiguous	No determination possible.
	Ambiguous - Agent Connection Broken	Agent was disconnected.
	Ambiguous - Agent Logout	Agent exited Interaction Scripter Client without dispositioning the call.
	Ambiguous - Agent Received a New Call	Agent accepted a new call without dispositioning the previous call.
Busy	Busy	No specific determination.
	Busy - Busy Signal	Busy signal was received.
	Busy - Disconnect before Analysis	Busy signal was initially received, but call disconnected before call analysis could be performed.
	Busy - Not Reached	Busy signal was received.
	Busy - Remote Busy	Busy signal was received.
	Busy - SIT Callable	Busy signal was received.

Failure	Failure - Timeout	Call timed out.
Fax	Fax	Fax machine.
	Fax - System Hang Up on Fax	Fax machine that, due to Campaign Agentless settings, is hung up on (for a non-Agentless Campaign calling mode).
Machine	Machine - Answering Machine	Answering machine detected.
	Machine - Failed to play recording.	An Agentless policy or campaign behavior failed to play a message.
	Machine	Undetermined machine.
	Machine - Recording played to Fax	Fax machine that, due to Campaign Agentless settings, receives WAV file (for a non-Agentless Campaign calling mode).
	Machine - Recording played to Machine	Answering machine that receives WAV file due to Agentless Policy Set Behavior (for a non-Agentless Campaign calling mode).
	Machine - System Hang up on Fax	Fax machine that, due to Campaign Agentless settings, is hung up on (for a non-Agentless Campaign calling mode).
	Machine - System Hang up on Machine	Answering machine that, due to Campaign Agentless settings, is hung up on (for a non-Agentless Campaign calling mode).
No Answer	No Answer	Call was not answered..
	No Answer - Answering Machine	Answering machine detected.
	No Answer - Disconnect before Analysis	Call disconnected before call analysis could be performed (for all Campaign calling modes) if the ISDN cause code is not set (happens rarely).
	No Answer - No User Responding	Unexpected call answering device (not answering machine, fax, voice, or unknown) (for all Campaign calling modes).
	No Answer - Timeout	Call timed out (CO problem).
	No Answer - User Alerting No Answer	Call picked up, but no answer.
No Lines	No Lines	There were no available lines.

	No Lines - No IP Response	There was no IP response when placing a call.
Not Reached	Not Reached	No ringback/dial tone for call.
	Not Reached - Disconnect before Analysis	No initial ringback/dial tone, but call disconnected before call analysis could be performed.
	Not Reached	In an Edge case where the SIPCallState is Connected but the normal CallState is not, it is possible to receive <Not Reached>.
Policy Scheduled	Policy Scheduled	Call is scheduled via a callback policy behavior.
Remote Hang Up	Remote Hang Up	Call disconnected.
	Remote Hang Up - Contact Hang Up	Call disconnected by remote party before going to an Agent.
	Remote Hang Up after Transfer	Transferred call was disconnected by remote party.
	Remote Hang Up in Attendant	Call disconnected by remote party after being transferred to Attendant.
SIT Callable	SIT Callable - Disconnect before Analysis	IC_SitTypeDetected == "Disconnect before Analysis" (for all Campaign calling modes).
	SIT Callable - Ineffective Other *	IC_SitTypeDetected == "Ineffective Other" (for all Campaign calling modes).
	SIT Callable - No Circuit	IC_SitTypeDetected == "No Circuit" (for all Campaign calling modes).
	SIT Callable - No route to Destination	IC_SitTypeDetected == "No route to Destination" (for all Campaign calling modes).
	SIT Callable - Normal	IC_SitTypeDetected == "Normal" (for all Campaign calling modes).
	SIT Callable - Protocol Error	IC_SitTypeDetected == "Protocol Error" (for all Campaign calling modes).
	SIT Callable - Reorder	IC_SitTypeDetected == "Reorder" (for all Campaign calling modes).
	SIT Callable - Temporary Failure	IC_SitTypeDetected == "Temporary Failure" (for all Campaign calling modes).

SIT Uncallable	SIT Uncallable - Bad Number	IC_SitTypeDetected == "Intercept" (for all Campaign calling modes).
	SIT Uncallable - Disconnect Before Analysis	IC_SitTypeDetected == "Disconnect before Analysis" (for all Campaign calling modes).
	SIT Uncallable - Ineffective Other *	IC_SitTypeDetected == "Ineffective Other" (for all Campaign calling modes).
	SIT Uncallable - Invalid Number Format	IC_SitTypeDetected == "Invalid Number Format" (for all Campaign calling modes).
	SIT Uncallable - No Circuit	IC_SitTypeDetected == "No Circuit" (for all Campaign calling modes).
	SIT Uncallable - No IP Response	IC_SitTypeDetected == "No IP Response" (for all Campaign calling modes).
	SIT Uncallable - Number Changed	IC_SitTypeDetected == "Number Changed" (for all Campaign calling modes).
	SIT Uncallable - Reorder	IC_SitTypeDetected == "Reorder" (for all Campaign calling modes).
	SIT Uncallable - Unknown Tone	IC_SitTypeDetected == "Ambiguous" (for all Campaign calling modes).
	SIT Uncallable - Vacant Code	IC_SitTypeDetected == "Vacant Code" (for all Campaign calling modes).
	SIT Uncallable - Unknown Tone	IC_SitTypeDetected == "Unknown Tone" (for all Campaign calling modes).
Skipped	Skipped - Agent Skip	Agent presses the Skip button in Base Scripter, or transfers a call after checking the "Disposition after transfer" box.
	Skipped - Do Not Dial	Call is skipped by a 'Do Not Dial' call routing policy behavior.
	Skipped - Policy No valid Phone Number	There is no available phone number due to Policy Set Behavior setting custom Contact Columns.
Success	Failed to play recording	Failed to play recording.
	Success	Success.

	Success - Recording played to Fax	Fax machine that receives WAV file due to Agentless Policy Set Behavior (for an Agentless Campaign calling mode).
	Success - Recording played to Live Voice	Live contact that, due to Campaign Agentless settings, receives WAV file (for an Agentless Campaign calling mode).
	Success - Recording played to Live Voice	Live contact that receives WAV file due to Agentless Policy Set Behavior (for an Agentless Campaign calling mode).
	Success - Recording played to Machine	Answering machine that, due to Campaign Agentless settings, receives WAV file (for an Agentless Campaign calling mode).
	Success - Recording played to Machine	Answering machine that receives WAV file due to Agentless Policy Set Behavior (for an Agentless Campaign calling mode).
	Success - System Hang up on Fax	Fax machine that, due to Campaign Agentless settings, is hung up on (for an Agentless Campaign calling mode).
	Success - System Hang up on Live Voice	Live contact that, due to Campaign Agentless settings, is hung up on (for an Agentless Campaign calling mode).
	Success - System Hang up on Machine	Answering machine that, due to Campaign Agentless settings, is hung up on (for an Agentless Campaign calling mode).
System Hang Up	System Hang Up	Call disconnected by system without going to an Agent.
	System Hang Up - Agent not available for callback	Own-Agent callback when Agent not available.
	System Hang Up - Attendant transfer failed	Transferring a call to an Attendant profile fails.
	System Hang Up - Failed to play recording	An Agentless policy or campaign behavior failed to play a message.
	System Hang Up - Failed to	An Agentless behavior failed to route a call to an agent.

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	route call to agent	
	System Hang Up - Failed to send fax	An Agentless policy or campaign behavior failed to send a fax.
	System Hang up after Transfer	Transferred call was disconnected by the system.
	System Hang Up in Attendant	Call disconnected by system after being transferred to Attendant.

*What is Ineffective Other?

"Ineffective Other" is the special information tone returned if a call attempt does not complete due to improper user action. Improper user actions include:

- Dialing the wrong prefix or access code
- Inserting an incorrect amount of coins in a pay phone
- Screened line access denial
- Dialing irregularity

When this error occurs, announcements are played to indicate that the call cannot be completed as dialed, with instructions that tell the caller how to correct the problem.

WrapupCategory Table

When you create a custom wrap-up category, the wrapupcategory column in the CallHistory table will contain a GUID instead of the display name. The ININ_DIALER_40.WrapupCategory table contains the display name and the associated GUID. You'll use this lookup table to match the GUID to the display name for reporting purposes.

WrapupCategory Schema

Column	Details	Description
Id	Varchar(80) Not Null	Stores the WrapupCategory GUID.
DisplayName	NVarchar(255) Null	Stores WrapupCategory name.

WrapupCode Table

When you create a custom wrap-up code, the wrapupcode column in the CallHistory table will contain a GUID instead of the display name. The ININ_DIALER_40.WrapupCode table contains the display name and the associated GUID. You'll use this lookup table to match the GUID to the display name for reporting purposes.

WrapupCode Schema

Column	Details	Description
Id	Varchar(80) Not Null	Stores the WrapupCode GUID
DisplayName	NVarchar(255) Null	Stores WrapupCode name (This is the name used to create the object not the label.)

SIT Codes

SIT stands for Special Information Tone and is an international standard signal consisting of three rising tones that indicate that a call has failed. A SIT is usually followed by a recorded message that describes the problem. Just like a dial tone or busy signal, a SIT is an in-band signal intended to both be heard by a caller and to be detected by an automated dialer to indicate that the call failed.

When it comes to Dialer, SIT, SIT Callable, and SIT Uncallable are Wrap-up Categories that the program uses to disposition calls

As a code in Dialer, SIT is a Wrap-up Category/Code that is generated by Predictive Dial COM applications, and SIT appears in the list of Wrap-up Codes and in the lists of Wrap-up Codes for Policy Disposition Conditions and Behaviors. When creating disposition policies, the only option available is SIT (you cannot select SIT Callable or SIT Uncallable). In the case of disposition policies, selecting SIT will catch both SIT Callable and SIT Uncallable return results.

When Dialer makes a call and receives a SIT, Dialer examines the attributes of the call passed to it by Telephony Services and looks for the IC_SitTypeDetected attribute, which designates the type of Tone that was detected.

If the attribute indicates an invalid call condition, Dialer sets the Wrap-up Category to **SIT Uncallable** and chooses the appropriate Wrap-up Code based on the detected Tone.

If the attribute indicates a valid call condition, Dialer sets the Wrap-up Category to **SIT Callable** and chooses the appropriate Wrap-up Code based on the detected Tone. A valid call condition is met if the system detects a tone which correlates to a system problem, not specific to the contact dialed. It keeps the contact in a state where it may be dialed again and assigns a wrap-up code of SIT Callable. If the audio returned indicates that the number was invalid, the system assigns a wrap-up code of SIT Uncallable to indicate that the record is no longer in a dialable status.

Status Codes

The Wrap-Up Category assigned when a call is dispositioned directly affects the status code written to the contact list and PND table. *Status codes* are one-character alphabetical flags that indicate the overall status of a contact in a campaign. Dialer uses status code flags to determine whether to select a record for processing.

Code	Meaning
A	Indicates that the maximum retry attempts for busy, answering machine, no answer and so on have been reached for the record. It will never be called again. This status is also assigned when "max attempt" thresholds have been reached for auto-schedule options or the total attempts to dial the record.
C	Indicates a Callable contact.
F	Indicates that all of a contact's numbers are uncallable, and that the record has been "flagged" for customer review. For example, if all attempts to dial phone numbers for a contact fail with SIT wrap-up Category, then that contact is essentially uncallable until a new contact column is added or some of the existing numbers are changed. Rather than mark the contact as uncallable, it is flagged with "F" so that customers can change the status back to "C" after they have added a new contact column, or updated contact numbers.
I	Indicates that the record selection process has selected this record for processing and the record has been passed to an Outbound Dialer server. However, the record may not have been dialed yet, and it has not been dispositioned by an agent. When a campaign stops, its active contacts are reset in the contact list (status changed from 'I' to 'C'), and the active campaign ID (I3_ACTIVECAMPAIGNID) is used by a stored procedure to ensure that only contacts associated with this campaign are cleared. This process takes into account the active campaign so that if the contact list is in use by multiple campaigns, the queued flag will be cleared on all contacts when the campaign stops (even ones queued by Dialer for other campaigns). This prevents contacts from being called back once they are completed or processed.
J	Indicates a record that has been inserted into the contact list table for Priority Dialing.
O	Indicates an auto-scheduled call. When the system schedules a call back according to the defined auto-schedule settings, Status is set to O to indicate that a callback has been scheduled, but has not been attempted yet.
P	Indicates that the record is to be purged and will not be dialed. The "P" status is set by DNC scrubbing.
R	Indicates a records that has been rescheduled because the designated agent was not logged on to take the call. If these are campaign wide calls, then if no agents are logged on, calls will be rescheduled with "R" in the status field. If 'ignore recycles' is checked, auto scheduled calls will be distinguished from agent scheduled campaign wide calls and own agent callbacks. The contact list status will appear as 'C' for auto-scheduled and rescheduled auto-scheduled calls if ignore recycles is not checked.
S	Indicates a Scheduled call. When an agent schedules a call back, status is set to S to indicate that a callback has been scheduled, but has not been attempted yet.
T	Indicates an Auto-rescheduled call (a scheduled call that was rescheduled by dialer, not an agent). This status is assigned to a scheduled callback that failed to reach a contact, and the

	maximum number of callback attempts has not been reached. When it is, the status will be changed to "A" to indicate that maximum retry attempts for busy, answering machine, no answer and so on, have been reached for the record. It will never be called again.
U	Indicates an Unusable call record. This status designates a contact that will not be called again. Items are given a "U" status when the assigned Wrap-up Category code indicates Success, SIT Un-callable, Failed, or Wrong Party.

It is important to understand how and where a record's status is assigned. If the wrap-up category applies to a single contact column, a status code is written to the Phone Number Detail (PND) table. The PND table breaks out each contact column into its own row that keeps track of a contact column specific status, attempts, and so on. If a row is marked with an un-callable status in the PND table, that phone number for that record will not be called again, but other contact numbers for that same record can still be called.

If the wrap-up category applies to the record as a whole (all contact columns in the record), then the status code is written to the status column of the contact list table.

CallHistory RuleGroup Table

CallHistory RuleGroup Table

The ININ_DIALER_40.CallHistory_RuleGroup table contains details of the RuleGroupID that appears in the CallHistory and CampaignStat tables. More specifically, it contains the name of the Rule Group associated with the ID. In addition, the CallHistory RuleGroup table contains the RuleSetID. You can find more details about the RuleSetID, such as the name of the Rule Set, in the CallHistory RuleSet table.

Related Topics

CallHistory RuleGroup Schema

CallHistory RuleSet Table

CallHistory RuleGroup Schema

The CallHistory RuleGroup table contains details of the RuleGroupID that appears in the CallHistory and CampaignStats tables.

Column	Details	Description
RuleGroupId	PK, smallint	The identification number assigned to the Rule Group for tracking purposes.
ActiveRuleGroupName	nvarchar(80)	The actual name assigned to the Rule Group.
RuleSetId	FK, uniqueidentifier	The identification number assigned to the Rule Set for tracking purposes. The name of the Rule Set can be found in the CallHistory Rule Set Table.

Related Topics

CallHistory RuleSet Table

CallHistory Table

CampaignStats Table

CallHistory RuleSet Table

CallHistory RuleSet Table

The ININ_DIALER_40.CallHistory_RuleSet table contains details of the RuleSetID, such as the name of the Rule Set, which appears in the CallHistory RuleGroup table.

Related Topics

CallHistory RuleSet Schema

CallHistory RuleGroup Table

CallHistory RuleSet Schema

The CallHistory RuleSet table contains details of the RuleSetID that appears in the CallHistory RuleGroup table.

Column	Details	Description
RuleSetId	PK, uniqueidentifier	The identification number assigned to the Rule Set for tracking purposes.
RuleSetName	nvarchar(80)	The actual name assigned to the Rule Set.

AgentComplianceOverrides Table

If an agent chooses an override option while using the Follow Up Call feature, there will be a code number in the agentoverride column in the CallHistory table that indicates what type of override occurred. This table is used to identify those code numbers.

By performing an SQL join of the CallHistory table and the AgentComplianceOverrides table, a database administrator can extract the pertinent data.

Note: In addition to identifying overrides from the Follow Up Call feature, this table also identifies overrides from the use of custom Icelib Manual call overrides.

AgentComplianceOverrides Schema

Column Name	Details	Description

Id	tinyint, not null	Code number from the agentoverride column in the CallHistory table.
Filter	bit, not null	This flag indicates whether Filter was overridden. This only applies to custom Icelib Manual Call overrides. If it is a 1, Filter was overridden. If it is a 0, Filter was not a factor.
QueryTimeFilter	bit, not null	This flag indicates whether QueryTimeFilter was overridden. This only applies to custom Icelib Manual Call overrides. If it is a 1, QueryTimeFilter was overridden. If it is a 0, QueryTimeFilter was not a factor.
ZoneBlocking	bit, not null	This flag indicates whether ZoneBlocking was overridden to make the call while using the Follow Up Call feature. If it is a 1, ZoneBlocking was overridden. If it is a 0, ZoneBlocking was not a factor.
Skills	bit, not null	This flag indicates whether Skills was overridden to make the call while using the Follow Up Call feature. If it is a 1, Skills was overridden. If it is a 0, Skills was not a factor.
DailyLimit	bit, not null	This flag indicates whether DailyLimit was overridden to make the call while using the Follow Up Call feature. If it is a 1, DailyLimit was overridden. If it is a 0, DailyLimit was not a factor.
MinimumSpacing	bit, not null	This flag indicates whether MinimumSpacing was overridden. This only applies to custom Icelib Manual Call overrides. If it is a 1, MinimumSpacing was overridden. If it is a 0, MinimumSpacing was not a factor.
PNDStatus	bit, not null	This flag indicates whether PNDStatus was overridden. This only applies to custom Icelib Manual Call overrides. If it is a 1, PNDStatus was overridden. If it is a 0, PNDStatus was not a factor.

DNCScrub	bit, not null	This flag indicates whether DNC was overridden to make the call while using the Follow Up Call feature. If it is a 1, DNC was overridden. If it is a 0, DNC was not a factor.
CampaignOwnership	bit, not null	This flag indicates whether CampaignOwnership was overridden. This only applies to custom Icelib Manual Call overrides. If it is a 1, CampaignOwnership was overridden. If it is a 0, CampaignOwnership was not a factor.

AgentStats Table

The **ININ_DIALER_40.AgentStats** table keeps track of agent performance. This table is shared by multiple Campaigns. It is in the CIC database, not the Dialer database.

Specifically, AgentStats stores the amount of time that agents spend in "Idle", "Connected", "Wrap Up" and "Do Not Disturb" states. "Connected" time is further broken into stages so that the time an agent spends in each stage of the call is recorded. The stage information in this table is updated when an agent transitions from one stage of a call to another.

AgentStats Schema

The Outbound Dialer Server populates this table as it progresses through the contact list during the course of a campaign.

Column	Details	Description
campaignname	varchar(255), null	The name of the Campaign as defined in Dialer Manager.
siteid	varchar(80), not null	The name of the Outbound Dialer server that the agent was logged on to.
odsoffset	int, not null	The offset of the ODS's time zone from UTC in seconds. This is used to translate the agenttimeUTC field to local time.
agenttimeUTC	datetime, not null	The time when the action described by this record happened.
agentid	varchar(80), not null	The CIC User ID of the agent who processed the call, as it is defined in Interaction Administrator.
stageid	varchar(10), null	Dialer uses this column to categorize non-Dialer call time as inbound or outbound (manually dialed). It populates the stageid column with the identifier 'ND-IN' for inbound non-Dialer calls

		or the identifier 'ND-MO' for manually-dialed outbound non-Dialer calls. This information is used by the Agent Utilization Summary report to summarize non-Dialer call time by inbound and outbound categories.
callid	varchar(11), null	Numeric ID of this call object. For more information, see the discussion of callid in the Reporting Data Dictionary.
callidkey	varchar(18), null	This internal, site-unique key identifies a call in the system. It is an 18 character alphanumeric strings whose format may change from release to release, though the values will always be unique. This field is not referenced in any report, but can be used by customers to cross-reference Dialer calls with the standard call data stored in the CIC database. For more information, see the discussion of callidkey in the Reporting Data Dictionary.
propertyname	varchar(255), not null	A name that identifies the type of statistic that the record contains. The supported property values are:<table><tr><td>**Property**</td><td>**Value**</td></tr><tr><td>AdditionalFollowup</td><td>Amount of time an agent spends on the Additional Follow Up screen,while using the using the Follow Up Call feature.</td></tr><tr><td>AwaitingCallback</td><td>Boolean flag indicating whether a callback was scheduled. This value is used for precisely dialed calls and agent owned callback.</td></tr><tr><td>BreakStart</td><td>Name of the campaign for which a break was taken. The AgentTime field specifies when the break began.</td></tr><tr><td>BreakStop</td><td>Name of the campaign for which a break was taken. The AgentTime field specifies when the break ended.</td></tr><tr><td>DNDTime</td><td>Number of seconds that the agent spent in a Do Not Disturb status (on break for example).</td></tr><tr><td>GlobalLogin</td><td>The date and time that an agent was logged into all campaigns available to them, based on their workgroup membership.</td></tr><tr><td>GlobalLogout</td><td>The date and time that an agent was logged out of all campaigns they were previously logged into.</td></tr><tr><td>IdleTime</td><td>Number of seconds that the agent was idle between two calls.</td></tr></table>

		Inactive	Agent is logged into Dialer but not active in any campaigns.
		Login	Name of the campaign that an agent was activated in. The agenttimeUTC column specifies when this occurred.
		Logout	Name of the campaign that an agent was deactivated from. The agenttimeUTC field specifies when this occurred.
		ManualOutboundPending	Amount of time between when the manual outbound call is placed from the Additional Follow Up screen and when the call is connected, while using the using the Follow Up Call feature. (Once the call is connected, the stage will transition to StageTime.
		NonDialerCallTime	Number of seconds that the agent spent on a non-Dialer call.
		NotLoggedIn	Agent is not currently logged in to Dialer.
		PreviewTime	Number of seconds that the agent spent previewing the call.
		StageTime	Number of seconds that the call was in the stage identified by the stageid field.
		WrapUpTime	Number of seconds that the agent spent wrapping up a call.
propertyvalue	varchar(255), null	The value of the statistic. All time-based values are expressed in seconds.	

CampaignStats Table

The **ININ_DIALER_40.CampaignStats** table contains summary statistics for each campaign running in Dialer. Each row will contain a set of statistics averaged over a configurable sample period. The default sample period is 60 seconds, but the user can change the sample period under the campaign configuration using the 'Statistics sample period' control. Columns that do not allow NULL values must have a value when records are added or inserted.

CampaignStats Schema

Column Name	Details	Description

periodstarttimeUTC	datetime, not null	Timestamp for the start of the sample period
periodendtimeUTC	datetime, not null	Timestamp for the end of the sample period
odsoffset	int, not null	The UTC offset of the ODS in seconds
campaignname	varchar(255), not null	The name of the campaign
siteid	varchar(80), not null	The site name of the ODS for this row
event	varchar(20), null	Records significant campaign events that occurred during the sample period. Valid values: 'recycle', 'reset', 'NewActive Group''
campaignstate	varchar(20), not null	The state of the campaign at the end of the sample period. Valid values: 'on', 'off', 'paused', 'scheduledonly'
dialingmode	varchar(10), not null	The dialing mode of the campaign at the end of the sample period. Valid values: 'preview', 'predictive', 'power', 'agentless'
filtersize	int, not null	The filter size at the start of the sample period
recyclesize	int, not null	The recycle size at the start of the sample period
totalagents	int, not null	The total number of agents that are active in the campaign
effectivetotalagents	float, not null	The total number of agents that are active in the campaign minus average non-Dialer agents (agents in this campaign that are currently on non-Dialer calls ().
idleagents	int, not null	The number of agents that are in an idle or finishing state in the campaign
effectiveidleagents	float, not null	The number of idle agents minus average non-Dialer agents
nondialeragents	int, not null	The number of agents that are on non-dialer calls in the campaign
dndagents	int, not null	The number of agents in a DND state in the campaign
totaldialercalls	int, not null	The total number of active calls in the campaign (pending + outstanding + connected)
pace	int, null	The current pace value for the campaign
cpa	float, null	The current calls per agent being used by the campaign (for example: 1/ConnectRate)
adjcpa	float, null	The adjusted calls per agent being used by the campaign (for example the CPA adjusted by pace.)
abandonrate	float, null	The current abandon rate of the campaign
RuleGroupID	smallint, null	The ID assigned to the Rule Group that was set. (When an entry appears in the RuleGroupID column, an entry titled NewAcive Group will appear in Event column.)
priority	tinyint, not null	The campaign's priority among all running campaigns

The analytics table is written to via the DialerTranServer process server. It is treated like a log table to implement data retention. The table will be named Dialer.CampaignStats. Rows are written to the table only if the data in the row is different from the previous row. Rows are written to the table only if any of the following values are non-zero: calls placed, dispositions, abandons, detections, contacts, rpcs, or if a significant event occurs.

Audit Table logs configuration changes

The Audit table (i3_AuditConfigChanges40) tracks changes made to configurations. Auditing authorizes each Outbound Dialer Server to record which user changed an object, and the properties of the object that changed.

When Auditing is enabled, ODS servers send logging messages to the DialerTranServer process on the Central Campaign Server. In turn, it writes records in the Audit table on the database server. The system uses one audit table (per Central Campaign Server) that is stored on the database. Audit entries that are older than a configurable retention period are automatically removed from the Audit table.

Audit Table Schema

The Audit table tracks changes made to configurations. Auditing authorizes Dialer Manager (on each Outbound Dialer) to record which user changed an object, and the properties of the object that changed.

When Auditing is enabled, Dialer Manager sends logging messages to the DialerTranServer process on the Central Campaign server. In turn, it writes records in the Audit table on the database server. The system uses one audit table (per Central Campaign server) that is stored on the database. Audit entries that are older than a configurable retention period are automatically removed from the Audit table.

Column	SQL Server Data Type	Oracle Data type	Null	Description
audittimeUTC	PK, datetime2(2)	timestamp	NOT NULL	The date and time when the change was made. Technically the time when the audit entry was inserted into this table.
sequenceId	PK, smallint	number(5)	NOT NULL	This sequence number is incremented for records that are inserted within the same second, to ensure that even if a batch of records are inserted at the exact same instant, they can be uniquely identified, even if the audittimeUTC values are the same.
siteId	nvarchar(80)	nvarchar2(80)	NULL	The Dialer site from which the change originated. This will be null if the change was made by CampaignServer.

siteOffset	int	number(10)	NOT NULL	The time zone offset of the Dialer site from which the change originated. This is the number of seconds that should be added to the audittimeUTC value to get the local time on the site.
icuser	nvarchar(80)	nvarchar2(80)	NULL	The CIC user name of the user that made the change. This will be null if the change was made by CampaignServer.
ntuser	nvarchar(80)	nvarchar2(80)	NULL	The Windows NT user name of the person who made listed configuration changes—the logged on user. This will be null if the change was made by CampaignServer.
app	nvarchar(80)	nvarchar2(80)	NOT NULL	The Interaction Dialer application that was used to make a change (Dialer Manager, CampaignServer, etc.).
computer	nvarchar(80)	nvarchar2(80)	NOT NULL	The name of the computer used to make the change.
objectType	varchar(32)	varchar2(32)	NULL	This is the descriptive name of the type of object that was changed. Examples include Campaign, Policy Set, Contact Column and so on.
objectId	varchar(38)	varchar2(38)	NULL	The id of the object that was changed. This is the GUID of the object.
objectName	nvarchar(255)	nvarchar2(255)	NULL	The name of the object that was changed, if it has one.
propertyName	varchar(48)	varchar2(48)	NULL	The name of the property that was changed if a specific property was changed. For some changes this will be a generic description. An example would be when a schedule is changed, since schedules don't have properties in the same way as other objects, the propertyName is simply Schedule.
previousValue	nvarchar(max)	nblob	NULL	The value of the property or object before the change. This will be null if the entry is recording the creation of an object.

updatedValue	nvarchar(max)	nclob	NULL	The value of the property or object after the change. This will be null if the entry is recording the deletion of an object.
correlationId	bigint	number(38)	NOT NULL	This arbitrary number correlates simultaneous changes, meaning if a client changes multiple properties in a single operation they will each get a separate row in the auditing table but will share the same correlationId.
context	nvarchar(max)	nclob	NULL	This field records data about the context of the object that was changed in a brief XML format. It always contains the object that was changed, and if that object logically belongs to another object then it will include the parent object(s), in order. The purpose of this field is to allow reporting to display the hierarchy of objects so that when, for example, a rule is changed it is easy to see which rule set contains that rule. The format of the objects in this field is: <o name="(object name)" id="(object id)" type="(object type)" /> Note that the elements are not nested, they're simply listed in order from parent to child. An example where the details of a rule action named 'Set Call Timeout' contained in a rule named 'Set timeout values' contained in a rule set named 'Change Campaign Values' would look like this:

				<o name="Change Campaign Values" id="{AB3881F7-5762-4E9C-99C5-1EB4AE262C50}" type="Rule Set" /><o name="Set timeout values" id="{61AB9BD5-212D-427B-A686-A299A6A85D5B}" type="Rule" /><o name="Set Call Timeout" id="{0C870E31-0330-4845-984F-A3FB4527AA17}" type="Rule Action" />

The data in this table is summarized by the Dialer Audit Report. The report indicates what was changed, when and where the change was performed, and by whom.

A multi-column primary key is defined on the table using audittimeUTC and sequenceId. As noted in the schema, object creations can be identified by rows where the previousValue is null, and object deletions can be identified by rows where the updatedValue is null.

Some object types have their values specially formatted to make changes easier to digest visually. Zones and schedules are the only objects that do this currently.

Priority Dialing Detail Table

The *Priority Dialing Detail* table is auto-created by Dialer to track Priority Dialing records inserted into a call list. The table is named **I3_<ContactList>_JIT**. Dialer replaces *<ContactList>* with the actual name of the contact list).

> See Priority Dialing for background information about this feature, which allows for prompt insertion of records at the front of the queue of records to be dialed, independent of Dialer's usual recycle logic. When Priority Dialing is enabled, Interaction Dialer checks at configurable intervals for newly inserted records in the call list, and queues them for immediate dialing.

The table contains only one column, which stores an I3_Identity. For performance reasons, Dialer watches this secondary table for inserted records, instead of the Call List itself. Just-in-time (Priority Dialing) records are created in this table only for call list records inserted (with a "J" status) while 1 or more Priority Dialing-active campaigns are dialing that call list.

The only action on insert is a trigger that inserts the i3identity into the JIT table. Everything else, such as addition of a record in the PND table, zone mapping and so on, happens as part of the contact query when dialer caches the record.

Priority Dialing Detail Table Schema

I3_<ContactList>_JIT		
Column	**Details**	**Description**
I3_IDENTITY	PK, bigint, not null	I3_IDENTITY is an integer value that uniquely identifies each row in the contact list.

Since Interaction Dialer creates and maintains this table automatically, customers should not modify it. Just in time records must be inserted into the call list instead, with a status of "J" to indicate that the record should be dialed immediately (just-in-time).

Contact Column Details Table

Dialer generates a Contact Column Details (CCD) table for each contact list in use. This table represents the relationship between the call list table and the PND table with respect to the CCID.

The CCD table tracks the contact columns chosen for a contact list and the contact column ids assigned to those contact columns. The contact column ids tracked in the contact column details tables correspond to the i3_ccid field in the phone number details (PND) table, making the new table useful when customizing the PND table.

Tables are named using this convention: I3_<*ContactList*>_CCD.

Contact Column Details Table Schema

The contact column details table that is generated contains two columns, which track the contact columns chosen for a contact list and the contact column ids assigned to those contact columns. The contact column ids tracked in the contact column details tables correspond to the i3_ccid field in the phone number details (PND) table, making the new table useful when customizing the PND table.

I3_<ContactList>_CCD		
Column	**Details (SQL Server)**	**Details (Oracle)**
column_name	Sysname	Nvarchar2(30)
ccid	Bigint	Number(20)

The primary key on the table is column_name. Neither column allows nulls.

Penetration Rate Tables

Penetration Rate Tables

Penetration Rate tables store data that customers can use to generate custom penetration rate reports to show the number of contacts that were contacted (the numerator) contrasted with a number of records in a contact list (the denominator).

I3_ContactListName_PEN Schema

I3PENETRATIONDATA Schema

I3PENETRATIONRANGE Schema

I3PENETRATIONUPLOAD Schema

I3_ContactListName_PEN Schema

This table stores the numerator used to calculate penetration rate. It contains one row for each completed call of the corresponding contact list table.

Column	Details	Description
UPLOADID	int, not null	A sequential number created every time a new contact list is uploaded or contacts are added to an existing contact list via the Import Contact List Wizard. This new Upload ID is then assigned to the new contacts.
I3_IDENTITY	bigint, null	An integer value that uniquely identifies each row in the contact list.
CONTACTSTATUS	nchar(1), null	One-character alphabetical flag that indicates the status of this contact.
PHONENUMBERCOL	nvarchar(80), null	Name of the contact list column that stored this contact.
PHONENUMBERSTATUS	nchar(1), null	Stores Phone Number Detail (PND) status, duplicating the I3_STATUS field in the PND table (which contains call completion codes 'U', 'C' and so on.)
CAMPAIGN	nvarchar(80), null	Campaign that dialed this contact.
CALLID	nvarchar(80), null	The callid number of this call attempt. For more information, see the discussion of callid in the Reporting Data Dictionary.
WRAPUPCATEGORY	nvarchar(80), null	Wrap-up Categories generically classify the result of a campaign call for reporting purposes.
WRAPUPCODE	nvarchar(80), null	Wrap-up Codes are strings that indicate the completion status of a call step. Wrap-up codes are the disposition options that agents see in a script. <more...>
CALLINGMODE	nvarchar(80), null	Indicates the dialing mode.
CALLPLACEDTIMEUTC	datetime, null	Time when call was placed.
SUCCESSRESULT	float, null	SUCCESSRESULT is a customer-managed column. Customers can use this column to maintain running counters, such as a money counter for example. SUCCESSRESULT in a row will contain whatever was in the SUCCESSRESULT column of the associated contact.

Related Topics

Dialer Tables

Penetration Rate Report Data

Penetration Rate Tables ERD.

I3PENETRATIONDATA Schema

This table contains the actual penetration data, specifically two rows per contact column (one for all values and one for unique values) plus one row per contact list to account for all contacts.

Column	Details	Description
UPLOADID	PK, FK, int, not null	Foreign key references I3PenetrationRange
RANGEID	PK, FK, int, not null	Foreign key references I3PenetrationRange
PENETRATIONTYPE	PK, nvarchar(80), not null	Whether it's for all contacts, a given contact column or a given unique contact column. Possible values include: Contacts, Phone Number, Unique Phone Number.
PENETRATIONSUBTYPE	PK, nvarchar(80), not null	Contains 'Total' or a phone number column. Possible values include: Total, Home, Mobile, Fax, etc.
PENETRATIONNAME	nvarchar(80), null	Optional name.
NUMBERITEMS	int, null	The number of uploaded items.

Related Topics

Penetration Rate Report Data

Penetration Rate Tables ERD.

I3PENETRATIONRANGE Schema

This table is reserved for future use.

Column	Details	Description
UPLOADID	PK, FK, int, not null	See Penetration Rate Report Data and Penetration Rate Tables ERD.
RANGEID	PK, int, not null	
VALUE	Nvarchar(80), null	
COLUMNNAME	Nvarchar(80), NULL	

I3PENETRATIONUPLOAD Schema

An integer value in this table is incremented every time a new row is added in this table. That occurs when contacts added to a contact list.

Column	Details	Description
UPLOADID	pk, int, not null	See Penetration Rate Report Data and Penetration Rate Tables ERD.
CONTACTLISTID	nvarchar(40), null	
CONTACTLISTTABLE	nvarchar(80), null	
UPLOADDATEUTC	datetime, null	

Objects in Interaction Dialer Manager

Objects in Interaction Dialer Manager

Dialer Objects

This section introduces *Dialer objects*—the building blocks of an Interaction Dialer configuration. The most important object in Interaction Dialer is a **campaign**. A Campaign is an encapsulation of properties that tell Interaction Dialer how to contact a list of people using a prescribed list of rules. Campaigns tie together a contact list, a script, optional objects and required configuration settings.

Objects are the building blocks of campaigns. Before a campaign is configured, other items are configured first for reusability reasons. Once reusable items are set up, configuring a campaign is a simple matter of selecting *building blocks* and setting a few parameters that are unique to the campaign.

From now on, let's call those preconfigured items ***objects*** instead of building blocks, because each building block is an instance of something (a schedule, for example). A campaign is itself an object; it contains other objects and settings that apply only to a campaign.

Campaigns refer to objects by reference. You can create many types of Dialer objects, each with its own set of properties. Later, when a campaign is defined, you select objects for the campaign to use—for example; a schedule tells Dialer when to run the campaign.

The Building Blocks of a Campaign		
Object	**Purpose**	
Contact List	Required	Tells Dialer which contact list to dial for the campaign.
Schedule	Optional	Tells Dialer when to run the campaign.
Script	Optional	Tells Agents what to do. Scripts display information to agents and update the information in your contact list. Scripts are optional, since Dialer can conduct agentless campaigns, which do not use scripts. See Screen Pop and Agent Scripts.
Rule Set	Optional	Rules run actions at the campaign level, in response to events. A rule set is a collection of rules. A rule is a set of conditions that, when met,

		perform some actions. Among other things, these actions might send a notification, or change a campaign property.
Zone Set	Optional	A zone set is a collection of time zone objects, which allow campaigns to respect *time zone blocking*—a feature that ensures contacts are called during permitted hours. The information in a zone set helps the Central Campaign server decide whether or not to select a record for outbound calling, based upon time of day. For example, most call centers do not want to disturb customers who are sleeping. Time zone blocking can also prevent auto-scheduled calls and agent-owned callbacks from being placed at inappropriate times. See About Time Zone Blocking and Mapping for more information.
Stage Set	Optional	Tells Dialer what the steps of a campaign call are, so it can make better predictions and operate more efficiently. Stages provide details about agent flow through a script. A stage set must be created in Interaction Administrator, but stages are implemented in scripts. Typically, each page of a script will correspond to a different stage. See Stages and Stage Sets for more information about this feature.
Skill Set	Optional	A set of skills can be used to make intelligent decisions when routing calls. Agents have skill proficiencies. The skill set allows skills to be assigned to contacts and dialed according to agent proficiencies, and then routed to an appropriate agent. Assigning a Skill Set to a campaign implements skills-based dialing, a feature that matches skill requirements in contact records with available agent's skills before calls are placed, to dial only those contacts that can be handled by the available agent pool.
Policy Set	Optional	Policies define conditions and behaviors that provide granular control over the processing of individual contact records. Similar to rules, policies define a set of conditions that, when met, perform some actions. The difference lies in the fact that policies apply to individual contact records whereas rules apply to campaigns as a whole. A policy can change the dialing behavior of an individual contact without having any effect on any other contact. It might also send a notification, disposition a call, or assign values to contact record fields.
Filter	Optional	Applies a SQL Filter to the selection of contact list records. Once Filters are defined using the Contact List Filters view, they can be assigned to multiple campaigns.
DNC Source	Optional	A DNC Source is a list of phone numbers that should not be dialed. Assigning a DNC Source to a campaign allows DNC Scrubbing—a feature that prevents matching contact numbers in the call list from being dialed.

Database Connection	Required	All campaigns require a database connection to be functional. The connection object tells Dialer which UDL to use. A UDL file contains the information that a database needs to connect with applications and vice versa. Dialer is unaware of UDL connections until you add them to its list of Database Connections. A database connection is required to configure a contact list. A default database connection is created when Interaction Dialer is installed. In many cases, this connection provides all of the database connectivity that a call center needs to run campaigns.

All of these objects, and the properties of campaigns are configured using Interaction Dialer Manager (IDM), an extension to Interaction Administrator—the application used to manage both the Customer Interaction Center (CIC) and Interaction Dialer.

Related Topics

Introduction to Interaction Dialer Manager

Configurations stored on the CCS

Dialer Objects

Object Relationship Diagram

This diagram illustrates the relationships between Interaction Dialer objects.
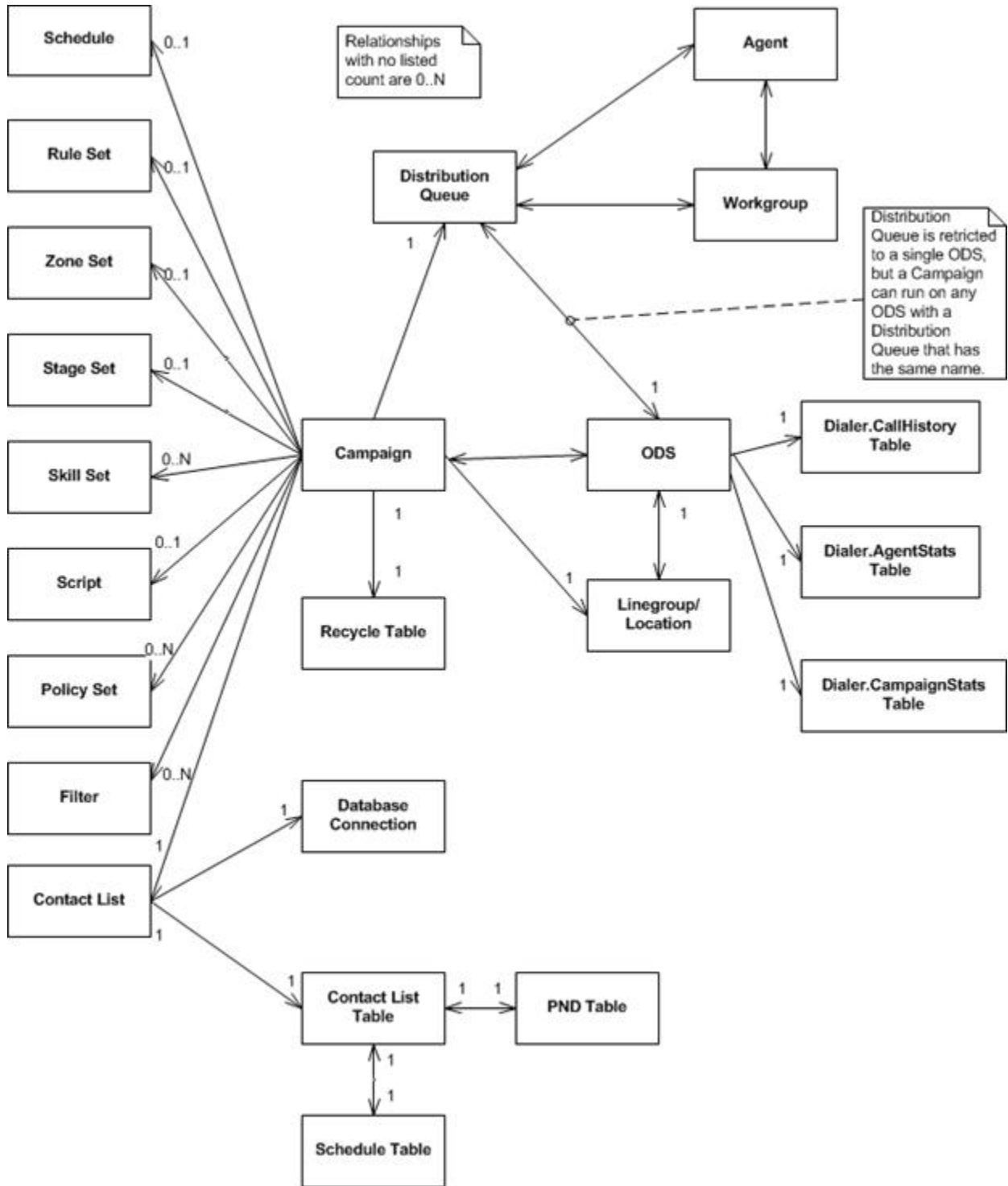
Scope

When configuring Interaction Dialer, pay particular attention to an object's *scope*—how it is used by other objects. Be aware of what will be affected by a change. For example, simple edits to a campaign configuration affect that campaign only, but changing a schedule affects all campaigns that use it. This concept of scope is very important when working with Rule Sets.

Related Topics

Objects are the building blocks of Campaigns

Properties of a Campaign Object

Introduction to Interaction Dialer Manager

Anatomy of a View

The user interface is consistent and simple to understand. To open a view, select a Dialer container in Interaction Administrator, or select a command in IC System Manager. Generally speaking, views in Dialer Manager have similar component parts:
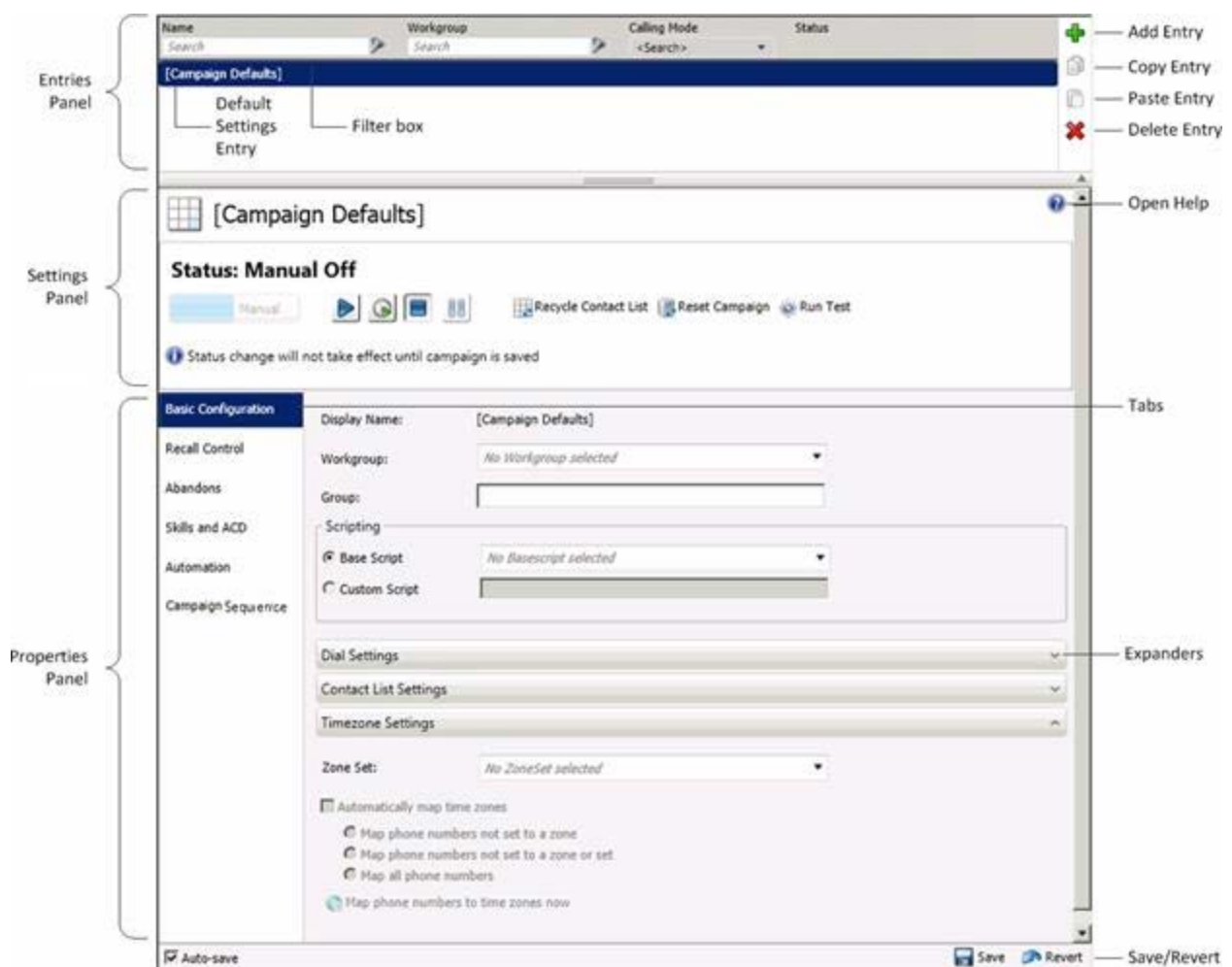
Entries Panel

All views have a panel at the top that lists previously saved entries. Buttons on the right side of this panel add, copy, paste, or delete configuration entries.

515

[Default Entry]

If the name of an entry appears within square brackets, it is a **default entry.** Any settings configured in this entry are automatically assigned to new entries added later. You cannot delete or rename a default entry. The views that provide default entries are: Database Connections, and Campaigns. The names of default entries are: [Default Connection], and [Campaign Defaults].

If you edit a default entry and change an attribute, subsequent new entries inherit its settings. Updating a Default entry does not affect *existing* entries at all. Think of default entries as templates for newly created objects. This feature is very powerful, since administrators can customize default settings to meet any need.

Settings Panel

The Settings Panel appears on Campaign views only. Other views may implement similar panels in future releases of Interaction Dialer Manager. Controls on this panel set the running state of the selected entry. For example, the execution state of a campaign can be turned on, off, paused, or set to run in accordance with schedule settings.

Properties Panel

Configuration settings appear on this panel. Tabs group options for related features. Controls are sometimes grouped on expanders. Clicking an expander reveals or hides a set of related controls.

Save/Revert buttons

To save changes made to any entry, click Save. To discard changes, click Revert.

Auto-save check box

When Auto-save is checked, the user interface does not prompt to save changes, and the entry is saved automatically when you select a different object or leave the container. When Auto-save is cleared a message prompts for confirmation to save when you select another object or leave the container.
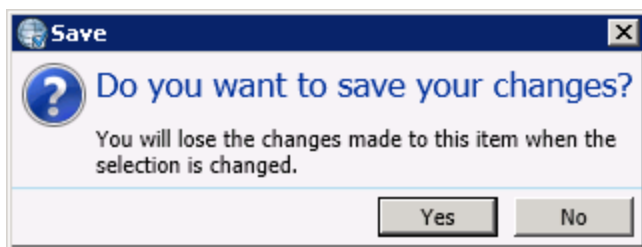
What does the red border around a configuration option specify?

Red borders identify configuration settings that are required, but not currently set to a value. If any options on a tab are required but not set, a red exclamation point is drawn on the tab to indicate that the user cannot save the object until required information is supplied.

Create or Edit an entry of any type

To create or edit any type of entry, the basic steps are:

1. Start Interaction Administrator. Then logon with CIC credentials.
2. Select a Dialer **container**. This opens a view that manages a specific type of object (schedule, campaign, and so on)
3. In the Entries Panel, click **Add** to create a new entry, or select an existing entry. The properties of the new or existing entry will appear in the Properties Panel.
4. Configure settings as needed, using tabs to select features and expanders to manage the visibility of options.
5. Click **Save**.

Configurations stored on the CCS

To configure Dialer settings using Interaction Administrator, Dialer Administrators logon to an Outbound Dialer Server. The administrator of any Outbound Dialer Server (ODS) can modify settings for other ODS servers managed by the Central Campaign server (CCS).

Interaction Dialer configurations (campaigns, schedules, rule sets, and so on) for each ODS are stored centrally on the CCS in an XML file named **dialer_config.xml**. Information in this file is updated when an administrator runs Interaction Dialer Manager and saves a configuration change. The dialer_config.xml contains all of the campaign, time zone, policy, and rule configurations for all Outbound Dialer Servers coordinated by the CCS.

Dialer_config.xml is stored in a directory on the Central Campaign Server. The default path is C:\i3\ic\Server\Resources.

Do not manually edit dialer_config.xml. The Central Campaign server updates this file when Dialer configuration settings are modified in Interaction Administrator. Outbound Dialers don't directly update the configuration file. Instead, they use Notifier Services connections to send configuration data to the Central Campaign server. The CCS watches for editing conflicts, and updates dialer_config.xml as needed. This allows configuration data to be updated by any Outbound Dialer server that is under control of the Central Campaign server.

As a best practice, backup dialer_config.xml frequently (daily if possible). This file contains critical configuration data that you might need to restore in an emergency.

Automatic backup of last loaded configuration

CampaignServer saves a backup copy of dialer_config.xml at startup, if it successfully loads configuration data from dialer_config.xml, it saves a backup copy of dialer_config.xml to a file named dialer_backup.xml. This backup contains the last good configuration, from the last time that the

CampaignServer process was started. In the event that dialer_config.xml becomes corrupted (due to insufficient disk space, insufficient access rights, a power outage, and so on), an administrator can replace dialer_config.xml with the contents of the backup file.

To create the backup, the system first saves dialer_config.xml to a file named dialer_temp.xml. This ensures that enough disk space is available. Next, it deletes dialer_backup.xml and renames dialer_temp.xml to dialer_backup.xml. If any of these backup steps fail, the error is accurately traced and sent to the event log before CampaignServer exits. CampaignServer does not try to replace a bad file with its internally maintained backup.

Conflict Notification Alerts

If two administrators edit the same object concurrently, information is saved for the first person that applies a change, and Interaction Dialer sends a notification message to the second user:

```
"One or more properties for this campaign were changed by another user. Any
current changes will need to be reapplied."
```

The conflict notification alert indicates that edits need to be recreated, since another user updated the record, overwriting the changes that were in progress.

Contact List Management

Contact List Management

Interaction Dialer Manager provides many integrated tools that help customers manage contact list tables. The contact list is an essential component of any outbound dialing system because it contains customer information and phone numbers that are dialed in attempts to reach contacts.

- Each campaign in Interaction Dialer can use a different database connection for its contact list and history tables. Interaction Dialer supports both Microsoft SQL Server and Oracle relational database systems.
- Each campaign can also have its own contact list, or contact lists can be shared among campaigns, potentially using filters to sub-select the records of interest for each campaign.
- Each contact list can have its own unique field structure, including an arbitrary number of phone number fields and other informational fields. When setting up outbound campaigns, sort criteria can be specified either from a pre-defined list of sort criteria or by entering custom criteria.
- Each phone number column in a contact list can be given a user-defined phone number type (for example cell, home, work, work 2, and so on.) This type is used to present type-specific statistics and can be used in calling policies to define different rules within a campaign for dialing different types of numbers (for example, to turn on answering machine detection for home numbers, but turn it off for work numbers). Time zone and number of attempts made is tracked per phone number for the same contact allowing for numbers in different time zones and balanced call coverage.
- Other data specified in the contact list can be used for skills-based dialing and **calling policy decisions**—an example might be: if the "AccountType" field is "Gold", then make sure this

contact goes to an agent with a higher skill level. All call list data for a contact is made available on screen pop to an agent script or 3rd-party application for review and optionally update. Any updates are written back to the contact list.

Records can be added to a running campaign's call list on the fly. That record can be tagged to be dialed right away—see Priority Dialing feature overview.

All data gathered during Interaction Dialer campaigns is written to database tables managed by Interaction dialer.

Built-in Contact Management Features

In Interaction Dialer Manager, contact lists are managed using the Contact Lists view. This view configures logical contact list objects that associate a contact list table in Dialer's database with other settings that define a campaign.
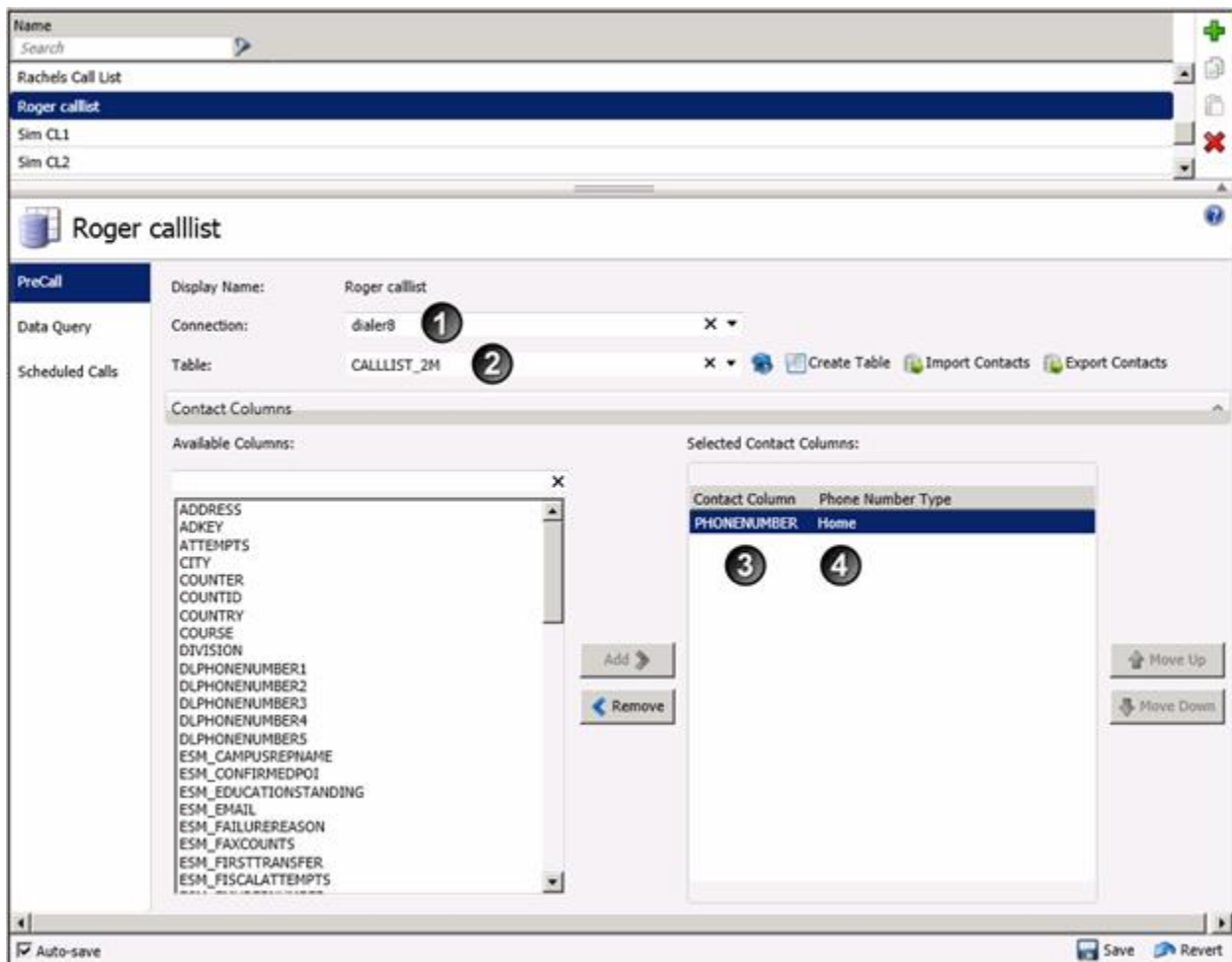
A contact list entry defines the **database connection** used **(1)**. This is a connection that was previously created using the Database Connections view. Database connections allow a campaign to select a

contact list table (2), without specifying any details concerning the location of that file, or the hosting DBMS.

A contact list entry also defines which **phone number columns** that should be dialed **(3)** and the type of telephone number **(4)**. *Phone Number Types* are user-defined strings associated with contact columns to identify a type of telephone number. Examples of phone number types might be "Work", "Home", or "Cell". Phone number types describe the purpose of phone numbers columns in a contact list. Phone number types are centrally defined in the Global Dialer Settings view, so that they can be assigned to any contact list object. See Define Phone Number Types and Associate a phone number column with a phone number type.

What happens when Dialer has multiple contact columns?

When the contact list assigned to a campaign has multiple contact columns, Interaction Dialer will pull in all contact columns, and place calls for each record until either:

- It places a call to a phone number that results in a contact, or
- It runs out of phone numbers to dial.

How do I know if a call is considered a contact?

The way that a Dialer Call is dispositioned determines if the call is considered a contact. If the check box named "The interaction connected to an actual person" is checked in Interaction Administrator, under People > Wrap Up > Wrap Up Categories, Dialer will consider the call a contact.

Beyond initially configuring Interaction Dialer, it is important to properly maintain contact lists. A contact list tends to be a living data source. It is continually growing and adjusting according to already contacted records and new records to be dialed.

Scrubbing against Do Not Call Lists

As a best practice and as required by telemarketing campaigns, Interaction Dialer customers can scrub their contact lists against state and local Do-Not-Call (DNC) lists prior to dialing those lists. See DNC Scrubbing of Contact Lists.

Import, Export, and Query Features

Interaction Dialer Manager provides import, export, and query features that help an administrator manage records in a contact list.

- Contact List Wizards can **import records** into a new or existing Dialer contact list from a CSV file, spreadsheet, access file, or other data source. You can also **export records** from a call list to popular file formats and data sources.
- Functionality on the Data Query tab of a contact list entry can **Query** a contact list to display a list of results in a data grid, saving query results as a filter or apply actions directly to records displayed in the grid, committing changes back to the database.
- It is possible to **manually exclude contacts from being dialed**, by querying a contact list in Dialer Manager, and setting the *Status* column of specific contact record to "E". This value indicates that the contact is "excluded from being dialed".

Contact List Wizards

Interaction Dialer manages all data and tables associated with a campaign *except* the contact list table that contains the names, telephone numbers, and other data associated with people being called. Many customers find it technically challenging to create contact list tables and to import data into them. For this reason, Interaction Dialer Manager provides wizards that simplify common contact list management tasks. Customers can create new contact lists, import data, or export data to popular data formats.

Buttons located near the contact list selection drop list invoke wizard operations:

- Create Table—this wizard acquires records from a data source and places them in a **new contact list table**. The new table is automatically assigned to the campaign. Afterward, customers need only select phone number columns to dial and optionally associate those columns with phone number types (work, cell, etc.)
- Import Contacts—this wizard acquires records from a data source and places them in the **contact list assigned to the campaign**. Create Table and Import Contacts both acquire records from a data source and insert them into a table. The difference is whether or not a new table is

created. The Create Table wizard begins by prompting the user to name a new table. After that, the wizards pages are identical.

- Export Contacts—this wizard exports contact list data to a data source or popular file format. For example, you can export data to a spreadsheet for analysis.

As a **prerequisite,** HTTP streaming must be configured before using these wizards, since the ability to import or export data requires access to Dialer's database and the ability to stream large amounts of data.

Interaction Dialer Manager does not perform direct database access. Instead, it passes requests to IceLib, so that routine transactions are handled consistently. Since IceLib is not designed to stream large amounts of data into or out of a contact list, a streaming HTTP server is used instead. The streaming HTTP service runs as part of DialerTranServer on the Central Campaign Server.

Multiple Phone Number Columns

Interaction Dialer can dial multiple telephone numbers to reach a contact. Furthermore, each phone number can be associated with a user-defined phone number type (work, home, cell, and so on). This enables statistics per phone number type, and enhanced management of phone numbers, such as time zone blocking, attempts counters, and DNC status on a per phone number basis.

If multiple telephone number columns are added to the contact list, Interaction Dialer can be configured to dial these numbers in a prescribed order, until the contact is reached. In the event that a callback is scheduled, the number that was used to reach the contact will be dialed when the callback matures.

- Contact list tables can contain as many telephone number fields as are needed. There is no limit to the number of phone numbers that can be stored for each contact.
- When more than one telephone number is configured, it may take longer to cycle through the contact list, since Interaction Dialer may place more than one phone call to reach each contact.
- If a contact number is empty, the next prescribed telephone number is dialed. Not everyone has a cell phone or work number, for example.
- It is the customer's responsibility to add supplemental telephone number fields to the contact list table. Fields can use any valid attribute name.
- The order in which numbers are called is configurable.
- Scheduled callbacks use the number that initially reached the contact, unless the agent edited the callback number. If so, that changed number is written to the database and will be dialed when the callback matures, instead of the number that initially reached the contact.

Custom Contact List Columns

- The number of columns in a contact list is limited only by database constraints
- Custom columns present data to agents and can be used by policies for automated decision-making

Adding Custom Columns

Any number of additional columns can be added to a contact list table. The only restriction is that the data type for new fields must be one of the following:

char	nchar	datetime	int
bigint	money	nvarchar	varchar

Other data types, such as float or binary are not supported. Custom fields can be passed to Interaction Scripter when the call record is popped on the agent's machine. Additional telephone number fields can be added to support multiple phone numbers per contact. Phone number columns should be a string type such as varchar.

Do not use spaces when naming custom contact list columns. Interaction Dialer does not support contact fields that have spaces in the field name.

Reserved column names

When constructing a contact list, customers should keep in mind not to use columns already reserved for use by CallRecordSchedule tables. The Dialer Transaction Server performs a join operation on the schedule table and the contact table. Using the reserved column names listed below will result in syntax errors and will prevent dialer from dialing scheduled contacts. Avoid columns with the following names:

agentid	i3identity	siteid
callid	schedphone	status
campaignname	schedtime	campaignid

Adapting existing tables as Contact Lists

Customers can use any existing contact list table with Interaction Dialer. When a table is selected for a Campaign configuration, Dialer adds required columns to the table if they do not exist. Dialer automatically adds the i3_identity column, which does not need to be a primary key.

Required Columns added by Dialer		
attempts	zone	status
i3_attemptsabandoned	i3_attemptsbusy	i3_attemptsfax
i3_attemptsnoanswer	i3_attemptsmachine	i3_attemptssystemhangup
i3_attemptsrescheduled	i3_attemptsremotehangup	i3_attemptscallable
i3_siteid	i3_identify	i3_lastcalled_utc
i3_attemptsdaily		

Preserving Performance

As a best practice, customers are advised not to run queries or other database operations against the call list table when it is in use by Dialer. This can cause performance problems.

DNC Scrubbing of Contact Numbers

- Flags numbers not to be dialed by matching contact list phone numbers against a Do-Not-Call list.
- The source of DNC data can be a third-party service (DNC.com) or a database table. Each campaign may have a different DNC scrubbing source.
- Collections customers can use a custom table for account "kills" or DNC.com for cell phone scrubbing.
- Initial bulk scrub of contact list is recommended but is optional.
- During campaign execution, batches of numbers are scrubbed just prior to placing the calls.

Feature Overview

As a best practice and as required by telemarketing campaigns, Interaction Dialer customers can scrub their contact lists against state and local Do-Not-Call (DNC) lists prior to dialing those lists. Scrubbing is often done against in-house lists acquired from the government entities or using DNC.com, a third-party list cleansing service provided by the Contact Center Compliance Corporation.

Scrubbing prevents contact numbers from being dialed by a campaign. Dialer integrates directly with DNC.com and supports custom DNC data sources, which must be tables in Dialer's database.

To define a DNC source, use the DNC Sources view. Once a source has been set it, you can assign it to a campaign and perform an initial bulk scrub of records in the campaign's contact list (see procedures below).

Scrubbing is a two-step process:

1. An initial, **bulk scrub** of the entire contact list is performed first. This typically removes 30-40% of the entries.
2. When the contact list is dialed by a campaign, Dialer performs **just-in-time scrubbing** to exclude contacts whose DNC status changed between the time the contact list was bulk scrubbed and the time the contact is being dialed. Just-in-time scrubbing is performed when records are pulled into cache.

It is not uncommon for a list to be dialed for days or weeks, so changes in DNC status should be expected to occur. Just-in-time scrubbing is intended to remove relatively few numbers while initial bulk DNC scrubbing can remove as many as 40% of the entries in a contact list.

Just-in-time scrubbing is performed for scheduled calls too. Calls to custom numbers that are blocked by a custom DNC source are not logged.

How scrubbed records are marked in the Contact List

Phone numbers blocked by DNC scrubbing are marked with a status of "P" in the campaign's Phone Number Detail table. "P" stands for "purge", to indicate that the number should not be called.

Phone Number Detail (PND) tables track the do-not-call status of multiple telephone numbers associated with a contact. Interaction Dialer creates and maintains a PND table automatically for each contact list in use which contains a row for each contact column, for each contact. PND tables are automatically created and managed by Interaction Dialer. Each PND table tracks time zone, contact attempts, and rescheduling attempts for each phone number associated with a contact record.

DNC scrubbing does not modify the status field in a contact list, which indicates the overall status of a contact. It does modify the callable status of individual numbers, which are maintained in a Phone Number Detail table.

Related Topics

[Configure a Custom DNC Source](#)

[Configure a DNC Source for DNC.com](#)

[Configure a Campaign to use a DNC Source](#)

[Bulk scrub a Campaign's Contact List](#)

[DNC Sources](#)

Priority Dialing

- Allows contact list records added on the fly to be dialed immediately without requiring a recycle
- Contacts are dialed as soon as agent(s) become available
- A Policy can carry out behaviors if the call type is a Priority Call

Feature Overview

Priority Dialing, also called Just-in-Time (JIT) dialing, is a feature that allows for prompt insertion of records at the front of the queue of records to be dialed, independent of Dialer's usual recycle logic. When Priority Dialing is enabled, Interaction Dialer checks at configurable intervals for newly inserted records in the call list. The query frequency is configurable from 5 seconds up to 5 minutes (300 seconds).

Priority Dialing should be used carefully. Depending upon the number of available agents, adding too many "J" records could overwhelm agents.

[Settings](#) for Priority Dialing are managed for *Campaigns* in the *Priority Dialing* frame:
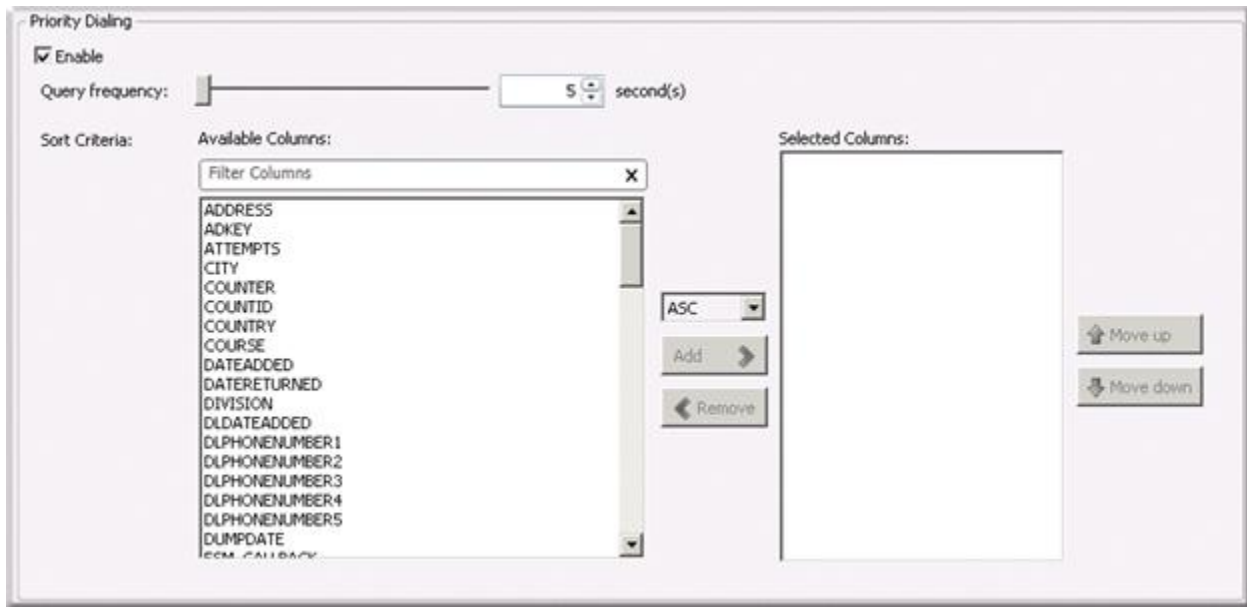
Priority Dialing records are records inserted in the call list with a "J" status. Found records are pulled into cache and immediately dialed, subject to normal agent availability and system overhead.

Technical Considerations

- Priority Dialing records are tracked using a table auto-created by Dialer named **I3_*<ContactList>*_JIT**. For performance reasons, Dialer watches this secondary table for inserted records, not the Call List itself.

  Priority Dialing records are created only for call list records inserted with a "J" status while 1 or more Priority Dialing-active campaigns are dialing that call list. The only action on insert is a trigger that inserts the i3identity into the JIT table. Everything else, such as addition of a record in the PND table, zone mapping and so on, happens as part of the contact query when dialer caches the record.

  Only records with both a "J" status in the call list <u>and</u> a corresponding record in the I3_*<ContactList>*_JIT table are pulled for dialing.

  Priority Dialing activity is triggered on call list insertions only; this means it is not possible to make an existing record get priority dialed just by changing its status to "J". You would have to remove/reinsert it.

  Because Priority Dialing is implemented using a trigger on the call list, some methods of inserting records may not be compatible by default. For example, the SQL Server BULK INSERT statement does not run triggers by default, so records inserted using a BULK INSERT statement would not be processed as Priority records.

- When a recycle occurs, orphaned _JIT records are cleared, and orphaned "J" statuses are changed to "C" (callable record). These recycle actions occur *before* other recycle functionality,

so orphaned "J" records that get cleaned up may be immediately chosen by the recycle that converted them, subject to filter/sort criteria.

An "orphaned" record is one of the following:

- An i3identity in the JIT table with no corresponding call list record, or whose call list record has a status other than "J".
- A call list record with "J" status that has no row in the JIT table.

For example, an orphan can be created if someone inserts a Priority Dialing record and immediately changes its status. Orphans in both tables are cleared at recycle time.

Policies can carry out behaviors for Priority Calls

- A "Priority Call" call category in the Policy Set Item Condition configuration allows a policy to examine call category information for the current contact record, so that a policy can run behaviors if the call type is a Priority Call.
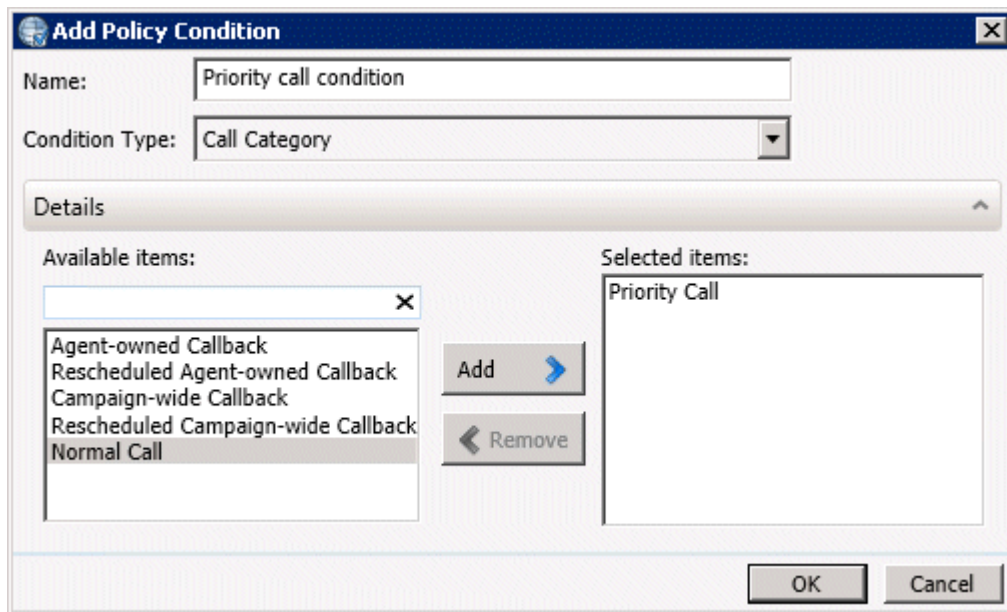
- Agent-owned callbacks will be dialed before Priority Dialing records, followed by campaign-wide scheduled calls, and then by regular Dialer calls.
- In some circumstances, precise dials are processed before priority calls.
- Policies can be used to precise dial priority calls to avoid abandoning them.
- Priority Dialing contacts are not queried as aggressively as regular and scheduled contacts. Dialer will cache only as many priority contacts as it estimates can be dialed before the next query. Therefore, if dialing pace picks up and it dials more than it planned, some regular or scheduled contacts may slip in before any further priority contacts. The feature is designed to leave priority records in the database rather than in Dialer's cache, if they're not being immediately dialed, so that records remain available in case there is a faster-dialing ODS that can choose them.

When regular records (or scheduled calls) are queried, Dialer is biased toward over-querying, so

that if the pace goes up before the next query, Dialer won't run out of records to dial. In the case of J records however, the bias is set in the other direction; which means it will only query *exactly* as many J records as it thinks it can dial, rather than erring on the side of extra as the regular/scheduled queries do.

The math that calculates how many calls Dialer determines it can place before the next query does not change based on the call type. Therefore pacing will generally affect "J" records exactly the same way that pacing affects other records. However "J" records will be queried less aggressively than other types. This is to leave as many "J" records in the database as possible, so that other Dialer servers can choose them.

- Note that the "priority call" status that you are able to use in Policies is only retained as long as Interaction Dialer holds the record in memory from the first load. The best explanation of this is by example:

Consider two priority calls (A and B): both are inserted as priority records. Both records are retrieved by the same priority contact query for the same campaign, which has a disposition policy in place that checks for "priority call" category. Call A connects, is answered, processed, and dispositioned as "Success". Since this all occurred while the call was still in Dialer's cache, the disposition policy runs, because the call still has "priority call" status. Call B, however, gets no answer when it is dialed, so Dialer reschedules it according to the customary reschedule delay and autoschedule settings. Dialer then unloads the call from cache, changing it to an auto-rescheduled status.

At this point, since dialer has deleted the call from memory, and the call list now only contains the auto-rescheduled status, the "priority call" categorization is lost. Later, when Dialer re-caches call B to try again, the result this time is a Success disposition. The "priority call" category disposition Policy will <u>not</u> run, because Dialer has no memory that this was a priority record. On the second load, it just looks like a regular callable ('C') record.

In short, Dialer will never set a contact to "J" status, ever. When Dialer writes a contact back to the database and drops it from memory, the contact's "priority call" status is forever lost, and the contact effectively becomes a regular contact from that point.

Particulars of "J" status contacts:

- Policies can analyze records by call category. "J" contacts are initially assigned to the "Priority Call" category.
- The "Priority Call" category is removed when the record leaves Dialer's cache. It may return to "Normal" category at any time after the initial dialing attempt. This depends on Dialer's caching behavior, agent availability, and other factors.
- To keep track of the Priority Dialing status beyond the initial dialing attempt, you must set an attribute.
- The configured filter for the campaign is also applied to "J" records.
- "J" records have a separate sort used only for them.
- Aside from the differences mentioned above, "J" records are treated exactly like "C" (callable) records in terms of dialing behavior, and are subject to all the same campaign settings and processing that regular calls are (skills, rescheduling, and so on.)

- All numbers of a "J" record will be dialed. This is a key feature distinction between Priority Dialing and scheduled call insertions. A scheduled call inserts a just in time call. Priority Dialing inserts a JIT contact, which may have multiple telephone numbers.

Campaign Management

Campaign Management

Interaction Dialer adds **campaign management** features to CIC. In practical terms, this means that call center supervisors can define any number of campaigns, and control their execution manually, or run campaigns in accordance with schedules.

Campaigns can be automated, using **Rules** that run in response to changing campaign conditions, or **Policies** that provide low-level control over the processing of individual contact records. Policies evaluate conditions and invoke special behaviors. Policies can be applied before a call is made, immediately after call analysis results are obtained, or when a call is finished. Rules apply to the campaign as a whole.

Stages are another campaign management feature. Supervisors can enhance the efficiency of predictive dialing by defining the stages of a campaign call. Stages identify each segment of a call that statistics can be collected upon. There are two types of stages: predictive and non-predictive. A predictive stage describes an activity that Interaction Dialer's patented staging algorithm measures as part of its predictive algorithm. Non-predictive stages are ignored by the predictive dialer, but are useful for reporting purposes.

Supervisors can monitor campaign and agent **statistics** in real-time using graphical or statistical views. Supervisors can also set **Alerts** that notify when conditions exceed user-defined thresholds (campaign goal met, queue backing up, and so on.)

Interaction Dialer's campaign management controls include:

- Call lists, which provide the source of contacts, can be imported and scrubbed using internal or third-party DNC scrubbing tools. Contact lists can be searched for contacts or numbers to be excluded. See Contact List Management.
- Time zones, which control when calls are placed (see Time Zone Blocking and Regulatory Compliance.
- Call Scheduling controls manage callbacks and reschedule calls based on call analysis results.
- Staging, a patented method for optimizing predictions. See Stages and Stage Sets and Pacing.
- Dialing controls including dialing mode, call analysis controls, line usage, recycles through the list, caller name/ID control, max attempts per number and contact, no answer timeouts, pacing limits, and more. See Stages and Stage Sets, Pacing, Regulatory Compliance, and automation topics, including Policies and Rules.
- Call routing including Skills-Based Dialing And Routing, ACD Weighting, and Precise dialing mode.
- Inbound/outbound blending settings.
- Abandon Rate Management, including abandoned call definition, legislative message specification, and more. See Regulatory Compliance, Stages and Stage Sets, and Pacing.

- Policy and Rule definition, which provides call, and campaign-level automation.
- Script selection and definition.

Related Topics

Campaign Creation

Supervisory Tools

Campaign Creation

Campaign Creation

- A Campaign is an encapsulation of properties that tell Interaction Dialer how to contact a list of people using a prescribed list of rules.
- Campaigns are the central feature configured in Interaction Dialer.
- Properties of a campaign are configured using Interaction Dialer Manager (IDM), an extension to Interaction Administrator—the application used to manage both the Customer Interaction Center (CIC) and Interaction Dialer.
- Customers can create any number of campaigns with separate settings per campaign.

A Campaign ties together a contact list, a script, and various other configuration objects to accomplish a particular objective for a client, initiative or promotion. Each campaign dials a specific contact list, which may be filtered to select a target audience. Dialer agents interact with a campaign-specific script. The configuration of a campaign defines the calling mode, script to use, and other particulars. Campaigns can use schedules, rules, and policy sets to automate processing. In general, campaigns define how a particular contact list is to be processed.

Interaction Dialer Manager is the user interface for defining and managing campaigns. Access to configuration options is governed by licenses. System administrators have full control over access rights so that different levels of authority can be given to different users to create, modify, and view just what is needed.

Related Topics

April Fools Day is coming. Prank your friends opening a never ending fake update screen on their computer. Sit back and watch their reaction.

Objects are the building blocks of Campaigns

Before a campaign is configured, other items are configured first for reusability reasons. Once these basics are set up, configuring a campaign is a matter of selecting *building blocks* in Interaction Dialer Manager, and assigning them to campaigns. Let's call those **objects** from now on, because each building block is an instance of something (a schedule, for example). A campaign is itself an object; it contains other objects and settings that apply only to a campaign. The diagram below shows objects that a campaign can reference.
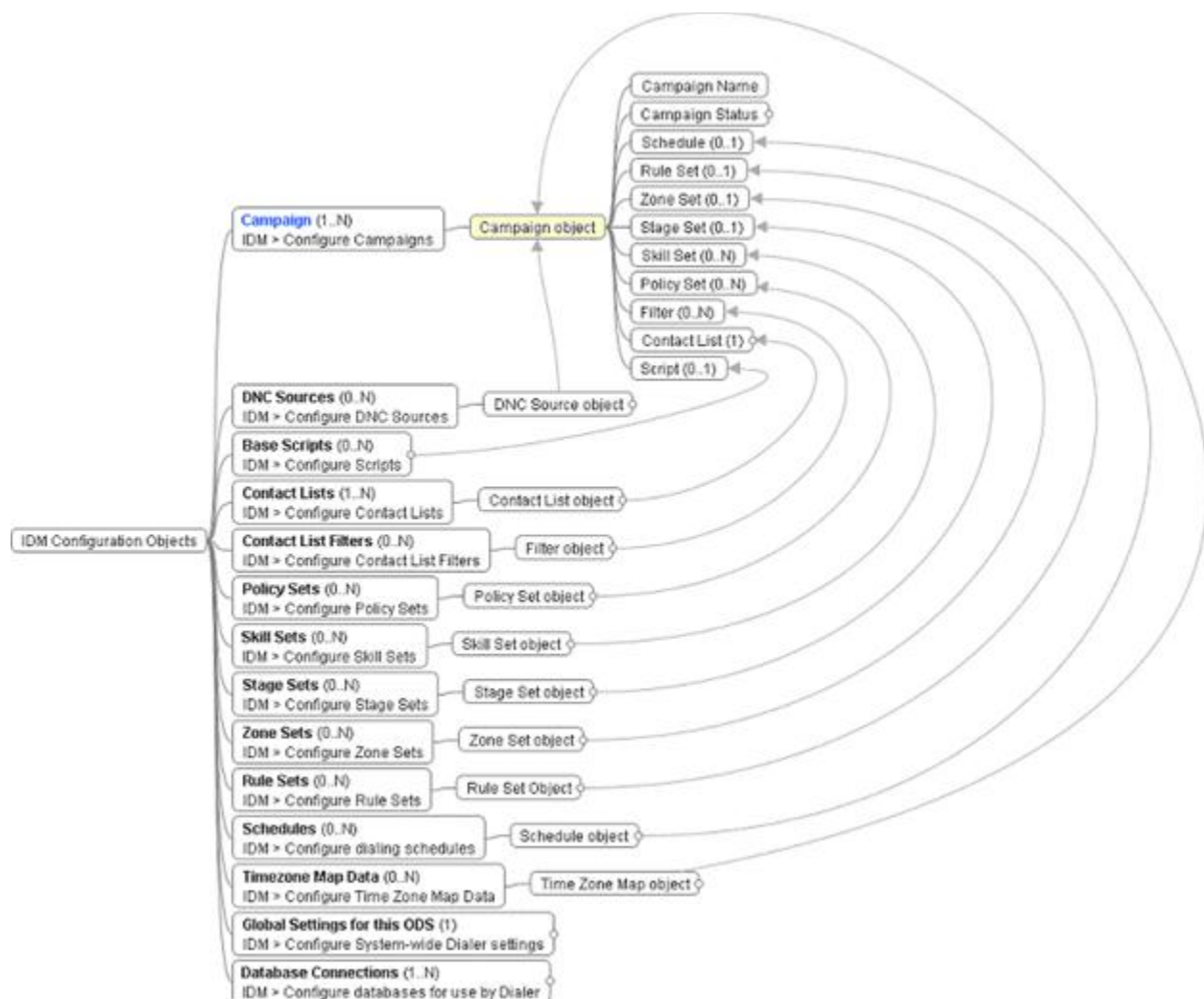
Campaigns refer to objects by reference

You can create many Dialer objects, each with its own set of properties. Later, when a campaign is defined, you select objects for the campaign to use. For example, a schedule tells Dialer when to run the campaign. The building blocks of a campaign are:

Object		Description and related feature overview
Contact List	Required	Tells Dialer which contact list to dial for the campaign.
Schedule	Optional	Tells Dialer when to run the campaign.
Script	Optional	Tells Agents what to do. Scripts display information to agents and update the information in your contact list. Scripts are optional, since Dialer can conduct agentless campaigns, which do not use scripts. See Screen Pop and Agent Scripts.
Rule Set	Optional	Rules carry out actions at the campaign level, in response to events.
Zone Set	Optional	Assigning a Zone Set to a campaign implements *time zone blocking*, a feature that prevents calls from being placed to particular time zones, during particular times of day. Information in a zone set helps the Central Campaign server decide whether or not to select a record for outbound calling, based upon time of day. For example, most call centers do not want to disturb customers who are sleeping. Time zone blocking can also prevent auto-scheduled calls and agent-owned callbacks from being placed at inappropriate times. See Time Zone Blocking for more information.
Stage Set	Optional	Tells Dialer what the steps of a campaign call are, so it can make better predictions and operate more efficiently. See Stages and Stage Sets for background information, and Stage Sets View for user interface details.
Skill Set	Optional	Assigning a Skill Set to a campaign implements skills-based dialing, a feature that matches skill requirements in contact records with available agent's skills before calls are placed, to dial only those contacts that can be handled by the available agent pool.
Policy Set	Optional	Policies define conditions and behaviors that provide granular control over the processing of individual contact records.
Filter	Optional	Applies a SQL Filter to the selection of contact list records.
DNC Source	Optional	Assigning a DNC Source implements DNC Scrubbing for the campaign—a feature that prevents contact numbers from being dialed by a campaign by scrubbing the contact list against a do-not-call database prior to dialing.

Related Topics

Define a Campaign

Copy a Campaign

Paste a Campaign

Remove a Campaign

Properties of a Campaign Object

Properties of a Campaign Object

The Campaigns container manages settings for each campaign. A campaign object is a collection of properties that tell Interaction Dialer how to process a contact list. The campaign defines how agents interact with the contacts in the list (if at all) and specifies how the campaign server should connect to the various data tables used during campaign processing. The properties of campaigns include:

- **Contact list** to dial, and how it should be sorted and filtered to select a subset of records.
- Whether to prevent **do-not-call** contact numbers from being dialed.
- **Mode** used to conduct outbound dialing (Predictive, Power, Preview, or Agentless)
- **Workgroup** of participating agents
- **Script** to guide agents through the stages of a campaign call
- How the campaign should automatically **schedule callbacks** when it is unable to reach a targeted party for some reason.
- Whether to adhere strictly to CIC's **Dial Plan**, or use one specific **line group** for campaign calls.
- Whether to use **Time Zone Blocking**, a feature that prevents calls from being placed to specific time zones, at inappropriate times of day.
- What this campaign considers an **abandoned call** to be.
- Outbound **Caller Name** and **ID**.
- **Pacing** adjustment to apply in response to real-time abandonment statistics for the campaign.
- Whether the campaign should examine **skills** in contact list records, to dial only those contacts that can be handled by the available agent pool.
- Actions to take after **call analysis** has figured out what is at the other end of a placed call.
- Whether to control the processing of individual contact records using **Policies**.
- Whether to control the processing of the campaign using **Rules** to evaluate statistics, events, and time

Campaigns have many additional properties. For details, see Campaign Properties Panel of a Campaign object.

The Campaign is an object too

Each Campaign object references other objects and has unique properties of its own. To configure a campaign, you must select at minimum, a **contact list** to dial, a **workgroup**, and a **script**, if the campaign requires agents. You must also specify whether to adhere strictly to CIC's Dial Plan or use one specific line group for campaign calls.
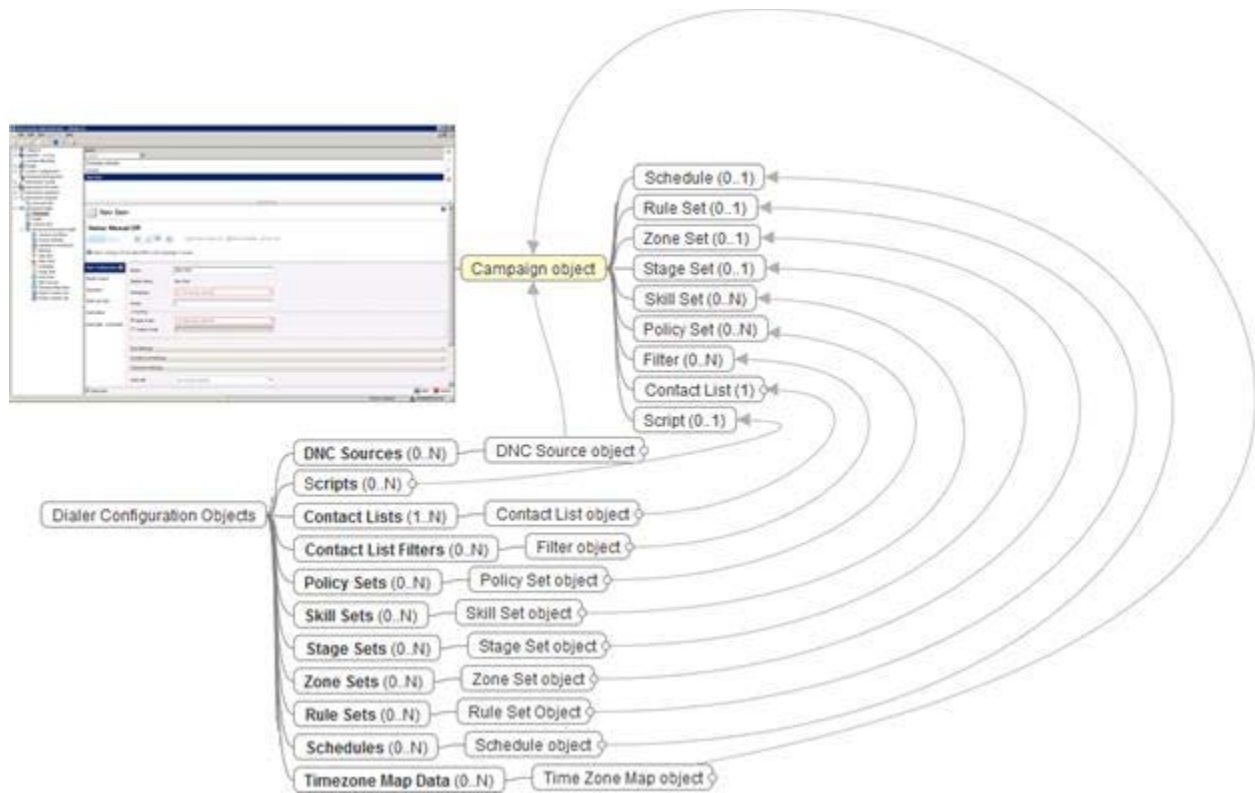
Most Dialer features are configured within the context of a Campaign. To fine-tune a campaign, assign optional objects to it, such as a schedule, filters, rule set, zone set, stage set, policy set, and timezone map. These objects can be assigned concurrently to other campaigns.

For example, you can configure a campaign to place outbound calls only when agents with selected skills are available, just by selecting a Skill Set for the Campaign to use.

If your call list doesn't include time zone definitions, you can assign a Zone Set and a Timezone Map data set. Interaction Dialer will automatically map time zones for you based on each contact record's area code.

Properties unique to Campaigns

Campaigns have some properties that are not based on other objects. Each campaign has a name, a workgroup that identifies participating agents, a calling mode, and settings that configure features. The Campaigns view topic discusses campaign properties in detail.

- For example, you can set what contacts see as **Caller ID** Name and Number, by filling in two fields on the Campaign view.
- Or, you can configure how Dialer should handle each possible dialing outcome, based on **call analysis**. Call Analysis is a platform feature that detects Busy, No Answer, Answering Machine, Fax Machine, Disconnects, Live Voice, Special Information Tones (SIT) and more. It reports the result of each contact attempt to Interaction Dialer.

- To use this information, a Campaign can be configured to handle any dialing situation. You don't have to configure call analysis itself; just what actions the campaign should take based on call analysis results. For example, Dialer might send a Fax if the call is answered by a Fax machine. Other options include whether or not to automatically reschedule a call, when to reschedule a call, and how many times to reschedule that specific phone number before removing it from the list to dial.
- Campaigns can even be configured to conduct **agentless campaigns**. Agents are not required for outbound customer satisfaction surveys, service reminder calls, appointment reminders, order process completions, and emergency notification messages.

Contact List Filters

- Filters control which contact list records are dialed for campaigns
- Filters can be changed dynamically using Rules
- Filters can be applied to the selection of callback records, but callbacks are not filtered by default

Feature Overview

Interaction Dialer supports the use of Filters to select a subset of records to process from a contact list. Each filter sets up the WHERE clause of the SQL statement used to select contact list records for the next cycle of calling. The syntax of SQL filters conforms to standard SQL WHERE-clause syntax. SQL stands for Structured Query Language. SQL is a standard language that creates, manages, and retrieves information in databases.

In most call centers, the person who understands SQL is not the person who manages campaigns. For this reason, the Contact List Filters view makes it easy for persons with little or no knowledge of SQL to create filters that select a subset of records from the contact list.

Instead of prompting for SQL language, users select columns from the contact list and enter criteria to match against each column. For example, a STATE column could select only records for Indiana, as shown in the figure above.

The use of predefined filters helps a Call Center capture the expertise of its in-house SQL experts, by saving filters as named entries that can be assigned to campaigns as needed.

- Filters can be generic or specific to a particular campaign. The same filter can be assigned to more than one campaign, so long as the filter is compatible with each campaign's database.
- Multiple filters can be assigned to the same campaign.
- Customers can filter against any column in the contact list database, including custom fields.
- A filter has no effect unless it is selected for use by a campaign. Afterward, only those records that match the filter are selected for processing by that campaign.

When an SQL filter is active, only those records that match the filter criteria are selected for processing by a campaign. Customers can filter against any column in the contact list database, including custom fields such as Customer Number, or Last Ship Date. For example, to pull only those telephone numbers that start with 317, the filter might be: PhoneNumber LIKE '317%'.

Campaign-level Filters

Once Filters are defined using the Contact List Filters view, they can be used by multiple campaigns, just by selecting filters for the campaign to use.

SQL Filters are optional. A filter is not used by any campaign until it is added to the Selected Filters list in the Filters section of the campaign configuration, which is on the Contact List tab of a Campaign configuration.

Optionally filter the selection of Scheduled Callback Records

Customers can optionally apply Filters to the selection of scheduled Callback records, whether scheduled by agents or auto-scheduled by Dialer when it is unable to reach a contact. By default, filters are not applied to callback records. Filtering can be applied to either type of callback by setting Filter Callbacks options on the Campaign configuration.

Apply Filters using Rules

The **Set Campaign Property** Rule Action can change the filter used by the campaign, in response to a condition of some sort—such as a statistic, event, or time. See the Rule Sets view for more information.
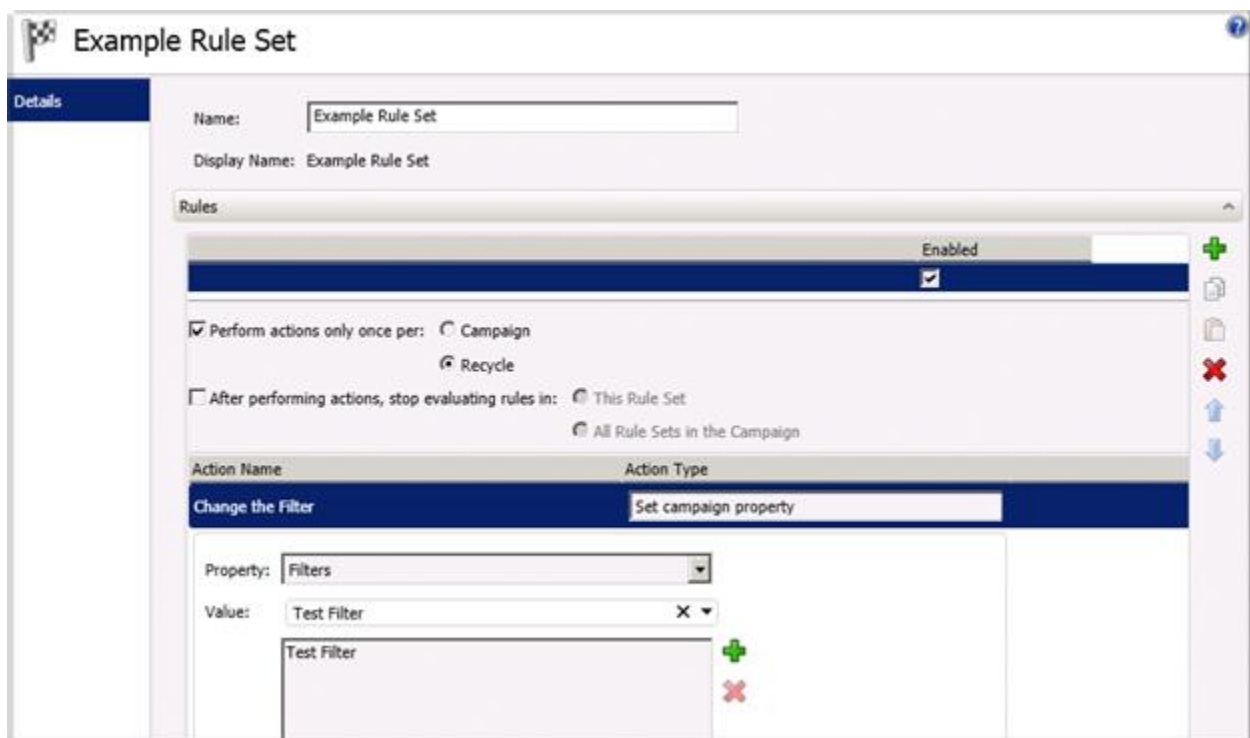
Related Topics

Contact List Filters view

Sort Criteria

- Control order in which contact list records are dialed (at the campaign level)
- Sort order can be changed dynamically using rules (by testing a condition while the campaign is running)

Defining the Sort Order for a Campaign

Sort Criteria can be specified when the campaign is defined, to reorder the contact list based on any combination of columns you select. This constructs an ORDER-BY clause that takes effect when the campaign is recycled (or stopped and restarted). See Sort Criteria.

Using Rules to Sort after evaluating a statistic, event, or time

Rules invoke Actions to perform work of some kind. You can use Rules to apply Sort actions to campaigns, when conditions that control execution of the rule are met. This makes it possible to sort the campaign dynamically in response to an environmental condition. In the example below, a rule changes the sort order when the campaign is recycled for the first time.
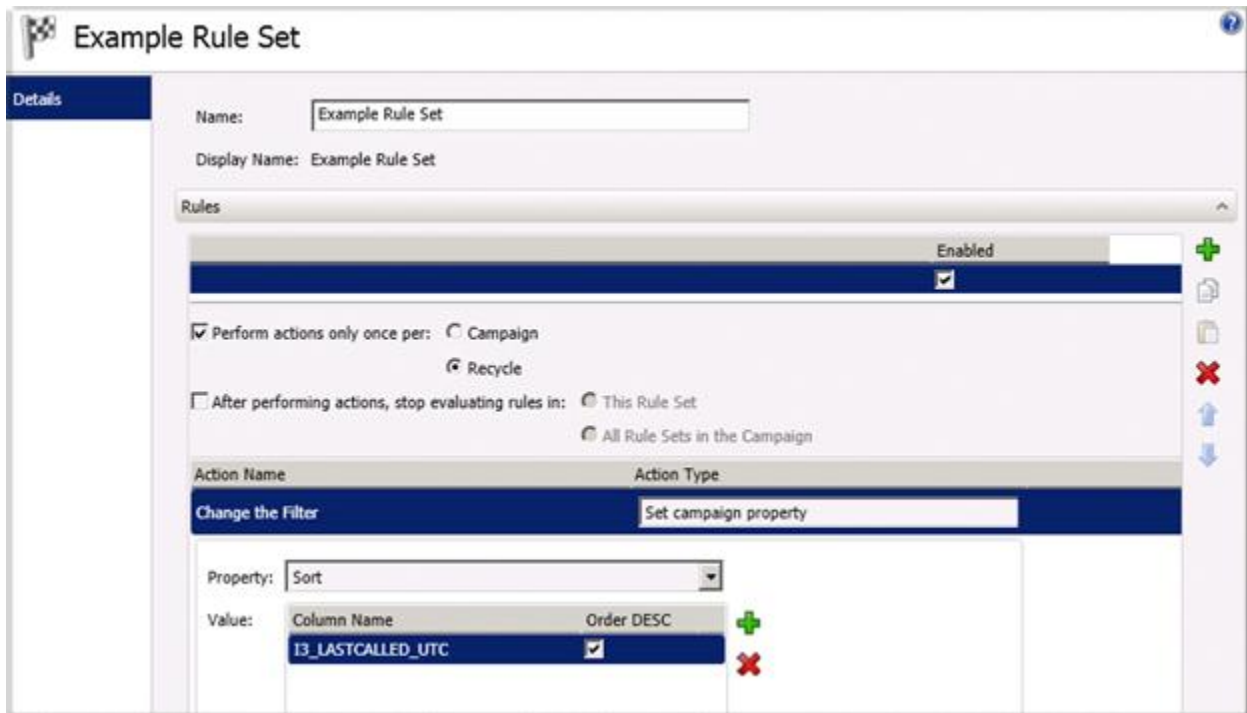
The Sort action is a Campaign Property Action. Other types of actions run handlers, send email, change campaign properties, and so on. See Rule Sets view for more information.

Zone Sets

- Zone Sets help a Campaign comply with legal and conventional rules
- Reduce agent idle time

Campaigns can reference Zone Sets

Campaigns can use Zone Sets to stay within legal and conventional rules by quickly assigning the parameters the campaign needs to track acceptable dial times in various time zones. This ensures that contacts are only called during periods of time that are appropriate for their time zone.

Specifically, if the **zone** column in your contact list stores each contact's time zone, you can use Interaction Dialer's Time Zone Blocking feature to prevent calls from being placed at inappropriate times. A related feature called Time Zone Mapping can be used if your contact list does not contain zone entries.

The Zone Sets view manages Zone Sets:
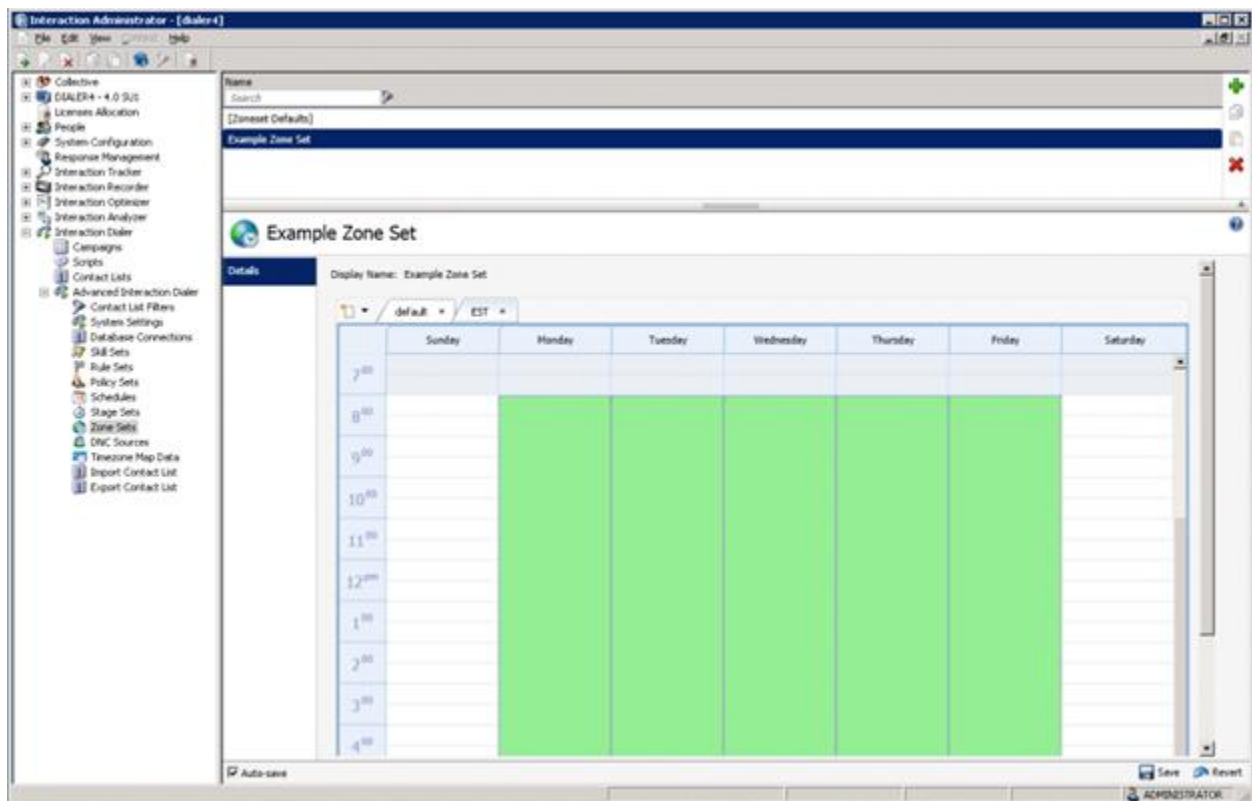
If you do not assign a Zone Set to a campaign, no time zone blocking occurs when that campaign is active.

When a campaign is assigned a Zone Set, its zone entries define when each time zone can be called. Each Zone Set is a collection of time zone entries that specify when it is appropriate for an Outbound Dialer to call a particular time zone—relative to the local time of the Central Campaign server. Zone Sets are optional, but in practice they are frequently used.

Related Topics

Contact Times: Schedules and Zone Blocking

Zone Sets View

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Skill Sets

Interaction Dialer campaigns can be configured to perform skills-based routing. By ensuring that correctly skilled agents are available prior to initiating any outbound calls, the Interaction Dialer solution is perfect for state-based licensing campaigns, language requirements, contact optimization, selling and collections specialties, and many other applications.

Skill Sets ensure that correctly-skilled agents are available before Dialer initiates outbound calls. See Skill Sets view for more information.
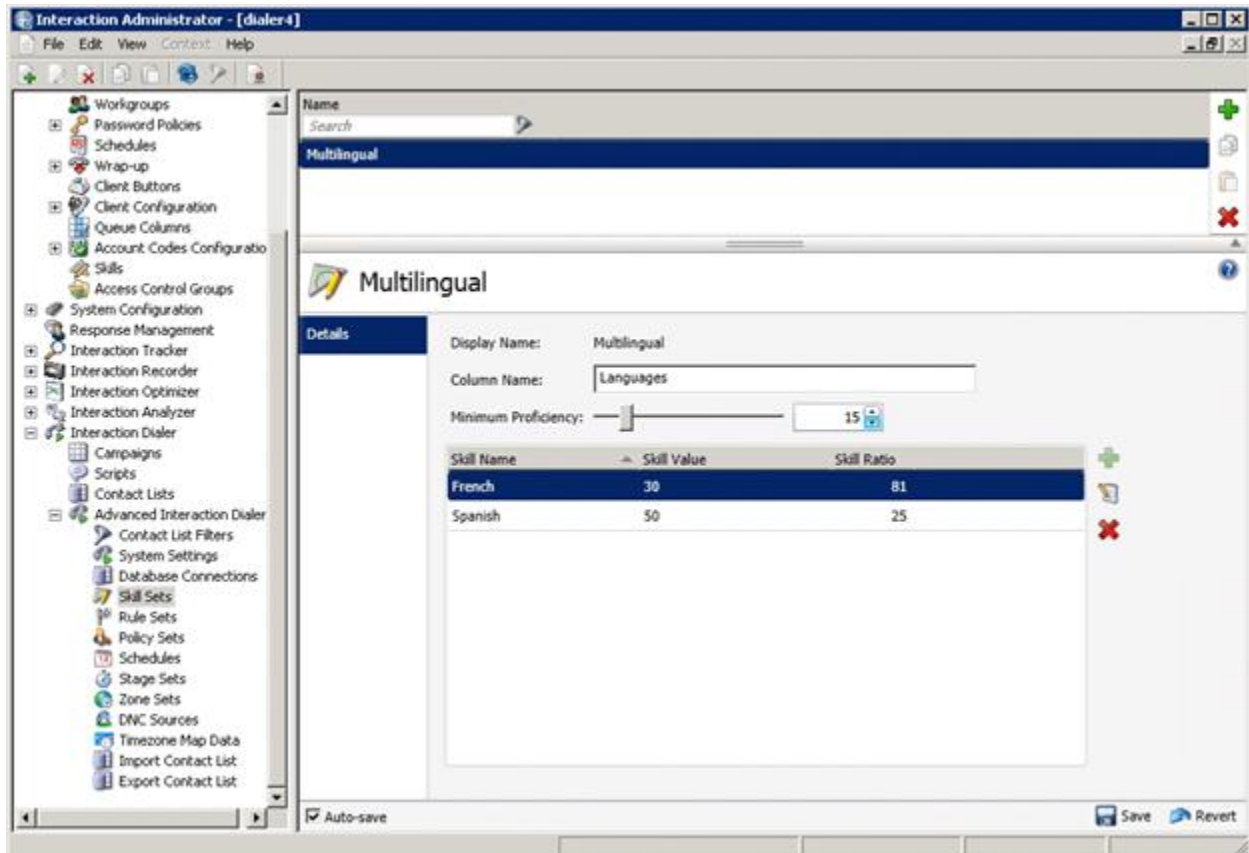
DNC Sources

The DNC Sources view configures DNC Sources that you can assign to a campaign. DNC Scrubbing is a contact list management feature that compares telephone numbers in a contact list with a list of do-not-call (DNC) numbers. This process flags numbers in the call list so that they are never dialed. Do-not-call lists are acquired from the government entities or using DNC.com, a third-party list cleansing service provided by the Contact Center Compliance Corporation.

Dialer_Manager_Help

Scrubbing is a two-step process:

1. An initial, bulk scrub of the entire contact list is performed first. This typically removes 30-40% of the entries.
2. When the contact list is dialed by a campaign, Dialer performs just-in-time scrubbing to exclude contacts whose DNC status changed between the time the contact list was bulk scrubbed and the time the contact is being dialed. Just-in-time scrubbing is performed when records are pulled into cache.

It is not uncommon for a list to be dialed for days or weeks, so changes in DNC status should be expected to occur. Just-in-time scrubbing is intended to remove relatively few numbers while initial bulk DNC scrubbing can remove as many as 40% of the entries in a contact list.

Just-in-time scrubbing is performed for scheduled calls too. Calls to custom numbers that are blocked by a custom DNC source are not logged.

Policy Sets

Policies give a campaign fine control over the processing of individual contact records, and allow for implementation of legislative requirements that involve per-contact behavior. Policies also fire notification events based on individual contact results.

> Policies provide low-level control over the processing of *individual contact records*, whereas Rules provide control over *campaigns*.

Policies evaluate Conditions that in turn, apply Behaviors to the processing of individual campaign records. Each behavior modifies the processing of an individual contact record. For example, a behavior might prevent a contact from being dialed, or require that the call is routed to an Agent who has a specific skill set.

A collection of Policies is called a Policy Set. Policy Sets are optional but quite powerful. They allow business logic to decide whether to place a call, dedicate an agent to be available via skills-based dialing, set call attributes for recording and post-call processing, send notifications to supervisors, and a host of other options.
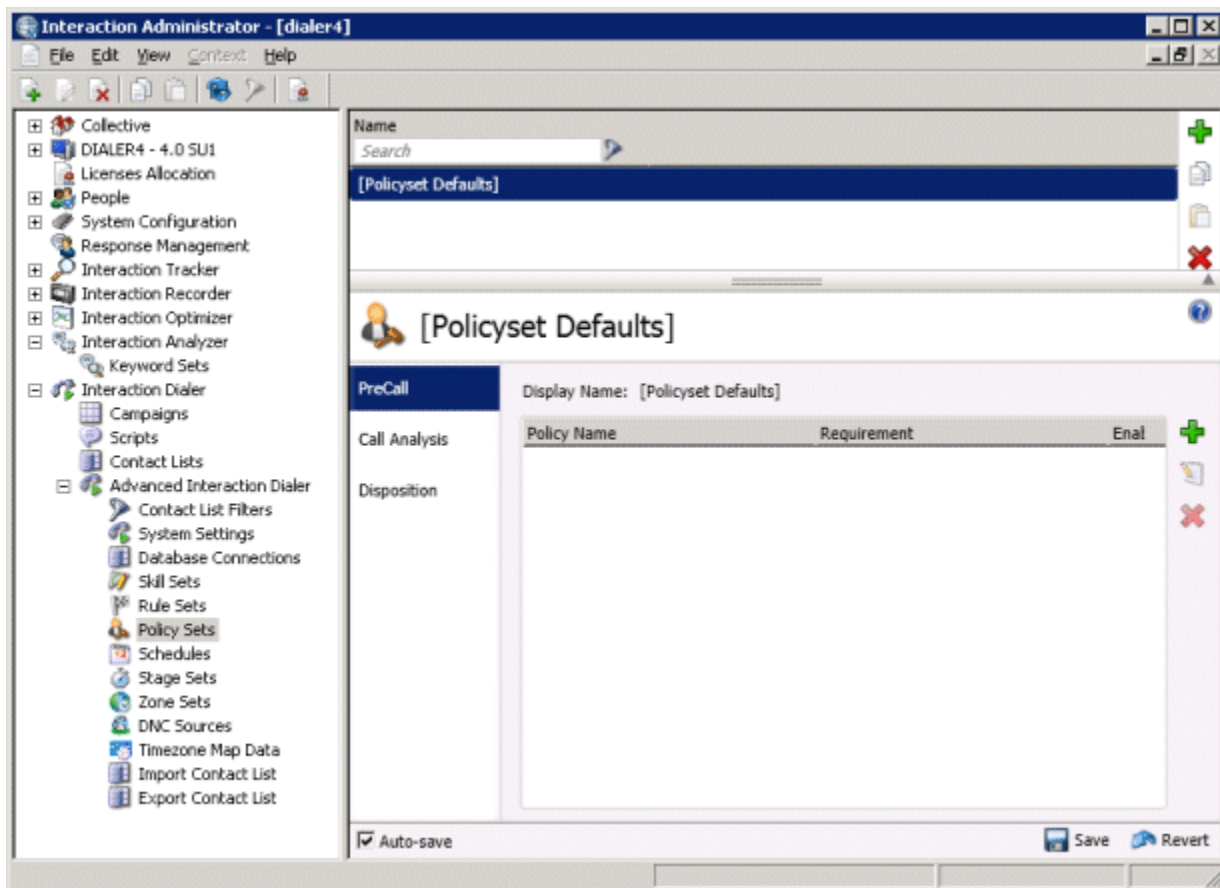
A Policy is made up of Conditions and Behaviors. Conditions determine when the Policy applies. Behaviors embody what event occurs when the Conditions are evaluated to "True" (either all of them or any of them depending on a Boolean configuration option). The conditions and behaviors in a Policy Set are evaluated in top-down order.

A policy can be defined as a Pre Call, Call Analysis, or Disposition evaluation type:

- Pre Call evaluation policy objects are evaluated before the call is made.
- Call Analysis objects are evaluated immediately after the Call Analysis result is determined, but before the call is sent to an agent or is dispositioned.
- Disposition objects are evaluated after the call is finished and is ready to be dispositioned.

Related Topics

Automation Rules and Contact Policies

Policy Sets view

Rule Sets

Rules allow you to optionally automate your campaigns. Rules evaluate a statistic, time, or event to determine whether to carry out an Action that affects the processing of campaigns. A collection of Rules is called a Rule Set.

When a Rule condition is met, it invokes Actions to perform work of some sort. An Action can update a campaign property, send an Email, run a handler, write an Event Log entry, page someone, or pass control to a different Rule Group. For example, a statistic-based rule might send an Email when a campaign goal is achieved (for example Total Calls > 1000).
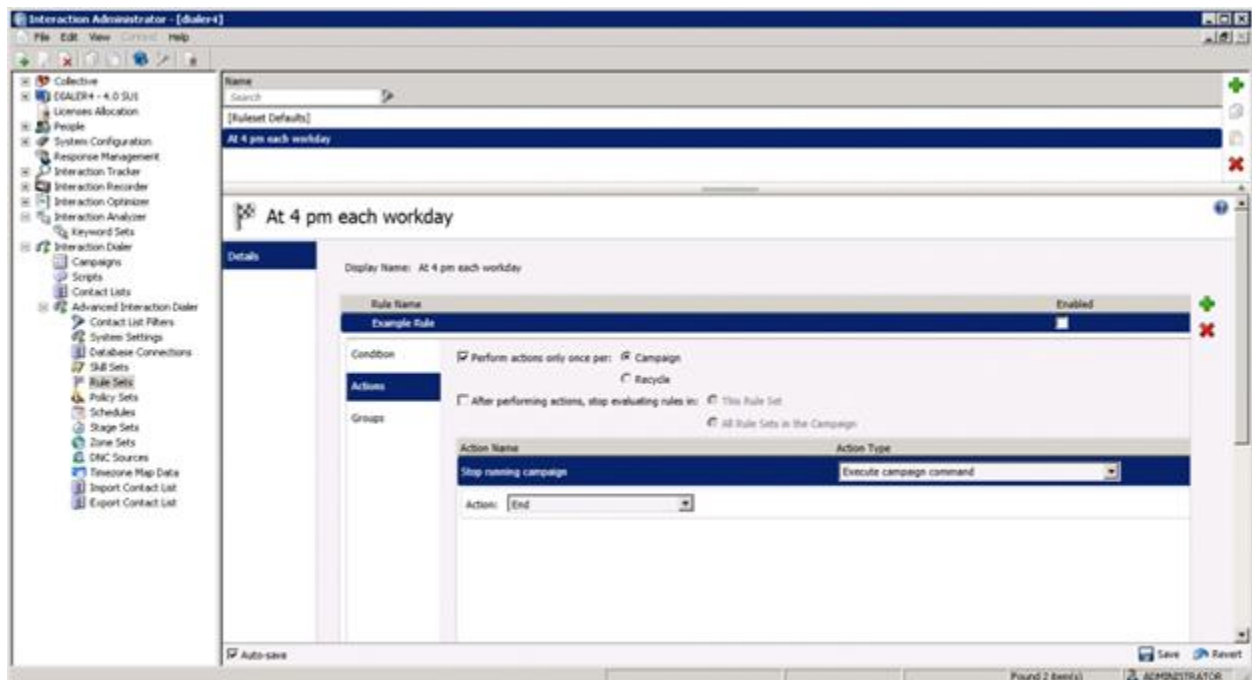
In the example above, a rule automatically stops a running campaign at 4:00 p.m., but only weekdays.

Related Topics

Campaign Execution Controls

Campaigns have **execution states** that are selectable in Interaction Dialer Manager and from within Supervisor views in IC Business Manager.

Command	Campaign Execution State
Turn Campaign On	No calls are placed for a campaign until that campaign is turned **on**. Outbound calling begins once agents change to available status. When a campaign is turned on, the contact list will be processed from the top.
Turn Campaign On for scheduled calls only	A campaign can be **on for scheduled calls only**. In this execution state, Dialer places only calls that were rescheduled by agents. Priority dials are still made, but no regular calls are placed. This mode ignores the campaign schedule, if one is assigned. Auto-scheduled calls are not placed in this mode.
Pause/Un-Pause	A running campaign can be **paused**. This suspends outbound dialing for the campaign. The campaign will continue to run until agents complete active calls. No new calls will be placed. The record cache is preserved so that the system can resume processing the contact list. A campaign can be **un-paused** by clicking the Pause button a second time**.** This will resume outbound dialing from the point the campaign was paused. Agents will not need to logon again when the campaign resumes.
Turn Campaign Off	A campaign can be **off**. This stops outbound dialing once the cache is empty. This execution mode ignores the campaign schedule. If you stop a campaign instead of pausing it, agents must log on when the campaign is turned back on. Outbound calling will resume once agents change to available status.
Recycle Campaign	A campaign can be **recycled**. Recycle refers to the process of restarting the call selection process at the beginning of the contact list. This happens automatically after all records are processed, or manually in response to a campaign reset command. A recycle period is the time that Interaction Dialer needs to process all records in a contact list.
Reset Campaign	A campaign can be **reset**. The contact list will be processed from the top to reach parties that were not contacted in a previous pass. If major settings have been changed (DSN, Sorting or Filters, and so on), the campaign is reset and restarted with the new configuration. This command also sets the count of recycles back to zero.

Managing the execution state of campaigns in Dialer Manager

Call center supervisors can manage the state of campaigns using simple visual controls in Interaction Dialer Manager's Campaigns view. See Campaign Execution Panel for details.
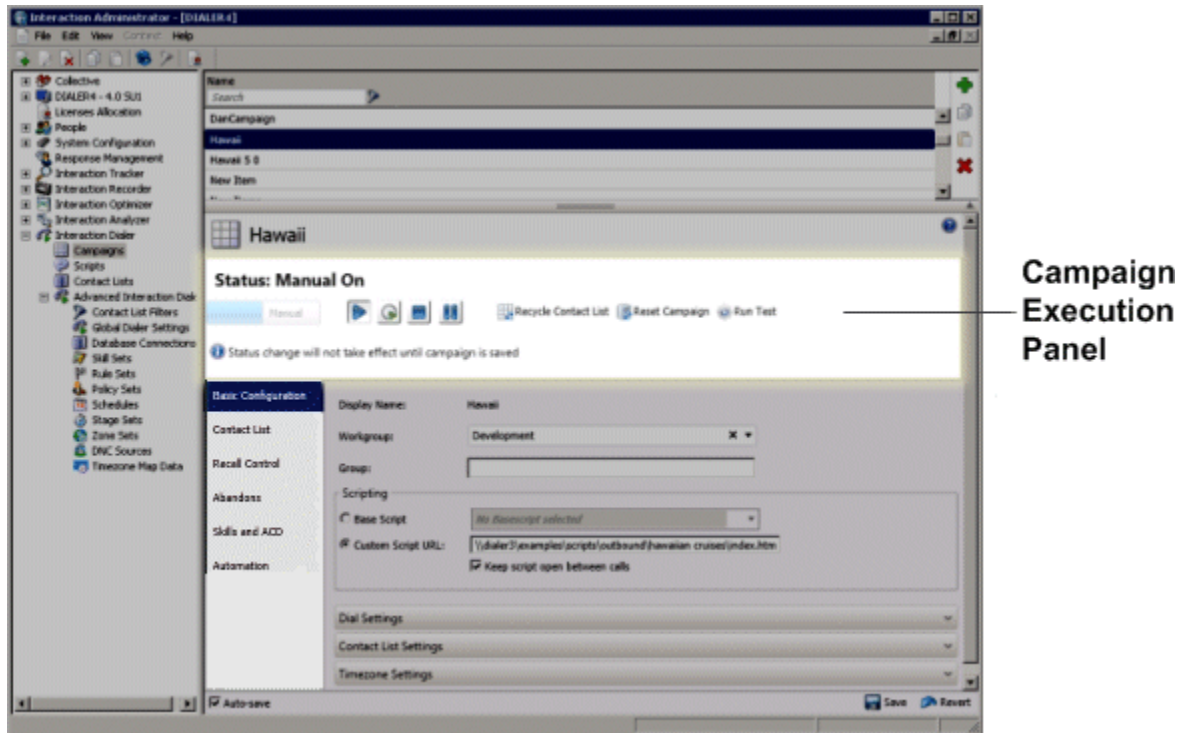
Managing the execution state of campaigns from IC Business Manager

When a call center supervisor is monitoring Dialer views in IC Business Manager, the supervisor can control campaign execution in three ways:

- By using campaign execution controls on the Dialer Campaign Details view:

- By using shortcut menu commands in IC Business Manager's Dialer Overview view:
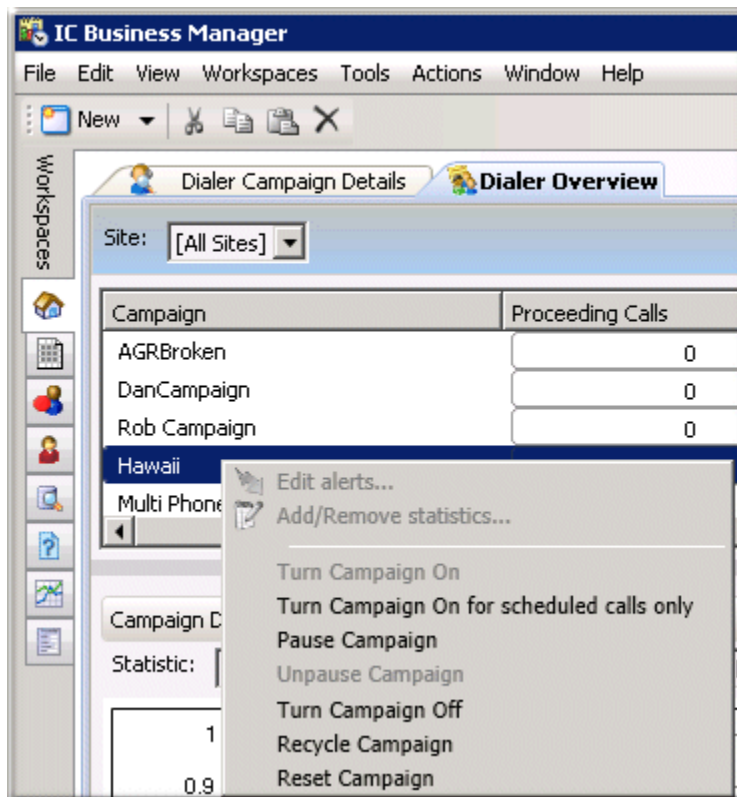
- By selecting Dialer Campaign Actions from the Actions menu:

Selecting *Dialer Campaign Actions* opens the **Dialer Campaign Actions** dialog. It offers the same execution controls that appear on the Campaigns page in Interaction Dialer Manager.

Note: the *Actions* menu only appears if the view is added to the default workspace in IC Business Manager.

Related Topics

Screen Pop, Scripting and Staging

Screen Pop, Scripting and Staging

Screen Pop and Agent Scripts

Predictive, power, and preview campaigns are only as good as the agent's ability to accomplish goals. Accordingly, the script is an integral part of the campaign configuration. Each campaign has a script that defines the agent experience. Screen pop occurs when a call is routed to an agent, telling the agent who they are talking to, and displaying data about the contact.

Interaction Dialer supports scripting options that make it easy for developers and non-developers to create scripts that guide agents through the stages of a campaign call. To optimize Dialer's patented method of optimizing dialing predictions, campaigns can implement Stage Sets. Staging breaks a call down into measurable segments based on agent transition through a script.

Screen Pop

CIC and Interaction Dialer agents typically have telephone headsets and calls are auto-connected. When an outbound call is delivered to an Interaction Dialer agent, several things happen concurrently:

1. The agent hears a configurable *whisper tone* played to announce the call, if system handlers on the CIC system have been customized to play whisper tone. Whisper tone is an optional audio message played to the agent immediately before the agent is connected to a live person. Whisper tone cannot be configured in Interaction Dialer Manager.
2. **Screen pop** occurs. The *script* associated with the campaign populates the agent's display with information pertaining to the call, the customer, and the campaign, based on behavior defined in the script. The script guides agents through the stages of each call, and allows agents to record the call outcome. This is called *dispositioning* the call. Screen pop can also drive a custom third-party application that has been integrated with Dialer using IceLib APIs. Information collected or modified by the agent is routed back to campaign database tables.
3. An optional, pre-recorded, agent-specific greeting can be played to the contact. This recording provides a consistent welcome to the called party, and gives the agent more time to review on-screen information about the contact.

Campaign Scripts

The script displays contact information, provides call controls, and allows agents to log call results.

- To streamline agent interactions with contacts, Interaction Dialer provides screen pop options ranging from display of call list data to integration with in-house or third-party applications.
- Screen pop occurs when a call is routed to an agent, telling the agent who they are talking to, and displaying data about the contact.
- Simple but effective *base scripts* can be configured directly in Interaction Dialer Manager using the Scripts view.

- Programmers can create custom scripts using the Interaction Scripter API, or CallScripter™, a packaged script authoring and execution environment.
- Programmers can integrate third-party .NET applications for Interaction Dialer using the *Interaction Center Extension Library* (IceLib) API and IceLib.Dialer APIs.

Scripts run in special Client applications

Scripts never run in a web browser, even though scripts are based on web technologies. The client applications supported by Interaction Dialer are:

- **Interaction Scripter .NET Client** displays **base scripts** configured in Interaction Dialer Manager or **custom scripts** developed using the Interaction Scripter API.
- **Scripter in Interaction Connect** displays base scripts configured in Interaction Dialer Manager.
- **Custom client applications** can be developed using the Dialer IceLib API for Interaction Scripter .NET Client.

Call Dispositioning

Every outbound call that Interaction Dialer places is *dispositioned* by an agent or by Interaction Dialer itself. This provides an indication of what happened to each call placed.

- Unsuccessful contact attempts (busy, no answer, SIT, and so on) are automatically dispositioned by the system.
- Dialer agents disposition calls by pressing buttons defined in the script (for example success, subscribed to magazine, failure, not interested, and so on).
- Dispositions are grouped for overview and detailed reporting purposes. New dispositions can be added for a specific campaign as needed.

Campaign Scripts

Campaign Scripts

Interaction Dialer supports scripting options that make it easy for developers and non-developers to create scripts that guide agents through the stages of a campaign call. Customers have multiple ways to develop scripts for Dialer campaigns, plus an option to develop custom integrations using the latest .NET technology.

Base Scripts	Custom Scripts	CallScripter™	Custom Applications
No programming required. Configured in IDM Scripts view.	Custom script written using Interaction Scripter API.	Custom script created using CallScripter™.	Custom client application created using Dialer IceLib API.
Use with Interaction Scripter .NET Client	Fully configurable interface based on HTML and JavaScript.	Web-based structured script development	.NET API used for integrating third-party

and with Scripter in Interaction Connect. Screen pop contact details to agent. Configurable call controls: hold, mute, record, transfer, disconnect, request break, Place call (preview only), skip call (preview only) Easy to configure – fixed page layout Configurable text at top of each page with substitution macros. Shows contact's local time. Multiple pages with selected call list fields per page. Configurable list of dispositions per page. License included with each Dialer seat.	Supports screen pop, custom call controls and disposition options. Customize screens to have any desired appearance and layout. Requires customer-supplied web development tool and web development expertise. License included with each Dialer seat. To develop a custom script for Interaction Scripter .NET Client using HTML and JavaScript, refer to the Interaction Scripter Developer's Guide.	and execution environment. Empowers non-technical users to build scripts quickly and easily using a library of drag and drop controls and ready-made templates. CallScripter is a third-party product purchased separately from Interaction Dialer. For details, see the CallScripter product information page.	applications with Interaction Dialer. Can be used to create custom client applications similar to Interaction Scripter Client. Requires .NET programming expertise and API expertise.

Interaction Scripter .NET Client

Base scripts run in **Interaction Scripter .NET Client**—the desktop application that Dialer agents use to interact with campaign calls. Custom scripts developed using Interaction Scripter API also run in this client application.

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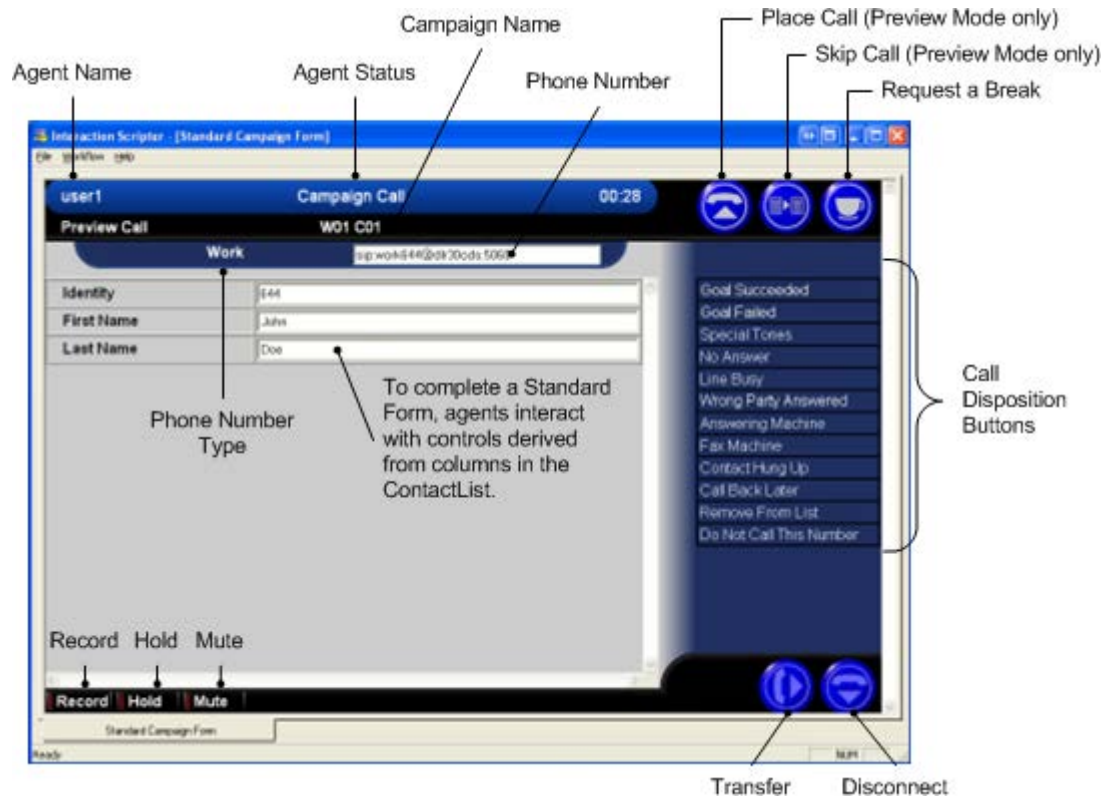
Interaction Scripter .NET Client populates the agent's display with information pertaining to the call, the customer, and the campaign, based on behavior defined in a script. Information collected or modified by agents is routed back to campaign database tables.

Interaction Scripter .NET Client provides page narration, navigation, data editing and call disposition options to the agent. Scripts are pushed to agent desktops automatically. No interaction at the agent desktop is required to deploy or update scripts.

Think of Scripter Client as a "browser" that runs a script when a call is sent to an agent. It provides required telephony functionality that standard web browsers do not offer. When this program is displaying a campaign form, it is called the Dialer Client. It may be called Scripter Client when it displays a custom campaign script. Regardless of the term used, Interaction Scripter Client renders any combination of campaign forms and custom campaign scripts for a campaign.

Campaign scripts make agents more productive, assure a consistent message, provide for complete data collection, and streamline agent interactions with customers. The process of producing and maintaining campaign scripts can be challenging, since script programming can demand significant time and programming expertise. Fortunately, Interaction Dialer provides a plethora of scripting options that reduce the burden of creating scripts.

- Non-programmers can create **base scripts** by setting options in the Scripts view in Interaction Dialer Manager.
- Web developers can use HTML and Javascript, or a drag-and-drop script development environment to create sophisticated custom scripts.

Interaction Scripter Client supports any combination of base and custom scripts when multiple campaigns are running. Agents receive exactly the information and options they need to process each call.

Scripter in Interaction Connect

Dialer agents can use Scripter in Interaction Connect to interact with campaign calls. Scripter in Interaction Connect supports base scripts. It does not support custom scripts at this time.
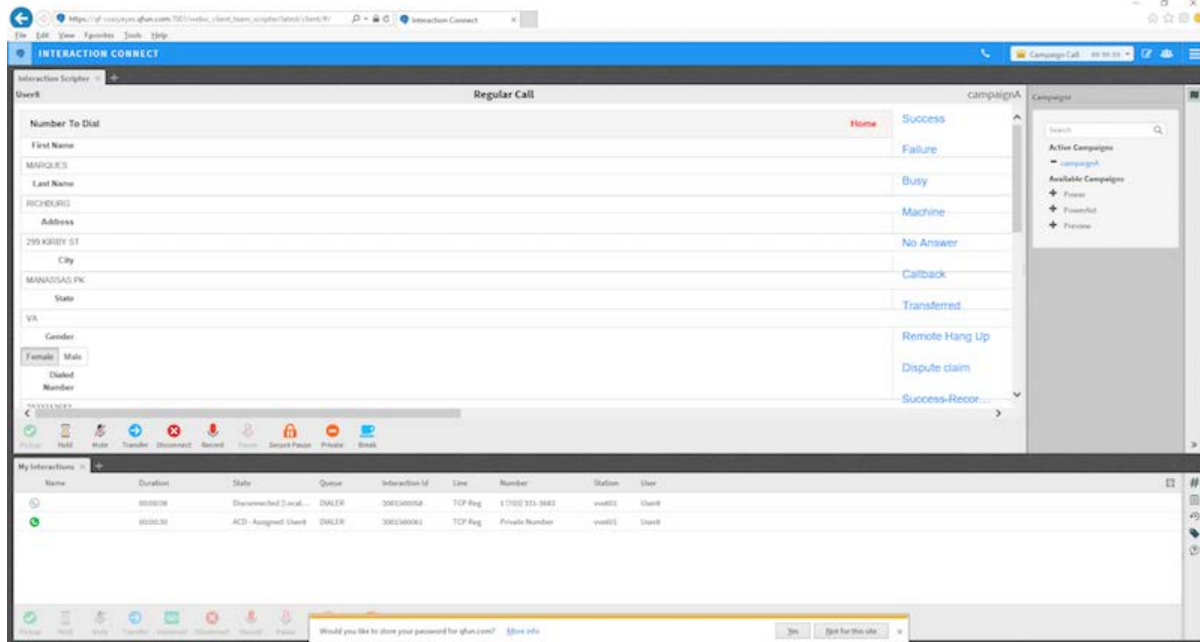
A base script runs when a call is sent to an agent and provides page narration, navigation, data editing, and call disposition options to the agent. A base script populates the agent's display with information about the call, the customer, and the campaign. Information collected or modified by an agent updates the campaign database tables. Create a base script by setting options in the Scripts view.

- Scripter in Interaction Connect makes agents more productive, assuring a consistent message. It provide complete data collection and streamlines agent interactions with customers.
- Scripter in Interaction Connect does not require an extra license. However, a user must have the Customized Client security right to view the Scripter tab in Interaction Connect.
- Scripter in Interaction Connect works only with campaigns that use base scripts. If a customer changes the type of script used by a running campaign, that could impact agents who are logged onto that campaign. Switching to a custom script will log the agents off. Switching to a base script will log the agents on, if they are global agents.
- At this time, Internet Explorer v11 does not display follow-up tooltips in Interaction Connect, when Windows 10 or Windows Server 2012R2 is used. This appears to be an iframe issue. Tool tips do appear in Internet Explorer 11 when Windows 7 is used. Chrome and Edge browsers on Windows 10 display tooltips as expected.

> **Note:** Certain controls do not work properly if you use Internet Explorer 11 with Windows 10 or Server 2012R2 OS. Refer to CIC System Software Requirements for Web Browser at https://help.inin.com/cic/desktop/Software_Requirements.htm#webbrowser/.

- Dialer administrators should configure the system to automatically assign a wrap-up category and wrap-up code if any agents use Scripter in Interaction Connect. Scripter in Interaction Connect automatically assigns wrap-ups based on the disposition button pressed by each agent. For each possible disposition, Administrators can configure the category and code assigned. See Configure wrap-up mapping for Scripter in Interaction Connect.
- For more information about using Scripter in Interaction Connect, refer to *Interaction Connect Help*.

Base Scripts

The Scripts view provides **configurable forms** for agent scripting that define call control buttons that agents use to disposition calls, and pages of text that tell agents what to say during each call. The scripts you can configure in Interaction Dialer Manager are called **base scripts**. No special programming expertise is required to create base scripts.
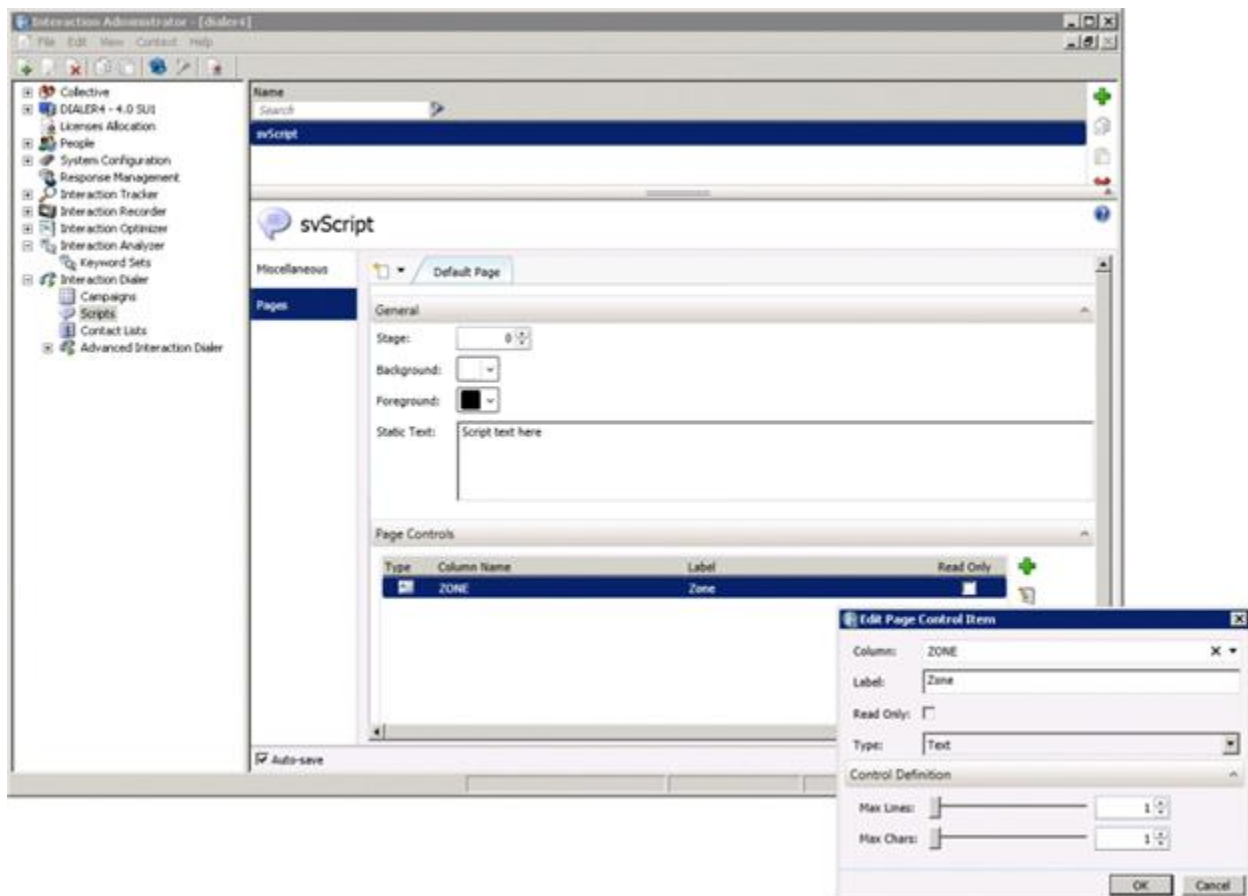
Advanced Interaction Scripter

Web Developers can create sophisticated custom scripts for Interaction Scripter .NET Client using *Advanced Interaction Scripter*—an optional script-creation API from Genesys based on HTML and JavaScript. Call Center Supervisors provide developers with the narrative that agents will read to customers, with logical branching paths that agents will use to navigate through a call, with numbers assigned to stages in the campaign, and with database fields that must be updated when forms are filled out. From this information, very advanced scripts can be developed. See Interaction Scripter Developer's Guide for details.

CallScripter™

Custom scripts can be created without writing JavaScript code. CallScripter™ empowers non-technical users to build scripts quickly and easily using a library of drag and drop controls and ready-made templates. For more information, see the CallScripter product information page at https://my.inin.com/products/AllianceSolutions/Pages/CallScripter.aspx.

Stages and Stage Sets

Stages and Stage Sets

To reduce abandonment rates and increase customer satisfaction, Interaction Dialer's stage-based prediction feature accurately paces and predicts each agent's script transitions with a staging algorithm—so innovative it's backed by a U.S. Patent.

- Dialer offers a patented method of optimizing dialing predictions, implemented using Stage Sets
- Staging breaks a call down into stages based on agent transition through script or other user interface
- Stages are configurable per campaign and are automatically tracked per agent and per campaign

What is a Stage?

A **stage** categorizes a general task that agents perform while talking to a contact. Each stage is a discrete part of a campaign phone call, such as pitching a product or service, or collecting order information. Stages can be thought of as completing actions performed by agents to process a call. A Stage can be specified for each page of a base or custom script. Consider, for example, a telemarketing campaign designed to sell newspaper subscriptions. Campaign calls could be broken down into four general script pages:

1. **Sales Pitch**: On this page, the agent asks the customer to buy the newspaper subscription. Every agent performs this action as the first step of each call. At the end of the Sales Pitch page, the agent transitions to another page, based upon the customer's response to the Sales Pitch.

   This page represents that Call Connected, or *default stage*, of the call. The first stage of the call is Stage 0 by default. Stage 0 cannot be deleted.

2. **Callback**: If the customer requests to be called back at another time, the script moves to the Callback page. Likewise, this would represent the Callback stage of the script. During this stage,

the agent logs the date and time when the customer would like to be contacted again, and hangs up.

3. **Failure**:If the customer does not wish to subscribe, the script flows into a Failure page, represented by a Failure page in Dialer, so that a <u>wrap-up code</u> can be recorded to explain why the customer was not interested.

   Since wrap-up codes are campaign-specific, the agent might log "doesn't read a newspaper", "subscribes to a different newspaper", or something similar. The agent would then terminate the call. Even if the customer hangs up without giving a reason, the script flows through this page so that the agent can log that.

4. **Wrap-up**: If the customer wishes to subscribe, the call transitions to a wrap-up stage, so that the agent can log the customer's address, method of payment, and other details, before hanging up.

Things to notice:

The script actually contains 5 pages. However, the Call Waiting page is only displayed when the agent is **not** connected to a contact. Its sole purpose is to show that the agent is logged in and available, but not speaking to a customer at the moment. Therefore, it is not a stage of the call.

Three pages represent the end of the script. After the Failure, wrap-up, or Callback pages, the call completes and the agent is returned to the Call Waiting page. Because we know that the call will end during these stages of the call, we call them **terminating stages**.

The amount of time that an agent is on a particular page of a script varies for each page. The tasks on those pages simply take different amounts of time to complete. Knowing which stage each agent is in would certainly help Dialer's predictive algorithm accurately predict when a call will end.

Stage Transitions

Stage *transitions* occur as agents navigate through scripts. Scripts present text for agents to read to the party called, and may prompt the agent to collect information. Scripts always provide visual controls that agents can use to disposition a call, or navigate from screen to screen.

Transitions occur when an agent navigates to a page that belongs to a different stage. The script assigns the appropriate stage number to that segment of the call. Scripts should be designed such that no special action on the agent's part is required to manage stage transitions. Different calls may transition to different stages. For a given call, some stages may not be entered. For example, not everyone will want to subscribe to a newspaper so the Wrap Up stage won't be entered for every call.

> Whenever a Stage Set is assigned to a campaign, its script should have the same set of stage numbers.

Benefits of using Stages

Configuring a campaign to use stages offers important advantages:

- **Improved performance from Dialer's predictive algorithm**. If Interaction Dialer can use a stage near the end of a call, rather than the entire duration of a call, it can more accurately predict when agents will become available for another call. Stages provide this granularity.
  By making predictions based on only the terminating stages of each script, predictive dialing uses more pertinent information to make predictions resulting in a more productive call center. For this reason, it is important to implement stages for all predictive campaigns.
- The **Agent Overview view**, provides agents' real-time stages status so that supervisors can observe the current stage for each agent.

The [Call Connected] Stage

Every Stage Set has a *default stage*, whose stage number is zero. This is the stage in which the campaign call begins. Unlike other stages, which may or may not be transitioned to, the default stage is always entered.

The default stage is defined automatically when a new Stage Set is created. It is named **[Call Connected]**. The default stage always has a value of zero. You cannot rename or delete the default stage nor can you change its stage number from zero to anything else.

The default stage starts when the call is first connected to the agent. It ends when the agent:

- Starts a new stage
- Completes the current call
- Transfers the current call

From a scripting point of view, Stage 0 starts when the call is connected and one of the following Dialer event notification messages is called:

- IS_Event_DataPop
- IS_Event_NewPredictiveCall
- IS_Event_PreviewDataPop

The default stage ends when the agent completes the call by invoking an IS_Action_* operation such as IS_Action_Disconnect, or enters a new stage using IS_Action_Stage.

The commands required for using stages in a custom script are:

```
<META NAME =<IS_ACTION_STAGE>
```

And within a Scripter tag:

```
IS_ACTION_STAGE.STAGE=1;
```

```
IS_ACTION_STAGE.CLICK();>
```

For more information, refer to the *Interaction Scripter Developer's Guide*.

Terminating Stages

A stage is considered to be a terminating or completing stage if a significant number of calls are likely to end in that stage. This can affect the overall accuracy of the predictive algorithm in subtle ways.

The Outbound Dialer server maintains statistics only for predictive stages. When a call ends in a non-predictive stage, the Dialer doesn't factor the length of that call into its predictive algorithm. This can reduce the accuracy of the Dialer if many calls terminate in a non-predictive stage.

Scripts should be written in such a way that there are definitive terminal pages that disposition calls. For example, a Failure page might disposition a call with user-defined wrap-up Codes such as, "Contact Hung Up", "Doesn't Want the Product", and so on. A Wrap-up page might disposition a call with a wrap-up Code such as, "Sale". These two pages would have predictive stages assigned to them.

Stages are defined by Stage Sets

A stage is a discrete activity within a phone call, such as pitching a product or service, or collecting order information. Since a call has multiple stages, a collection of stage entries is called a **Stage Set**. This section explains why it is advantageous to use Stage Sets.

Stage Sets enhance the efficiency of predictive dialing by defining each segment of a call that statistics can be collected upon. Each stage categorizes a general task that agents perform while talking to a contact. Stages can be thought of as completing actions performed by agents to process a call. Stages usually correspond with pages of a campaign script.

The stages of a campaign call are defined using the Stage Sets view. Stage names and other attributes are saved in groups (called Stage Sets) that can be assigned by name to one or more campaigns. A Stage Set is nothing more than a set of stages that have been given a name. Each campaign can have its own

Stage Set. However, a Stage Set can be assigned to more than one campaign. Stage Sets are optional, but in practice they are often used.
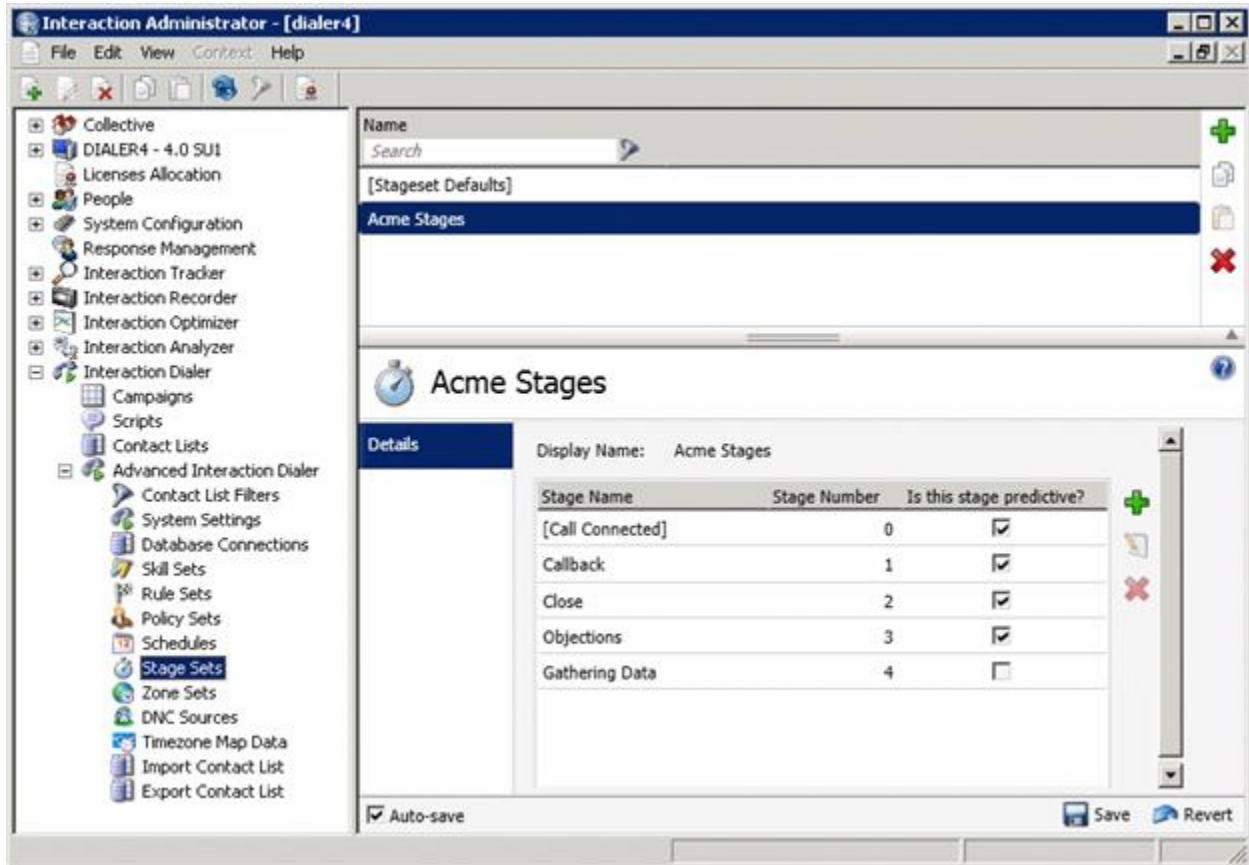
The Stage Sets view in Dialer Manager.

The basic attributes of a stage

- **Stage name**: This user-defined label categorizes one or more tasks that agents perform in the course of a campaign call. This name can contain spaces, numbers and special characters.
- **Stage number**: When an agent transitions to a different stage, the campaign script sends the stage number (an integer value) to the Outbound Dialer server, to tell it that the agent has entered a new stage. Stage numbers are used in campaign scripts to transition an agent from one stage to another.

When creating stages of a Stage Set, you must coordinate stage names (and numbers) with the person who is creating custom campaign scripts for campaign(s) to which this Stage Set will be assigned. The script developer uses stage numbers in scripts that transition agents to different stages when new HTML pages are opened in the Interaction Scripter Client.

The Outbound Dialer Server doesn't use stage names internally. Instead, it uses the Stage number to keep track of stages. When an agent transitions to a new stage, the campaign script sends the stage id (an integer value) to the server, to tell it that the agent has entered a new stage.

- **Predictive attribute:** Every stage has a predictive attribute that indicates whether or not the Outbound Dialer server should collect statistics while agents are in that stage. All terminating stages should be marked as predictive. The predictive attribute should be set for stages that lead to a disposition of the call record (terminal stages).

The Outbound Dialer server tracks the amount of time that each agent spends in predictive stages. While a campaign is active, the Outbound Dialer server monitors agent performance at each predictive stage and maintains statistics that allow it to predict the probability that the call will complete in the current stage. The server estimates how long each agent will take to complete that stage of the call.

The Outbound Dialer server does not monitor or factor in time that each agent spends in non-predictive stages. Non-predictive stages are ignored by the predictive dialer, but are useful for reporting purposes.

A predictive stage describes an activity that Interaction Dialer's patented staging algorithm measures as part of its predictive algorithm.

The predictive algorithm is a calculation that determines if a call should be made. The calculation is based on a number of factors, including agent status, stage completion measurements and ContactList quality.

Stage Sets are dynamically referenced by Campaigns

A Stage Set has no effect until it is assigned to a predictive campaign. Afterward, Dialer's pacing algorithm analyzes stage statistics to make better predictions regarding when and how many calls to place. Stages help Dialer's pacing algorithm to predict when agents will become available.

As each agent progresses through scripts or other applications, stage transitions are communicated to Interaction Dialer. Each agent's average time in each stage is tracked and presented on real-time tracking interfaces. These average stage times are also used by the pacing algorithm to estimate the likelihood of an agent ending a call at any given time, thus optimizing the likelihood of an accurate prediction.

Related Topics

Add a Stage Set

Contact Times: Schedules and Zone Blocking

Contact Times: Schedules and Zone Blocking

It is important to manage **when campaigns run** and **when contacts are dialed**. These are not the same! Campaigns have unique requirements; agent availability may vary throughout the day, and no one wants to dial contacts at inopportune times. Fortunately, Interaction Dialer can evaluate each contact's time zone to dial at appropriate times only. This feature is called time zone blocking. Each time zone is defined in a Zone Set that tells Dialer when the zone should be called. Time zone blocking is configured by assigning a Zone Set to a campaign.

If the contact list does not contain each contact's time zone, time zone mapping can be performed by comparing the initial digits of each phone number with a database of numbers and time zones. This database is called a timezone map. Timezone maps are configured using the Timezone Map Data view.

By assigning a **schedule object** to a campaign, you can control when a campaign is on or off. When a campaign is turned on, agents are able to logon. See Scheduled execution of Campaigns.

Calling only at appropriate times

Few call centers want to disturb customers who are sleeping. Calling contacts at any inappropriate time is inefficient and wastes money. Each outbound campaign can be configured to dial contacts at appropriate times, based on the **time zone** information. This feature is called Time Zone Blocking.

> **Time Zone Blocking** lets the Central Campaign server decide whether to select a record for outbound calling, based upon the contact's time of day. Time zone blocking also prevents auto-scheduled calls and agent-owned callbacks from being placed at inappropriate times.

How Dialer obtains a Contact's time-of-day

Each contact's time-of-day is inferred from time zone information that Interaction Dialer obtains by reading the **zone** column of the contact list for the time zone associated with the contact, or by looking up initial digits of a telephone number in a time zone map database to obtain the time zone corresponding to an individual telephone number.

This latter process, called Time Zone Mapping, is useful when the zones column in a contact list is not fully populated, or has no time zone data at all. It is especially useful when contacts have multiple telephone numbers that may be in different time zones.

Time Zone Mapping obtains the time zone of each contact number, by looking up initial digits of the number in a database, instead of relying on the contact record to provide a time zone for the contact as a whole. The time zone map data set can be purchased from a third-party, or it may be a database table managed by the customer.

> To set up time zone mapping, configure a data source that translates a phone number's area code and exchange into a time zone. These data sets are called "time zone map data sets". Once a time zone map data set has been defined, time zone mapping can be enabled on a campaign-by-campaign basis. When enabled, automatic mapping is performed for contact numbers that do not have an associated time zone.

Zone Sets define when calls can be placed to a time zone

Time Zone Blocking and *Time Zone Mapping* both use **Zone Sets** to indicate when a time zone can be dialed. Each entry in a zone set identifies one time zone, and when that zone can be dialed—on which days of the week at specific times of day. A zone set can contain any number of zone entries. A zone set can be used by multiple campaigns.

The information in a zone set (when each zone can be dialed), combined with the contact's time zone (read from the contact list or looked up from a database), gives Dialer the information it needs to select records to dial.

How to implement Time Zone Blocking

To ensure that calls are placed only at appropriate times:

1. Create a zone set with entries for each time zone used by contacts.
2. Assign that zone set to a campaign.
3. Optionally configure a time zone map data set.
4. Enable Time Zone Mapping for the campaign, and set options that define how broadly automatic mapping should be applied.

Calling only at appropriate times

Introduction to Zone Sets

- Time Zone Blocking controls when calls can be placed based to each contact's time zone. It works by comparing the contact's time zone with **Zone Set entries** that define when that zone can be called.
- **Zone Sets** define for each time zone, days of week and times of day when dialing is allowed.
- Campaigns can share the same Zone Set, or use different Zone Sets.

Feature Overview

A Zone Set is a Dialer building block object that defines when individual time zones can be called. Zone Sets have no effect unless they are assigned to a campaign. This implements the Time Zone Blocking feature.

Time Zone Blocking prevents calls from being placed at inappropriate times. Zone Sets helps the Central Campaign server decide whether to select a record for outbound calling, based upon time of day. Time zone blocking also prevents auto-scheduled calls and agent-owned callbacks from being placed at inappropriate times.

> To use Time Zone Blocking, the **zone** column in the contact list should contain each contact's time zone, or zones for each phone number can be looked up using an time zone mapping data set.

A Zone Set contains multiple zone entries, one of which must match the contact's time zone. For each zone entry in a Zone Set, days of the week and specific times of day are defined. When the contact's time zone matches a Zone Set entry, the server can determine whether or not to select the contact record for dialing.

The Dialer Transaction server applies zone blocking to all calls that are sent to Interaction Dialer. Blocking is applied to campaign calls, auto scheduled calls, and agent-owned callbacks. The Dialer server performs one final check for zone blocking prior to dialing each contact.

How the zone column is used

Each record in a contact list contains a **zone column**. This column can store a string of alphanumeric characters that identify the time zone of contact. The zone field is an arbitrary user-defined string that can be up to 25 characters in length. Most call centers use time zone abbreviations (like those listed below) to identify the time zone associated with each telephone number in a contact list.

Abbreviation	Time Zone
AST	Atlantic Standard Time
ADT	Atlantic Daylight Time
EST	Eastern Standard Time
EDT	Eastern Daylight Saving Time
CST	Central Standard Time
CDT	Central Daylight Saving Time
MST	Mountain Standard Time
MDT	Mountain Daylight Saving Time
PST	Pacific Standard Time
PDT	Pacific Daylight Saving Time
HST	Hawaiian Standard Time
AKST	Alaska Standard Time
AKDT	Alaska Standard Daylight Saving Time

Time Zone Blocking occurs when a Zone Set is assigned to an active campaign. A single Zone Set can be shared by multiple campaigns. No blocking occurs if the campaign is not associated with a Zone Set.

Important: Interaction Dialer requires that the Outbound Dialer server and the Central Campaign server are in the same time zone in order to use Zone Blocking. Zone blocking is not supported when the ODS and CCS are not in the same time zone, since the ODS uses the ODS CCS time zone when doing zone blocking.

Each entry in a Zone Set matches the name of a zone in the contact list, and also specifies when it is appropriate to contact a particular time zone—relative to the local time (system clock) on the Central Campaign Server.

The name of a zone entry **must** correspond to the name of a zone in the contact list table, or to the name of a zone returned by time zone mapping.

When the Central Campaign server needs to select records from the contact list, it will create a list of zones that are currently blocked based on the current Central Campaign server time. For each record that the Central Campaign server selects from the database, a check will be performed against the Contact's Zone column and the list of blocked zones.

If the Zone entry is not found in the list, the record is available to be called.

- Time Zone Blocking is performed by the DialerTransServer process, which runs on the Central Campaign server. The CampaignServer maintains a list of blocked zones in memory. It derives this information from the Zone Set assigned to the campaign.
- When the DialerTransServer selects a record from the contact list, it compares zone values in the call record to its list of blocked zones. If a match is found, the call record is excluded from the selection.

This comparison determines whether or not calls are placed based upon time of day information.

Items to Remember

- Each campaign may be assigned a Zone Set that contains zone entries which define when it is appropriate to contact the party.
- Zone Sets are optional. If you do not assign a Zone Set to a campaign, no Time Zone Blocking occurs when that campaign is active.
- The name of each Zone Set entry must match the name of a zone in the contact list table. If the zone field in a contact list record does not match any of the zone entries in the Zone Set, no call blocking occurs for that record.
- Time ranges in the Zone Set are always expressed relative to the Central Campaign server's local time.

Related Topics

Zone Sets view

Create a new Zone Set

Edit an existing Zone Set

Assign a Zone Set to a Campaign

Delete a Zone Entry

Delete a Zone Set

Time Zone Blocking

Time Zone Blocking

- Time Zone Blocking uses the contact's time of day (time zone) to prevent dialing at inappropriate times.
- Zone Sets specify when calls can be placed to particular time zones.

Feature Overview

To create Zone Sets, you need to understand how the Central Campaign server decides whether or not to select a record for outbound calling, based upon time of day. This feature is called **Time Zone Blocking**.

> Time Zone Blocking prevents calls from being placed to particular time zones, during particular times of day.

For example, most contact centers do not want to disturb customers who are sleeping. Time zone blocking also prevents auto-scheduled calls from being placed at inappropriate times. Most importantly, this configuration is essential in keeping your system compliant with legislation regarding approved call times. We will cover compliance in more detail later.

Here's how Time Zone Blocking works: Each record in the contact list table contains a time zone field. This field contains a string of alphanumeric characters that uniquely identify the time zone of the targeted party. The zone field is an arbitrary user-defined string that can be up to 25 characters in length. Most call centers use time zone abbreviations (like those for North America listed below) to identify the time zone associated with each telephone number in a contact list.

Zone	Description	Offset from UTC	Observe Daylight Savings Time
NST	Newfoundland Time	-3.5 hours	No
NDT	Newfoundland Time	-3.5 hours	Yes
AST	Atlantic Time	-4 hours	No
ADT	Atlantic Time	-4 hours	Yes
EST	Eastern Time	-5 hours	No
EDT	Eastern Time	-5 hours	Yes

CST	Central Time	-6 hours	No
CDT	Central Time	-6 hours	Yes
MST	Mountain Time	-7 hours	No
MDT	Mountain Time	-7 hours	Yes
PST	Pacific Time	-8 hours	No
PDT	Pacific Time	-8 hours	Yes
AKST	Alaska Time	-9 hours	No
AKDT	Alaska Time	-9 hours	Yes
HST	Hawaii/Aleutian Time	-10 hours	No
HDT	Hawaii/Aleutian Time	-10 hours	Yes

Time Zone Blocking occurs when a Zone Set is assigned to a campaign. No blocking occurs if the campaign is not associated with a Zone Set. A single Zone Set can be shared by multiple campaigns.

Each entry in a Zone Set specifies when it is appropriate to contact a particular time zone, relative to the local time (system clock) on the Central Campaign Server. The name of a zone entry must correspond to the name of a zone in the contact list table.

When the Central Campaign server needs to select records from the ContactList, it will create a list of zones that are currently blocked, based on the current Central Campaign server time. For each record that the Central Campaign server selects from the database, a check will be performed against the Contact's Zone column and the list of blocked zones.

If the Zone entry is not found in the list, the record is available to be called.

Time Zone Blocking is performed by the DialerTranServer process, which runs on the Central Campaign server. The CampaignServer maintains a list of blocked zones in memory. It derives this information from the Zone Set assigned to the campaign.

When the DialerTranServer selects a record from the contact list, it compares zone values in the contact record to its list of blocked zones. If a match is found, the call record is excluded from the selection. This comparison determines whether or not calls are placed based upon time of day information. Some key items to consider are:

- Each campaign may be assigned a Zone Set that contains zone entries which define when it is appropriate to contact the party.
- Zone Sets are optional. If you do not assign a Zone Set to a campaign, no time zone blocking occurs when that campaign is active.
- The name of each Zone Set entry must match the name of a zone in the contact list table. If the zone field in a contact list record does not match any of the zone entries in the Zone Set, the Default Zone is used.
- Time ranges in the Zone Set are always expressed relative to the Central Campaign server's local time.

Defining Time Ranges
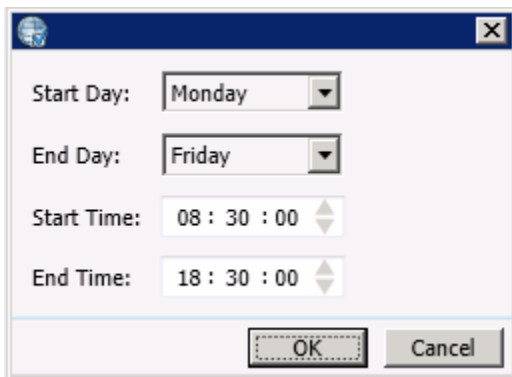
The time selection control makes it easy to specify when outbound dialing may occur for a specified time zone. There is, however, one caveat. The Central Campaign server interprets zone entries relative to the time it obtains from its system clock. This means that zone entries must be defined using the Central Campaign server's local time, rather than using the time zone to which that entry refers.

Time zone ranges must be defined using the time zone of the Central Campaign server, rather than the time zone to which that entry refers.

United States Time Zone Chart					
Hawaii	**Alaska**	**Pacific Standard Time (PST)**	**Mountain Standard Time (MST)**	**Central Standard Time (CST)**	**Eastern Standard Time (EST)**
(CST-4 hrs)	(CST-3 hrs)	(CST-2 hrs)	(CST-1 hr)	(CST)	(CST+1 hr)
1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM
2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM
3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM
4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM
5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM
6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM
7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM
8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM
9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM
10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM
11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM
12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM
1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM

3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM
4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM
5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM
6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM
7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM
8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM	1:00 AM
9:00 PM	10:00 PM	11:00 PM	12:00 AM	1:00 AM	2:00 AM
10:00 PM	11:00 PM	12:00 AM	1:00 AM	2:00 AM	3:00 AM
11:00 PM	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM
12:00 PM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM

Use this chart to compare the time zone of your Central Campaign server to other time zones, so that you can define time zone entries easily. Remember, zone entries must be defined using the time zone of the Central Campaign server.

- Use the table to locate start and end times for a specified time zone.
- Locate the corresponding time for your Central Campaign Server.
- Create a new zone entry, and select the corresponding time values using the time selection control. For example, 1:00 A.M. Hawaii corresponds to 2:00 A.M. Alaska Time, and so on.

U.S. Time Zone offsets using UTC

If the US Time Zone table doesn't list a needed time zone, you can refer to the following table to find out how to calculate the difference between zones using Universal Time offsets. If you know the UTC time of the Central Campaign server, you can calculate the difference between two time zones using the table below.

Local Time	Add to UTC
CET - Central European	1 hour
FWT - French Winter	1 hour
MET - Middle European	1 hour
MEWT - Middle European Winter	1 hour
SWT - Swedish Winter	1 hour
EET - Eastern European, USSR Zone 1	2 hours
BT - Baghdad - USSR Zone 2	3 hours
ZP4 - USSR Zone 3	4 hours
ZP5 - USSR Zone 4	5 hours
ZP6 - USSR Zone 5	6 hours
WAST - West Australian Standard	7 hours
CCT - China Coast, USSR Zone 7	8 hours
JST, Japan Standard, USSR Zone 8	9 hours

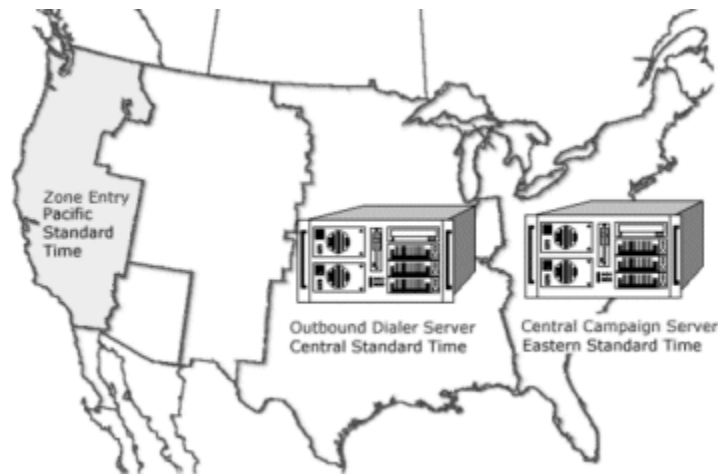| EAST - East Australian Standard GST	10 hours
NZST - New Zealand Standard	11 hours
NZT - New Zealand	12 hours

International Time Zone offsets using UTC

Add this offset for international zones:

Coordinated Universal Time (UTC) is a world standard for regulating clocks and time.

Example Time Zone Scenario

Consider, for example, the following scenario:

- The **Outbound Dialer** server in Chicago (CST) is running the Interaction Dialer Manager administrative interface.
- You have created a zone entry named **PST**, and want to allow dialing between noon and 3 PM Pacific Standard Time (PST).
- The **Central Campaign** server is located in the Eastern Standard Time (EST) zone.

In this scenario, three time zones are involved (Pacific, Central, and Eastern). However, the time zone of the Outbound Dialer server can be ignored, since it does not coordinate time zone blocking when the CCS is in a different time zone.

You must consider the time zone you want to set (PST) and the time zone of the Campaign server (EST). The PST zone entry must be entered in Eastern Standard Time, since that is where the Central Campaign Server is located.

As you can see from the time zone comparison chart below, 12:00-3:00 PST corresponds to 3:00-6:00 EST.

Pacific Standard Time (PST)	Eastern Standard Time (EST)

3:00 AM	6:00 AM
4:00 AM	7:00 AM
5:00 AM	8:00 AM
6:00 AM	9:00 AM
7:00 AM	10:00 AM
8:00 AM	11:00 AM
9:00 AM	12:00 PM
10:00 AM	1:00 PM
11:00 AM	2:00 PM
12:00 PM	3:00 PM
1:00 PM	4:00 PM
2:00 PM	5:00 PM
3:00 PM	6:00 PM
4:00 PM	7:00 PM
5:00 PM	7:00 PM
5:00 PM	8:00 PM
6:00 PM	9:00 PM

Since the Central Campaign server is in the EST time zone, you would select (and set) 3:00 PM to 6:00 PM in the time selection control. This allows the Campaign server to dial the PST zone between noon and 3 p.m. PST.

Zone entry for the example scenario

Here's how the example entry would appear in the *Zone Sets View*. The time span is 3:00 PM to 6:00 PM Monday through Friday EST, the zone of the CCS.
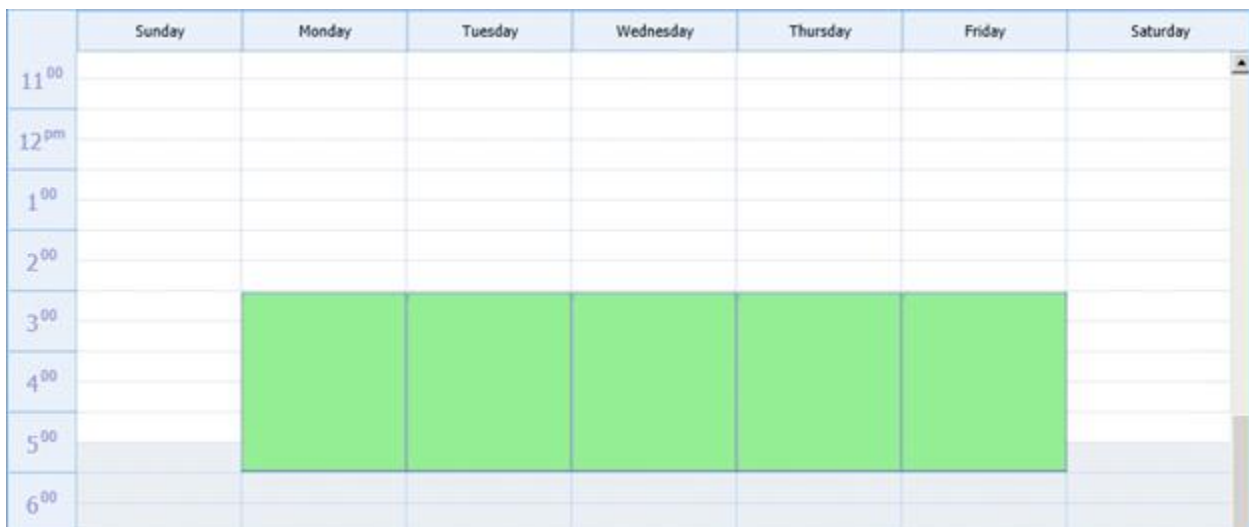
Use the Time Zone Chart to help when setting up time zone blocking for a time zone that is different from the time zone in which the Central Campaign server is located.

Related Topics

[Zone Sets](#)

Time Zone Mapping

Time Zone Mapping

- Ensures that contacts are only called at appropriate times, by mapping telephone numbers to time zones in real-time, based on initial digits in the contact telephone number (for example area code and exchange in North America), instead of using the zone column of each contact record to identify the contact's time zone. To determine the zone, the initial digits of the contact number are looked up in a time zone map data source.
- This feature is targeted at North American time zones, but support is available for NANP mapping tables purchased from third-party vendors.
- Number mapping tables can be loaded for use in other international countries or regions as needed. Several vendor-provided data sets are supported. A generic ININ open format can be used to load other datasets, such as in-house tables, or datasets from additional vendors.
- Mapping is done automatically if turned on and only if a time zone is not already defined for the phone number. This feature is enabled on a per-campaign basis.
- Time zone mapping associates a zone with each contact number. The zone of each contact number is stored in the Phone Number Detail (PND) table, apart from the contact list. PND tables are automatically created and managed by Interaction Dialer.

Feature Overview

Dialer can be configured to automatically map individual phone numbers in a contact list to a time zone so that calls to those numbers will be conducted at an appropriate time.

To implement this feature, you first configure a data source that translates a phone number's area code and exchange into a time zone. These data sets are called "time zone map data sets". Once a time zone map data set has been defined, time zone mapping can be enabled on a campaign-by-campaign basis. When enabled, automatic mapping is performed for contact numbers that do not have an associated time zone.

Each contact list record can have multiple Contact Columns. For example, a contact list might have PhoneNumber, CellPhone, and WorkPhone columns. Dialer supports automatic mapping of each telephone number per contact, against custom or commercial time zone mapping data sets, to set the zone entry for each number in the Phone Number Detail (PND) table. Phone Number Detail tables track the do-not-call status of multiple telephone numbers associated with a contact. However, each PND table tracks time zone, contact attempts, and rescheduling attempts for each phone number associated with a contact record. PND tables are automatically created and managed by Interaction Dialer.

Automatic time zone mapping allows discrete time zone information to be used for each contact number. As before, customers can populate zone columns in the contact list table. When data sets for time zone mapping are configured, Dialer provides per-campaign options that control how broadly automatic mapping is applied. For each campaign, you can choose to:

- map phone numbers that have no zone information. This will cause only those phone numbers not associated with a zone to be mapped.
- map phone numbers that have no zone information <u>and</u> numbers that had previously been automatically mapped. If the time zone map data set has been updated, the latest zone from the data set will be used in place of the zone entry that was previously written to the campaign's PND table. The PND table will be updated with the latest zone for this telephone number.
- map all phone numbers, regardless of their current zone settings

Related Topics

[Timezone Map Data view](#)

Time Zone Mapping Procedure

To implement the Time Zone Mapping feature:

1. Define a time zone map data set using the [Timezone Map Data](#) view. This data set can be used by multiple campaigns.
2. When configuring a campaign, check the [Automatically Map Time Zones box](#) and select an option to control how broadly automatic mapping is applied.

Custom time zone map data sets

When third-party data sets are used, Dialer's time zone mapping feature is primarily targeted at North American telephone numbers. This is because commercial data sets support telephone numbers in the North American Numbering Plan (NPANXX), which covers the United States, and in some cases, Canada.

Open Data Set Format

International customers are not excluded from using time zone mapping. Interaction Dialer supports an **open data set format** that customers can use to create custom time zone map data sets. It is easy to define zone mappings for areas other than North America.

The open data set format is a text file with an extension of .dat or .txt. The text file must conform to the following structure:

```
PHONE NUMBER + TAB + ZONE NAME
```

- PHONE NUMBER should be entered without hyphens or parenthesis. Wildcarding is allowed using the '*' character. Once a wildcard digit is used, all digits to the right of the wildcard must also be wildcards.

Formatting should follow the "Standardized Number" formatting from the Dial plan. For example: +1317 for 317 numbers.

- ZONE NAME is a string used to associate a zone set zone with the phone number. The zone name must match the name of a zone defined using the Zone Sets Container.
- There must be a tab character between the Phone Number and Zone Name fields.

Customers who create a custom data set must configure Dialer to use it. See Timezone Map Data for details.

Zones in the data set must be in the Zone Set too

When a custom zone map data set is used, the zone set assigned to the campaign must contain the same zones. If the time zone field in the custom mapping file does not correspond to the zones in a Zone Set then the contacts will be dialed according to the Default Zone, making the time zone mapping useless.

Scheduled execution of Campaigns

The Schedules view creates schedule objects. Schedules dictate the time segments when campaigns will run—weekly, one time, or any mix of times and dates when the campaign should begin and end.
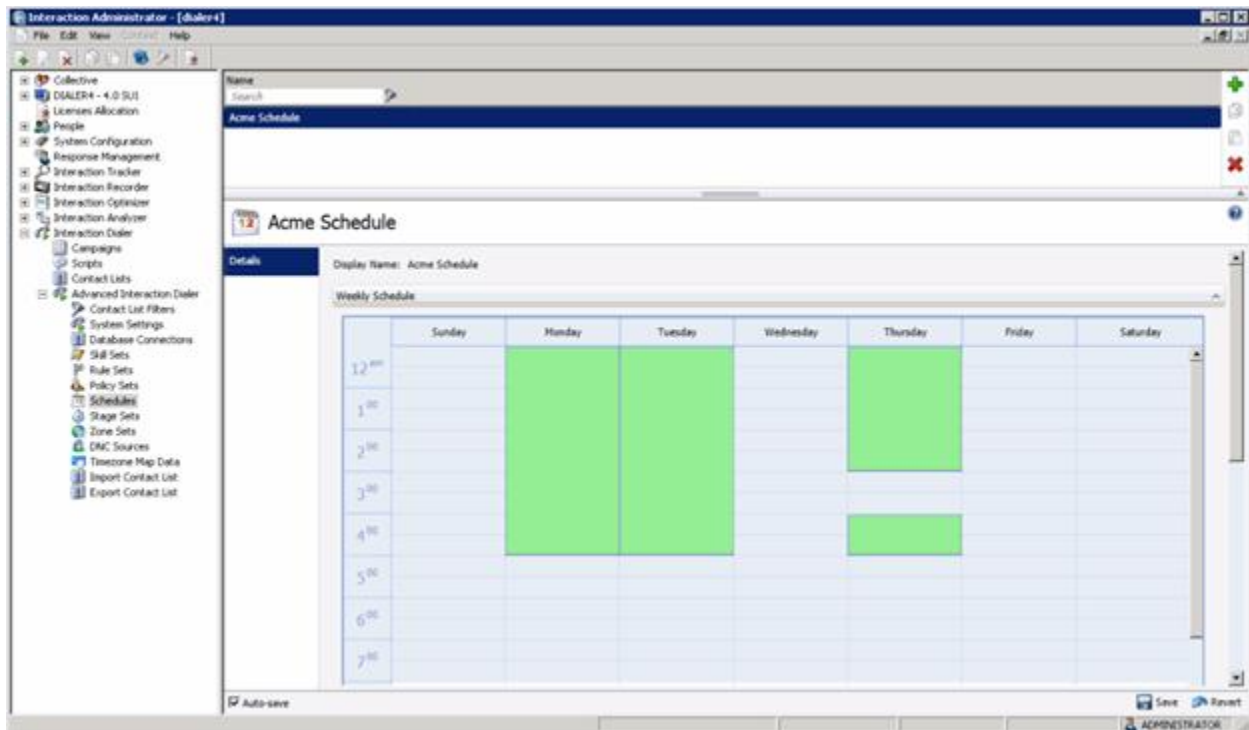
Each campaign can have a schedule assigned to it. The same schedule can be used by multiple campaigns. Controls on the Campaigns views allow the campaign to be started, stopped, paused, or run in accordance with its assigned schedule.

How Schedules are evaluated

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The CCS evaluates schedule entries to determine whether to start or stop a campaign. To understand the schedule evaluation process, suppose that Central Campaign server must evaluate four schedule entries to decide whether to activate a campaign. Each entry is intended to start or stop the campaign from 9 a.m. to 10 a.m. However, entries refer to different days of the week, and some days overlap. Let's follow the process that Campaign server uses to decide whether or not to activate the campaign.
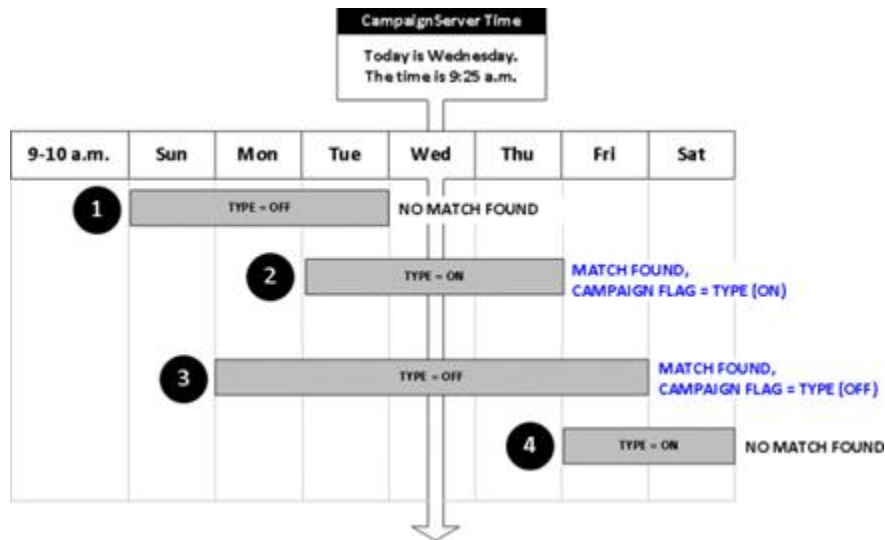
In this example, Campaign server evaluates all entries, and turns the campaign OFF, based upon the Type of the last matching entry (#3).

The Campaign server creates an internal flag (True or False variable) so that it can remember whether to switch the campaign on or off, based upon the Type of the last entry that matches its date/time criteria. Since Campaign server has not processed any entries yet, it sets this flag False by default.

Campaign server follows these steps to evaluate the schedule:

1. It evaluates the first entry to see if the current time (Wednesday, 9:25 a.m.) falls within the start and stop range of the entry. The first record does not match, since Wednesday is not in the Sunday through Tuesday range.
2. It reads the next record, and finds a match. It sets its internal flag to the entry's Type value, which is ON, or True.
3. Since all records must be evaluated, it reads the next record. This record also matches its criterion. It sets the flag OFF (False), since that entry is intended to stop the campaign.
4. The fourth record is not a match. Since the last match set the flag OFF, it concludes that this schedule sets the campaign inactive.

Related Topics

Add a Schedule

Assign a Schedule to a Campaign

Automation Rules and Contact Policies

Automation Rules and Contact Policies

Powerful customization options make it easy to automate campaigns and the processing of individual contact records. **Rule Sets** provide high-level control over campaigns. **Policy Sets** provide low-level control over individual contact records.

Rules and policies allow an administrator to tweak the behavior of Interaction Dialer according to current conditions. For example, when the abandonment rate reaches a certain level, adjustments can be made to the way calls are placed. Or, should previous attempts fail to reach a contact, an administrator can use contact policies to handle failed contacts differently.

Rules and contact policies optimize the Dialer environment by automating adjustments to the system. A significant portion of Dialer administrator's time is rightfully devoted to configuring rules and policies. In the long term, automation frees the administrator's time, while implementing business logic tailored to specific needs.

Rules

Rules evaluate conditions to determine whether to carry out an action that affects the processing of a campaign. The conditions of a rule can reference system statistics, time of day, and events that occur in the system, such as a call list being recycled or a campaign starting.
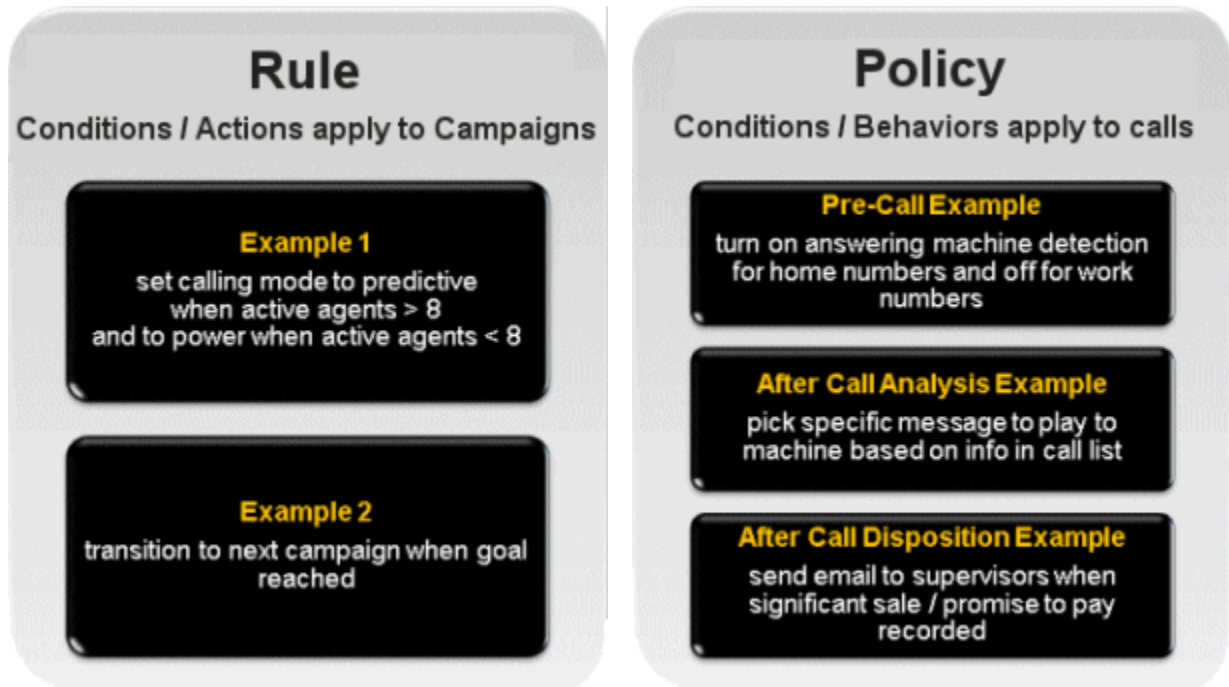
Rule actions affect the processing of a campaign. For example, Actions can pause a campaign, recycle its contact list, change the dialing mode, apply a filter, log agents out of the campaign and into a different one, send an Email, run a handler, pass control to a different set of rules, and more. Rules are grouped into Rule Sets which can be assigned to multiple campaigns as needed.

Policies

Policies evaluate conditions that in turn, apply behaviors to the processing of individual contact records.

Each behavior affects the processing of an individual contact. For example, a behavior might prevent a contact from being dialed, or require that the call is routed to an agent who has a specific skill set.

Policies can be evaluated before the call is placed (pre-call), after call analysis, or after the call is dispositioned. Policies are grouped into Policy Sets which can be assigned to multiple campaigns as needed.

Rule

Conditions / Actions apply to Campaigns

Example 1

set calling mode to predictive
when active agents > 8
and to power when active agents < 8

Example 2

transition to next campaign when goal
reached

Policy

Conditions / Behaviors apply to calls

Pre-Call Example

turn on answering machine detection
for home numbers and off for work
numbers

After Call Analysis Example

pick specific message to play to
machine based on info in call list

After Call Disposition Example

send email to supervisors when
significant sale / promise to pay
recorded

Example Rules:

- Change the dialing mode of a running campaign to predictive mode when there are more than 10 active agents or back to power mode when the number of agents falls below 10.
- Change the messaging behavior of a campaign after 5pm when more people are home.
- Send congratulatory email to workgroup when a statistical milestone is reached.

Example Policies:

- Turn answering machine detection on for a home number and off for a business number
- Select a specific message to play to an answering machine based on an attribute of the contact just called.
- Send an email message to supervisors when a significant sale has been recorded.
- Dial the work number first before 5pm and the home number first after 5pm.
- Choose to dial a number precisely (to guarantee that the call will not be abandoned) if the contact is in California and has ever been abandoned in the past.

Related Topics

Rule Sets view

Policy Sets view

Differentiate when to use Rules vs. Policies

- Rules implement if/then/else logic at campaign level.
- Conditions evaluate statistics, system events, or the current date and time.
- Rule actions can dynamically modify running campaigns, send messages, change filters, and so on.
- Rules apply to campaigns as a whole. Rules do not affect the processing of individual contact records.
- Rules are grouped into Rule Sets for use with many campaigns.

- Policies implement if/then/else logic at the contact level, before, during, and after the call to control dialing and call routing.
- Policies are powerful. Business logic in a policy can decide whether to place a call. It can analyze agent availability to begin precise dialing. It can set attributes for recording and post-call processing, or send notifications. Policies can modify dialing modes; make decisions based on contact data, update contact list data, and more.
- Policies are grouped into Policy Sets for use with many campaigns.

Do I need a Rule or a Policy?

When creating conditional actions, the first decision is whether to assign that object as a rule or as a policy. Ask yourself these questions:

- Should this change apply to all records (Rule) or only the current record (Policy)?
- Does the condition evaluate a contact record field? (Policy)
- Does the action assign a value to a contact record field? (Policy)
- Will the action activate another campaign? (Rule)
- Should the action also apply to subsequent campaigns? (Rule)

Always test rules and policies before activating them on a production Dialer system. If after going live, a Rule Set or Policy Set does not behave as intended; it can be adjusted or deactivated with changes taking effect immediately. Changes to rules or policies take effect immediately after being applied. A restart is not necessary.

Understand Rule Sets and Rule Groups

The Rule Sets view manages conditional logic used to automate the run time characteristics of campaigns.
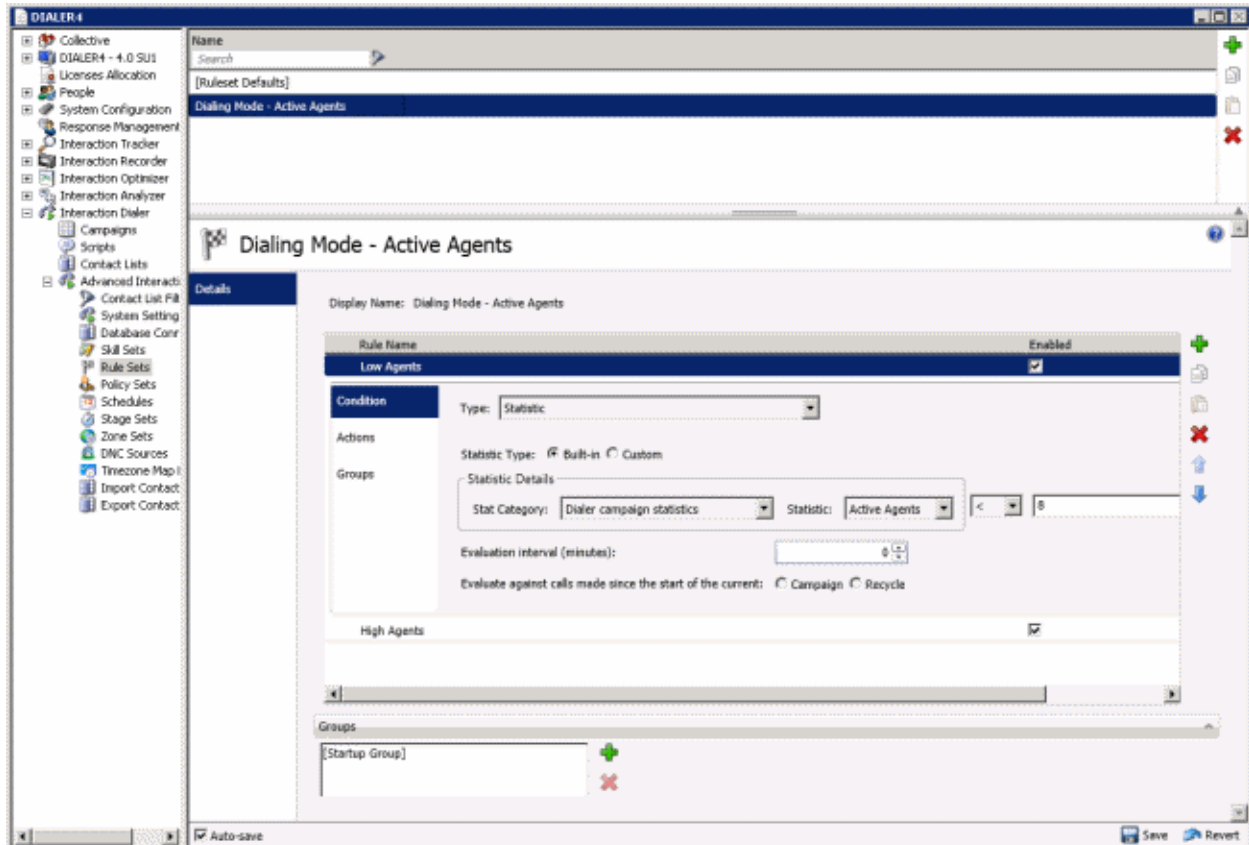

Rule Sets are collections of rules that can be associated with campaigns. It is important to note that Rule Sets, but not individual Rules, are assigned to campaigns. Rule Sets are optional.

Rule sets are, quite literally, sets of rules. When rules are assigned to a campaign, many rules may be assigned. So, these rules are assembled into a rule set. This provides the logical group of rules for assignment purposes.

To create a Rule Set:

1. Open the Rule Sets view.
2. Click the **Add** button (➕) in the list of Rule Set entries at the top of the view.
3. Add a Rule. A rule evaluates a time, statistic, or event condition. When the evaluated condition is True, the rule carries out one or more actions. An action can update a campaign property, send an email message, run a handler, write an event log entry, or change rule groups.

Rule Groups
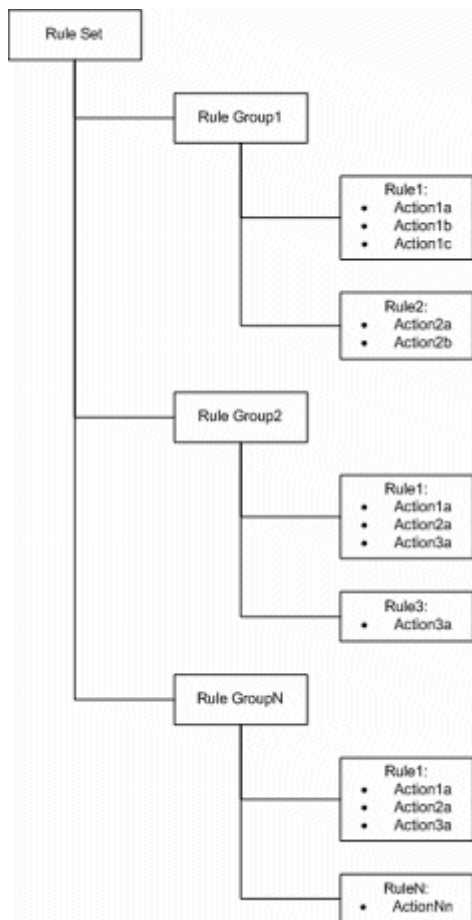
Within a rule set, there are rule groups. Rule groups create subsets of rules to designate which rules are active at any given time. Even though many rules might be assigned to an object, it might not be desirable to let all of those rules be active all the time. So, rules within a rule set might be associated with a rule group.

Only one rule group is active at any given time. Any rules not contained in that rule group sit dormant until their rule group is activated. Rule groups are activated via a rule.

Rule groups are optional. If rule groups are not employed, then all rules within a rule set will be active all the time.

Rule groups are defined on the Groups expander portion of the Rule Sets view. See Add a Rule Group.

Rule groups contain rules. Rules are the actual logic of a condition that, when met, triggers some action.

A rule may reside in all groups, many groups, or just one group.

Understand Policy Conditions and Behaviors

A Policy is a per-contact rule. Policy Sets provide fine control over the processing of individual contact records, and allow for implementation of legislative requirements that involve per-contact behavior. Policies also fire notification events based on individual contact results. Policy Sets are optional, but in practice they are frequently used. Policy Set objects are created in the Policy Sets view in Interaction Dialer Manager.

A Policy is made up of conditions and behaviors. Conditions determine when the Policy applies. Behaviors embody what event occurs when the conditions are evaluated to 'True' (either all of them or any of them depending on a Boolean configuration option).

A Policy can be established to adhere to a Legislative requirement. An example might be never to abandon a contact more than once. In this case, the number of abandons would be the policy condition and the behavior could be to skip the call, mark the call so it is never called again, or schedule the call for a "precise" callback (one that cannot be abandoned).

Another example might be to prevent calls to California from ever being abandoned. To do this, you could create a policy with a condition of State = CA, and set its behavior to precisely dial the contact.

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When the policy condition is true, an agent will be "set aside" before Dialer places this call, ensuring that the call will not result in an Abandon.

Precision Dialing selects an available agent—one whose status is Available when there are no further ACD calls that might be routed to that agent. Next, the Dialer checks to see if any precision dial calls are queued. If so, it marks the agent as "Awaiting Callback" and places the call. When the call connects it is blind transferred directly to the agent. If the call does not connect, the agent is returned to an Available status and new calls are generated.

Policies make it easy to precision dial any contact in the contact list. No changes to contact list data are required. Instead, create a policy that specifies conditions when precise dialing needs to occur. Dialer will process calls normally until a policy condition deems that the call needs to be dialed precisely.

Control when conditions are evaluated by setting the Policy's evaluation type

A policy condition can be evaluated before the call is made, when a call analysis result is available, or after the call is finished. Each policy is defined with a particular **policy evaluation type** that determines when conditions in the policy are evaluated. The possible evaluation types are **Pre Call**, **Call Analysis**, and **Disposition**. Policy evaluation type is determined according to the tab under which the policy is created. This timeline illustrates when each policy type will be evaluated, per contact list record:

In Interaction Dialer Manager, policy evaluation type is configured after a policy entry is added, before any of its conditions are defined, by selecting a **PreCall**, **Call Analysis**, or **Disposition** tab. In the

example below, the *Details* tab was selected since the example policy behavior precisely dials contacts in California.
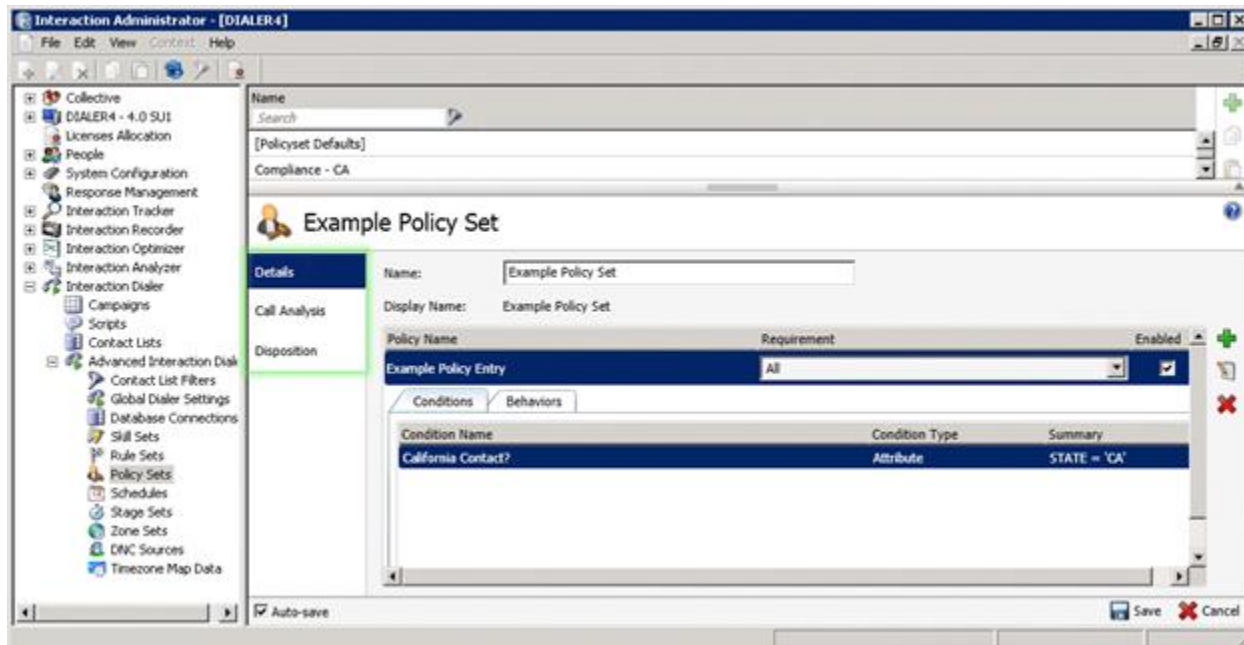
The options for configuring conditions and behaviors are the same, regardless of which evaluation type tab is selected. Evaluation type merely determines **when** the policy should be evaluated.

Policy Evaluation Type	Description and Usage
Details	Evaluated before the call is made. Precall policies allow changes to the way the call is dialed, and any other processing before the record is dialed.
Call Analysis	Evaluated immediately after the Call Analysis result is determined, but before the call is sent to an agent or dispositioned, or right after the call is placed if Call Analysis is off. Call Analysis is a CIC process that analyzes a connection to determine if the call reached a live person, a fax machine, or an answering machine, and whether or not an agent is available to process the call. Call analysis policies allows control of deliver of the call to an agent, early disposition of a call, and rescheduling according to call analysis results. Call analysis policies are not available to preview campaigns.
Disposition	Evaluated after the call is finished and the disposition is ready to be updated in the ContactList. This is the final opportunity to make adjustments to the contact record or rewrite a disposition.

The next figure illustrates how the precise dialing behavior would be set for the policy example that precisely dials contacts in California.

In this example, a PreCall policy defined with an Attribute Condition (State = "CA") that states that if the contact is from California, apply a Call Routing Behavior that requires Precision Dialing for this contact. Precision Dialing will not place this call unless an agent is available.

In a similar way, Policies can carry out behaviors for Priority Calls (records inserted into the contact list on the fly). A "Priority Call" call category in the Policy Set Item Condition configuration allows a policy to examine call category information for the current contact record, so that a policy can carry out behaviors if the call type is a Priority Call. See Priority Dialing for details.

Availability of Policy Conditions and Behaviors

Conditions	Behaviors
	Behaviors determine *what* happens when the conditions are evaluated to true.
Conditions determine whether a policy object applies to an individual contact record.	Behaviors are conceptually similar to Rule Actions, and in some cases, Behaviors perform the same type of work as Actions do. For
You can define different types of conditions based upon whether the policy is PreCall, Call Analysis, or Disposition type.	example, both Rule Set Actions and Policy Set Behaviors can send an Email message. The difference is that Rule Sets provide control over campaigns, while Policy Sets provide control over the processing of individual contact records.

Numerous conditions and behaviors are available for use with contact policies. The available conditions and behaviors vary according to the type of policy configured. Certainly, it does not make sense to evaluate the result of call analysis before the call is even dialed. For this reason a Call Analysis condition

is not available to PreCall policies. Likewise, it does not make sense to choose not to dial a call after the interaction has already completed. Accordingly, Disposition policies cannot have Call Routing behaviors.

The table below lists the **conditions** that are available for each evaluation type.

Condition Type	Policy Evaluation Type		
	PreCall	**Call Analysis**	**Disposition**
Abandon			X
Attribute	X	X	X
Call Analysis		X	
Call Attribute		X	X
Call Category	X	X	X
Disposition			X
Duration		X	X
Phone Number Details	X		
Phone Number Type	X	X	X
Statistic	X	X	X
Time	X	X	X

The **behaviors** available for each evaluation type are:

Behavior Type	Policy Evaluation Type		
	PreCall	Call Analysis	Disposition
Agentless		X	X
Attribute	X	X	X
Call Analysis	X		
Call Attribute	X	X	X
Call Routing	X		
Callback	X	X	X
Calling Party	X		

Contact Columns	X		
Custom Handler	X	X	X
Disposition	X	X	X
Email	X	X	X
Event Log Message	X	X	X
Number to Dial	X		

Policies in Preview Dialing Mode

Special considerations apply when policies are used in a preview mode campaign. Pre-call policies are evaluated before the preview data pop is sent to an agent on a preview campaign. Call Analysis policies are ignored, and all disposition policy conditions and behaviors apply to preview campaigns.

- Call Analysis policy behavior type is ignored.
- Call Routing policy behavior type does not pop data to agent if "Do Not Dial" is selected. ACD options are not applicable in preview mode.
- For contact columns policy behaviors, the first column in the list specifies the number dialed when "PlacePreviewCall" is invoked.

Related Topics

Add a Policy Set

Skills-Based Dialing and Routing

Skills-Based Dialing and Routing

Skills-Based Routing vs. Skills Based Dialing

ACD Weighting by Campaign

How Skills-Based Dialing Works

Skills-Based Dialing and Call List Sorting

Skills and Scheduled Calls

Skills-Based Preview Dialing

Configure Skills-Based Dialing

This section explains the difference between skills-based dialing and skills-based routing. It helps you understand Dialer's skills-based dialing process, which is more effective than ACD routing alone.

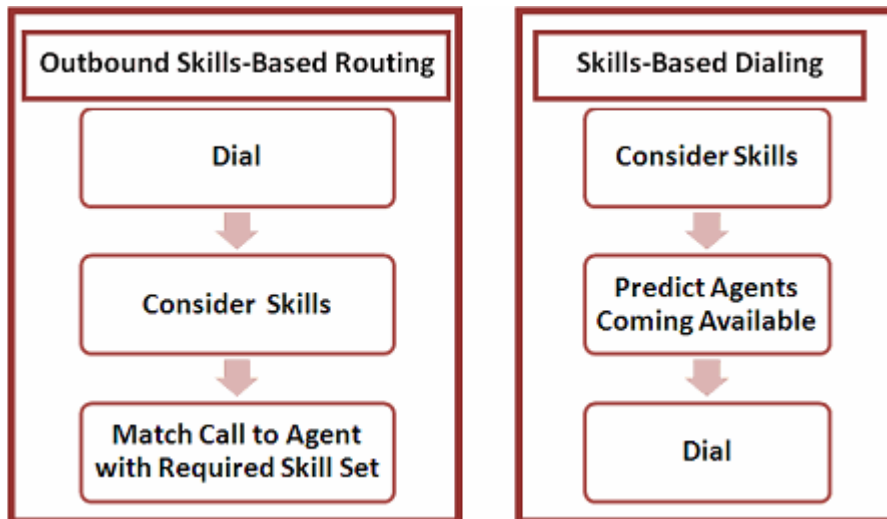**Skills-Based Routing vs. Skills Based Dialing**

One feature that makes CIC so effective in the contact center environment is the powerful Automatic Call Distribution (ACD) system. In the inbound center, matching agents with interactions that use their specific skill sets provides not only shorter talk times, but also produces more efficient interactions and greater customer satisfaction.
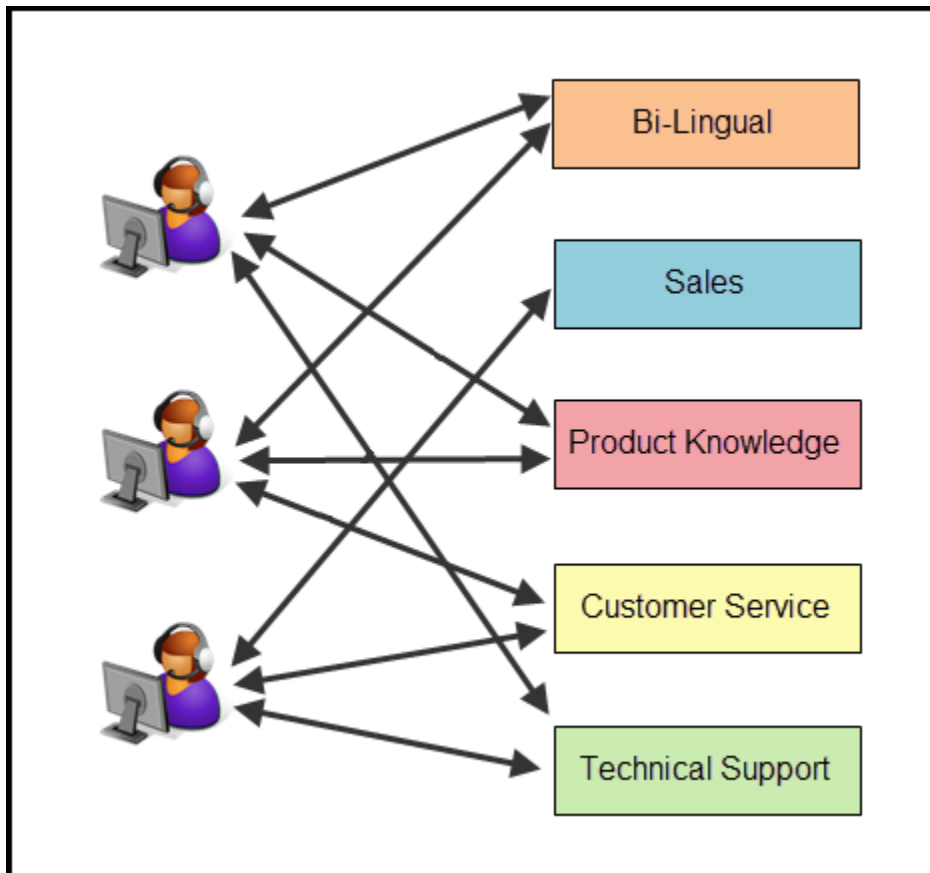
Skills-Based Routing involves an already connected call. Skills are associated with interactions (required skills) and with agents (available skills). The ACD subsystem matches these skills up to route an interaction to the best available agent. Dialer can use ACD-based skills-based routing to route a live caller to the best available agent.

Skills-based routing works well in a predictive or power dialing environment when all agents have the skill(s) and can accept the call. It does not work as well, however, when skills are used to select from a subset of agents, that is when a call requires a specific skill set that is possessed by only certain members of the group. This latter use of skills-based routing can result in excessive abandons and a poor dialing experience, especially if no one from the required subset is available when the call connects. The solution is to use skills-based dialing instead.

Skills-Based Dialing is available for preview, power, and predictive campaigns. To understand this feature, it is important to differentiate between skills-based routing and skills-based dialing. Skills-based dialing looks ahead to choose contacts to be dialed:

Skills-based dialing selects only contacts in the call list that can be handled by the available agent pool. Skills are evaluated before contacts are dialed. The mixture of contacts' required skills and agents' anticipated availability and skills is dynamic and must be managed similarly to pacing. Some examples of outbound situations in which only a subset of agents will have a skill include:

- State-based licensing—wherein lenders and insurers must be licensed in states into which they are attempting to sell.
- Specialized selling or collections—when a subset of agents are trained or allowed to handle particular products or customers.
- Language skills—when the contact has special language requirements.

Once a contact with an appropriate skill requirement is selected to be dialed and a live person contacted, that contact's skills are associated with the connected call. The call is then routed to the most appropriate available agent using skills-based ACD routing.

> **Note**: When skills-based dialing is used, contacts with null skill values are never dialed.

- Skills-based routing is based on several elements (depending on the type of ACD queue selected.) Common attributes include skill level, cost (agent), priority (interaction), and time available. Agents and interactions collect points for each configured element, and the agent/interaction with the overall highest score is selected.
- Skills-based dialing focuses on agent skill proficiency and predicted availability. Dialer uses sorting and skill requirement to filter agents who are eligible/ineligible to process a specific contact call.

ACD Weighting by Campaign

- Control skills-based routing of outbound calls for campaign
- ACD Weighting is especially useful with blended campaigns.

About ACD

Interaction Dialer uses CIC's **Automatic Call Distribution (ACD)** very effectively. It routes telephone calls, chat calls, emails, and generic objects (collectively referred to as interactions) based on agent availability, skill levels, costs, priority and other attributes.

> For comprehensive information about ACD, refer to the *CIC ACD Processing Technical Reference* in the Technical Reference Documents section of the [PureConnect Documentation Library.](#)

Interaction Center's ACD quickly finds the best match between agent and interaction by calculating agents' scores and interaction scores. Scores are calculated by a subsystem on the CIC server called the **ACD Server**. This subsystem's job is to quickly calculate agent and interaction scores, even when there are many interactions in an ACD queue.

Interaction Center's ACD is designed to work in two scenarios:

1. When there are **many interactions waiting** to be answered and an agent becomes available. In this case, Interaction Center selects the best interaction for that agent to answer, using a formula that calculates each interaction's score.

   This *Interaction score formula* takes into account interaction skill requirements, priority, the amount of time an interaction has been in the ACD queue or the CIC system. If there are many interactions waiting to be answered and an agent becomes available, a score is calculated for each interaction. The Interaction with the highest score is assigned to that agent.

2. When there are **many agents available** to take an interaction. In this situation, Interaction Center chooses the best agent to take the interaction.

   ACD does this by calculating a score for each agent, called the *Agent score formula*. If multiple agents are available when an interaction arrives in an ACD queue, the agent with the highest score receives that interaction. Agent scores take into account an agent's skills, cost, amount of time that agent has been available, and other custom attributes you define.

How campaign settings affect ACD routing

By configuring the criteria analyzed by ACD formulas, you can customize ACD routing for each outbound campaign. One way is to configure on a per-campaign basis, numeric values (called "weights") that affect ACD routing.

Weights and other values that affect the agent score formula are configured on a per-campaign basis on the [Skills and ACD Tab](#) of a campaign:

For example, if you are concerned with matching calls to agents with the best skill for that call, you can increase *Agent Skill Level* weight more than other weight parameters, which include call priority, time held in queue, overall time the call has been in the system, agent cost, and agent availability time.

This information helps the ACD Server pick the best agent to receive an interaction, when there are many agents available to take an interaction.

Related Topics

Campaigns view

Outbound ACD Routing Controls (Campaign settings)

How Skills-Based Dialing Works

This topic provides a technical walkthrough of the skills-based dialing feature. The Skill Sets container maps skill values in a custom contact list column to CIC skills. Skill Sets also establish minimum required Agent skill proficiency, and a dialing ratio for controlling the relative amount of each skill to dial. In general, Interaction Dialer will dynamically determine how many calls to place of each skill requirements according to the skill assignments of logged on agents.

> The dialing ratio may be thought of as a "multiplier" to affect the number of certain records (based on skill requirements) to cached. Since Dialer updates the cache dynamically, leaving the dialing ratio at "1" will generally give the best results.

Dialer maintains an **Active Agent Skill Table**, an internal table of agents who are logged on and active for each skill combination. Skill combinations that have 0 agents logged on and active have no entry in the table.

The table below shows an example Active Agent Skill Table for 10 total agents and 6 skill combinations. The number of fractional agents for each skill combination is on the right with the total number of agents with the skill in parentheses.

Total Agents: 10	
Active Agent Skill Table	
AZ, Home	2.5 (4)
IN, Home	1.5 (4)
IN, Life	1.5 (4)
TX, Auto	1 (2)
TX, Home	1.5 (4)
TX, Life	2 (5)

Dialer uses the Active Agent Skill Table to determine how many calls to cache for each skill combination. Dialer tailors its call list queries based on the current cache level and the desired cache level. The table below shows how many records Dialer will maintain in its cache for each skill combination, assuming 400 records are needed in the cache. The total number of records in the cache will be allowed to exceed 400 to ensure that there are always plenty of callable records for each skill combination.

Calls in Cache: 400	
Contact Cache Totals	
AZ, Home	100
IN, Home	60
IN, Life	60
TX, Auto	40
TX, Home	60
TX, Life	80

The contact cache is only cleared when the campaign is turned off or restarted. If there are contacts in the cache that can no longer be dialed because the agents that could accept those calls have gone on break or logged out, then these calls will remain in cache until agents become available for them or the campaign is turned off or restarted.

Dialer also keeps a table of how many agents are idle for each skill combination. Skill combinations that have 0 agents logged on and active will have no entry in the table. The graphic below shows an example table for 3 idle agents and 4 skill combinations. The number of fractional idle agents for each skill combination is on the right with the total number of idle agents with the skill in parentheses.

Idle Agents: 3

Idle Agent Skill Table	
IN, Home	0.25 (1)
IN, Life	1.25 (3)
TX, Home	0.25 (1)
TX, Life	1.25 (3)

Dialer will then use the Active Agent Skill Table to determine how many calls should be proceeding for each skill combination. When an agent becomes idle (or has a prediction) Dialer will use the agent's skills and the number of proceeding calls for the agent's skill combinations to determine how many calls to place. The figure below shows how many records Dialer will have proceeding for each skill combination based on the Idle Agent Skill Table, assuming 4 calls per agent.

Proceeding Calls: 12 Calls per Agent: 4	
IN, Home	1
IN, Life	5
TX, Home	1
TX, Life	5

The Dialer Overview view in Interaction Supervisor will display the number of remaining records for each skill.

Skills-Based Dialing and Call List Sorting

Sorting is done first, and then the contact list cache is broken up by skill. This means that skills take priority over sorting. For example, consider a sort criterion of attempts ascending, and skills A and B. The call list cache would look like this (where the numbers 0, 1, and 2 are the attempts count for each record):

Initial Cache			
SKILL A		**SKILL B**	
A	0	A	0
	0		0
T	0	T	0
	0		0
T	1	T	1
E	1	E	1
	1		1
M	1	M	1
	2		2

P	2	P	2
	2		2
T		T	
S	2	S	2

If there are more Skill A agents than Skill B agents (and thus Dialer will be dialing through the Skill A records faster) then after a while of dialing the cache might look like this:

SKILL A		**SKILL B**	
A	2	A	0
	2		1
T	2	T	1
T		T	1
			1
E		E	2
			2
M		M	2
P		P	
T		T	2
S		S	

Consequently, Dialer will be dialing Skill A records that have an attempt of 2, while also dialing Skill B records that have attempt of 0. While this snapshot may appear to violate the criteria, Dialer is adjusting to the staffing as intended for this scenario.

Skills and Scheduled Calls

Campaign wide scheduled calls are treated like regular calls. Dialer uses the Active Agent Skill Table to determine how many calls need to be in the schedule call cache for each skill combination. Dialer will tailor its schedule of call list queries based on the current cache level and the desired cache level. The number of scheduled records in the scheduled cache will be similar to the contact cache for non-scheduled calls.

Agent owned callbacks will not respect skills. If a call is scheduled for a particular agent, then the call will be placed for that agent if the agent is logged on, regardless of what skills the agent has or what skills are defined on the contact list record.

Skills-Based Preview Dialing

In preview dialing, an agent becoming available prompts the Dialer to supply that agent with the next contact on the call list. The agent then clicks a button to place the call to the contact.

Skills-based routing of preview contacts uses a combination of null call objects and Dialer's skills-based routing capabilities. A null call object represents the contact to be preview-dialed, allowing that contact to be routed to an agent based on availability/status. The scripting side of Dialer accepts a null call object and uses information in that object to place the call.

Skills-based dialing in preview mode uses the Active Agent Skill Table and the Contact Cache previously described. When an agent becomes idle, Dialer selects a call from the cache that matches the agent's skill combination. ACD routing is not performed with preview calls.

> **NOTE:** The case of no contacts with appropriate skills for an available agent is reported via the Dialer Health View and messaging. These alerts also occur in the reverse scenario: no agent is available for a contact with the specified skill.

Procedure to Configure Skills-Based Dialing

Three views are used when configuring skills-based dialing:

Skills view—defines skills that agents may have.

Skill Sets view—maps a skill column in the contact list to skills defined in CIC.

Campaigns view—associates Skill Sets with a campaign.

Regulatory Compliance

Regulatory Compliance

Overview

This chapter provides background information about the *Federal Do-Not-Call Registry* and *Telemarketing Sales Rule*. It lists American states that maintain individual do-not-call (DNC) lists, and explains modifications that states made to federal telemarketing rules. It explains how to manage Do-Not-Call lists, which are called *DNC Sources* in Interaction Dialer.

You will learn how to perform an initial bulk scrub of contact lists to prevent unwanted numbers from being dialed. Afterward, Dialer's just-in-time scrubbing feature will exclude contacts whose DNC status changed between the time the contact list was bulk scrubbed and the time the contact is dialed.

This chapter explains how Filters can be used to dial only call those records that meet a certain criteria. Sorting is discussed too, should you need to dial the list in a certain order. While these tasks can be accomplished through back end procedures on the database management system, they are simplified through the use of Filters and Sort Criteria in Interaction Dialer.

Federal Do Not Call Registry

Legislative Timeline

Unlike inbound ACD systems, use of predictive dialers is governed by certain state and federal statutes, depending on the purpose of the outbound dial. For companies who engage in telesales, compliance with Do Not Call registries has emerged from an internal best practice into State and Federal regulation.

Although the Federal Do Not Call Registry was enacted in October 2003, legislation preceded the registry by over a decade:

1991	The Federal Communications Commission (FCC) drafts the Telephone Consumer Protection Act (TCPA).
1992	In December, the TCPA is enacted.
1994	The Federal Trade Commission (FTC) begins drafting the Telemarketing Sales Rule (TSR), an addendum to the Telemarketing and Consumer Fraud and Abuse Prevention Act.
1995	The TSR is enacted.
1999	After reviewing the effect of the TSR for five years, the FTC proposes the creation of a National "Do Not Call" list.
2003	Following a series of hearings from consumers groups and businesses who engaged in telemarketing, the TSR is amended in January to include the Federal Do Not Call Registry. In June, the FTC begins taking requests from consumers to be enrolled on the Do Not Call registry. There are over ten million phone calls the first day. On October 1st, the Federal Do Not Call list officially goes into effect. There are over 50 million consumers who are pre-enrolled.
2007	By Q4, nearly 150 million consumers have enrolled both household and mobile numbers on the Federal Do Not Call List.

Telephone Consumer Protection Act

Created by the FCC in 1991, the Telephone Consumer Protection Act (TCPA) was developed in response to the increase in telephone sales in marketing/business practices and the increase in consumer complaints. Key provisions of the TCPA for businesses who made such calls included:

- Limit telemarketing calls to the period between 8 A.M. and 9 P.M. (local time for the number dialed.)
- Maintain an internal "Do Not Call" list and honor any request to not be called again. A person's name must be kept on the list indefinitely.
- Have a clearly written policy (with regard to TCPA procedures), available to anyone upon request.
- Have a clearly defined training program for personnel making the telephone solicitations.
- Service bureaus (including outsourced marketing centers) must forward all requests to be removed from a list to the company on whose behalf they are calling. It is that company, not the service bureau, who is held legally liable under the TCPA. The "Do Not Call" request must also be

honored by any affiliate or subsidiary of the company if there is a reasonable expectation on the part of the consumer that the request would apply also to the affiliate or subsidiary.

Telemarketing Sales Rule

In 1994, the U.S. Congress estimated that, despite the TCPA, consumers lost nearly $40 billion annually due to telemarketing fraud. Congress stated that interstate telemarketing fraud had become an issue of "such magnitude" that existing government resources were overwhelmed and insufficient to adequately protect consumers.

In 1995, the Federal Trade Commission exercised its jurisdiction over fraud over state lines and developed the Telemarketing Sales Rule (TSR) as part of the Telemarketing and Consumer Fraud and Prevention Act. Using the guidelines set forth in the TCPA, the TSR made the following provisions:

- Required telemarketers to make specific disclosures of material information
- Prohibited misrepresentations
- Set payment restrictions for the sale of certain goods and services

As technology progressed, the TSR was amended in 2003 to also include:

- Telemarketing companies transmitting of Caller ID information
- Maximum percentage limits for abandoned outbound calls
- Requirement telemarketing companies to retain certain business records for two years
- Creation of the National "Do Not Call Registry"

Exemptions to Federal Regulations

Although the vast majority of organizations who market using outbound dialing are covered by the TCPA, TSR and Federal Do Not Call Registry, there are situations in which these Federal laws do not apply.

The FTC does not have jurisdiction over banking, common carriers (including telephone companies and airlines), nor not-for-profit organizations. These industries therefore do not fall under the auspices of the TSR. Outsourced companies marketing for these companies are subject, however, to TSR compliance.

Other exemptions to the Federal regulations include:

- An organization with whom the consumer has an established business relationship (EBR.) An EBR is defined as a consumer inquiry, application, purchase or transaction regarding products or services offered by the person or entity involved. The EBR is in effect for eighteen months following the last business transaction or three months after the last inquiry or application.
- Organization has received prior written permission from the consumer.
- Calls which are not commercial or do not include unsolicited advertisements (including surveys and political campaigning)

- Business-to-Business calls; business phones may not be registered on the Federal Do Not Call Registry.

> Some States maintain their own "Do Not Call" registries and may have telemarketing governances that are more restrictive than Federal regulations. See State Do Not Call Lists.

See also:

State Do Not Call Lists

Internal Do Not Call Lists and Additional DNC Resources

Managing DNC in Interaction Dialer

Filters and Sort Criteria

Compliance in the Outbound Collections Contact Center

Common Compliance Challenges and Additional Considerations

State Do Not Call Lists

States Maintaining Separate Do Not Call Lists

When the FTC's Telemarketing Sales Rule was amended in 2003 to include the Federal Do Not Call Registry, many States had already drafted and enacted their own registry.

Although many States merged their requests with the Federal DNC, a number of individual States continue to maintain their own lists. These States and the date that the Do Not Call registry went into effect are below:

States Maintaining Do Not Call Lists			
State	**Date Effective**	**State**	**Date Effective**
Alabama	1999	Maine	2001
Alaska	1996	Massachusetts	2003
Arkansas	2000	Minnesota	2003
California	2003	Missouri	2001
Colorado	2002	New York	2001
Connecticut	2001	Oklahoma	2002
Florida	1991	Oregon	2000
Georgia	1999	Pennsylvania	2002
Idaho	2001	Tennessee	2000
Indiana	2002	Texas	2002
Kentucky	2002	Wisconsin	2003
Louisiana	2002		

State Do Not Calls Laws that Exceed Federal Guidelines

As discussed on the previous pages, several States continue to maintain separate Do Not Call registries to cover their residents. While most State telemarketing laws are very similar to Federal guidelines, there are a number of States who maintain stricter telemarketing rules. Examples of these States/laws are:

Indiana: Telemarketers may not place calls to anyone on the State's list, regardless of customer status. This includes calls to people with whom the company has an established business relationship, unless they have received specific permission from the customer to receive calls.

Florida: Florida bans automated phone calls by computer, although autodialers with prerecorded messages are allowed in the Federal guidelines with the following exemptions: any emergency phone lines (911, hospital emergency lines, physician/medical service lines, health care facilities, poison control centers, fire protection or law enforcement agencies), pagers and mobile phones.

Colorado: Under State law, Colorado residents may take claims against alleged violators in small claims court.

Massachusetts: Like Florida, MA does not allow any solicitations via recorded message. Massachusetts also bans calls after 8pm (one hour earlier than the Federal law.)

New Jersey: Similar to Indiana, New Jersey does not allow carte blanche with calls placed under the "existing business relationship." New Jersey allows calls to these customers, but no new product/service or upsell may be solicited.

> Some States allow more exemptions than the Federal laws stipulate. Mississippi, for example, does not require State DNC compliance from the following types of businesses (as long as they are licensed in the State of Mississippi): real estate agents, insurance agents, motor vehicle dealers, securities brokers and investment advisors, newspapers, and funeral homes.

State DNC/Telemarketing Rule Contacts

States vary widely in the amount charged to non-exempt businesses for Do Not Call registries. Each State also establishes its own timeline for how often businesses must renew their DNC registrations.

Similarly, States can differ greatly in penalties assessed for Do Not Call non-compliance. Wisconsin, for example, lists a first offense at $100 per minute of call. Conversely, New Jersey may assess upward of $10,000 per violation.

In order to maintain compliance with State Do Not Call registries and regulations, it is suggested that each be reviewed individually.

Internal Do Not Call Lists and Additional DNC Resources

Internal Do Not Call Lists and Additional DNC Resources

Regulatory Information for Company Do Not Call Lists

The final registry of do not contact numbers is the internal company-kept list. The FTC's Telemarketing Sales Rule stipulates that internal lists supersede exemptions to National and State Do Not Call regulations.

Following are considerations for maintaining company Do Not Call lists:

- Requests may be made by customers at any time and must be honored, regardless of pre-existing business relationship. In many States, different regulations apply for collection/informational calls, however the TSR mandates that any call with the ultimate purpose of selling a product/service be subject to exclusion at the customer's request.
- In addition to pre-existing business relationships, customer removal requests likewise supersede any previous written permission to contact.
- The Telephone Consumer Protection Act, enforced by the FCC, requires that businesses keep all direct customer DNC requests on file for five years.
- Companies should maintain the internal DNC with care, and document the customer DNC request process. The Department of Justice has successfully sued companies for violating their own internal DNC registries, on behalf of the FTC. In several of these cases, the FTC further evidenced lack of "effective procedures" to document and maintain these lists within the company.

Additional US DNC Information

Although there are several links through State websites (as well the FTC site), the Federal Do Not Call List may be accessed at http://www.telemarketing.donotcall.gov. This site includes valuable information for companies who make telephone solicitations.

In addition to the fifty States and the District of Columbia, the National Do Not Call registry also covers the following US territories:

- Puerto Rico
- U.S. Virgin Islands (St. Croix, St. Thomas, St. John)
- North Mariana Islands (Saipan, Tinian, and others)
- American Samoa
- Guam

Full area code DNC lists are updated on the National registry daily, and are generally available for download after 8:00 A.M. (EST) daily.

Toll-free numbers (500, 800, 866, 877, 880, 881, 882 and 888) are also covered by the National Do Not Call registry.

Organizational Responsibility for Federal Do Not Call Registry

The chart below provides information by organization regarding the Federal Do Not Call Registry:

Type of Organization	Who Must Pay?	Who Must Complete the Certification?	Who May Download the Information?	Who Owns the Subscription Account Number (SAN)	May the Organization Transfer the SAN?
Seller who engages in its own telemarketing	Seller	Seller	Seller	Seller	Yes to one or more TM/SP
Seller who uses Telemarketer TM or Service Provider (SP)	Either Seller or TM/SP on behalf of Seller	Either Seller or TM/SP on behalf of Seller	Either Seller or TM/SP on behalf of Seller	Seller	Yes, to one or ore TM/SP
Telemarketer or Service Provider on behalf of Seller Client	TM/SP on behalf of Seller/Client or no one (if using existing SAN)	TM/SP on behalf of Seller/Client AND for themselves	TM/SP on behalf of Seller/Client	Seller/Client	No – Seller/Client owns the SAN
Telemarketer or Service Provider with "independent access"	TM/SP	TM/SP	TM/SP	TM/SP	No
Exempt Organizations (EO)	No payment required or TM/SP if engaging in non-exempt telemarketing activities on behalf of EO	EO or TM/SP on behalf of EO	EO or TM/SP on behalf of EO	EO	Yes to one or more TM/SP

A covered seller is subject to Federal Trade Commission's amended Telemarketing Sales Rule.

International Do Not Call Legislation

When developing outbound dialing campaigns that span international borders, it is necessary to ensure compliance with Do Not Call legislation for each country included on your calling list.

Although Do Not Call regulations are still in their infancy in much of the world, many countries have passed or have pending legislation for no-contact registries. These include (but are not limited to):

- Australia

- Canada
- New Zealand
- United Kingdom
- Germany
- France
- Pakistan
- India
- Israel

Do Not Call regulations are controlled and enforced by the country of the dialed party, regardless of where the phone call originated. Similar to the US, the European Union has also drafted legislation to cover all member countries.

An excellent resource for EU marketing legislation is the Federation of European Direct and Interactive Marketing (http://www.fedma.org). Collections regulations are often available by the body regulating fair trade within member countries.

Rather than develop specific registries, many countries have chosen to append telemarketing stipulations to existing privacy laws. These regulations include allowable hours of outbound dialing, clauses regarding prior business relationships and, very importantly, international transportation/storage of customer contact data. It is advisable to check with individual countries for the most current legislation prior to beginning any international campaign.

- Federation of European Direct and Interactive Marketing, European Union - Tel +322777603; http://www.fedma.org
- Direct Marketing Association, United Kingdom - Tel +(44) 02077664401; http://www.dma.org.uk
- Institute of Direct Marketing, United Kingdom - Tel +(44) 0181 9775705; http://www.theidm.co.uk
- Union Francaise du Marketing Direct, France - Tel +(33) 1 4256 3886)
- Dansk Markedsforingsforbund, Denmark - Tel +(45) 33 118 787
- Associazione Italiana per il direct marketing, Italy - Tel +(39)229014157
- Chambre de Commerce, Luxembourg - Tel +(352) 42 39 39 ext 810
- Direct Marketing Instituut Nederland, Netherlands - Tel 0031206429595
- Telecom Regulatory Authority of India - Tel 91-11-2321 1934, 2323 3466, 2322 0534, 2321 3223; http://www.trai.gov/
- Canadian Radio-Television and Telecommunications Commission, Canada - Tel 1 877-249-2782; http://www.crtc.gc.ca/
- Do Not Call Register, Australia - Tel 1300 792 958; http://www.donotcall.gov.au/

Filters and Sort Criteria

Filters and Sort Criteria

Contact List Subsets

A very common request is to take the contact list and only call those records that meet a certain criteria. Perhaps the list should even be dialed in a certain order, contingent upon that criteria or another. While

these tasks can be accomplished through back end procedures on the database management system, they are simplified through the use of Filters and Sort criteria in Interaction Dialer.

Filter Criteria	Sort Criteria
A filter is a condition that can be applied to a contact list to dial only a specific subset of the list. It is the 'WHERE' clause of a SQL query.	A sort criteria consists of designating one or more contact list columns to use to order list. It is the 'ORDER BY; clause of a SQL query.

By providing this level of control, Interaction Dialer administrators have flexibility in selecting records for dialing. Filters are properties assigned to Campaign objects. For background information about Filters, see Contact List Filters.

Creating Filters

Implementing filters requires 2 configuration steps, both of which are described in the discussion of the Contact List Filters view.

1. **Create the filter**. See Define a Contact List Filter.
2. **Apply the filter**. See Assign Filters to a Campaign.

In many call centers, the person who understands SQL ORDER BY syntax is not the person who defines or manages campaigns. Your company's Database Administrator is probably very familiar with SQL, whereas Call Center Supervisors may not possess SQL expertise.

The use of saved Filters helps a Call Center capture the expertise of its in-house SQL experts, by saving filters as named entries that Supervisors can assign to campaigns as needed. Filters can be generic or specific to a particular campaign. The same filter can be assigned to more than one campaign, so long as the filter is compatible with each campaign's database.

> Filters are optional. A filter has no effect unless it is selected for use by a campaign. Afterward, only those records that match the filter are selected for processing by that campaign.

When you modify a filter, changes are automatically applied to all campaigns that reference the filter object. However, changes to a filter do not take effect until the campaign is recycled or reset.

Filter Callbacks

Typically, filters only apply to the regular records in the contact list, not to scheduled calls. However, scheduled calls can optionally be forced to adhere to an active filter. Within a campaign's configuration, there are 2 check boxes that govern filtering of callbacks.

Customers can optionally apply filters to the selection of scheduled Callback records, whether scheduled by agents or auto-scheduled by Dialer when it is unable to reach a contact. By default, filters are not applied to callback records. Filtering can be applied to either type of callback by setting Filter Callbacks options on a Campaign configuration.

Agent Scheduled—check to apply filter criteria to the selection of callbacks scheduled by agents.

Auto-Scheduled—check to apply filter criteria to the selection of auto-scheduled callbacks. Auto-scheduled callbacks are created up by the system when it is unable to reach a targeted party for one of the following reasons:
Call was abandoned

- Line was busy
- Fax Machine Detected
- No answer
- Answering Machine detected
- Remote Hang Up
- System Hang Up

Related Topics

Creating Filters

Assign Filters to a Campaign

Filter Callbacks

Sort Criteria

Sort Criteria
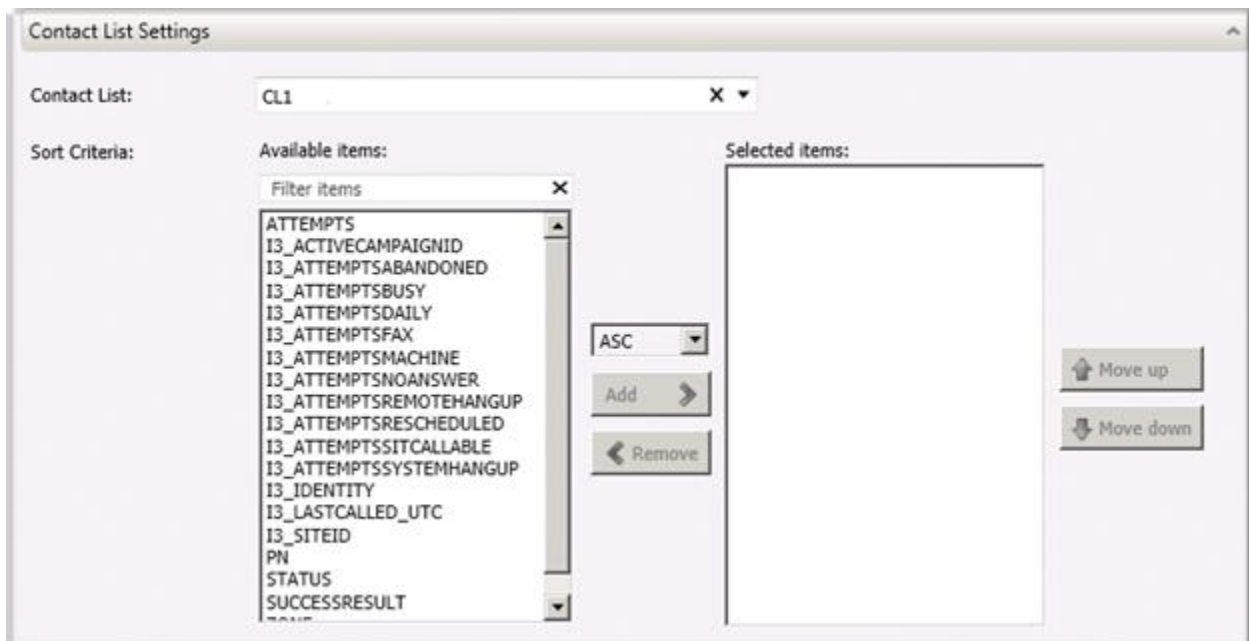
Sort criteria settings on the Campaigns view allows an administrator to specify an order in which contacts should be called. Depending on the type of campaign, any variety of sort criteria might be beneficial.

Sorting is optional. To sort by a column, select it in the *Available Items* list. Then select *ASC* for an ascending sort, or *DESC* or a descending sort. Finally, click *Add*. Your selections are displayed in the Selected Items list. You can modify the order of criteria using *Move Up* and *Move Down* buttons.

Examples:

- **Sort descending by outstanding balance** so that those collections contacts with the largest balanced are dialed first.
- **Sort ascending by attempts**. The contact list keeps track of how many times Interaction Dialer has attempted to dial a contact. By sorting on this field, contacts that have not yet been dialed would be dialed first. After those who had not been dialed have been called, Dialer would next dial those that have only been called once…
- **Sort ascending by date of last contact** to first dial those customers we have not contacted in the longest period of time.

Compliance in the Outbound Collections Contact Center

Fair Debt Collection Practices Act (FDCPA)

The Fair Debt Collection Practices Act (FDCPA) became law on March 20, 1978. While the intent of the legislation was to dissuade the use of misleading or harassing collection practices by the creditor, section 805 (Communication in Connection with Debt Collection) outlines specific guidelines for calling. In short, debt collectors are prohibited from communicating with a consumer:

"…at any unusual time or place or a time or place known or which should be known to be inconvenient to the consumer. In the absence of knowledge of circumstances to the contrary, a debt collector shall assume that the convenient time for communicating with a consumer is after 8 o'clock antemeridian and before 9 o'clock postmeridian, local time at the consumer's location."

In general, creating zone sets for the hours of 8am-9pm complies with the FDCPA. Be aware, however, that the Federal guidelines do not supersede individual State guidelines, if the State laws stipulate more restrictive calling hours.

> The Federal Trade Commission (FTC) is currently urging modifications of the FDCPA, to update the legislation to include guidelines regarding mobile phones and text collection practices.

There have been multiple instances of litigation that cite the FDCPA regarding the use of false/hidden ANI (caller ID information) and questionable frequency of calls (complaints of harassment.) Make sure to check the most recent iteration of the Federal laws, and local statutes for your entire customer base to ensure Dialer is configured in compliance with all laws.

State Legislation Resources

As mentioned in the DNC module, there are often occasions where merely understanding Federal guidelines for outbound dialing is not sufficient. Many States have enacted legislation that further restricts creditor contact.

Similar to DNC lists, collections legislation is seldom static. To keep Dialer use in compliance, it is incumbent upon your organization to remain cognizant of modifications and additions to current regulations, and to likewise keep the Dialer configuration in compliance with local, State and Federal laws.

The following pages contain the URL for each US State's collection legislative code. Please verify, especially with those sites that are not maintained by the government, that the content is the most recent, prior to making any operational/configuration changes in Interaction Dialer Manager.

State	URL
Alabama	http://www.legislature.state.al.us/
Alaska	http://www.legis.state.ak.us/
Arizona	http://www.azleg.state.az.us/
Arkansas	http://www.arkleg.state.ar.us/
California	http://www.leginfo.ca.gov/
Colorado	http://198.187.128.12/colorado/
Connecticut	http://www.cga.ct.gov/asp/menu/Statutes.asp
Delaware	http://www.delcode.state.de.us/
Florida	http://www.flsenate.gov/statutes/
Georgia	http://www.legis.state.ga.us/
Hawaii	http://www.hawaii.gov/
Idaho	http://www3.state.id.us/idstat/TOC/
Illinois	http://www.ilga.gov/legislation/ilcs/
Indiana	http://www.in.gov/legislative/ic/code/
Iowa	http://www.legis.state.ia.us/
Kansas	http://www.kslegislature.org/cgi-bin/statutes/
Kentucky	http://www.lrc.state.ky.us/KRS/TITLES.HTM
Louisiana	http://www.legis.state.la.us/lss/tsrssearch.htm
Maine	http://www.mainelegislature.org/legis/statutes/
Maryland	http://mlis.state.md.us/
Massachusetts	http://www.mass.gov/legis/laws/mgl/
Michigan	http://www.michiganlegislature.org/
Minnesota	https://www.revisor.leg.state.mn.us/statutes
Mississippi	http://www.mscode.com/01index.htm
Missouri	http://www.moga.state.mo.us/statutes/C425.HTM
Montana	http://data.opi.state.mt.us/bills/mca_toc/
Nebraska	http://statutes.unicam.state.ne.us/

Nevada	http://www.leg.state.nv.us/NRS
New Hampshire	http://www.gencourt.state.nh.us/rsa/
New Jersey	http://www.njleg.state.nj.us/
New Mexico	http://www.conwaygreene.com/nmsu/
New York	http://assembly.state.ny.us/leg/
North Carolina	http://www.ncleg.net/gascripts/Statutes/
North Dakota	http://www.legis.nd.gov/cencode/t13.html
Ohio	http://www.legislature.state.oh.us/laws.cfm
Oklahoma	http://www.oscn.net/
Oregon	http://www.leg.state.or.us/ors/697.html
Pennsylvania	http://www.attorneygeneral.gov/consumers
Rhode Island	http://www.rilin.state.ri.us/
South Carolina	http://www.scstatehouse.gov/
South Dakota	http://legis.state.sd.us/statutes/index.aspx
Tennessee	http://www.tennesseeanytime.org/laws
Texas	http://www.capitol.state.tx.us/
Utah	http://www.le.state.ut.us/~code/
Vermont	http://www.leg.state.vt.us/statutes/
Virginia	http://leg1.state.va.us/cgi-bin/
Washington	http://apps.leg.wa.gov/rcw/
West Virginia	http://www.legis.state.wv.us/WVCODE/
Wisconsin	http://www.legis.state.wi.us/rsb/Statutes
Wyoming	http://legisweb.state.wy.us/titles/statutes

Common Compliance Challenges and Additional Considerations

Common Compliance Challenges and Additional Considerations

Top Five Compliance Challenges

Although Interaction Dialer provides the tools to make outbound dialing campaigns successful, the complexity of telemarketing rules mandates that strong technology is coupled with a strong, documented process.

A study conducted by Ken Sponsler, General Manager of Consulting and Audit Services for PossibleNOW, Inc. summarizes the main five challenges that outbound contact centers face with regard to Do Not Call legislation:

1. Knowledge of the rules
2. Possessing Written Compliance Guidelines

Knowledge of the rules

As we've seen in earlier modules, telemarketing rules are constantly revised and may differ widely from region to region. To further compound the issue, contact centers are also frequently bound by other compliance measures that vary by industry. For example, a health insurance contact center may be regulated by the Health Insurance Portability and Accountability Act (HIPAA), Gramm-Leach-Bliley Act (GLBA) and Centers for Medicare and Medicaid Services (CMS), among others. These regulations may create more strict rules for outbound centers. CMS, for instance, allows telemarketing calls to Medicare recipients for enhanced services, but stipulates that enrollment in these services is allowable only via inbound calls. Depending on the services offered, an agent may or may not be required to be licensed in the state they are calling.

The scope of compliance can seem overwhelming, and often even a dedicated compliance staff may be unaware of Do Not Call regulations, especially if the company conducts business in several States and countries. Thorough research for DNC compliance should be conducted prior to starting any new campaign and periodically as laws are revised.

Possessing Written Compliance Guidelines

As mentioned in the Internal Do Not Call module, the documentation of your internal process to comply with the Telemarketing Sales Rule and Telephone Consumer Protection Act is imperative in the event of an audit or complaint. Ken Sponsler suggests that beyond the general process of downloading lists each month, this document contain descriptions of the compliance rules, assignment of responsibility, training process, monitoring process and enforcement methodology. In short, define the rules, create a plan for compliance, and test the effectiveness of the plan at regular intervals.

Meeting Record Keeping Requirements

Depending on the industry, many campaign-related records may be required to be maintained for two years, while Do Not Call records (especially internal) may be required to be stored for up to 10 years. Sponsler poses these questions for a status check: if your organization were to be investigated for an alleged violation from two years ago, could you produce records of Do Not Call "scrubbing" activity, or proof of dialing hours, even if these records were associated with a customer with whom you no longer did business

Possessing Mutually Supportive Due Diligence

This is especially important for outsourced contact centers. Due diligence includes monitoring and enforcement by both the contact center and client, and records that clearly state customer transactional history, to comply with the Established Business Relationship requirement by both Federal and State guidelines.

Having a Defendable Position

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This should act as the framework for developing compliance standards within your organization. In the example given earlier in the chapter regarding a contact center that was sued on behalf of the FTC, lack of process was strongly noted in the decision rendered by the Department of Justice. Clear internal guidelines for rule compliance, training, monitoring and enforcement will greatly assist in lessening liability if a complaint is lodged.

To begin drafting internal compliance procedures, ensure all responsible parties are able to answer the following questions:

- Is our outbound activity regulated by the FCC, FTC or both?
- In companies with several divisions, how many versions of the Federal Do Not Call Subscription Account Number (SAN) are we required to purchase?
- Is your company located in a State that requires telemarketers and sellers to register?
- How do the States in which you do business define "Established Business Relationship"? Are you aware of the Do Not Call regulations by State in reference to the EBR?

Related Topics

Additional Compliance Considerations

Additional Compliance Considerations

The previous discussion included compliance information that is specific to Interaction Dialer. Compliance in the outbound contact center is a broad subject that is not exclusive to predictive dialer configuration. The following information is provided for consideration when beginning any new outbound campaign.

Recording Laws

In any contact center, there exists a need to record conversations, even if only for quality assurance purposes. Depending on the type of industry, multiple regulations exist that govern the right to record, and the retention of the recordings. Multiple State and local statutes may exist, and generally take precedence. Below are some Federal laws/acts that are commonly considered to make the most impact on contact centers:

- Consent-to-Record Laws
- Telemarketing Sales Rule (TSR)
- Truth-in-Lending Act
- Fair Debt Collection Practices Act (FDCPA)
- Health Insurance Portability and Accountability Act (HIPAA)
- Public Company Accounting Reform and Investor Protection Act (Sarbanes-Oxley)

Mobile Phones

The increasing use of mobile phones adds a new layer of complexity with DNC compliance. Primarily, there are two overriding issues:

- Increasing frequency of consumers using mobile phones in lieu of land lines
- Time zone blocking

Mobile number given as main contact: When the Federal DNC list was originally conceived cellular phone numbers tended to be kept very private (generally due to the cost-per-minute involved.) Customers seldom noted these numbers as "Home" when giving out information to businesses, applying for credit, and so on. As mobile plans have decreased in cost, and cellular phone use has become nearly ubiquitous, many consumers have disconnected their home land lines and opted for mobile use only.

This change in consumer behavior has caused some problems with DNC compliance. Conventional wisdom was that mobile numbers were exempt from telemarketing/collections calls, much as they are not publicly published in phone directories. The TFCC used the language "prior express consent" in regard to contacting consumers via the mobile number. Due to more and more individuals solely using mobile phones and thus offering these numbers with other personal information to businesses, the FCC is revisiting the question of contact lists that include mobile phone information.

While the legislation has not officially been edited, multiple forums have been held at the Federal level, and the FCC has clarified its language, originally found in the Telephone Consumer Protection Act (TCPA): *"Persons who knowingly release their phone numbers have in effect given their invitation or permission to be called at the number which they have given, absent instructions to the contrary."* The statement is further clarified that this applies in such instances that, *"the called party has in essence requested the contact by providing the caller with their telephone number for use in normal business communications."* The FCC also noted that "normal business communications" involves active consent, i.e. it is still not acceptable to capture the ANI of a mobile number and use it for further contact; the customer must give permission for the number to be used, either verbally or by the means stated above.

Time Zone Considerations: With the increasing use of mobile phones, we are experiencing a shift in another area: the association between area code and time zone. Whereas land lines are, by definition, associated directly with the area code, cellular phone users are not required to reside in the area code associated with their number. This situation becomes problematic in attempting to maintain mandated callable hours, especially if the area code of the mobile number is assigned to a different time zone than where the user actually is.

Existing Business Relationship

As mentioned earlier in the chapter, the Existing Business Relationship (EBR) clause has been noted in legislation beginning in 1991. When the Do Not Call registry began, this exemption was very valuable to companies in that they were allowed to contact, regardless of DNC status, customers who had inquired/applied to them within the last three months, or had purchased a product from the company within the last eighteen months. This exemption opened a much larger market to outbound centers, and provided the means to communicate with their customers.

While the EBR has always been required to cease if a customer asks not to be contacted (that is placed on a company's internal DNC), other litigation has occurred in recent years that questions the definition of "Existing Business Relationship." Of main concern are direct offers/promotions in which consumers are asked for personal information, which is taken as passive consent to contact, that is a "relationship" between the consumer and the company. While most of these marketing tactics are still admissible,

several courts have decided that using "veiled" or "concealed" language on the original offer constitutes a violation of DNC regulations. They are referring to the small print, where the consumer is notified that by participating in the promotion, they are giving consent to be contacted by the company, even if subsequent calls are not directly related to the offer. Often this verbiage appears intentionally small, so that a consumer is likely not to read it, or, in some cases that have been litigated, this information has not appeared on the same page as the consumer information request.

Outbound Caller Name and ID

- Controls what shows up on called party phones per-campaign or per-call (using contact policies)
- Construct caller name/ID from call list columns using policies if wanted
- Phone carrier must pass caller name/ID through

Feature Overview

The ability to send Caller ID information is often required for telemarketing. Interaction Dialer provides complete control of over the caller name and ID that is visible to contacts. The name and number out-pulsed when a call is placed can be controlled at the campaign (contact list) level and may be overridden at a per-call level. This is a regulatory compliance feature.

To set caller name and ID at the campaign level, set the Calling Party Name and Calling Party Number campaign properties.

To override at a per-contact phone number level, policies can be used. Dynamic control of caller ID can have a major impact on contact rates and is often needed when dialing on behalf of multiple clients.

Related Topics

Configure Caller ID for a Campaign

Configure Caller ID using a Policy

Call Timeout

Call Timeout

Call Timeout is a regulatory compliance setting that sets the length of time (from 1 to 100 seconds) that an outbound call will stay in the waiting queue (waiting for an agent to become available) before the Outbound Dialer server disconnects it, plays the no available agent wave file, or transfers the call to the no available agent attendant profile.

For example, a campaign with a call in the waiting queue and a Call Timeout of 3 will wait three seconds before disconnecting the call. If this setting is too low, contacts who answer calls will be hung up on.

Related Topics

Configure Call Timeout for a Campaign

Configure Call Timeout for a Campaign

1. At the **Home** screen in Dialer Manager, click **Campaigns.**
2. Select a campaign in the **Campaign Entries** panel.
3. Select the **Basic Configuration** tab.
4. If necessary, expand the **Dial Settings** expander.
5. Scroll down to Call Timeout**.** Use the spin control to specify the length of time (in seconds) that an outbound call will stay in the waiting queue (waiting for an agent to become available) before the Outbound Dialer server disconnects it, plays the no available agent wave file, or transfers the call to the no available agent attendant profile.
6. Click **Save**.

No Answer Timeout

No Answer Timeout

No Answer Timeout is a regulatory compliance setting that controls how long a call in a Ringing state (not connected or answered) will stay active before Telephony Services disconnects the call.

You can configure this setting for campaigns, or dynamically change it per-call using a policy, to control how long a contact's phone should ring before the call is disconnected. By default the system waits 20 seconds for the contact to answer. The range of acceptable values is 1-100 seconds.

Related Topics

Configure No Answer Timeout for a Campaign

Configure No Answer Timeout for a Campaign

1. At the **Home** screen in Dialer Manager, click **Campaigns.**
2. Select a campaign in the **Campaign Entries** panel.
3. Select the **Basic Configuration** tab.
4. If necessary, expand the **Dial Settings** expander.
5. Scroll down to No Answer Timeout. Use the spin control to specify how long a call in a Ringing state (not connected or answered) will stay active before Telephony Services disconnects the call. By default the system waits 20 seconds for the contact to answer. The range of acceptable values is 1-100 seconds.
6. Click **Save**.

Regulatory Compliance Features

Regulatory Compliance Features

- Campaign configuration features help telemarketers and collections agencies comply with regulations.
- Collections campaigns can use skills-based dialing and routing with agents who are trained to handle specific products or customers.

- Contact lists can be scrubbed prior to dialing. Caller ID can be set for each campaign and overridden on a per-call basis. Legislative messages can be played when no agents are available.
- Abandon Rate settings allow customers to manage abandonment rate calculations, control how abandons affect the pace of outbound dialing, and to specify on a per-campaign basis, what is considered an abandoned call. Other settings control no answer timeouts, time zone blocking, and whether or not configuration changes are recorded for auditing purposes.

Overview

Interaction Dialer provides options that help organizations stay in compliance with government and conventional regulations and to be good corporate citizens. In providing these options, Genesys has considered and continues to review a wide range of regulations including the US FTC's Telemarketing Sales Rule (TSR), the US FTC's Fair Debt Collection Practices Act (FDCPA), the UK OfCom's Persistent Misuse Statements, and many other government and locale requirements.

Regulatory compliance options for telemarketing, collections, and other types of campaigns are fully supported. These options include flexible time zone management, abandoned rate definition and control, DNC scrubbing, caller ID and name specification at the campaign and call level, call and screen recording, call time out controls, legislative message handling, opt-out controls, and more.

Controls include detailed and per-campaign management of abandoned rate (for example how it is calculated, when a call is considered abandoned, targets rates), control over caller ID name and number, no answer timeouts, legislative messages in case of no available agent, and more.

Pre-scrubbing and just-in-time scrubbing of do-not-call (DNC) numbers is supported using any combination of customer-supplied DNC lists, third-party DNC scrubbing, and on-the-fly exclusion of specific numbers programmatically (for example: specific collection accounts or call-in DNC requests). Just-in-time DNC scrubbing checks the supplied list or third-party DNC service just prior to placing calls allowing numbers to be added at any time while dialing. For details, see the DNC Scrubbing feature overview.

Time zones can be configured to match both real-world time zones and business or convention driven time zones. See Time Zone Blocking.

A collections campaign can use *skills-based* dialing or routing with agents who are trained or allowed to handle certain products or customers:

- Skills-Based Dialing examines skills in contact records, to dial only those contacts that can be handled by the available agent pool. Skills-based dialing is available for preview, power, and predictive campaigns.
- Skills-Based Routing sends an already connected call to an agent that has required skills, such as the ability to speak the contact's language, required product familiarity, and so on.

Interaction Dialer can record all details of calls placed including configuration changes, specific numbers and call times, and whether or not a call was abandoned. This data provides a clear audit trail for proof of good faith efforts, if needed. See Configuration Change Auditing tab of the Global Dialer Settings view.

DNC Scrubbing

As a best practice and as required by telemarketing campaigns, Interaction Dialer customers can scrub their contact lists against state and local Do-Not-Call (DNC) lists prior to dialing those lists. For details, see the DNC Scrubbing of Contact Numbers feature overview.

Abandon Rate Management

Dialer dynamically adjusts the pace of outbound dialing in response to abandonment statistics. You can:

- Control how abandonment rate is calculated (per dial or contact)

- Control how abandons affect pacing (strict or target)

- Specify what is considered an abandoned call

An **abandoned call** is a call that is answered but disconnected before any conversation takes place. Options for Abandon Handling—what to do when no agents are available to take a call—are configured on the Abandons tab of a Campaign configuration.

Settings on the Abandon Rate Pacing Adjustment expander affect the pace of outbound dialing in response to real-time abandon statistics. This helps customers to maintain compliance with Telemarketing Sales Rule (TSR) or other similar regulations.

Settings on the Abandon Call Definition expander specify what a campaign considers an abandoned call to be.

Legislative messages

Play fixed or dynamic message when no agent available to satisfy TSR's "Safe Harbor" provisions

Minimum Rings

See No Answer Timeout.

Call Detail Documentation

Called number, date/time, result, message played, etc. written to call history table for each call placed.

Call and Screen Recording

Interaction Recorder, a CIC add-on product, is a common companion to Interaction Dialer for reliable recording of all, random, or specific calls based on given contact, agent, time, campaign or other attributes. Both calls and screens can be recorded by Interaction Recorder. In any business, and especially in regulated industries such as healthcare and financial services, recording interactions is essential to optimizing agent performance, customer service and regulatory compliance.

Product Overview

Call recording is a common and required function of many outbound call centers. Interaction Dialer takes advantage of **Interaction Recorder**, a pre-integrated add-on to Customer Interaction Center and Interaction Dialer, to provide seamless recording of all calls, random calls, or calls that match some set of conditions, such as calls from a specified number, at a certain time, to a certain agent, for a certain campaign, and so forth.

Interaction Recorder also provides agent screen recording, if wanted. Interaction Recorder has built in agent scorecard definition and tracking capabilities to allow for quality monitoring and scoring of recordings.

Interaction Recorder covers every aspect of recording and file management, centralized in one intuitive interface for managers and authorized users alike. It provides multichannel media recording for calls, IVR, web chats, emails and faxes.

Interaction Recorder is a single-vendor, all-in-one solution. Interaction Recorder is a built-in function of CIC's core platform technology and requires only simple licensing to enable its full recording capabilities. The single administration interface in CIC makes configuring Interaction Recorder settings and users just as easy, eliminating the dual administration issues of many proprietary recording systems.

Typical applications of Interaction Recorder include:

Dispute resolution	Recorded interaction details and reports help resolve customer disputes, and also provide evidence in regulatory compliance situations to protect against potential fines and legal costs.
New agent training	Supplement training programs both for in-center and remote agents using screen recordings and easily distributed call recordings. Recorded interactions inform new agents about "right" and "wrong" ways to handle interactions.

Agent improvement training	Use call and screen recordings to emphasize best practices for even the most experienced agents.
Process improvement	Determine ways to better manage agents and interaction processes. Recordings also provide benchmarks for improving agent skill sets and how skills apply to various interaction types.

Key Features

- Interaction Recorder provides synchronized playback of screen and audio recordings, including work items not requiring direct customer interaction such as processing a claim or conducting research
- A single, simple interface for configuring multiple policies: *what* interactions are recorded, *where* they are stored, and *who* can access, play, score and export them
- Flexibility to store and play files locally to reduce bandwidth utilization
- Rules-based recording by entity, workgroup, role, or individual
- Screen recording for synchronized playback of the screen and audio recording
- Multimedia recording for calls, web chats, emails and faxes
- Categorization to archive and quickly retrieve recording files in large volumes
- Records agents and business users alike
- Security and PCI compliance via the encryption, policy management, pausing when sensitive information is collected, and storing recordings locally for cloud-based deployments of call recording files, audio and information about each call

Product Information Page

https://www.genesys.com/inin/solutions/customer-engagement/workforce-optimization/multichannel-recording

Best Practices

Best Practices

Interaction Dialer can greatly increase the efficiency of outbound call centers if it is used effectively and correctly. This section highlights recommended practices that are useful to the effective and efficient operation of Interaction Dialer, learned by Genesys staff working with many customers and partners over time.

Interaction Dialer works in a wide variety of industries which may have contradictory "best practices" based on the state and national regulations as well as industry requirements. For that reason, it is difficult to provide guidance on specific implementation best practices, beyond the essential components of Interaction Dialer. Please consider your specific implementation before following general configuration recommendations.

Configuration

This section contains tips and best practices for managing Dialer configurations. Dialer settings are managed using Interaction Dialer Manager (IDM), a plug-in that adds Dialer's containers to Interaction Administrator.

New configuration objects inherit default settings that you should customize

When a new configuration object is created in Interaction Dialer Manager, its initial values are inherited from current values in the **default entry** for that object type. For example, when a new Campaign is created, its abandon rate settings and all other values are initialized to values retrieved from the [Campaign Defaults] entry.

The available default entries are: [Default Connection] and [Campaign Defaults].

Square brackets signify a default entry, which is always the first item in each list of entries. Any settings configured in a default entry are automatically assigned to new entries added later. You cannot delete or rename a default entry. The views that provide default entries are: Database Connections, Stage Sets, Rule Sets, Campaigns, Policy Sets, and Zone Sets.

If you edit a default entry and change an attribute, subsequent new entries inherit its settings. Updating a Default entry does not affect existing entries at all. Think of default entries as templates for newly created objects. This feature is very powerful, since administrators can customize default settings to meet any need.

As a best practice, set default entries to values which make sense for your environment. This serves several purposes. It saves time when creating new campaigns. It maximizes consistency and minimizes the opportunity for an error in settings. This is especially important for Campaign objects.
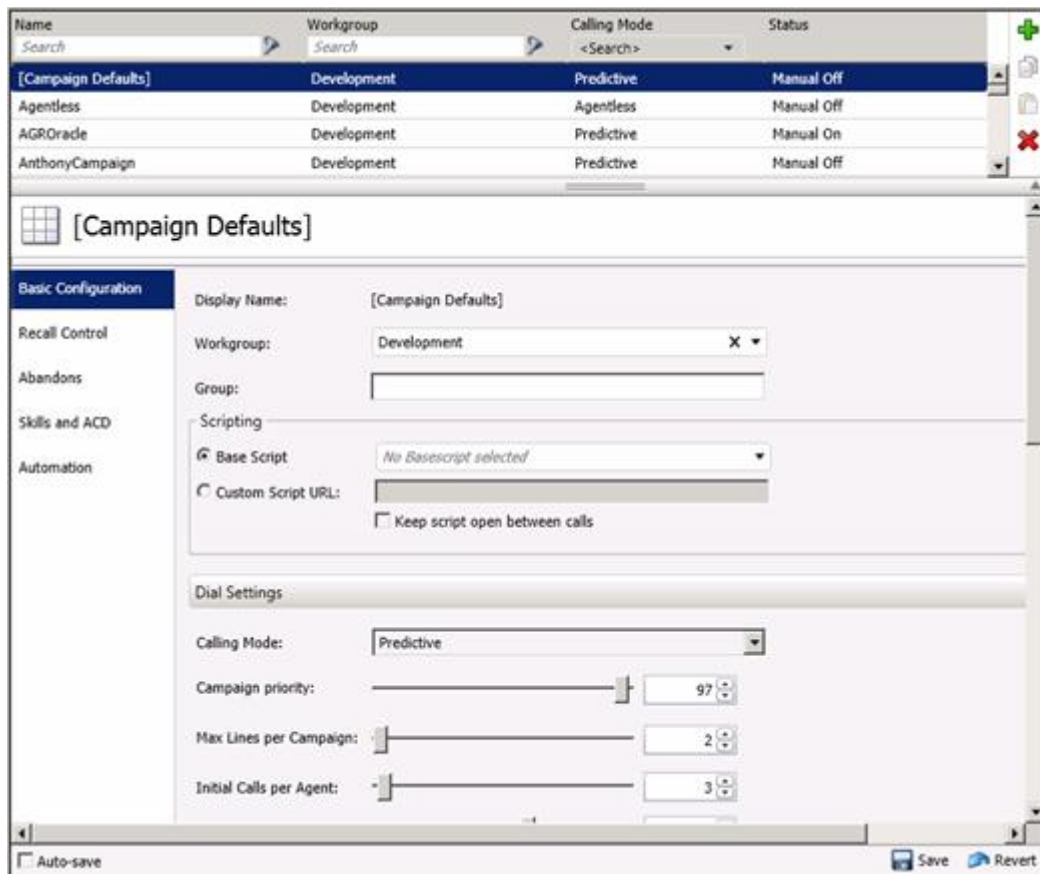
The default entry for a Campaign object.

Related Topics

Pacing—tips for decreasing idle time.

Customer Experience—optimizing the experience of the people you call.

Dialer Efficiency—decreasing the load and increasing the capacity of Dialer.

Common Mistakes—practices to avoid.

Configuration

Copy and Paste

Dialer Manager users can **copy** and **paste** configuration entries. These operations make it possible to duplicate a campaign, policy set, or rule set, for example.

As a best practice, save Dialer objects as baseline templates for further customization. For example, use the copy command to clone a well-proven Campaign that is customized for the goals of your contact center. This duplicates established configurations with a minimum of effort, and saves settings than are

more goal-specific than is practical to include in default entries. This saves time, improves consistency, and reduces error.

Automation with Rules

In Dialer, **rules** are executed for a campaign based on changes in statistics, time, or events. Rules are a powerful method for automating the management of Dialer.

As a best practice, if your team manually changes a campaign setting at different times of the day based on time, circumstance, or event (e.g. call list recycling), consider automating that change. Automation reduces effort and enhances consistency. Examples of rules-based automation include:

- Changing the dialing mode to Power when there are fewer than 15 active agents on the campaign. The companion rule to this changes the dialing mode to Predictive when there are more than 15 active agents.
- Modifying the sort or filter criteria on a campaign based on time of day.
- Recycling a list automatically at specific times in the day.
- Turn off maximum recycles for a campaign, and use a rule instead, to automatically stop the campaign and start another one after a desired number of successful calls.

Configuration Change Auditing

Dialer configuration changes take effect immediately in most cases. Since modifications can have a huge impact on the success of an outbound operation, it is wise to turn enable configuration change auditing in Dialer. This will create a log of the changes that were made, who made them and when they occurred. It is especially important to use this feature when more than one person can make changes to Dialer. The Dialer configuration change history collected in the audit table.

Why not to use Preview calling with blended ACD agents

It is not a good idea to run a Preview campaign with blended ACD agents. Here's why:

Preview Calls do not use ACD. Occasionally, customers use Preview Dialing with a blended ACD environment. There is no inherent restriction against this, but slight risk is involved. "Preview Dialing" is

a non-ACD dialing mode. When preview dialing is used in a blended ACD environment, it is possible that an ACD interaction will be routed to agents while at the same time, a Preview call is assigned to an agent's queue. Once the agent is placed into a "Campaign Call" status, ACD server will not route additional ACD calls to that agent. However, that small window of time when the agent is available could be enough time to receive a Dialer and ACD interaction at the same time. For this reason, it is not advised to run a Preview calling mode campaign with blended ACD agents.

Pacing

Pacing

Dialer automatically modifies the pace of outbound dialing to keep logged-in agents busy without placing too many calls. This function is called **pacing**. Dialer's pacing algorithm maintains a balance between two goals:

- Minimize idle time—the time agents wait between calls.
- Minimize abandoned calls—calls that connect to live speakers when no agents are available to talk to the person.

The more agents that are logged in to a predictive or power campaign, the more efficient that campaign will be and the less idle time there should be, assuming there are enough lines and other resources available to dial.

Blending

Because Dialer leverages CIC's ACD to deliver live speakers to agents, Dialer inherently blends inbound and outbound calls. Agents can receive calls from multiple inbound queues while receiving outbound calls generated by Dialer. Dialer automatically sets aside a percentage of agents to handle inbound calls based on the recent history of non-Dialer (inbound) calls that agents have been taking. This can be turned off if desired, so that no agents are reserved for inbound calls.

Typically, inbound calls take precedence over outbound dialing in a blended environment. In collections, inbound calls are often called "money calls" as they are someone who wants to pay. When a blended agent becomes available, the ACD first decides if there are any interactions appropriate for that agent. If there are none, the agent goes idle and Dialer adds the agent to its pool of idle agents.

On the Skills and ACD tab in the Campaign configuration in Interaction Administrator, inbound workgroups can be specified for monitoring by Dialer. If the volume in one or more of these workgroups exceeds a specified maximum, Dialer will slow down dialing to allow for these calls to be handled by the blended agents.
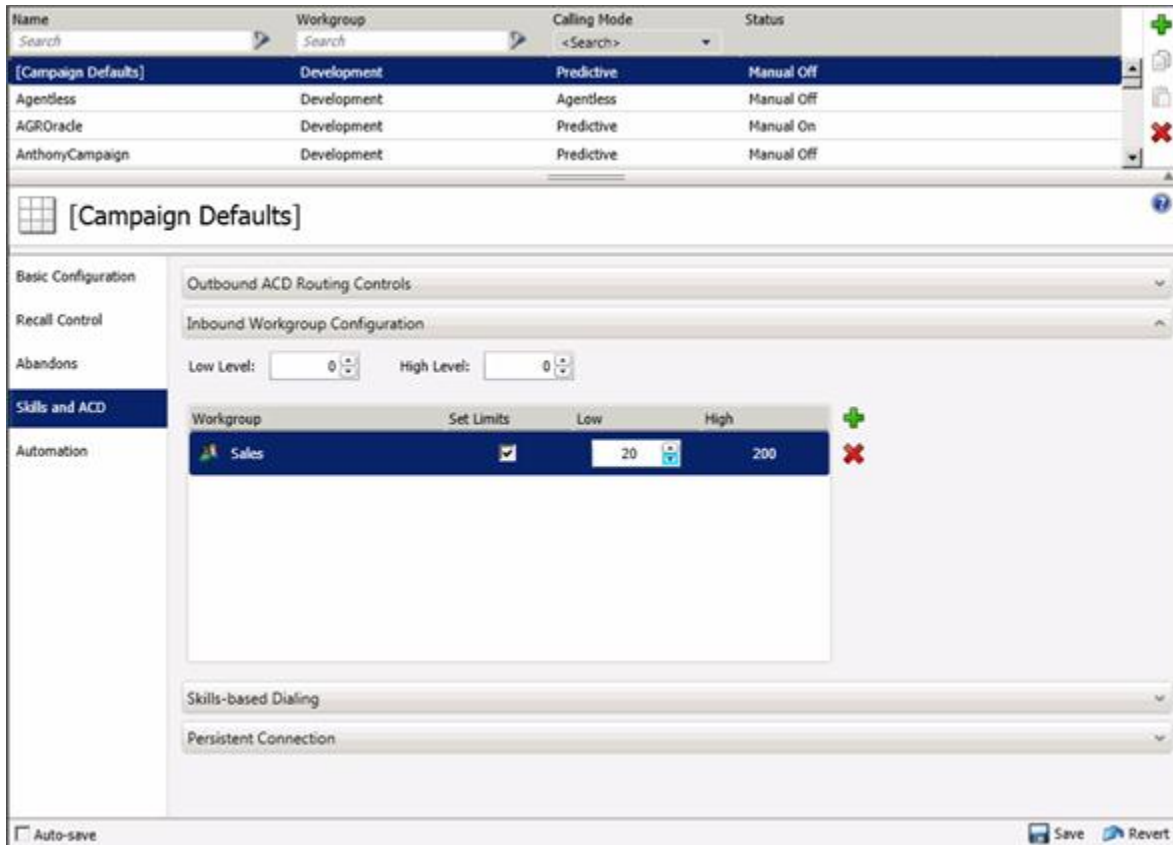
Understanding Abandons

The definition of an outbound abandoned call varies depending on the application and country location of Dialer. Compliance rules for dialers vary throughout the world.
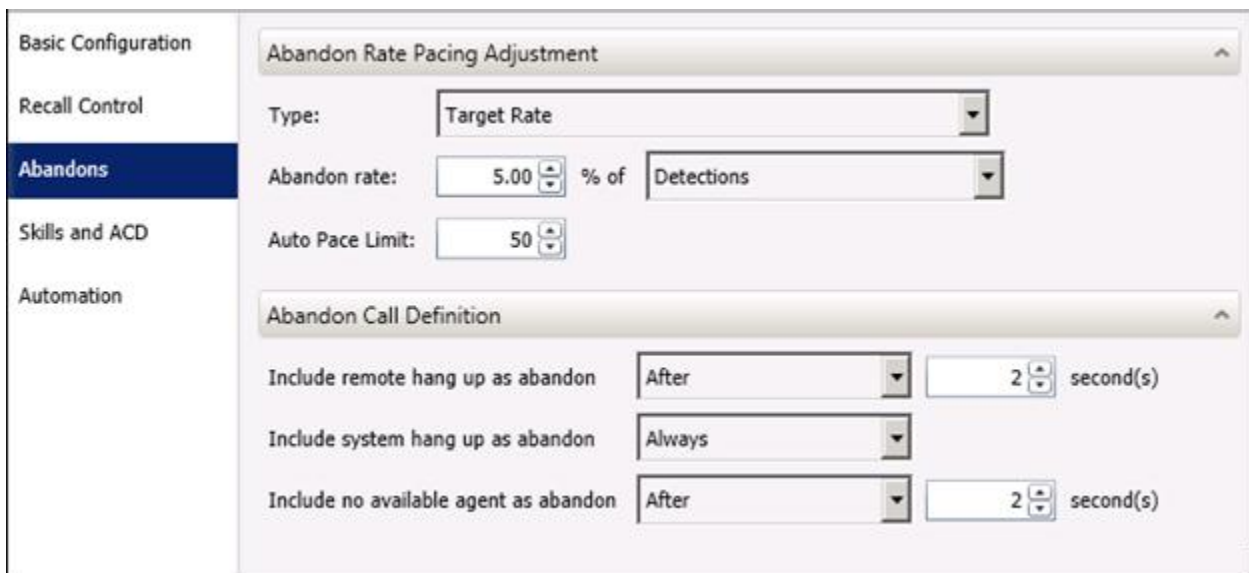
Dialer provides the ability to define what is considered an abandoned call and how abandoned calls affect pacing. The best practice here is to understand the regulations specific to your industry, making sure that Dialer is compliant with those, and at the same time not over-calculating the abandons.

The *Abandons* tab for a campaign entry sets abandon rate as a percentage, based on calls placed, total contacts reached, or a ratio of call analysis detections. Settings on the *Abandon Rate Pacing Adjustment* expander affect how abandoned calls affect pacing. Settings on the *Abandon Call Definition* expander define what is considered an abandoned call.

Settings that affect pace and number of calls placed per agent

Dialer's pacing algorithm is constantly adjusting the calls per agent value to reflect how many calls should be in progress to keep the idle agents busy while staying within the configured abandon rate limit. Important configuration settings in Dialer Manager can affect Dialer's pacing and use of the calls per agent value that Dialer is calculating:

Max Lines per Campaign on the *Campaign > Basic Configuration* tab puts a ceiling on the actual number of calls that Dialer can place per campaign. For example, if the Max Lines per Campaign value is set to 25 and Dialer's pacing algorithm feels it should place 35 calls to keep the agents busy, Dialer will respect the setting and only place 25 calls. This can translate into longer idle times. So, if you are experiencing too much idle time between calls, check this value. As a best practice, Max Lines per Campaign should be set to a high value (not exceeding the number of lines available to CIC) unless there is a specific reason to set it lower.

Initial Calls per Agent on the *Campaign > Basic Configuration* tab tells Dialer's pacing algorithm where to start the calls per agent value when a campaign starts. If this value is set to 1, the Dialer will start by placing 1 call for each idle agent and will slowly adjust the value up to the appropriate place based on results. If Dialer eventually adjusts the value to 5 calls per agent from 1 initially, agents will experience higher idle times to start until Dialer can adjust.

If you have experience with a campaign's previous run, it is a best practice to set the Initial Calls per Agent value to the experienced *steady state value* for the campaign to reduce campaign startup idle time. The steady state value correlates to the connect rate (i.e., 10% connect rate = 10 calls per agent | 5% connect rate = 20 calls per agent | etc.). Set the value of Initial Calls per Agent equal to, or just below the average connect rate equivalent.

Global Dialer Settings that affect Pacing

Two additional settings, set from the *Advanced Dialer > Global Dialer Settings > Outbound Dialer Servers* tab, can have significant impact on Dialer's ability to keep agents busy:

Maximum Calls governs the maximum concurrent calls that all Dialer campaigns running on a server will have connected or dialing. The purpose of this parameter is to limit the Dialer's line usage if there are other line needs (e.g. inbound). The minimum value of this setting should be the maximum number of calls that the system can handle. Make sure that the value is adjusted if more lines are added for Dialer's use. Not managing this value correctly can impact Dialer's ability to keep agents busy.

Maximum Call Rate governs the maximum number of calls that Dialer can place per second. In a SIP environment, Dialer can support more than 40 calls per second. Increasing the allowable rate will help performance during dialing peaks. Unless you are certain that your Dialer configuration can support higher throughput, it is a good idea to verify a higher setting for this parameter with your vendor or Genesys Customer Care before making a change. If this setting is too high, it could inhibit Dialer's ability to keep agents busy and could increase idle time.

Customer Experience

Customer Experience

The concepts and best practices in this section relate to the called person's experience with saying "hello" and being connected to an agent as well as getting requested callbacks at the appropriate time.

The Scheduled Calls dialog

Accessed from the Contact Lists, Scheduled Calls tab on the Interaction Dialer configuration dialog, it is a best practice to be aware of and use the Schedule Call interface.

This view has multiple uses, including:

- Re-assign agent-owned callbacks to other agents
- Remove campaign-wide callbacks
- Move callbacks to another time

SIP Line configuration

In a SIP Dialer configuration, there can be a perceived delay between the time the caller completes his or her greeting and the agent is connected to the call. This delay can have significant impact on live speakers connections. In general, it is recommended that TCP be used with SIP lines configured for Dialer. If UDP is used, it is recommended that the Reinvite Delay be reduced from its default value of 750 to 50 ms for Dialer configurations.
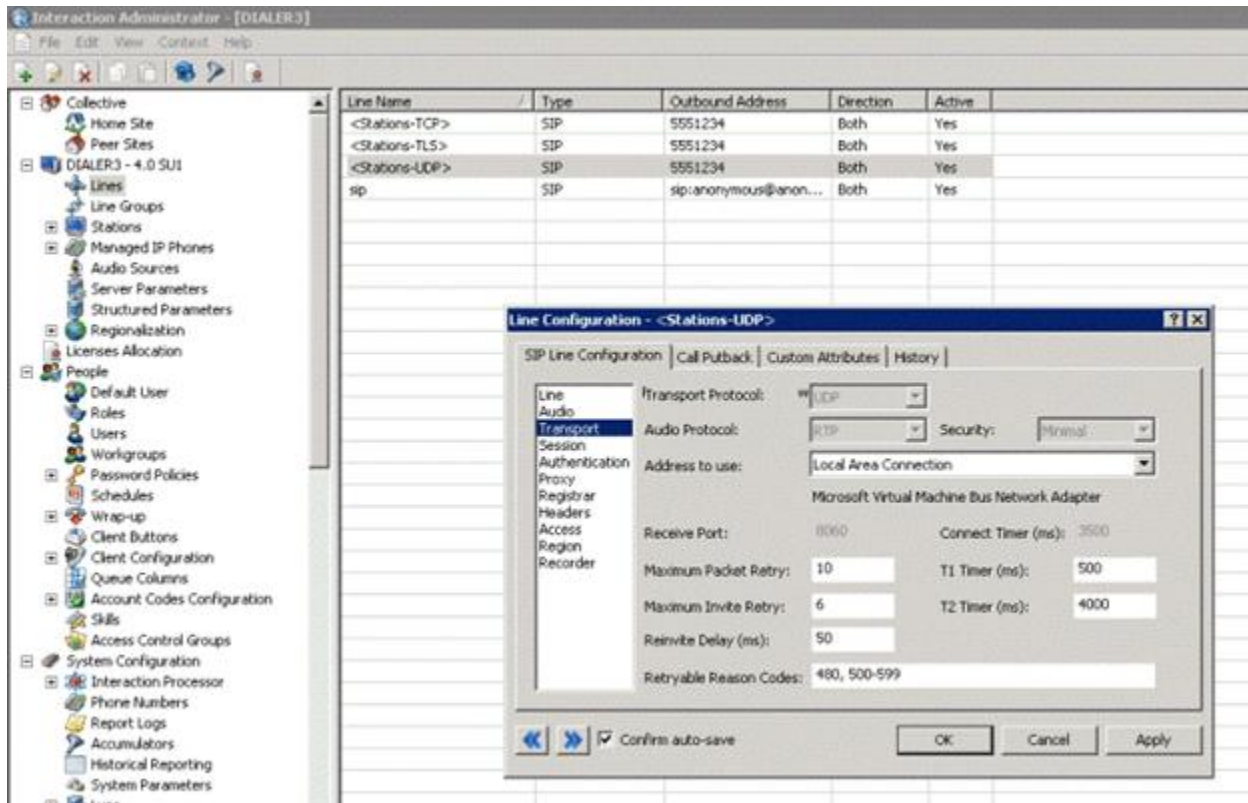
Converting Callbacks

Dialer supports agent-owned callbacks, which are callbacks destined for a specific agent. If that agent is not available when the time for a callback arrives, the contact will not receive the call at the desired time. If possible, it is best practice to use Dialer's ability to convert agent-owned callbacks to campaign-wide callbacks after a few attempts (e.g. 3) and a relatively brief reschedule delay (e.g. 5 minutes). This feature is configured and turned on using the Campaign Recall Control tab.

Dialer Efficiency

Dialer Efficiency

There are often multiple ways to do similar things in Dialer. Using the most efficient method will make Dialer and CIC more efficient and capable of supporting more agents, calls, and other processing. This section highlights some important considerations for Dialer efficiency.

When to use Filters vs. Policies

Filters are applied to the campaign's specified call list on the database server using a SQL WHERE clause. Policies are applied by Dialer per contact retrieved from the call list. As a best practice, use a filter to restrict which records to dial instead of a policy's "Do Not Dial" behavior if at all possible.

To better understand the impact of using a filter vs. a policy for this purpose, consider a 100,000 record call list in which only 40,000 records will be dialed because of restrictions. If those restrictions are applied by a filter, only 40,000 records will be retrieved from the database for Dialer. If a policy is used instead, all 100,000 records must be retrieved from the database for evaluation by the policy. By using Filters instead of Policies, you can significantly reduce the load on your Central Campaign Server and the database server.

Goal	Policy	Filter
Don't Dial Texas	If state = 'TX', don't dial.	state <> 'TX'
Don't Dial Area Code 317	If areacode = '317', don't dial.	areacode <> '317'… or… HomePhone not Like '317%'
Don't Re-Try Fax Machines	If i3_attemptsfax > 0, don't dial.	i3_attemptsfax = 0

Examples of using a filter instead of a policy.

Minimize Policy Handler Use

It is possible to call handlers from Dialer policy behaviors. In many cases, this is not recommended since handlers can be expensive in terms of Dialer/CIC processing, especially if the handler does database access or otherwise interacts with outside systems. If possible, consider other ways to deliver the same capability without handlers if possible such as:

- Pre-process the call list prior to loading
- Add columns to the call list that can be used in policies without handlers
- Using existing Dialer capabilities (e.g. skills-based dialing, contact exclusion API)
- When the Bulk Call API is used, pre-call custom handler policies are ignored by Dialer.

Minimize Policy Handler Use

Default Handlers installed on the Outbound Dialer Server
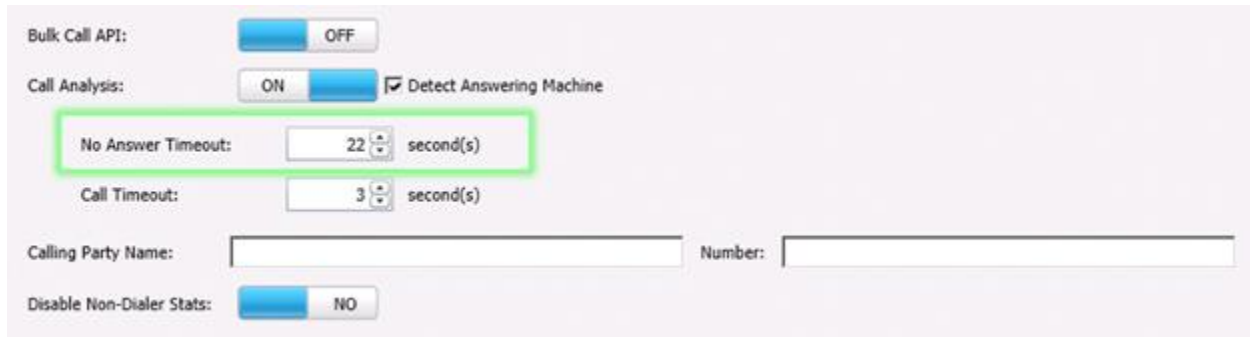
The handlers installed with Dialer on the Outbound Dialer Server include:

- Custom_DialerCustomHandlerRuleActionEvent.ihd
- Custom_DialerPreCallRuleActionEvent.ihd
- Dialer_AgentCallWrapUp.ihd
- Dialer_FaxMessageRequest.ihd
- Dialer_RuleActionEvent.ihd

No Answer Time Out

The **No Answer Time Out** value on the *Campaign > Basic Configuration* tab controls when Dialer gives up on a call which has not answered. In the US, answering machines most commonly answer after the 4th ring and each ring cycle takes 6 seconds with the first ring often occurring in less than 6 seconds. So

a value of 20 to 23 seconds for the No Answer Time Out will give the called party the most amount of time to answer without connecting to many answering machines. If a campaign does not leave messages on answering machines, it is best practice to set the No Answer Time Out to a value less than 24 seconds. Connecting to an answering machine can increase long distance charges for no purpose if messages are not being left.

Auto-scheduling

Dialer allows calls to be automatically rescheduled based on the result of the call. This is configured on the Campaign Recall Control tab. In general, it is a best practice to only autoschedule "busy" result calls. Autoscheduling answering machines does not make sense in most cases. Auto-scheduling too many calls can cause Dialer to become consumed making auto-scheduled calls to numbers already attempted instead of further penetrating the call list.

Reduce time to route calls to agents

- Shorten the whisper tone setting in the Alert tool step found in the AcdProcessEventCall handler. We recommend setting it no lower than 250ms so it is audible to the agent.
- Reduce the Re-invite Delay to 50ms if you are using UDP on the SIP line. If you are using TCP, the Re-invite delay is not necessary.
- If you are sending both live party results and answering machines to agents:
  - Enable "Terminate Analysis on Connect" on the SIP line. This connects the audio, but only if the campaign is not enabled for answering machine detection. Otherwise, it still does fax machine detection post-connect and delays the audio.
  - Disable Answering Machine Detection on the campaign.
- Manage scheduled calls appropriately, especially agent-owned calls:
  - Use the "Manage Scheduled Calls" dialog for control.
  - Use scheduled calls as intended, never to space calls.
  - Convert agent-owned callbacks to campaign-wide rather than assigning them to one agent. If that agent is on vacation or leaves the company, the scheduled call will not happen.

Common Mistakes

This section covers a few of the more common mistakes made in configuring or using Dialer.

No database operations against active Contact List tables

Customers are advised not to run queries or other database operations against any contact list table that is in use by Dialer. This will cause performance problems.

Dialer Server Parameters

Several important Dialer server parameters that should be set by the install and that should typically not be changed. If there are problems with Dialer, verify the values of these parameters. If they do not appear to have the right values, contact your reseller or Genesys Customer Care to verify. The server parameters are:

- **Dialer Sitename**: for a CIC switch-over pair, the value of Sitename should be the same for both servers in the pair. Note that when CCS Switchover is utilized, a parameter named "Dialer Campaign Server Backup" will be created.
- **Dialer Support**: Should be set to 1 if Dialer is installed.
- **Dialer Campaign Server**: should be the name of the Central Campaign server that manages your Outbound Dialer servers.

Sorting – Geography, Indexes

In general, it is not a good idea to sort a call list by anything related to specific geography. For example, sorting by zip code can have a negative impact on idle time. Sorting by specific geography introduces the potential for large variability in contact rates between areas. For example, if it is raining in one area, more people will be inside. The smoother the contact rate, the less opportunity there is for error.

As a best practice, sort by attempts ascending plus other appropriate non-geographic values such as balance or date contact added. Especially for large call lists, it is important that appropriate database indexes be created on the columns included in the sort criteria. The same is true of columns used in a campaign's filter – include appropriate indexes on the columns involved.

Zone Codes

Time zone codes used in the call list must match the actual values configured in the Zone Set used with the campaign. Zone codes are case sensitive. If Dialer does not find a match for the zone code used for a contact or phone number, the "[Default Zone]" value is used.

Unless the Default Zone is defined *restrictively*—as the times when all other zones are callable, its use when not intended can cause dialing outside of legal or conventionally appropriate time ranges. As a best practice, use the Timezone Overview Supervisor view in IC Business Manager to see if records fall into the Default Zone. Then look into why those records aren't matching a valid zone.

**How to restart Dialer subsystems**

There are certain instances where Dialer may get into a "Bad State" and the best recovery method that does not require restarting the CCS or ODS servers is to cycle the main Dialer subsystems. This should

only be done when no agents are logged into Dialer and its Campaigns have been set to Manual Off. Following this procedure should result in minimal Dialer downtime, generally 1-3 minutes.

1. Logon to Interaction Administrator.
2. Select to the **Campaigns** container.
3. For each Campaign that is not already in a *Manual Off* status, click **Stop**. Then click **Save**. Repeat until all campaigns are in a *Manual Off* status.
4. Close Interaction Administrator.
5. Open **IC System Manager** on your Outbound Dialer Server. The shortcut is **Start** > **All Programs** > **PureConnect** > **IC System Manager**.
6. Right-click **DialerServer**. Then select **Stop Subsystem** from the shortcut menu.
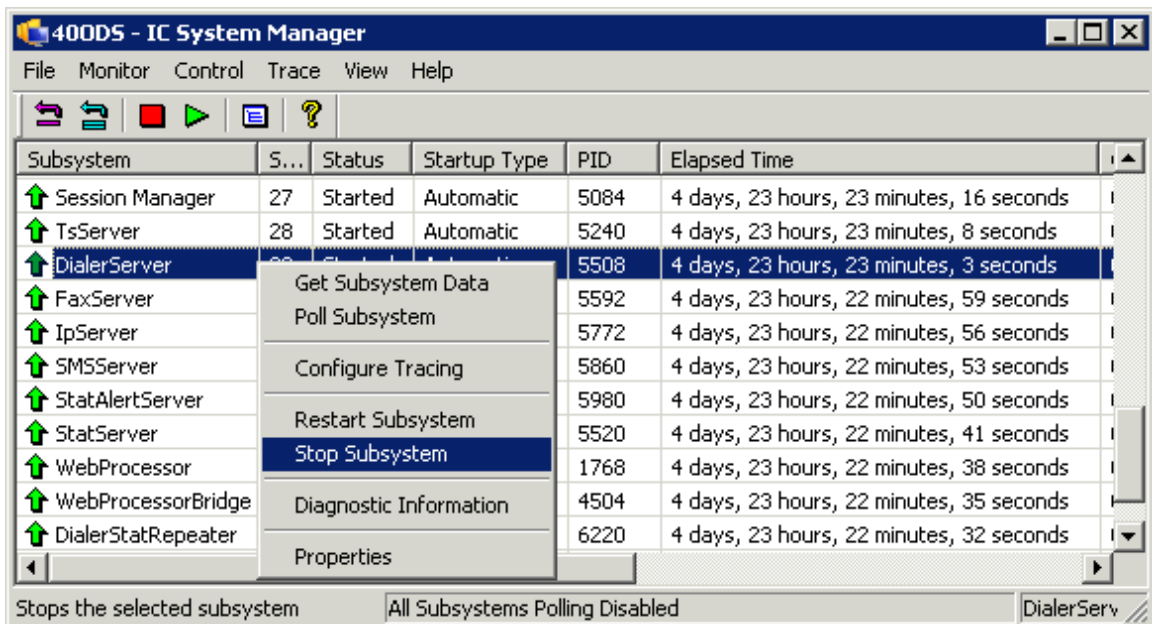
7. Click **Yes** to confirm that you wish to stop *DialerServer*. Performing a memory dump is optional, but takes extra time.
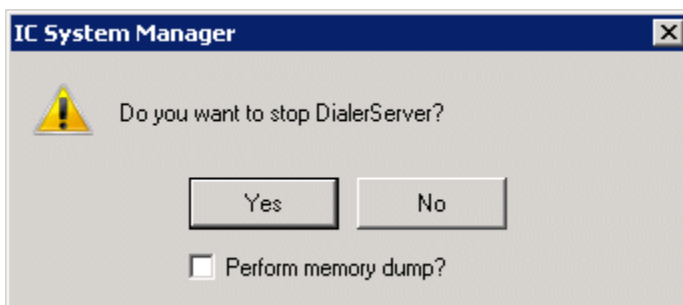
8. Right-click **DialerStatRepeater**. Then select **Stop Subsystem** from the shortcut menu.
9. Click **Yes** to confirm that you want to stop *DialerStatRepeater*.

 At this point, both subsystems should have a red status arrow in the leftmost column, indicating that that they are stopped.

10. Leave IC System Manager open.
11. Go to the Central Campaign Server. Then logon to the CCS.
12. Start the **Services** applet by selecting **Start** > **All Programs** > **Administrative Tools** > **Services**.
13. Scroll down to **Interaction Center**. Right click Interaction Center and select "Restart".

Be VERY sure you are doing this on the CCS and not the CIC/ODS.
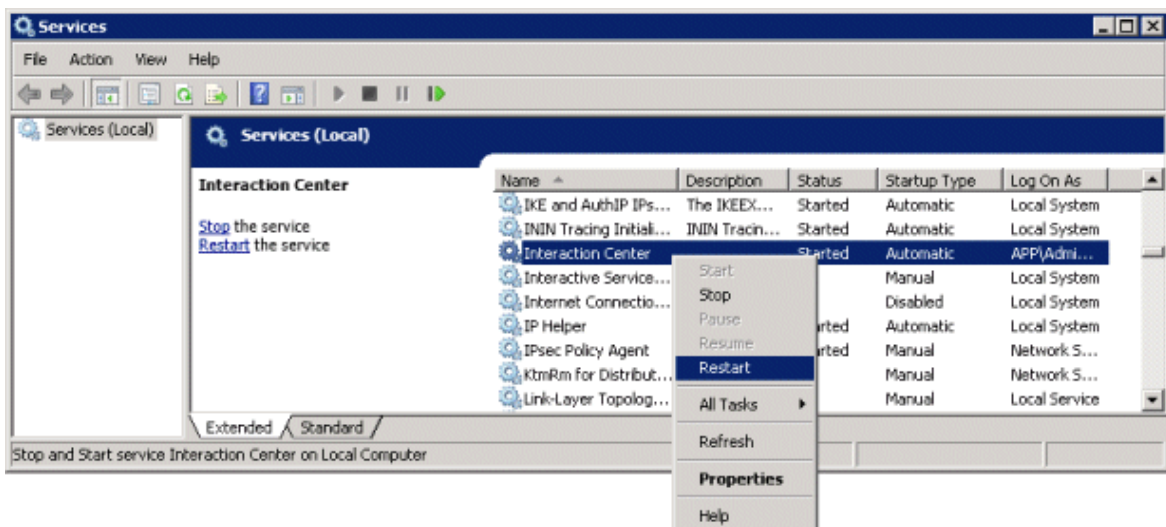
14. Once the service has been restarted, switch back to the **ODS/CIC Server**.

15. In *IC System Manager*, right-click **DialerServer**
16. Select **Restart Subsystem** from the shortcut menu. Then click **Yes** to confirm a restart of the service.
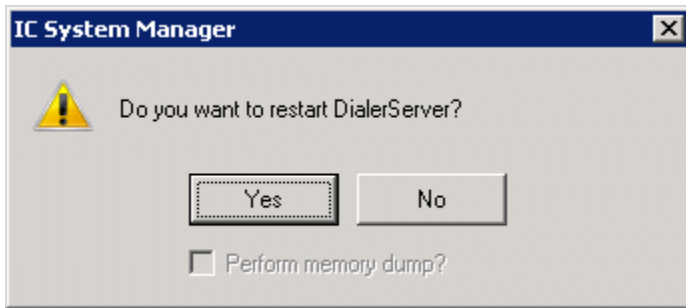
17. Once started, right click **DialerStatRepeater**.
18. Click **Restart Subsystem**. Click **Yes** to confirm a restart.
19. Once both services are started (wait for green up arrows), close IC System Manager.
20. Start **Interaction Administrator**.
21. Use the **Campaign view** in Interaction Dialer Manager to start campaigns that were stopped in step 3.

What agents should do when the Skip button is disabled on a Preview Call

For a base script, the Skip button is grayed out while agents are on a connected Preview Call. While on a custom script Preview Call, the Skip Call button is disabled to prevent things getting into a bad state. Since the agent cannot Skip the call, she must manually disconnect the call, or disconnect using the My Interactions page.

If the agent does not disconnect the call, here's what happens while on a custom script Preview Call with Campaign Call status with "Preview Call" Dialer status:

- Agent clicks the Skip Call button. Status changes to Follow Up and Dialer status changes to Waiting For Call.
- Agent clicks the Available button. Status changes to Available, with Dialer status Waiting For Call.
- Clicking Disconnect or Disposition does not disconnect the call.

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Revisions

This topic summarizes changes in Interaction Dialer.

Interaction Dialer 2018 R3

1. Added information to the Wrap-up Categories and Codes topic, to explain why it is not possible to correlate Dialer-assigned wrap-up codes with ISDN Cause Codes. The system logs cause codes in the CallHistory table, but does not use ISDN cause codes exclusively to determine which system wrap-up code to assign.
2. Added callid to the list of reserved column names in the Custom Contact List Columns topic. In other words, you cannot create a custom column in your contact list named callid, since that name is reserved by Interaction Dialer.
3. Updated the Campaign Settings topic to discuss the format of *Custom Script URLs* for Scripter .NET, Connect, and PureConnect Cloud.
4. Updated the Contact List Management topic to add notes titled "What happens when Dialer has multiple contact columns", and "How do I know if a call is considered a contact?".
5. Added a note to Auto-Scheduled Callbacks titled "How do multiple contact columns work in conjunction with the Auto-Reschedule feature?".

Interaction Dialer 2018 R2

1. Made minor changes in Dialer to suppress tracing of attribute values for the new PureConnect data privacy feature. Starting in 2018 R2, customers can prevent potentially sensitive data from appearing in trace logs. The PureConnect data privacy feature can suppress the trace logging of data that might be sensitive. This feature is enabled by setting server parameters. For details, see PureConnect data privacy feature in Chapter 6 of the Security Precautions Technical Reference. Note that to access this secure content, you must login to the Genesys Product Information website.
2. Removed references to Interaction EasyScripter from this document. Interaction EasyScripter is no longer offered by Genesys. It was replaced by CallScripter™ from http://www.callscripter.com. CallScripter empowers non-technical users to build scripts quickly and easily using a library of drag and drop controls and ready-made templates. For more information, see the CallScripter product information page at https://my.inin.com/products/AllianceSolutions/Pages/CallScripter.aspx.
3. Documented new server parameter, Dialer Prevent Autobreak On Workgrroup Followup in the Optional Server Parameters topic. It resolves an issue caused by email and chat interactions entering Followup status
4. Documented new server parameter, Apply Custom DNC to PND Lookup in the Optional Server Parameters topic. It allows the PND to be filtered by a database-based custom DNC.
5. Documented new server parameter, Dialer Preserve Agent Ownership On Max Daily Attempts in the Optional Server Parameters topic. It tells Dialer not to increment the attempts rescheduled when an agent-owned callback is rescheduled due to hitting the max daily attempts limit.
6. Added best practices topic. See What agents should do when the Skip button is disabled on a Preview Call.

Interaction Dialer 2018 R1

1. Updated the **Play File** option in the Automation Tab topic.
2. Added optional server parameter "Dialer Scripter Use Record Snippet". When set True, Interaction Scripter.NET will record snippets, provided that the record option is made visible in the client by assigning the "Snip" security right, and that the user has the "Record Interaction Snippet" right, which grants authorization to initiate recordings in their queue.

Interaction Dialer 2017 R4

1. A new **Scripter in Interaction Connect** feature provides agents with a convenient way to handle inbound and outbound calls that use scripts from within Interaction Connect. The user interface permits agents to either dock and adjust a scripting window inside Interaction Connect or have a script-only view. Interaction Connect Help was updated to provide details about Scripter in Interaction Connect. Other documentation was updated to distinguish when necessary, differences between Interaction Scripter .NET Client and Scripter in Interaction Connect. At this time, Scripter in Interaction Connect supports base scripts only. Interaction Scripter .NET Client supports both base and custom scripts. Scripter in Interaction Connect does not require any additional installations. However, a user must have the Customized Client security right to view the Scripter tab in Interaction Connect.
2. Dialer administrators should configure the system to automatically assign a wrap-up category and wrap-up code if any agents use Scripter in Interaction Connect. Scripter in Interaction Connect automatically assigns wrap-ups based on the disposition button pressed by each agent. For each possible disposition, Administrators can configure the category and code assigned. See Configure wrap-up mapping for Scripter in Interaction Connect.
3. Added a server parameter named Dialer JIT Query Frequency Override. When assigned an integer value in milliseconds, it overrides the Priority Dialing Query Frequency campaign setting for all campaigns running on the Dialer server. This parameter will allow priority calls to be added to cache in less than 5 seconds.
4. Added information about **collation and language settings in SQL Server**, to the Supported Database Servers topic.
5. Added supplemental information about the **Copy Dialer Attributes to Call Attributes** option in the Dial Settings topic.
6. Revised the Custom Data behavior type topic to better explain its purpose.
7. Updated Create Database Table Wizard. When a contact list has multiple contact columns, Interaction Dialer requires all phone number columns to be the same type and size.
8. Updated description of the `calldisconnectedtimeUTC` column in the CallHistory Schema, to better describe when Dialer will stop tracking a call. Also added supplemental information about `length` and `iscontact` columns.
9. Added a new article in the Best Practices section. See Why not to use Preview calling with blended ACD agents.
10. Noted in Dialing Modes and Dialer Access Licenses that agents must have an **ACD Access License** assigned to them, if they are to receive ACD-routed preview or power dialing mode calls.
11. Updated Optional Server parameters to describe a new parameter: "Dialer Clear Reservation On Breakgranted". When set to "True", Interaction Dialer will clear any campaign reservation

the agent has when a break is granted. The agent will be free to be reserved for a new campaign when their break ends.

12. Updated the formatting of this document.
13. Updated Attempt Control topic to note that for the "Minimum Minutes to Next Dial" setting, all contact columns will be called when this record is attempted.
14. Updated Define a Contact List Filter to clarify what the Contact List drop down does when creating a contact list filter.
15. An update to the call analysis model for Australia (en-AU) caused Dialer to report, "Machine - Failed to Play Recording" since a machine was detected during pre-connect. This message is now classified as a SIT Callable.
16. Rebranded Dialer documentation set to apply Genesys terminology, copyrights, trademarks, and styling.

Interaction Dialer 2017 R3

Added the Penetration data retention in days parameter to General topic of Global Dialer Settings.

Added the PenetrationDataCleanupTime parameter to Campaign Server Parameters topic.

Added additional information to further explain some Dialer Status Messages and Dialer History Messages.

Interaction Dialer 2017 R2

Added the Dialer Allow Policy to Update Attempts parameter to Optional Server Parameters topic.

Added the Execute Custom Disposition As Standalone parameter to Campaign Server Parameters topic.

Interaction Dialer 2017 R1

Follow Up Call feature

The Follow Up Call feature is designed to allow Dialer customers to be able to place multiple, consecutive calls within a preview campaign to a single contact based on a disposition selected for one of the numbers associated with the contact.

For example, suppose that an agent dials a number, reaches the contact, but is asked to call back on another number that is either already on the contact record or provided to the agent by the contact. Using the Follow Up Call feature, the agent will be able make the additional calls from within Dialer where the calls will be logged and will fall under Dialer's compliance controls.

To implement the Follow Up Call feature, an administrator must have the Modify Base Script Compliance Overrides security right. To be able to fully take advantage of the options made

available in a Base script that is designed for the Follow Up Call feature, an agent must have the Allow Agent Compliance Override security right.

In order to enable the Follow Up Call feature in a Base script, you will select the **Allow agents to make additional calls to same record** check box and grant the appropriate override rights in the Additional Calls section on the Scripts > Miscellaneous tab.

When a Base script that uses the Follow Up Call feature appears in Interaction Scripter, you'll see the **Call a different phone number for this party** check box appear at the top of the Call Disposition panel.
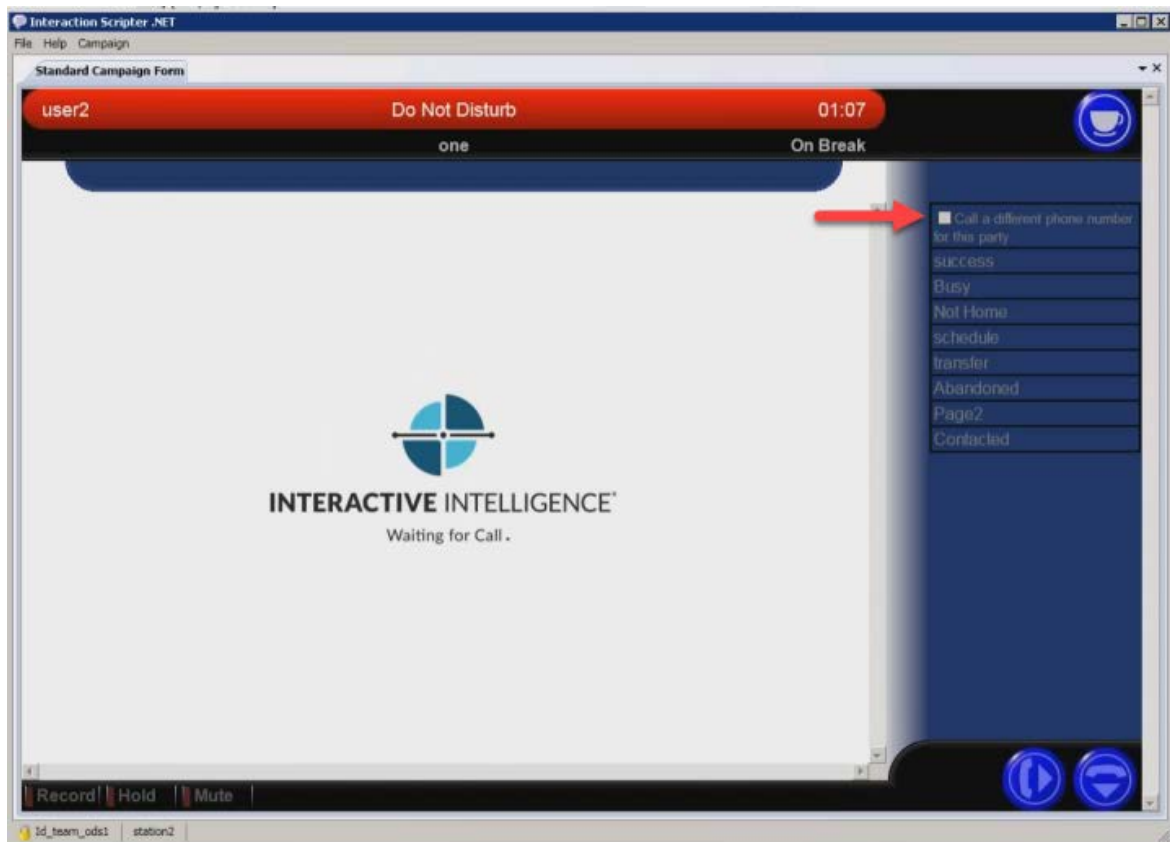
When you select the **Call a different phone number for this party** check box and disposition the call, you'll see the Additional Follow Up window, which shows all of the numbers on the contact record. You'll also find a field into which you can manually enter a phone number to make an ad hoc call. While in this screen, an agent's status will be set to Additional Follow Up.
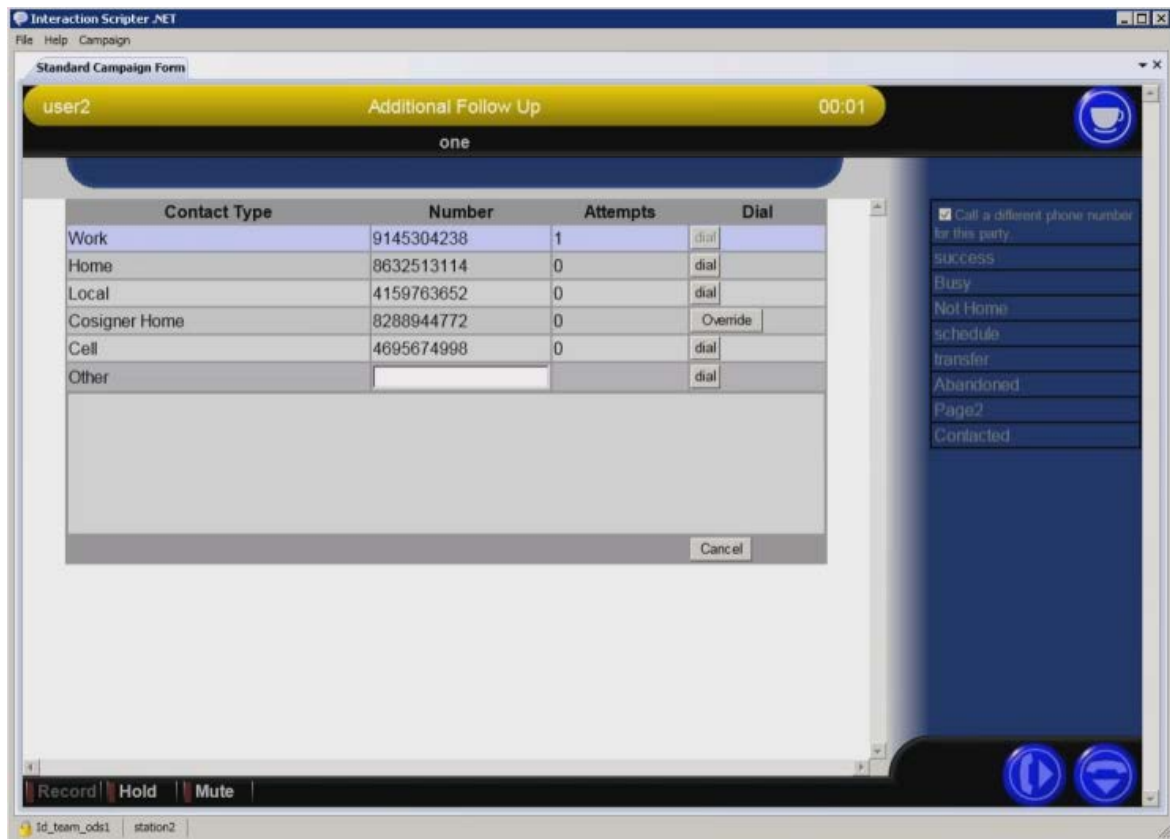
Numbers that can be dialed immediately, will have a dial button. Numbers that are blocked, due to DNC block or timezone block, will have an Override button. As long as the agent has the Allow Agent Compliance Override security right, they can click the Override button and make the call anyway.

Additional calls made using the Follow Up Call feature will be logged in the IsAdditionalCall column in the CallHistory table. If any overrides were made while making additional calls, a code will appear in the agentoverride column in the CallHistory table. The codes will be specifically identified in the AgentComplianceOverrides table. By performing an SQL join of the CallHistory table and the AgentComplianceOverrides table, a database administrator can extract the pertinent data.

Additional Follow Up is considered a status and the amount of time that an agent spends in the Additional Follow Up window will be logged in the AgentStats table using the ManualOutboundPending property.

To support the Follow Up Call feature, DialerServer hosts an HTPPS server using 13151 for this communication. If you wish to use a different port, you can use the Dialer Server HTTP Port parameter to specify a different port.

Interaction Dialer 2016 R4

No new features added to Dialer.

Minor corrections to various topics.

Interaction Dialer 2016 R3

Preview Routing Type added to Call Routing behavior

When you configure the Call Routing behavior type for a PreCall policy type, you can now select Preview in addition to standard routing types: Normal, Precise, and Do Not Call. Selecting the Preview routing type will configure the system to wait until an agent is available, present the agent with a screen pop that consists of information about the contact, and place a call object in an initializing state on the agent's queue. The system will then either wait for the agent to manually make the call or, if the Preview Countdown is enabled, make the call once the time on the countdown timer elapses.

Enhanced Recall Control settings

As you know, the Max Attempt thresholds found on the Campaigns | Recall Control tab allow you to set the number of contact attempts after which a contact is no longer called. This can be configured on a per record, per number, or per day basis. You can now use the new Max Attempts Per Day Enforced By setting, found in the Attempt Control section, to specify how you want to implement the Max Attempts count on a per day basis by selecting either Record or Phone Number.

You can then define exactly how you want to define a day by using the Max Attempts daily call list queries reset setting which you'll find on the General tab in Global Dialer Settings.

A new Campaign property, called MaxDailyAttemptsDefinition, can also be used to specify how the Maximum Daily Attempts Count will be implemented. Either by record or by phone number.

New Campaign Ownership feature

In order to prevent the possibility that a single contact could be simultaneously dialed by multiple campaigns that are sharing a Contact List, a new feature called Campaign Ownership has been added to the Dialer product. The controls exposed by the Campaign Ownership feature ensure that in the event that multiple campaigns are simultaneously using this contact list, only one campaign will be able to dial a specific record in a contact list for a configurable period of time. In other words, the first campaign that dials a number in a particular record, owns that record, such that any other campaign that attempts to access that record will be denied. Once the time period expires, the record is available to other campaigns sharing the contact list.

Once you have enabled the Campaign Ownership feature, you can track the records owned by a campaign.

If you have the Contact List Ownership Control, you can manually release campaign ownership on records.

Tracking Scheduled Calls

As you know, when an agent schedules a callback, details about the callback are placed in the CallRecordSchedule Table. When the callback occurs, that entry is removed from that table and there is no real history showing that the call was a scheduled call. To facilitate the tracking of historical data on scheduled calls, a new column called callscheduletime has been added to the CallHistory table. Now, when a callback is scheduled, in addition to information added to the CallRecordSchedule Table, callback information is added to the CallHistory table. More specifically, when a call results in a scheduled callback, a record is added the CallHistory table for that call and both the wrapupcategory and wrapupcode fields will contain the code *Scheduled*. The callscheduletime field will be NULL. When the call is actually dialed, a second record for that call will be entered into the CallHistory table and the date and time that the call was *scheduled* will be entered into the callscheduletime field. As such, each scheduled callback will now have two records in the CallHistory Table - one indicating that the original call was scheduled for a later time and one indicating when the call was scheduled. The time that the call was actually made will still be recorded in the callplacedtimeUTC field in the CallHistory table.

Multiple DNC Sources

You can now configure multiple DNC sources per campaign. More specifically, when you are configuring DNC settings on the Contact List Tab List tab in the Campaigns view, you can choose to use both a DNC.Com source and a custom source at the same time.

Tracking metadata from DNC.com

When scrubbing a contact list, Dialer can now access and process additional metadata from DNC.com. This metadata includes information on Calling Time Window, Calling Time Restrictions, Do Not Call Today, and Existing Business Relationship (EBR) Permission. Information about calls that are blocked based on this metadata are stored in a new searchable table that can be configured on the DNC Metadata tab. Results of blocked call searches can then be exported in a number of different formats for future use.

Additional options on the Contact List Tab List tab in the Campaigns view, such as Apply Calling Time Restrictions, Apply Callable Zone Override, Apply Do Not Call Today, and Apply Permission EBR Override, allow you to configure your scrub operation to consider special conditions in the DNC.com metadata and block or unblock numbers appropriately

Campaign Command Center enhancements

In order to make it easier to find what you are looking for in the Campaign Command Center, you'll find have added two new features:

- **New Status Column:** Each campaign's current status is listed in a new Status column and is color coded to make it easy to identify the various status' at a glance. For instance, the Status field for campaigns that are in an On status is green, while campaigns that are paused are Yellow. Campaigns that are in an Off status are grey.

- **Color Coded Rows:** To make the campaigns in a sorted list even easier to discern, the Campaign Command Center groups the results in color coded rows. For example, if you sort by Campaign Mode, you'll see that all of the rows containing a particular campaign mode, such as Predictive, are highlighted in the list with the same color. If you sort by Priority, all of the rows containing the same priority will be highlighted in the same color. This sort enabled color coding applies to the all columns in the Campaign Command Center.

Interaction Dialer 2016 R2

Advanced Campaign Management

This release features a major enhancement called Advanced Campaign Management, which is available as a Feature License. Using the Advanced Campaign Management (ACM) feature provides you with a new way to create and run campaigns in Interaction Dialer. Essentially, ACM allows you to configure a campaign such that it automatically modifies its behavior throughout the day as conditions change. To do so, you break down your campaign into groups, each with the same set of campaign properties and then adjust the values of those campaign properties in each group. You then arrange these campaign groups in a sequence so that the flow of the campaign transitions from group to group based on time, event, or statistical activation triggers.

- If you upgraded from Dialer 3.0, where you used the Workflow feature to manage your campaigns, you'll find that the Advanced Campaign Management feature to has been designed to replicate the structure and functionality of Workflows using the new Campaign Sequences paradigm.
- If you never used Dialer 3.0 or the Workflow feature, then you'll want to take a close look at the Advanced Campaign Management feature to determine if you might be able to improve the efficiency of your campaigns by reorganizing them into Campaign Sequences.

  To take advantage of the Advanced Campaign Management feature, you'll use the tools on the new Campaign Sequence Tab, found in the Campaign Properties Panel, to arrange your campaign into Campaign Groups, You then arrange these campaign groups in a Campaign Sequence so that the flow of the campaign moves from group to group based on time, event, or statistical activation triggers. Once a campaign sequence is running, you can use the tools on the Dialer Campaign Sequence Details View to monitor the progress of the campaign. You can learn more about this new feature in the *Advanced Campaign Management for Interaction Dialer - Overview Guide*, which is available in the Interaction Dialer section of the PureConnect Documentation Library.

Dialer Reports

This release also provides two new Dialer Reports: Best Time to Call Analysis and Call Answer Distribution. These reports will allow customers more intuitive looks into their data set in an effort to increase ROI and will provide details on campaign groups implemented using the Advanced Campaign Management feature.

Interaction Dialer 2016 R1

Updated documentation and screen shots to reflect new logo and color scheme.

Interaction Dialer 2015 R4

1. Added information detailing the new components of the Campaign Server Switchover feature, such as the ability to Deactivate a Switchover.
2. Added a CCS Switchover FAQ to provide answers to common questions about exactly happens in the Dialer environment with a CCS Switchover event occurs.
3. The new Campaign Server Parameters tab allows you to view, create, modify, and delete Server Parameters on the Central Campaign Server.
4. Added details concerning the use of existing Custom Stored Procedures (SPROCs).
5. Added information describing how the Max Attempts Per Day value is now considered when rescheduling an agent-owned callback.
6. Added information describing the new I3_SUBSTATUS column in the PND table.
7. Updated information describing how the Run Contact List Predefined Actions right allows an administrator to determine what Predefined Actions a users can see and perform in the Data Query section of a Contact List.
8. Added information describing that if the contact list has more than 500 records, users will now be prompted to confirm a Predefined Actions operation before an action is actually run that will modify the contact list.
9. Added information explaining that the Calling Party Number field can now accept the E.164 number format for international telephone numbers. More specifically, the number can be prefixed with a + (plus sign) to indicate that the number includes an international country calling code
10. Added information explaining that if you create a custom wrap-up category or a custom wrap-up code, those columns in the CallHistory table will contain a GUID that is associated with the display name.
11. Documented a new server parameter, Dialer Cisco Tone Detection Enable, that creates a new tone detector for a standard Cisco PBX.
12. Reorganized and updated the Rule Sets view topic and its sub-topics

Interaction Dialer 2015 R3

1. A new column called RuleGroupID was added to the CallHistory table and the CampaignStats table.
2. Two new Call History tables containing additional details related to the RuleGroupID have been added: CallHistory RuleGroup table and CallHistory RuleSet table
3. Updated/reorganized entire Dialer Health View topic in order remove outdated information as well as to better accommodate and portray new and existing messages.
4. Updated/reorganized entire Contact List Filters view topic to accommodate changes in the UI aimed at making it clearer that filters are independent from a contact list.

Interaction Dialer 2015 R2

1. Added information about the new Manual Calling feature and its separate Features license.
2. A new message pertaining to the Manual Calling feature can appear in Dialer Health View.
3. A new column that identifies a Manual Calling Server now appears Global Dialer Settings.
4. A new column called previewtimerinit was added to the CallHistory table.
5. There are two new Optional Server Parameters called Dialer StartReceivingCalls Per Campaign and Dialer Delay Campaign Transition Login that you can use to alter how Interaction Dialer functions.

Interaction Dialer 2015 R1

Updated documentation to reflect changes required in the transition from version 4.0 SU# to Interaction Dialer 2015 R1, such as updates to product version numbers, system requirements, installation procedures, references to Interactive Intelligence Product Information site URLs, and copyright and trademark information.

Interaction Dialer 4.0 Service Update 3

1. Updated the description of the *CurrentTime* macro to say that it returns the current UTC time when macro substitution is performed. Previously the documentation stated incorrectly that it returned the current time of the Central Campaign Server.
2. The Import Contacts Wizard uses Microsoft DLL's that are resident if you have Microsoft Office or Microsoft Outlook installed. If neither product is installed, import of Excel .xlsx files will fail with this message:

   "The Microsoft.ACE.OLEDB.12.0 provider is not registered on the local machine"

   To resolve this problem without installing Office or Outlook, install the *Microsoft Access Database Engine 2010 Redistributable*, from this web address: http://www.microsoft.com/en-us/download/details.aspx?id=13255.
3. Updated the Dialer Tables topic to note that penetration rate records are not inserted into the _PEN table after each call. Instead, data about penetrated calls is accumulated in RAM and written to the _PEN table 100 records at a time per database connection. This improves performance by reducing the number of round trips to the database, eliminating the overhead of individual RDMS transactions.

   When call volume is low, fewer than 100 records are written. A scheduled job is triggered every two minutes to ensure that calls older than 5 minutes are flushed to the database. As a consequence, calls in RAM can never be older than 7 minutes.
4. Secure connections with DNC.com are now possible. A new "Use secure server" checkbox on the DNC Sources view in Dialer Manager configures the CampaignServer to use a secure https connection when communicating with DNC.com. When enabled, information about contact numbers is exchanged without exposing information to third parties. Previously http was the only supported protocol.

5. Should the primary CCS server fail for any reason, it is now possible for a secondary Central Campaign Server to switch over automatically. See Campaign Server Switchover on the *Global Dialer Settings* view, and *Setup CCS Switchover* in the *Interaction Dialer Installation Guide*.

6. A new "*Supervisor can override the agent right to logon/logoff all campaigns*" option on the General tab of the Global Dialer Settings view allows a Supervisor or Administrator to move agents who have the *Logon Campaign* security right to different campaigns, or to simply log them on to additional campaigns, overriding the restriction imposed by the security right while still allowing agents to specify which campaign they wish to start with.

7. The Rule Sets user interface was modified to place controls for configuring Rules and Groups on separate tabs. Previously, these were expanders on a Details tab. Instead of having to double click a rule to see its details, highlighting a rule entry displays the details in the bottom half of the window. When a rule is selected, rule conditions, evaluations, actions, and groups are tabbed in the bottom half of the window. For details, see Rule Sets.

8. Previously, Dialer Manager did not provide a means to write custom values to any column in the database in a bulk fashion. A new predefined action named "Bulk Action" was added to the Data Query tab for a Contact List configuration. The feature allows users to select contacts based on a filter, and write into the database directly by updating a particular column based on the selected records. See *Predefined Actions* on the Data Query tab of a Campaign entry.

9. The Filter selection for the Contact List in Dialer configuration will now allow for server-side filtering. This means that typing into the "filter" box will find items that are not currently in the list due to maximum length limitations.

10. Dialer now generates a Contact Column Details (CCD) table for each contact list in use. This table represents the relationship between the call list table and the PND table with respect to the CCID. See CCD table represents the relationship between ContactList and PND and Contact Column Details Table Schema.

11. Added new supervisory views to IC Business Manager. The new views are:

Dialer Real-time Agent Management	This view makes it easier for Call Center Supervisors to move or remove logged on Agents from a Campaign if they are logged on without Login Campaign Security rights.
Penetration Rate view	Detailed information about Dialer penetration rates.
Phone Number Type Overview	Displays Phone Number Type summary statistics for the site, campaign and interval selected.
Stage Overview	Displays overview statistics for Stages for a specific Dialer campaign, site and agent.
Wrap-up Category Chart View	Shows wrap-up category statistics in a chart.
Wrap-up Code Chart View	Shows wrap-up code statistics in a chart.
Zone Overview	Displays callable records grouped by time zone.
Campaign Command Center	This view displays a rollup of campaigns, their status. It allows an administrator to start, stop, pause, recycle, or reset a campaign, or alter the campaign's priority.

12. Added a new security right in Interaction Administrator for Interaction Dialer called: "Lock Policy Sets". It determines whether or not a user can check the "Locked" checkbox option for a Dialer policy object, preventing it from being modified, removed, or unlocked by anyone who does not

have the "Lock Policy Sets" security right.

Once a policy is locked, users who do not have this right can view the policy but they cannot remove or edit it until the lock is removed. Locked policies can be assigned to a campaign, but they cannot be removed from a campaign except by users who have the "Lock Policy Sets" security right.

A padlock icon next to a Policy Set indicates that the current user either does not have permission to this object, or it is a locked policy. Once a locked policy set is saved on a campaign, it can only be removed by a user with the "Lock Policy Sets" security right.

Interaction Dialer 4.0 Service Update 2

1. Updated the Dial Settings topic for a new **preview call timeout** feature. Preview campaigns can now be configured to force a call to be placed if the agent does not dial the contact within a configurable number of seconds. When this option is not set, agents on preview calls can sit idle on preview pop as long as they wish.

   This feature makes it possible to limit preview time without having to code time limits in a custom script. The system will fire an event to the client (Scripter or custom client) and the call will be placed. There is no need to alter custom clients to pick up this functionality.

   A countdown timer is visible to agents using base scripts. Agents cannot stop a countdown, but they can skip preview calls as before, if the script provides a Preview Skip option.

   At the contact automation level, a policy can override the preview timeout value. For example, a contact might be so important, a policy might give the agent extra time to review account details. See Preview Dialing behavior type.
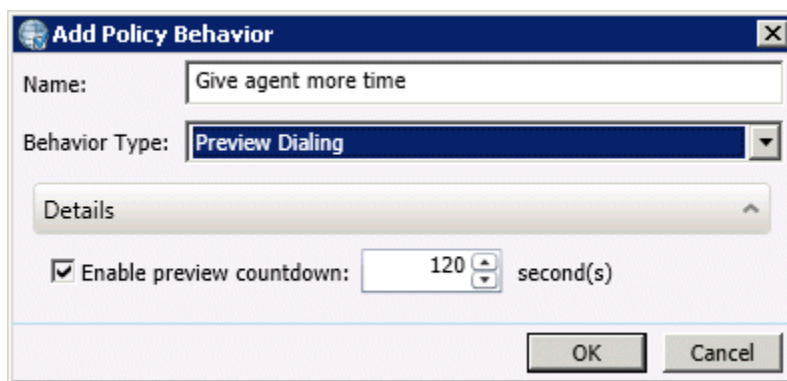
   At the campaign automation level, a new *Change Preview Timeout* rule action allows preview timeout to be enabled or disabled. See *Enable Preview Countdown* under Assignable Campaign Properties.
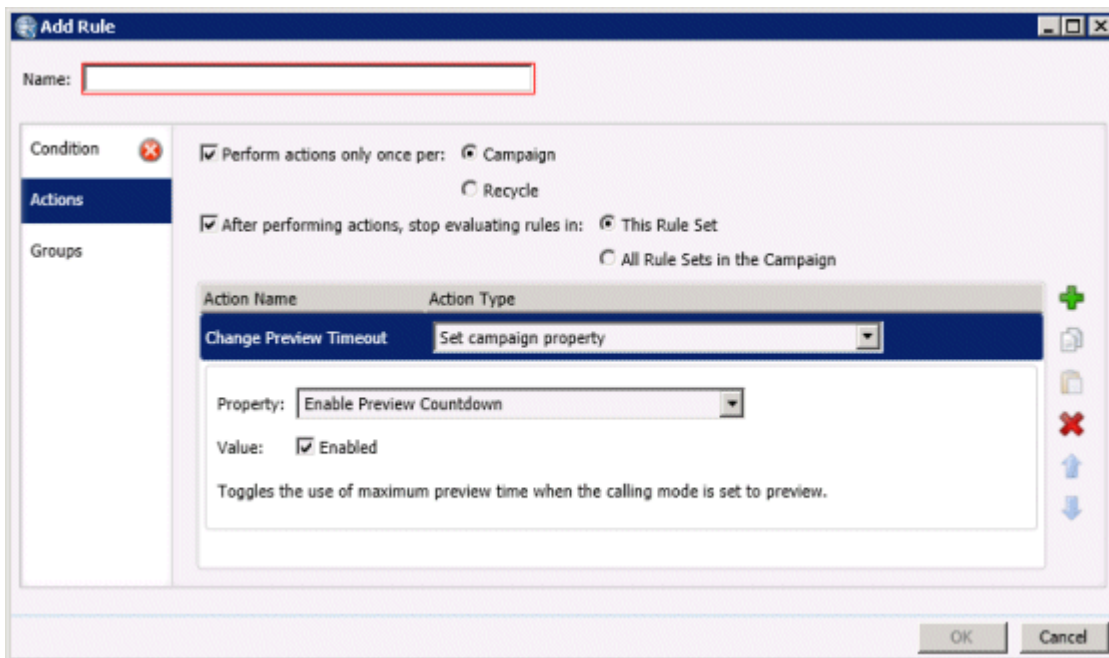
2. New tables were added to manage penetration rate reporting data. Customers can use this data to create custom penetration rate reports. For details, see Penetration Rate Report Data and Penetration Rate Tables ERD in this document. For information about the penetration rate API for C++, see *Get Penetration Data* and *Get Penetration Rate* in IceLib.Dialer documentation.

3. A new policy disposition behavior can be used to query against a custom PND column. It invokes a stored procedure (sproc) in the call list database to perform a logical operation of some sort, such as altering records in the call list database or altering entries in custom columns. The procedure accepts two optional character strings for custom information. See Custom Stored Procedure behavior type.
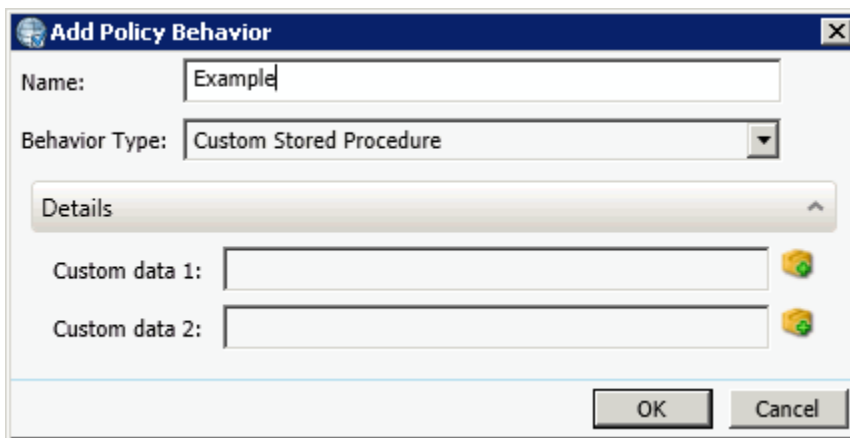
For background information about PND enhancements (such as custom PND columns for example) refer to the Interaction Dialer 4.0 SU2 Release Notes.

4. Using the Policy Sets user interface, you can now access custom PND columns for the purpose of setting a policy condition. To do this, add a Policy Condition and set the *Condition Type* to

"Phone Number Details". Then select "Custom" from the *Phone Number Detail* list.


At this point, you can select a custom PND column, and configure evaluation type, operator, value, and test a regular expression value. See also: Phone Number Details Condition Type and Setting Phone Number Details to Custom.

5. The configuration of sorts and filters for a campaign were moved to a new tab named Contact List. This tab also provides the means to identify contact columns. In other words, the Campaigns entry now has a **Contact List** tab.

6. New query-time filters at the campaign level provide the option to query columns from the PND table as well as the contact list table. See Phone Number Filters on the Contact List tab of a Campaign.

7. Previously, there was a 30 character limit on the base script disposition. The size of this field was increased to store 100 characters.

8. A new [ContactPNDAttribute:?] macro allows custom Data Policy behaviors to retrieve the active contact's phone number details attribute value. See Custom Data Behavior Type.

9. Added a new DNC Update behavior type for Policies. See *DNC exclusion based on identity or expiration date* in the *Revisions* topic of *Interaction Dialer Release Notes*.

10. Updated the Add a Policy Set topic to discuss a new *policy set locking* option. It is now possible to lock a policy object so that it cannot be modified, removed, or unlocked by any person who does not have *Master Administrator* rights. This is accomplished by checking the "Locked" check box for a policy in Interaction Dialer Manager. Once a policy has been locked, users who are not Master Administrators can view the policy but they cannot remove or edit it until a Master Administrator removes the lock. Locked policies cannot be removed from a campaign. Dialer Manager users can configure campaigns to use locked policies that they have access to, but once the campaign is saved, the locked policy can only be removed by a Master Administrator.

11. Updated the Associate a Rule with a Rule Group topic. When selecting the groups for a rule, an [Any] group is also listed. Adding [Any] group to the rule will cause the rule to be evaluated regardless of which group is currently active.

12. Added a new *Call Dialing Mode condition type* for policy objects. This pre-call condition type allows a policy to evaluate the dialing mode used to dial the contact. This is used primarily to determine if the call was placed as a non-preview dial in conjunction with the Phone Number Type to comply with new regulations. See Call Dialing Mode condition type.

13. Previously, if a policy set had more than one policy, the user interface did not clearly indicate other policies in the policy set if any policy other than the first policy in the list was selected. The Policy Sets user interface was updated to display all the policies within a policy set clearly, so that selecting any policy does not obscure the others. Policy details were moved to their own grid on the policy set.

14. Rules can now assign a subset of contact columns from those defined on the Contact List to be dialed by a campaign. Rules can also change the order in which contact columns are dialed. To set this up:

    a. Add a new Rule.
    b. Under Actions, set *Assign Contact Columns* to **Set campaign property**.
    c. Set *Property* to **Contact Columns**.
    d. When prompted, select a **Contact List**.
    e. Move contact columns in or out of the *Selected Items* list.
    f. Click **OK**.
    g. Use the **Up** and **Down** buttons to reorder contact columns in the list, if desired.

    See the Contact Columns property under Campaign Properties.

15. A new "Customize Contact Columns" option allows a campaign to use either its associated contact list's contact columns as they are defined on the contact list, or a customized list of contact columns (a partial list or by changing the order of the columns. See Contact List Tab.

16. Priority Dialing settings were moved to the Contact List tab for a Campaign.

17. A new Agent Management rule action allows workgroups of agents to be logged out of campaigns and logged into different campaigns.
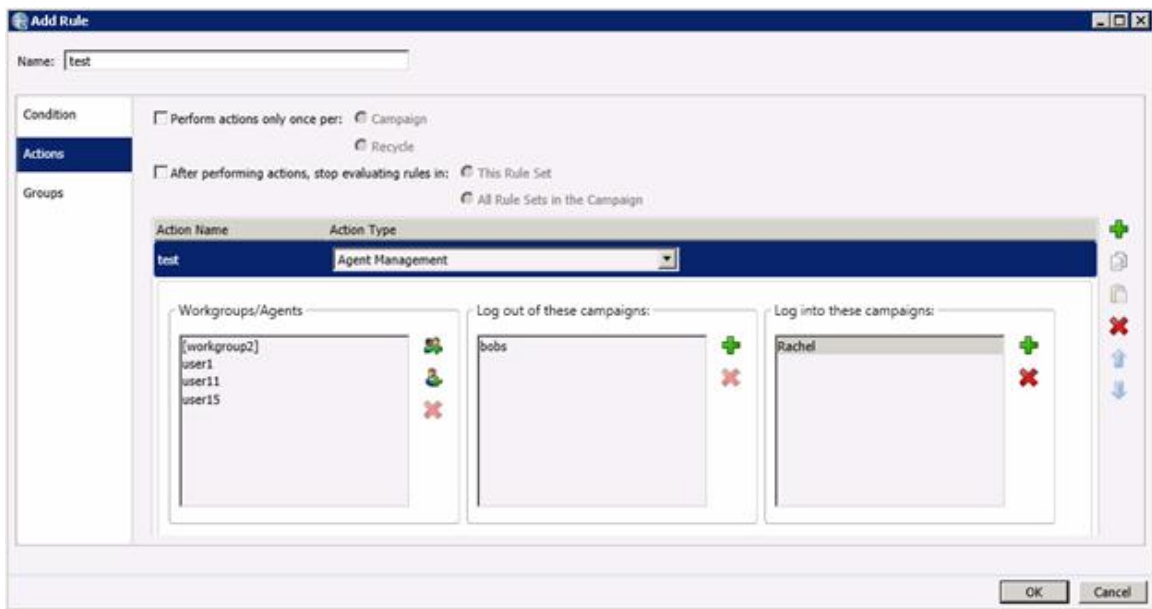
18. The Set Campaign Property rule action can now set the follow up status that Dialer will put the agent into when a Dialer call disconnects but has not been dispositioned yet. A typical selection might be "Follow Up". The rule can select a different status from the status configured for the campaign on the Recall Control Tab. When configuring a rule action, select *Follow Up Status* from the list of Campaign Properties.
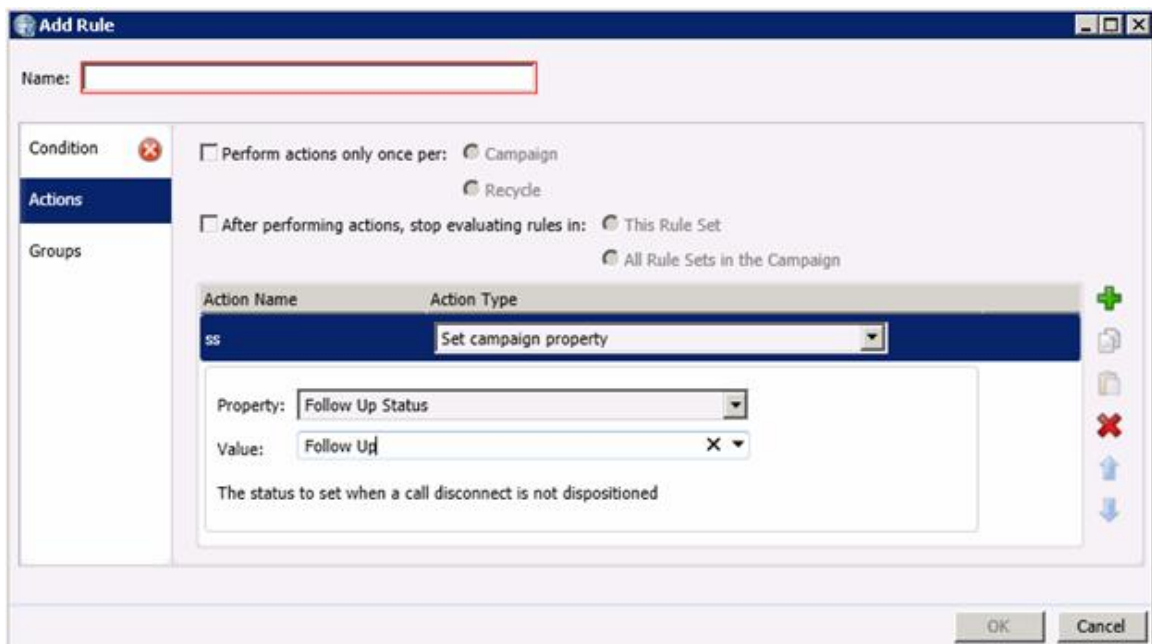
19. The Run campaign command rule action can now change a campaign's dialing mode to dial scheduled calls only. In this execution state, Dialer places only calls that were rescheduled by agents. Priority dials are still made, but no regular calls are placed. This mode ignores the campaign schedule, if one is assigned. Auto-scheduled calls are not placed in this mode.

20. All do-not-call configurations are scrubbed regardless of whether they are being used in a campaign or not, or if the campaign is active or not.

Interaction Dialer 4.0 Service Update 1

1. Interaction Dialer no longer supports the option to "log history updates as .csv files on outbound dialing servers". The checkbox for this option was removed from the Global Dialer Setting view.
2. Modified the procedure titled Add a Rule to add two new system events that a rule condition can evaluate: "Campaign Paused" and "Campaign Unpaused".
3. A new global setting manages Interaction Dialer's Configuration Change Auditing feature. Auditing authorizes each Outbound Dialer server to record which user changed an object, and the properties of the object that changed. Auditing is a system-wide setting, meaning that auditing is either "on" or "off" for all servers. Auditing is disabled by default.
4. Fixed a bug that could cause a new campaign to reference an invalid recycle table. Newly created campaigns are assigned properties based on those of the default campaign object. Previously, the recycle table property was included in this behavior erroneously. New campaigns are now always saved without a recycle table assigned so that the system may create a new table and assign it to the campaign later.
5. Support was added for configuration change auditing. When enabled, auditing tracks all configuration changes made using Dialer Manager, or an API such as IceLib.Configuration.Dialer. Auditing authorizes each Outbound Dialer server to record which user changed an object, and the properties of the object that changed. Auditing is a system-wide setting, meaning that auditing is either "on" or "off" for all servers. Auditing is disabled by default. Auditing provides a clear audit trail for proof of good faith efforts, if needed. See Configuration Change Auditing and Configuration Change Auditing tab.
6. Customers can now export their Dialer_Config.xml file directly to a Development server, and import sections of Dialer_Config.xml from a Development system to a production server. This is accomplished using a new Import/Export Configuration view in Interaction Dialer Manager.
7. The Date/Time control used in base scripts is now based on a JavaScript date/time picker. Due to localization issues, it was necessary to eliminate the old ActiveX picker control, which offered options for formatting the display of dates. The new control no longer offers time formatting options, so related user interface selections were removed from the Page Controls expander.
8. Additional supervisory views are available in IC Business Manager:

   - Agent Overview displays statistical information for Dialer Agents broken down by Dialer campaigns.
   - Skill Overview displays statistics broken down by skill per each Dialer campaign.

9. Updated the Dial Settings topic to note that the "Copy Dialer Attributes to Call Attributes" setting has no effect on Dialer calls unless they are transferred to an Outbound Attendant profile. Only interactions which are transferred to Attendant have Dialer attributes assigned to them.
10. Added a server parameter that allows Priority contacts to be added to the front of Dialer's cache of Priority Contacts. By default, when Priority contacts are pulled into Dialer they are added to the end of Dialer's existing cache of Priority contacts. When new server parameter *Dialer*

Prepend Priority Contacts is enabled by giving it a value of 1, Dialer adds each batch of Priority contacts to the front of its existing cache of Priority contacts.

11. New security and access control were implemented. See Dialer Licenses, Rights, and Security for details.

Interaction Dialer 4.0 GA

This document was written for Dialer 4.0 GA, so there were no revisions from a previous release. This topic will be updated to describe changes made in service updates.