



Administrative and Supervisory Tasks

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Agent Management

In addition to reviewing the following sections, note that the following table lists agent tasks and their documentation references.

Task	Where Discussed/Notes
Adding agents	<i>Cisco Unified Contact Center Enterprise Installation and Upgrade Guide</i>
Dedicating agent to Outbound Option campaigns	<i>Cisco Unified Contact Center Enterprise Installation and Upgrade Guide</i> ; assign the agent only to campaign skill groups
Re-skilling agents	CCE Web Administration Application Online Help

Agent Addition

You assign agents to skill groups to map them to campaigns and to skill the agents for multiple active campaigns.



Note An agent can be assigned to multiple campaigns.

Agents Dedicated to Only Outbound Option Campaigns

There is no setting to restrict a particular agent to only Outbound Option campaigns. If you want to dedicate a particular agent, associate the agent only with Outbound Option campaign skill groups.

Agent Re-skilling

The Unified CCE Web Administration application allows supervisors to sign-in and change the skill groups for agents they manage. CCE Web Administration is a browser-based application for use by call-center supervisors. You can change the skill group designations of agents on your team and quickly view skill group members and details about individual agents. Changes you make to an agent's skill group membership take place immediately without the need for the agent to exit and re-enter the system.

See the CCE Web Administration Application online help for information about using the agent re-skilling feature.

See the *Administration Guide for Cisco Unified Contact Center Enterprise* for detailed instructions on how to re-skill agents.

Campaign Management

To manage your campaigns most efficiently, use multiple query rules instead of using multiple campaigns.

Single Campaign Versus Multiple Campaigns

You might choose to run multiple campaigns because of different calling policies (for example, time rules) or to run different outbound modes simultaneously.

From the perspective of dialer port allocation, running fewer campaigns with a larger agent pool is more efficient. Dialer ports are allocated based on the number of agents assigned and the current number of lines per agent to dial. The more campaigns you have that are active, the more the ports are distributed across the campaigns, which affects overall efficiency.

Use query rules to break down a campaign into smaller requirements. These rules can be enabled based on penetration or scheduled times. Campaign reports are available on a query rule level.



Note In multiple campaigns, the skill groups of agents handling the calls must be the same as those of a single campaign.

Results from Individual Customers

After running a campaign, you can generate a list of customers who were reached, not reached, or have invalid phone numbers.

The following are options for how to receive this information from the Outbound Option solution.

Interpret Information from Dialer_Detail Table

The Dialer_Detail table is a single table that contains the customer call results for all campaigns. When you view the Dialer_Detail table, note that each attempted Outbound Option call is recorded as an entry in the table. Each entry lists the number called and which numbers are invalid.

For more information, see the appendix on the Dialer Detail Table.

Dialing List

You can also review the Dialing List in the Campaign Manager's private database on the Logger Side A for customer call information. However, using this source has several drawbacks when compared to the Dialer_Detail table:

- You must avoid querying this table while campaigns are in progress. Excessive activity on this table slows the performance of the real-time processes running on Logger Side A, particularly the Campaign Manager. This can lead to interruptions in dialing and long idle times for agents.
- There is a different dialing list table for every campaign query rule. You must look in multiple locations as opposed to looking in the one Dialer_Detail table.

Use the Dialer_Detail table for customer call information whenever possible.

Management of Campaign Manager Database Tables

The Campaign Manager tables, Dialing_List and Personal_Callback_List can grow to be large. If the database size grows too large, Campaign Manager performance can significantly slow down. To limit the size of the Outbound Option database, a stored procedure is run daily at midnight to purge records that are no longer needed.

By default, records are removed from the Personal_Callback_List table when the record's **CallStatus** is either C, M, or D, and the **CallbackDateTime** for the record is more than five days old. In the Dialing_List table, records are removed by default when **CallStatusZone1** has a value of either C, M, or D, and **ImportRuleDate** is more than five days old.

You can change the status and age of the records to be removed by modifying the Campaign Manager registry values on the Logger machine. The registry settings are located in HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems, Inc.\ICM\<instance name>\LoggerA\BlendedAgent\CurrentVersion in the Outbound Option registry.

- To specify the records to remove from the Personal_Callback_List table, set **PersonalCallbackCallStatusToPurge** and **PersonalCallbackDaysToPurgeOldRecords**.



Note **PersonalCallbackCallStatusToPurge** is not added by default. To change the call status of the records to remove, create this registry setting manually.

- To specify the records to remove from the Dialing_List table, set **DialingListCallStatusToPurge** and **DialingListDaysToPurgeOldRecords**.



Note **DialingListCallStatusToPurge** is not added by default. To change the call status of the records to remove, create this registry setting manually.

To specify the age of the records to be removed, set **PersonalCallbackDaysToPurgeOldRecords** or **DialingListDaysToPurgeOldRecords** to specify the number of days to keep the record before it is removed. For the Personal Callback list, this value is the number of days after the personal callback is scheduled (CallbackDateTime). For the Dialing List, this value is the number of days after the record is imported

(ImportRuleDate). The default is 5. The valid range is 1 to 30. If the value is not set or set to 0, the automated purge is disabled.

To set the call status of the records to be removed, set **PersonalCallbackCallStatusToPurge** or **DialingListCallStatusToPurge** to a string containing the call status types to apply when purging personal callback or dialing list records. For example, if the string contains “C,M,F,L,I,” all records with these call statuses, that are also older than the number of days specified by **PersonalCallbackDaysToPurgeOldRecords** or **DialingListDaysToPurgeOldRecords**, are removed from the database.

You can specify the following call status values:

Value	Description
U	Unknown
F	Fax
I	Invalid Number
O	Operator
L	Not Allocated
X	Agent Not Available
C	Closed
M	Max Calls
D	Dialed

Management of Predictive Campaigns

The following sections provide guidelines to follow when working with predictive campaigns.

Initial Values for Lines per Agent

Determining the initial value for the number of lines per agent is not as simple as inverting the hit rate. If a campaign has a 20% hit rate, you cannot assume that five lines per agent is the applicable initial value for the campaign if you are targeting a 3% abandon rate. The opportunity for abandoned calls increases geometrically as the lines per agent increases; therefore, set the initial value conservatively in the campaign configuration.

If the reports show that the abandon rate is below target and does not come back in line very quickly, modify the initial value in the campaign configuration to immediately correct the lines per agent being dialed.

End-of-Day Calculation for Abandon Rate

It is not unusual for a campaign to be over the abandon rate target for any given 30 minute period. The dialer examines the end-of-day rate when managing the abandon rate. If the overall abandon rate is over target for the day, the system targets a lower abandon rate for remaining calls until the average abandon rate falls into line. This end-of-day calculation cannot work until after the campaign has been running for one hour. Small sample sizes due to short campaigns or campaigns with fewer agents might not give the dialer enough time to recover from an initial value that is too high.

Similarly, if the campaign is significantly under the target abandon rate, it might begin dialing more frequently with an abandon rate over target for a while to compensate in the abandon rate.

Transfer of Answering Machine Detection Calls to Agents

When enabling the Transfer AMD (Answering Machine Detection) to agent option for an agent campaign or enabling the Transfer AMD to IVR option for an IVR campaign, consider the increase in calls to the target resources (agents or IVR) when determining the initial value. If the expectation is that the AMD rate and the live voice rate are over 50%, perhaps start out with an initial value of 1.1 or even one line per agent to stay under a 3% abandon rate.

Parameter Tuning

The Voice Calls Per Adjustment and Gain parameters are settings in the Advanced Users configuration tab used to control the way the predictive dialing behaves. Do not modify the default values unless you understand the parameters and the possible risks incurred when changing the pacing.

- The Voice Calls Per Adjustment parameter is a count of the number of live voice connections that are required to trigger a correction. (The default value is 70 voice calls.) If the abandon rate exceeds the target by a significant margin, the dialer can make corrections before collecting 70 calls.
- The Gain parameter controls the size of the Lines per agent corrections.

Setting the Voice Calls Per Adjustment parameter to a smaller setting leads to larger fluctuations in the measured Abandon Rate because the sample size is less significant. This results in less change in the Lines per agent value over time.



Caution

Be careful when modifying both parameters (Gain and Voice Calls Per Adjustment) at the same time. For example, increasing the Gain while decreasing the Voice Calls Per Adjustment results in larger changes in the “Lines per agent correction rate,” which might overcorrect changes in measured values.

Decreasing the Gain while increasing the Voice Calls Per Adjustment can similarly cause too slow of a change to underlying changes in the hit-and-abandon-rates. A campaign that is reaching more than 20 live voice customers every minute (600 per half hour) might benefit from reducing the Gain, but a lower Gain becomes less effective as the number of agents in the campaign dwindles or the hit rate changes rapidly.

Management of Agent Idle Time

One of the key reporting metrics for administrators managing campaigns is the amount of time agents spend idle between calls.

There are many possible reasons for longer idle times, such as a combination of one or more of the following:

- A dialing list with a low hit rate. The solution is to create an improved list.
- A small agent pool results in fewer calls, resulting in slower adjustments. One solution is to add more agents to the pool.
- Shorter average handle times means agents become available more frequently. A shorter handle time means that the agent idle time percentage will climb.
- Not enough dialer ports deployed or too many agents. Deploy more ports or use fewer agents.

- A large number of retry attempts at the beginning of a day when running with append imports resulting in lower hit rates. Prioritize pending over retries.
- Modifying the maximum number of attempts up or down in an active campaign. This activity can interrupt the Campaign Manager's processing of dialer requests for records, as mentioned earlier in this chapter. One solution is to perform the activity during off hours.
- Running out of records to dial. Import new records.

EnhancedPredictiveDialing, is a new registry setting with the controlled feature. This setting is an attempt to reduce the idle time when there is a low hit rate for voice customers, and also when there's a long idle agent time. This change adapts to the dialing rate more aggressively, and it may not respect the configured abandon limit. This feature is disabled by default.

Enabling the *reclassifytransferfailures* registry setting reduces the agent idle time and will also improve the predictive dialing. For more information see, [Dialer Registry Settings](#)

Sources of Higher Idle Times in Reports

The following Outbound Option reports provide information regarding sources of higher idle times:

- Campaign Consolidated Reports: These reports provide a very useful overview of a campaign by combining campaign and agent skill group statistics into a single report. They provide average idle time, campaign hit rate, the number of agents working on the campaign, as well as their Average Handle Time per call. Low hit rates and low average handle times result in more work for the dialer to keep those agents busy.
- Dialer Capacity Reports: These reports show how busy the dialers are and how much time was spent at full capacity when the dialer was out of ports. They also provide the average reservation call time as well as the average time each dialer port spent contacting customers.

Dialer Saturation

If both Dialers have relatively low idle times and high all ports busy times, then it is likely the Dialers have been oversubscribed. The combination of number of agents, Dialing List hit rate, and average handle time are likely more than the deployed number of ports the Dialer can handle.

To solve this problem, perform one of the following actions:

- Reduce the number of agents working on the campaign.
- Move a campaign to a skill group on another agent PG.
- Add more Dialer ports to the solution, possibly on another agent PG.

Few Available Records

Call Summary Count reports show how many records in the aggregate campaign dialing lists have been closed and how many are still available to dial.

Retry Records in Append Campaigns

Running campaigns with an append import and maximum number of attempts greater than one can result in a large number of retries at the beginning of the next day. As a general rule, retries usually have a lower hit rate than pending records. Longer idle times for agents might result until the first group of retries are called

because retry records usually have priority over pending records by default. The number of records increase as you increase the retry time.

There are a few ways to manage this situation:

- Shorten the retry times to reduce the number of retries that are scheduled at the end of the day.
- Change the Campaign Manager priority scheme so all numbers and records are tried once before any retries are attempted. Set the PendingOverRetryEnabled registry key to **1** in the Campaign Manager.



Note See the appendix on Registry settings for detailed information about the PendingOverRetryEnabled registry setting.

- Modify the campaign import to use the **Overwrite** option instead of the **Append** option and import new records daily.

SIP Dialer Voice Gateway Over-capacity Errors

If your network monitoring tool receives an alarm in the SIP dialer about being over capacity, you can ignore the alarm unless it becomes an ongoing issue. This section describes the source of the alarm and remedial actions associated.

If the Voice Gateway in a SIP dialer implementation is over dialed or over capacity, the SIP Dialer receives one of the following messages:

- SIP 503 messages if the SIP Dialer is deployed with Voice Gateway only
- SIP 502 messages if the SIP Dialer is deployed with SIP Proxy

If the percentage of SIP 502 or SIP 503 messages reaches 1% of all messages, the SIP dialer raises an alarm.

Use one of the following measures to attempt to remedy the problem if Voice Gateway capacity becomes an ongoing issue:

- Check the Voice Gateway configuration. If there are errors, fix them and reset Port Throttle to its original value. Port Throttle (the calls-per-second rate at which the dialer dials outbound calls) is set on the Dialer General tab in the Configuration Manager.
- Check the sizing information. Adjust the value of Port Throttle according to the documented guidelines.
- Enable the auto-throttle mechanism by setting the Dialer registry setting **EnableThrottleDown** to 1.

To set **EnableThrottleDown**, open the Registry Editor (regedit.exe) on the PG machine and navigate to `HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems, Inc.\ICM\<customerinstance>\Dialer`.

The SIP dialer performs an automatic throttle down when the percentage of SIP 502 or SIP 503 messages reaches 2% of all messages, if the auto-throttle mechanism is enabled. This throttle down means that the SIP dialer decreases the configured value of Port Throttle by approximately 10%.

If one throttle down does not correct the problem, the SIP dialer performs more throttle downs until either the problem is corrected or the value of Port Throttle is throttled down to 50% of the originally configured value.

For each automatic throttle down, alarm and trace messages clearly provide detailed information about the adjusted port throttle value, configured port throttle value, and time duration.

Even after the problem is corrected, the dialer does not automatically throttle back to the configured value. To increase the throttle back to the configured value, run the **updateportthrottle /portthrottle <configured value>** command using the process monitoring tool Procmon.

Update the North American Numbering Plan Data

The Regional Prefix Update Tool (RPUT) is used to update the Unified CCE database to the latest North American Local Exchange NPA NXX Database (NALENND).

- If Unified CCE ICM is using the North American Numbering Plan.
- On an Administration & Data Server that includes **Real-time Data Server** as part of its role.

The RPUT is composed of the following two files (installed in the `ICM\bin` directory on the Unified CCE AW-HDS-DDS server):

- `region_prefix_data.txt` (or the `<DatafileName>`)
Contains the data this tool uses to update the region prefix table in the Unified CCE database. Note that you should change paths to the `ICM\bin` directory.
- `regionfix.exe`
This executable reads the `region_prefix_data.txt` data file and updates the region prefix table.

The RPUT is run from the command line as described in the following procedure.

Procedure

-
- Step 1** Open a command prompt (Select **Start > Run**, and enter **cmd**, then click **OK**).
- Step 2** Change the path to `ICM\bin`.
- Step 3** Enter the following at the prompt: `regionfix.exe <DatafileName>` (where `<DatafileName>` is the name of the data file).
- The Regional Prefix Update Tool then shows the version of the input data file and asks if you want to proceed. If you proceed, the tool connects to the Unified CCE database. The number of records that are to be updated, deleted, and inserted appear. These records are put into three different files:
- `region_prefix_update.txt` (which includes preserved Custom Region Prefixes)
 - `region_prefix_new.txt`
 - `region_prefix_delete.txt`
- Step 4** You can either delete or retain the entries present in the `region_prefix_delete.txt` file while performing the insertions and updates. To retain the entries, type **No** when the tool prompts you to delete the entries. Type **Yes** to delete the entries.
- Step 5** Check the contents of the files before proceeding.
- Step 6** Answer **Yes** to proceed with the update.

When the update is complete, the tool displays the following message:

Your region prefix table has been successfully updated.

Reports

This section provides an overview of the Outbound Option reports available in the Cisco Unified Intelligence Center.

For complete information about using Unified Intelligence Center, how to download and import report bundles, and detailed descriptions of the templates for the reports mentioned here, see Cisco Unified Contact Center Enterprise Reporting User Guide at <https://www.cisco.com/c/en/us/support/customer-collaboration/unified-contact-center-enterprise/products-user-guide-list.html>.

Outbound Option Reports

This section describes the Outbound Option reports, created using the Unified Intelligence Center.

- [Outbound Historical Reports Bundle, on page 10](#)
- [Outbound Realtime Reports Bundle, on page 11](#)
- [Agent Reports, on page 11](#)
- [Campaign and Dialer Reports, on page 12](#)
- [Skill Group Reports, on page 14](#)
- [Import Rule Reports, on page 14](#)
- [Dialer Reports, on page 13](#)



Note All Outbound Option reports are voice-only reports and can be used in Unified CCE environments.

The Outbound Option reports are distributed in two report bundles: Realtime Outbound and Historical Outbound. The report bundles are available as downloads from Cisco.com <https://software.cisco.com/download/type.html?mdfid=282163829&catid=null>. Click the Intelligence Center Reports link to view the available report bundles. Depending on how it was deployed, your installation of Unified Intelligence Center may include all or a subset of these reports.

Additionally, sample custom report templates are available from the Cisco Developer Network (<https://developer.cisco.com/web/ccr/documentation>.)

For information on importing report bundles or custom reports to the Cisco Unified Intelligence Center, see *Cisco Unified Contact Center Enterprise Installation and Upgrade Guide*.



Note Call Type reporting can be used on Outbound Option reservation calls and transfer to VRU calls. Call Type reporting is not applicable for outbound customer calls because a routing script is not used.

Outbound Historical Reports Bundle

The Outbound Options Historical reports receive data from the historical data source. Reports are populated with interval data that has a default refresh rate of 15 minutes.

Half-hour/Daily: Provides statistics for each half-hour period. Many of the half-hour reports are also available in a daily report format.

The Outbound Historical bundle contains the following reports:

Report	Description
Attempts per Campaign Daily	Shows the status (summary and percentage) of each campaign for the selected time period and the breakdown of attempts (in percentage) of each campaign for the selected time period.
Campaign Consolidated Daily	Shows the daily activity and performance of the selected campaigns and their skill groups for the selected time period and provides analysis of the actual customer calls (outbound calls which reached live voice, inbound calls, or calls transferred to the campaign's skill group) for the selected campaigns and their skill groups for the selected time period.
Campaign Consolidated Half Hour	Shows the list of Consolidated Calls and Agent Statistics per Campaign by Half Hour and Breakdown of completed calls.
Campaign Half Hour Summary	Shows the status for all campaigns for the selected time period, the status (summary and percentage) of each campaign for the selected time period and the breakdown of attempts (in percentage) of each campaign for the selected time period.
Dialer Call Result Summary Half Hour Dialer Capacity Daily Dialer Capacity Half Hour	Shows the status of each dialer for the selected time period.
Import Rule	Shows the status of imported records for the selected time period.
Query Rule Within Campaign Daily	Shows the breakdown of attempts (in percentage) of each campaign for the selected time period and the status (summary and percentage) of each campaign for the selected time period.
Query Rule Within Campaign Half Hour	Shows the breakdown of attempts (in percentage) of each campaign for the selected time period, the status (summary and percentage) of each campaign for the selected time period and the status for each Query rule within a campaign for the selected time interval.

Outbound Realtime Reports Bundle

The Outbound Option Real Time reports display current information about a system entity; for example, the number of tasks an agent is currently working on or the number of agents currently logged in to a skill group. By default, the reports automatically query the Admin Workstation database on the distributor every 15 seconds. The data is written to the database by the Router almost every 10 seconds.

The Outbound Real Time Reports Bundle contains the following reports:

Report	Description
Call Summary Count per Campaign Real Time	Shows the status of each query rule within a campaign, status of all campaign records, and the currently valid campaign dialing times.
Dialer Real Time	Shows the status of each dialer, including the number of contacts dialed today and the result of each attempt.
Import Status Real Time	Shows the status of Outbound Option import records.
Query Rule Within Campaign Real Time	Shows the status of all campaign records, dialing times, and query rule within a campaign.

Agent Reports

In addition to the reports contained in the Outbound Reports bundles, other Agent reports also provide information about Outbound activities:

Report	Outbound Option Fields
Agent Queue Real-Time Agent Real-Time Agent Skill Group Real-Time Agent Team Real-Time	The Direction field indicates the direction of the call that the agent is currently working on including Other Out/Outbound Direct Preview, Outbound Reserve, Outbound Preview, or Outbound Predictive/Progressive. The Destination field indicates the type of outbound task on which the agent is currently working.
Agent Team State Counts	The Active Out field shows the number of agents currently working on outbound tasks.
Agent State Real Time Graph	For agents handling Outbound Option calls, the Hold state indicates that the agent has been reserved for a call. The Outbound Dialer puts the agent on hold while connecting the call.

Interpreting agent data for Outbound Option tasks, requires understanding how Outbound Option reserves agents, reports calls that are connected to agents, and handles calls that are dropped by customers before the calls are connected.

Outbound Option is automatically enabled at setup. It provides automatic outbound dialing capability.

The Outbound Option Dialer assigns and connects calls differently than regular contact center enterprise routing. Report data for agents handling Outbound Option calls therefore differs from data for agents handling typical voice calls and multichannel tasks.

When the Outbound Dialer calls a customer, it reserves the agent to handle the call. The Dialer places a reservation call to the agent and changes the agent's state to Hold. This reservation call is reported as a Direct In call to the agent.

For typical calls, the agent is placed into Reserved state when the contact center reserves the agent to handle a call. For Outbound Option calls, reports show the agent in Hold state when reserved for a call and the time that agent spends reserved is reported as Hold Time.

When the customer answers the call, the Outbound Option Dialer transfers the call to an agent. The call is now reported as a Transfer In call to the agent. When the customer call is transferred to the agent, the Dialer drops the reservation call and classifies it as Abandon on Hold.

The abandoned call wait time, set in the Campaign Configuration screen, determines how calls are reported if the caller ends the call. Calls are counted in the Customer Abandon field in both Real Time and Historical campaign query templates only if the customer ends the call before the abandoned call wait time is reached.

For agent reporting per campaign, Outbound Option provides reports that accurately represent the Outbound Option agent activity for a contact center, including information grouped by skill group.

The following list describes the data that are presented in the agent reports.

- A real-time table that shows Outbound Option agent activity that is related to Outbound Option calls.
- A historical table that shows agent daily performance for Outbound Option predictive calls, by skill group.
- A historical table that shows agent daily performance for Outbound Option preview calls, by skill group.
- A historical table that shows agent daily performance for Outbound Option reservation calls, by skill group.

Campaign and Dialer Reports

Outbound Option provides a campaign report template that describes the effectiveness of a campaign and the dialer. This list can be used for Agent and VRU campaigns.

Observe the following guidelines when using the campaign reports:

- Campaign Real Time reports describe how many records are left in the campaign dialing list.
- Both Campaign and Dialer Half Hour reports provide the call result counts.
- Dialer utilization fields in the Dialer Half Hour report are unaffected, although the Half Hour record might be missing if the Campaign Manager was inactive during the half-hour boundary. When the Dialer restarts, only the Dialer Utilization fields are affected; therefore, the Dialer Utilization only captures port status since the Dialer restarted during that half hour. Some records might be left in an active state for a short period of time after the Dialer or Campaign Manager restarts, but the Campaign Manager has a mechanism to reclaim those records.



Note

Campaign Real Time reports capture call results since the last Campaign Manager restart only. If the Campaign Manager restarts, data collected before the restart is lost.



Note When the active Campaign Manager fails over, partial campaign interval reports are generated for the relevant interval based on the data that was available after failover. Some of the campaign statistics collected prior to failover will be missing.

The campaign interval tables used in Reporting are impacted due to this scenario.

The following list describes the data that is presented in the campaign reports.

- A summary of call results for query rules within a campaign since the beginning of the day.
- A summary of call results for a campaign since the beginning of the day. It includes a summary of all query rules within the campaign.
- A view of what is configured for valid campaign calling times for zone1 and zone2 for selected campaigns. The times are relative to the customer's time zone.
- A view of what is configured for valid campaign calling times for zone1 and zone2 for selected campaign query rules. The zone times are relative to the customer's time zone. The query rule start and stop times are relative to the Central Controller time.
- How many records for selected query rules have been dialed to completion, and how many records remain.
- How many records for selected campaigns have been dialed to completion, and how many records remain.
- A summary of call results for selected campaign query rules for selected half-hour intervals.
- A summary of call results for all query rules for selected campaigns for selected half-hour intervals.
- A historical table by half-hour/daily report that shows the status (summary and percentage) of each campaign for the selected time period.
- A historical table by breakdown of attempts (in percentage) of each campaign for the selected time period.
- A historical table by half-hour/daily report that shows the status (summary and percentage) per query rule of each campaign for the selected time period.
- A historical table by breakdown of attempts (in percentage) per query rule of each campaign for the selected time period.
- A summary half-hour/daily report that shows activity and performance of the selected campaigns and their skill group for the selected time period, including abandon rate, hit rate, and agent idle times.
- A historical table by breakdown of actual customer calls (outbound calls which reached live voice, inbound calls, or calls transferred to the campaign skill group) for the selected campaigns and their skill groups for the selected time period.

Dialer Reports

The Outbound Option Dialer reports provide information about the dialer. These reports include information about performance and resource usage. The templates also enable you to determine whether you need more dialer ports to support more outbound calls.

The following list describes the data presented in the Outbound Option Dialer reports:

- A real-time table that shows contact, busy, voice, answering machine, and special information tone (SIT) detection for each dialer. A SIT consists of three rising tones indicating a call has failed.
- An historical table that records contact, busy, voice, answering machine, and SIT Tone detection for each dialer by half-hour intervals.
- Displays information about the amount of time the dialer was idle or had all ports busy.
- Displays Dialer status on a port-by-port basis used for troubleshooting. If this report does not display any records, then the data feed is disabled by default. It is only enabled for troubleshooting purposes.

Skill Group Reports

For skill group reporting per campaign, Outbound Option provides reports that represent the skill group activity for a contact center.

The following list describes the data presented in the skill group reports:

- A real-time table that shows all skill groups and their associated Outbound Option status.
- A historical table that records Outbound Option counts for the agent states *signed on*, *handle*, *talk*, and *hold* by half-hour intervals.

Import Rule Reports

Outbound Option reports also enable you to view the success of record imports. Using the Import Rule templates, you can monitor whether records are being added successfully (good records) or are failing (bad records), and how long it takes to import the records.

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

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

The following information is available in the Import Rule reports:

- Number of successful, unsuccessful, and total records imported by time range
- Current import status
- A real-time table that shows the number of successful, unsuccessful, and total records imported or to be imported.
- A historical table that shows the number of successful, unsuccessful, and total records imported by time range. The Total Records column indicates the total number of records available in the import file.



Note Import Rule reporting data is not populated for Outbound API-based imports. However, you can get this data directly from the API.
