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GUIDE

# Unify OpenScape Contact Center Enterprise

Unify OpenScape  
Contact Media Service  
Dialer V11 R1

User Guide  
10/2024

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# 1 Introduction

The OpenScape Contact Media Service Dialer (CMS Dialer) is a feature which allows creating and executing outbound dialing campaigns. The CMS Dialer manages the generation of outbound calls to a list of leads configured for the campaign and it uses all the flexibility of the OpenScape Contact Center to route the outbound calls to the agents. Campaigns can be created with a list of leads and configured to be executed in a specific time frame, which includes days of week and time of the day.

The CMS Dialer can be integrated with the OpenScape Contact Center to route the outbound calls to human agents or to virtual agents (with Speechbot). The CMS dialer can also be integrated with the OpenScape Contact Media Service Voice Portal (CMS Voice Portal) to route the calls to the IVR. So agentless campaigns can be executed by integrating the CMS Dialer with the Speechbot or with the IVR.

The CMS Dialer utilizes Automatic Machine Detection (AMD) to identify if the call to the customer was automatically answered by a machine (for example Voice Mail). In this case, the Dialer detects that the call attempt was not successful and it can be reinitialised.

The CMS Dialer supports external Do-Not-Call services. It also provides an internal Do-Not-Call service which can be configured with a list of numbers that must not be dialled.

Currently the CMS Dialer supports campaigns with the Progressive Dialing mode. Further modes, like Preview Dialing, Power Dialing and Predictive Dialing will be added in the future.

## 2 Function Description

### 2.1 Dialer

The CMS Dialer is a combination between the OpenScope Contact Media Service Dialer and one of the following components:

- The OpenScope Contact Center
- The OpenScope Contact Media Service Voice Portal for agentless dialing.

For the execution of campaigns with either physical or virtual agents, the CMS Dialer monitors the status of the agents in the OpenScope Contact Center. When agents are identified as free, a call is generated for each free agent. When the CMS Dialer detects that the call was successfully answered by the customer, it transfers the call to the pilot number of the Contact Center and the call is routed to the agent.

For the execution of agentless campaigns with the IVR, the CMS Dialer monitors the status of the IVR channels. When free IVR channels are identified, one call is generated for each free channel. When the CMS Dialer detects that the call was successfully answered by the customer, it transfers the call to the pilot number of the IVR and the call is routed to the channel. Currently, the only support for IVR is the CMS Voice Portal.

When a Campaign is created, the following parameters related to the execution period must be defined:

- Date range – the first and the last day for the Campaign
- Time range – the time of the day when the campaign is executed (the point in time for the beginning and the ending of the Campaign)
- Days of week – the specific days of the week when the campaign runs.

When a campaign is created, an entry in the schedule is created for each day the campaign will run. This facilitates the control of the campaign regularity.

When a call to a lead is not successful and the number of attempts for the call has not been exceeded, the next attempt will occur once the Retry-After interval has passed. Based on the Retry-After definition (call end + retry time), there are two possible scenarios for the lead:

- 1) If the time to retry comes and the scheduler is stopped, the call will be added to the pool. The lead will be called again as soon as possible, for the next scheduler.
- 2) If the time to retry will only come on the next scheduler, it may happen in that timeframe. For example, if a call ends at 17h00 and the retry after time is after 1440 minutes (24 hours), the lead must be added to the pool on the next day at 17h00 as well.

### 2.2 Answering Machine Detection

The Answering Machine Detection detects if the call was attended by a human being or by an answering machine. The following parameters are verified:

- Silence detection on pickup.
- Silence detection after the first speech.
- Tone detection

## Function Description

### Do-Not-Call

If the Answer Machine Detection identifies that the call was not attended by a human, the following actions must be taken:

- The call is disconnected.
- The number of attempts is incremented.
- The call result is updated to inform that the call was not successful, and the status is set to AMD.

## 2.3 Do-Not-Call

## 2.4 External Do-Not-Call Service

The Do-Not-Call service can be deployed by consulting an external web service which can be accessed via an HTTP Request formatted as JSON for every new call in a campaign. The Professional Service uses this interface to implement a connector to consult specific Do-Not-Call services like Griffon (in US) or NãomePerturbe and NãomeLigue (in Brazil).

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**NOTICE:** The communication between the CMS Dialer and the DNC Web Service shall be established over TLS.

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**NOTICE:** The calls which are not completed because of the Do-not-Call services are added to Call Record with the resolution `Call Result = DoNotCall`.

---

A Do-Not-Call Web Service API allows the CMS Dialer to access a Do-Not-Call service if a provided number is present in the Do-Not-Call list. The content of the HTTP body shall be provided in the JSON format.

The request will be sent as a POST HTTP request:

```
POST /donotcall
{
  "number": "554181021119"
}
```

The response shall be contained in a 200OK HTTP response:

```
{
  "number": "554181021119",
  "doNotCall": true
}
```

---

**NOTICE:** If the parameter `doNotCall` returns 'true', it indicates that the passed number has been found in the Do-Not-Call list and it must not be called by the dialer.

---

There is no client authentication mechanism for this web service, since there is no data protection risk.

## 2.5 Embedded Do-Not-Call Service

An embedded native web service will be provided with the CMS Dialer to execute the Do-not-Call Service based on a loaded .csv file. The .csv file must contain the list of numbers which must not be dialed.

The DNC Web Service will receive requests with lead numbers, it will verify if the number is in the Do-not-Call list and give back a response to CMS Dialer.

---

**NOTICE:** It is not possible to edit/remove the Embedded service.

---

## 3 Solution Components

The CMS Dialer uses the following components:

- **OpenScape Contact Media Service (CMS)**, which is responsible for:
  - Creating the campaigns with their list of leads and schedule.
  - Executing the campaigns by calling the corresponding lead numbers.
  - Verifying if the number is not included in a Do-Not-Call Service list and must not be dialed.
  - Detecting if the call was answered by a machine.
  - Transferring the call to the agent when the call is answered by the customer, not a machine.
  - Re-trying to call the leads which were not successful in the previous attempts according to the maximum number of attempts.
- **Communication Platform (OpenScape Voice, OpenScape 4000 and OpenScape Business)**, which is responsible for establishing the outbound calls.
- **OpenScape Contact Center**, which is responsible for distributing the calls to the agents according to the work flows defined in the Routing Strategy. The agent handles the outbound call as usual, via the Agent Portal Web.
- **OpenScape Contact Media Service Voice Portal**, which is used to route the outbound calls to the IVR.



## 4 Infrastructure

### 4.1 System Requirements

#### 4.1.1 CMS

The system requirements for CMS are the following:

**Table 1: System requirements for CMS**

Requirement	Description
Processor	Intel Xeon E-2174G 3.80GHz
Memory	8 GB
Hard Drive	HD1: 160 GB, 7200 RPM, SATA HD2: 100 GB, 7200 RPM, SATA
Display settings	024 x 768 pixels with 16-bit color
Other	1 Gbps Ethernet network interface card

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**NOTICE:** The CMS Dialer requires a second hard disk which will contain the PostgreSQL database.

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**NOTICE:** The CMS Dialer supports up to 300 parallel outgoing calls.

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#### 4.1.2 OpenScape Contact Center Server

The regular specification requirements for OpenScape Contact Center server shall be used.

## 5 Components Configuration

The OpenScape Contact Media Service must be configured to handle the Dialer.

### 5.1 OpenScape Contact Media Service

A license of type Outbound Dialer License Ports must be available for each extension number used to start the outbound calls.

For more information regarding the configuration of the OpenScape Contact Media Service Dialer, see the Atos Unify OpenScape Contact Media Service, Installation Guide, chapter "Dialer Configuration" .

### 5.2 OpenScape Contact Center

The OpenScape Contact Center must be configured to route the outbound dialer calls as usual.

For blending scenarios, the OpenScape Contact Center configuration must be defined according to the customer requirements.

A REST SDK server must be configured in the OpenScape Contact Center.

### 5.3 Communication Platform

#### 5.3.1 OpenScape Voice

Each Dialer port is a SIP Subscriber in the OpenScape Voice. The SIP Subscriber can be configured with the same profile as the CMS Basic IVR (Call Director) SIP Subscribers.

## 6 Dialer Management

The Dialer Service Web Application is used to manage the campaigns. It is accessed via the URL: `https://<CMS server DN>:9443`.

There are four roles for the users which can perform the following activities in the Dialer Service Web Application:

- Master:
  - Create/remove/update/display Dialer users.
  - Manage passwords.

---

**NOTICE:** Password policies are not implemented. Only the Master can reset passwords for the users.

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- Create/remove/update/display Groups.

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**NOTICE:** Groups are not removed but disabled.

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- Associate Users and Groups.

- Group Manager:
  - Create/remove/update/display Dialer users for its group.

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**NOTICE:** The Group Manager can only assign to a user the groups for which he/she is responsible for.

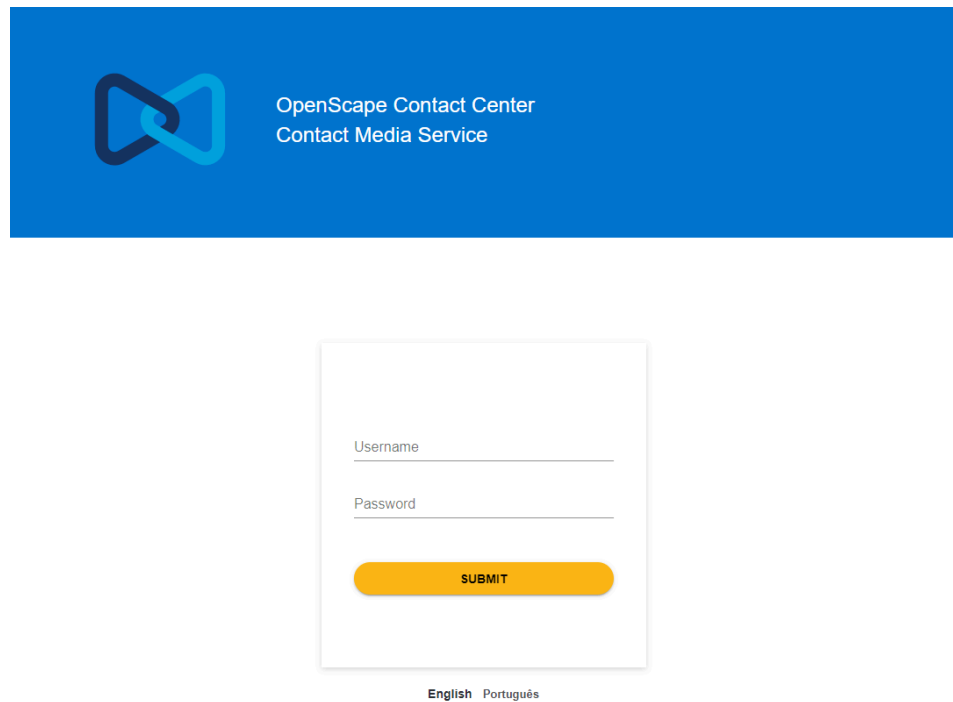
---

- Display the group tab.
- Enable/Disable group.

- Campaign Administrator:
  - Create/remove/update/display Campaigns.
  - Create/remove/update/display Campaign Schedules.
  - Start and stop campaigns.
  - View campaign summary.
- Campaign Supervisor:
  - View campaign summary.
  - View campaign settings.
  - View campaign schedules.

### 6.1 Authentication Page

The OpenScape Contact Media Service authentication page allows the user to login and to select the language of the application.



The image shows the authentication page for the OpenScape Contact Center Contact Media Service. At the top, there is a blue header bar containing the OpenScape logo (two interlocking blue and black shapes) and the text "OpenScape Contact Center" and "Contact Media Service". Below the header, there is a white rectangular box with a thin grey border. Inside this box, there are two input fields: "Username" and "Password", each with a horizontal line for text entry. Below these fields is a yellow rounded rectangular button with the word "SUBMIT" in black capital letters. At the bottom of the white box, there are two links: "English" and "Português", with "English" being the active link.

**Figure 1: Authentication page**

Username

Password

SUBMIT

English

Português

Figure 2: Language options

6.2 Dialer Users tab

This tab allows creating and managing the user accounts.

Dialer Service Configuration

User: masterLogout

Dialer Users

General

User Name	First Name	Last Name	Role	Dialer Groups	+Add User
master	master	master	Master	Default Dialer Group	<div></div>
adm	Administrator	stcms16	Campaign Administrator	Default Dialer Group Group1 FD1 faste	<div></div> <div></div>
Manager	IVR	Manager	Manager	Group1	<div></div> <div></div>
Master2	Master	Two	Master	Group1	<div></div> <div></div>
Super	Super	Visor	Campaign Supervisor	Default Dialer Group Group1	<div></div> <div></div>

Items per page 101 - 5 / 5<<<>>>>

Figure 3: User accounts

GGr

## Dialer Management

- A list of the users, containing the following data: user name, first name, last name, role, dialer group, an Edit icon and a Remove icon
- The +Add user icon which displays a modal screen with the following parameters:
  - Username : it identifies the user in the authentication process.
  - Password: the password for the user authentication.
  - First name: user's first name.
  - Last name: user's last name.
  - Role: Campaign Supervisor, Campaign Administrator, Manager or Master.
  - Dialer Group: the group can be selected via the drop down menu.

The screenshot shows the 'Dialer Users' modal screen. The background is a table with columns: User Name, First Name, Last Name, Role, Dialer Groups, and +Add User. The table contains five rows of user data. The '+Add User' column has an edit icon and a remove icon. The modal screen is a white box with a title bar 'Add User'. It contains the following fields: 'User Name' (text input), 'Password' (text input), 'Confirm Password' (text input), 'First Name' (text input), 'Last Name' (text input), 'Role' (radio buttons for Campaign Supervisor, Campaign Administrator, Manager, Master), and 'Dialer Groups' (dropdown menu). The 'Role' field has 'Campaign Supervisor' selected. The 'Dialer Groups' field has 'Select Dialer Group(s)' selected. At the bottom of the modal are 'SAVE' and 'CANCEL' buttons.

User Name	First Name	Last Name	Role	Dialer Groups	+Add User
master	master				
adm	Administra				
Manager	IVR				
Master2	Master				
Super	Super				

Figure 4: Add User screen

- The Edit icon which displays a modal screen with the same fields as the Add User screen.

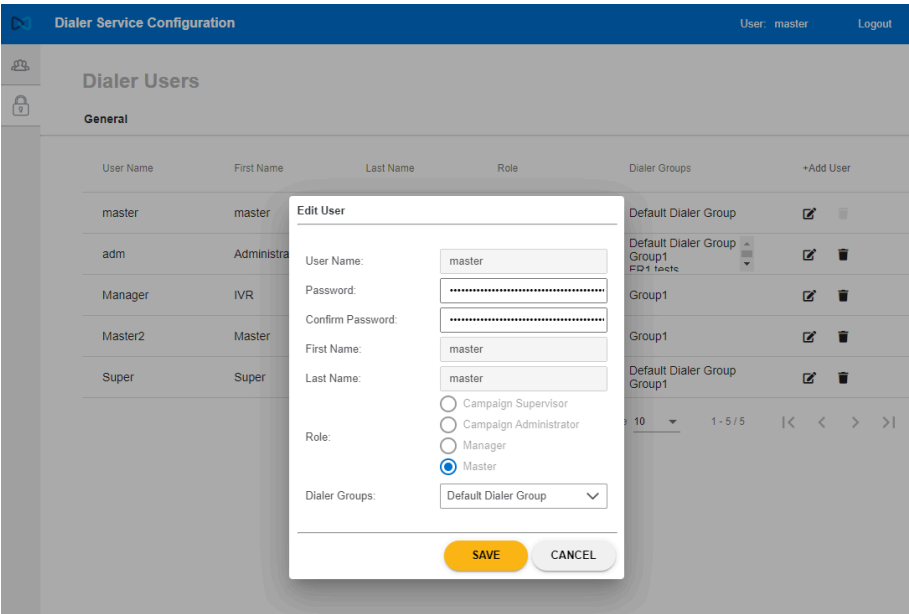


Figure 5: Edit User

- The Remove icon, which opens a dialog window.

### 6.3 Dialer Groups tab

This tab allows creating and managing the Dialer groups, used to organize the users which manage related campaigns.

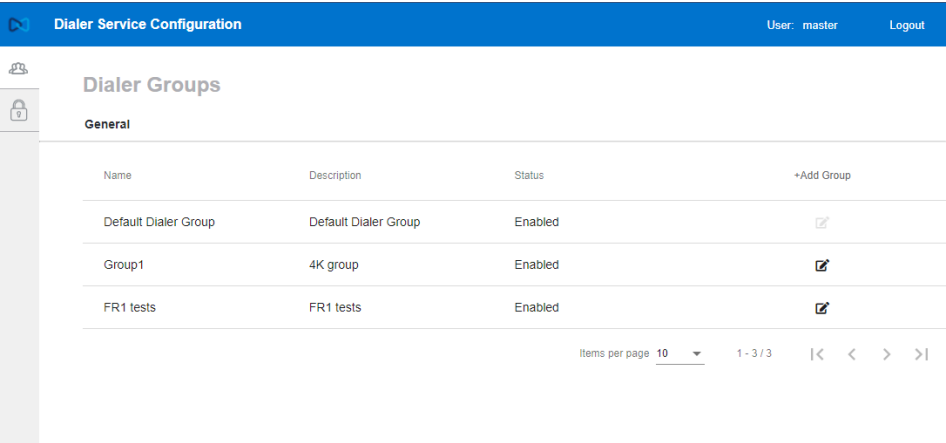


Figure 6: Dialer Groups tab

The Dialer Groups tab displays the following information:

- An +Add group icon which displays a modal screen with the following parameters:
  - Group name: this name identifies the group.
  - Description: displays details about the group.
  - Enable check box: to enable/disable the group.

**NOTICE:** A group cannot be removed. It can only be disabled.

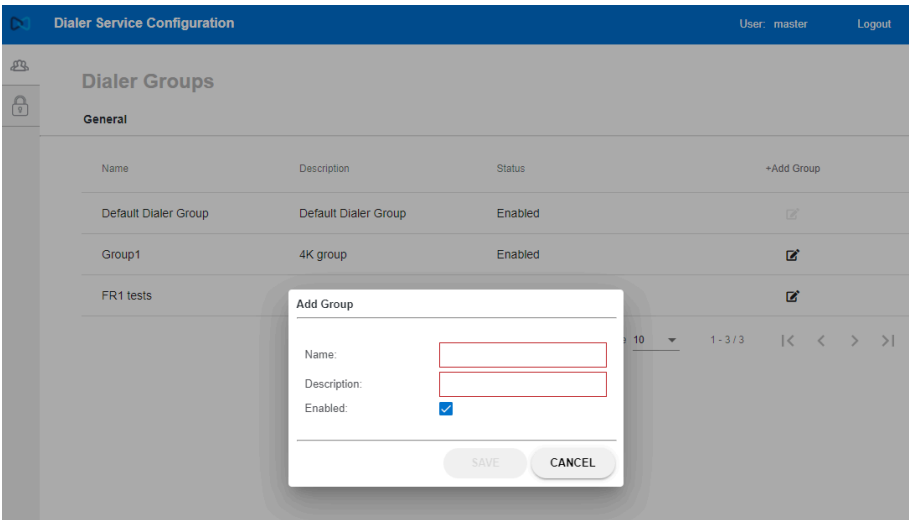


Figure 7: Add Group screen

- The Edit icon which displays a modal screen with the same fields as the Add Groups screen.

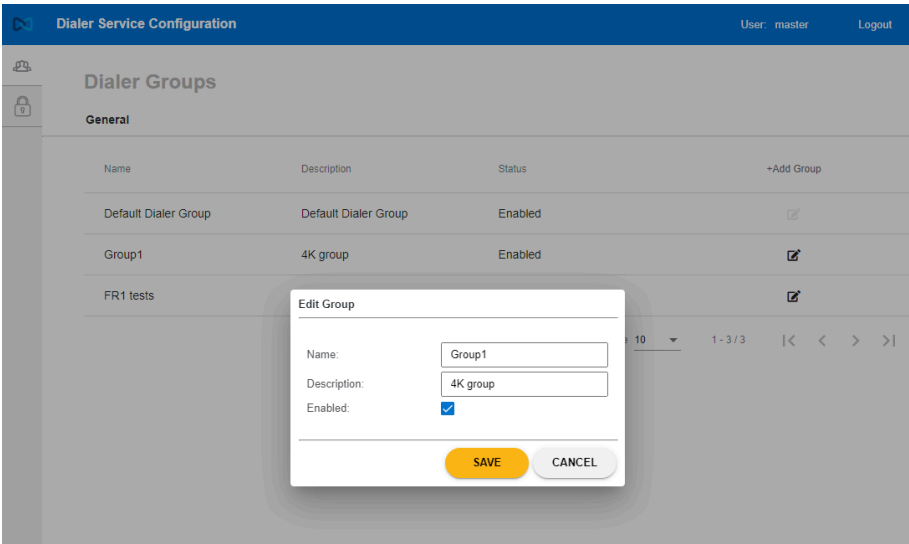


Figure 8: Edit Groups

The following rules are applied when a Dialer Group is disabled:

- The campaigns in STARTED state for which the group is disabled remain unchanged. The campaigns will run until the end of all schedules.
- The campaigns in STOPPED state for which the group is disabled are not allowed to start anymore. The "Start" button shall be disabled in this case.



- It is not possible to add new campaigns with a disabled group.  
Suggestion: remove the group from the "Dialer Group" drop down or keep it gray out.  
The same rule is applied for editing a campaign.
- The Campaign Supervisor and Campaign Administrator users are not able to login if all their groups are disabled, because the number of enabled groups for user is zero. If at least one group is enabled for that user, the user is allowed to login.

---

**NOTICE:** A Campaign Manager user is allowed to login even if no groups are enabled, mainly because a Campaign Manager has the permission to enable/disable groups.

---

## 6.4 Campaign Management tab

This tab allows creating and managing the campaigns.

The main view contains:

- A list of the campaigns, which contains the following data: Name, Description, State, Type, Queue, Dialer Group, Run/Stop Campaign icon, 3 vertical dots for more services.

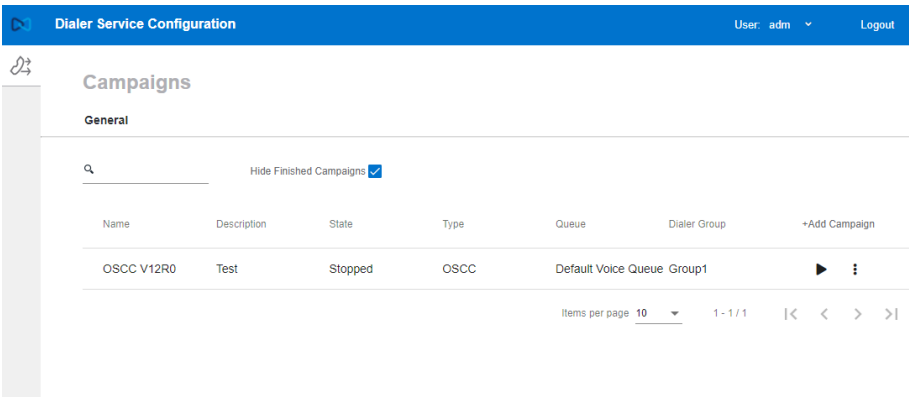


Figure 9: Campaigns list

By clicking the 3 vertical dots icon, the following services are displayed: Edit campaign, View/Edit Schedule, Upload leads, View/Edit leads, View Summary.

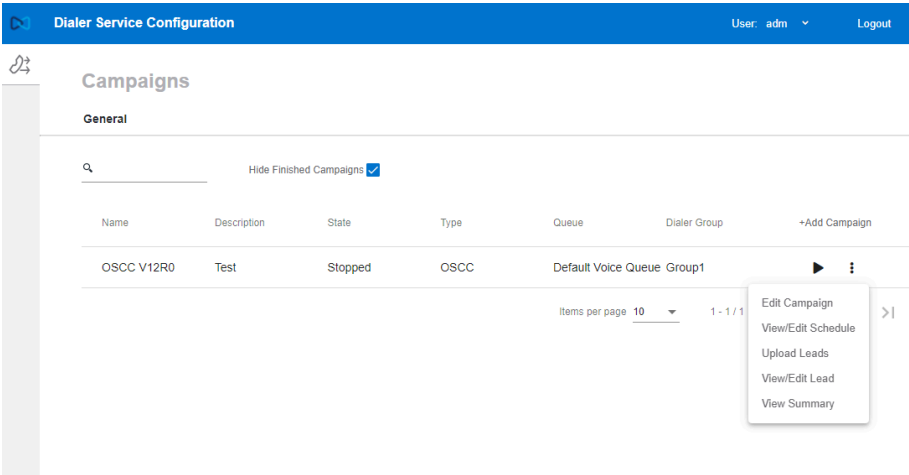


Figure 10: List of services

- An +Add campaign icon which displays a modal screen with the following parameters:
  - Campaign name - it must be a unique name that identifies the campaign.
  - Description - a text field that allows adding more details related to the campaign.
  - Dialer Group – the group for which the campaign is associated.
  - Date Range – define the initial date and the final date of the campaign.
  - Working Hours – defines the time interval in which the campaign will be executed.
  - Weekdays - a check box for each weekday to indicate in which days the campaign will be active.
  - Pilot Number – the pilot number to access the contact center queue or the IVR.
  - Max Attempts – the maximum number of times a number is tried in the campaign.  
Default: 5.  
Range: 1 to 100.
  - Retry after time (min) – it indicates how many minutes the dialer will wait until trying to dial a number which failed.  
Default: 60 minutes.  
Range: 1 to 1440 minutes.
  - Type – the possible options are OSCC and IVR. This parameter indicates if the call will be routed to OSCC or the the IVR.
  - Queue – select the queue which shall attend the campaign.

---

**NOTICE:** The queue must be reachable via the pilot number

---

- Answer Machine Detection – to enable/disable the Answer Machine Detection.
- Do-not-Call Service - to choose from a list of configured Do-not-Call service to be used for the campaign.

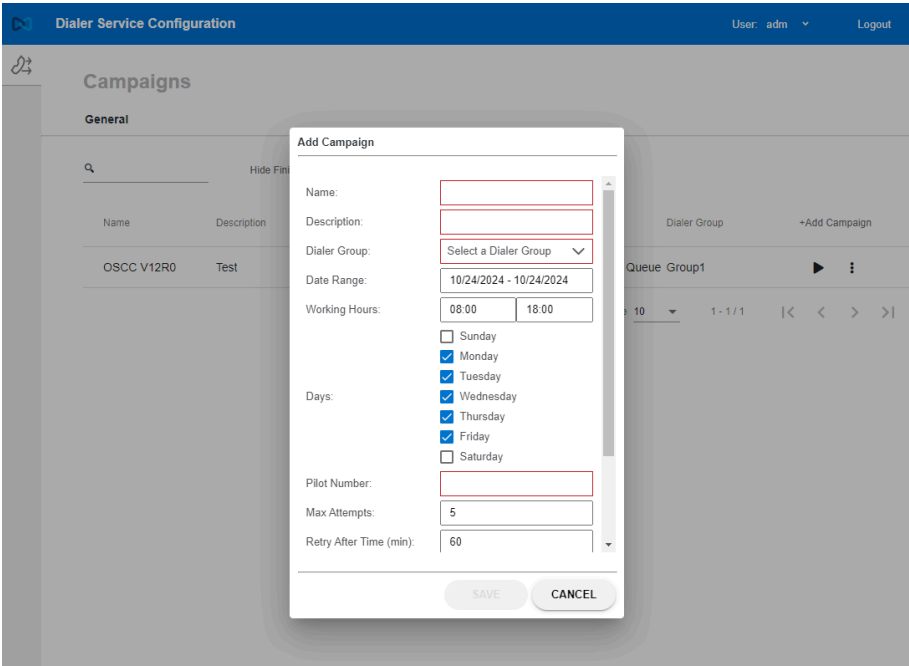


Figure 11: Add Campaign screen

- The Edit Campaign icon which displays a modal screen with the following fields:
  - Campaign name
  - Description
  - Dialer Group
  - Pilot Number
  - Max Attempts
  - Retry after time (min)
  - Type
  - Queue
  - Answer Machine Detection
  - Do-Not-Call Service

---

**NOTICE:** A Campaign must be stopped before changing the parameters.

---

The screenshot shows the 'Edit Campaign' modal in the 'Dialer Service Configuration' application. The modal is overlaid on a 'Campaigns' table. The table has columns 'Name' and 'Description'. One row is visible: 'OSCC V12R0' and 'Test'. The modal contains the following fields:

- Name: OSCC V12R0
- Description: Test
- Dialer Group: Group1 (dropdown)
- Pilot Number: 554183022950
- Max Attempts: 5
- Retry After Time (min): 60
- Type: ☒ OSCC ☐ IVR
- Queue: Default Voice Queue (dropdown)
- Answer Machine Detection: ☒
- Do-Not-Call Service: Embedded Service (dropdown)

At the bottom of the modal are 'SAVE' and 'CANCEL' buttons. The background interface shows a user 'adm' and a 'Logout' link.

**Figure 12: Edit Campaign**

- View/Edit Schedule icon which displays a horizontal tab, with the following content:
  - A list of Schedules, with the following data: Date, Start Time, End Time, State.

Possible values for the states are:

  - Not Running: the schedule has been manually stopped or is has run out of time.
  - Running: the schedule is being executed.
  - Finished: the schedule has already been executed.
  - Do Not Call OOS: the schedule is not being executed because the Do-Not-Call function is out of service.- Edit all Schedules icon, which allows to change the start and the end time of the campaign, for the remaining days.

**NOTICE:** The campaign must be stopped to allow editing the schedules.

**NOTICE:** Only the schedule for the current day as well as future schedule entries will be changed.

- Add new Schedule button, which allows adding a new schedule for the campaign.

**NOTICE:** It is only possible to add one schedule per day.

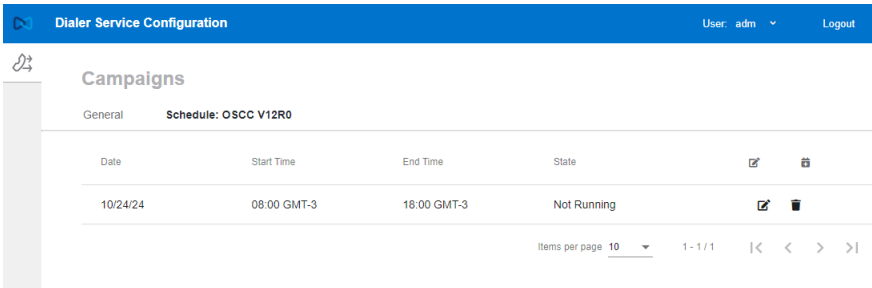


Figure 13: Add New Schedule

- Upload leads: a Windows browsing screen will be opened for the user to select the file containing the leads. If a valid file is selected, the content will be uploaded to the Dialer database. The file must be a .csv file with the Name and the Phone Number separated by comma, as for example:

Mary Silvester,554183015031

James Moore, 554183015023

**NOTICE:** Leads can only be uploaded to a Campaign if the Campaign is stopped.

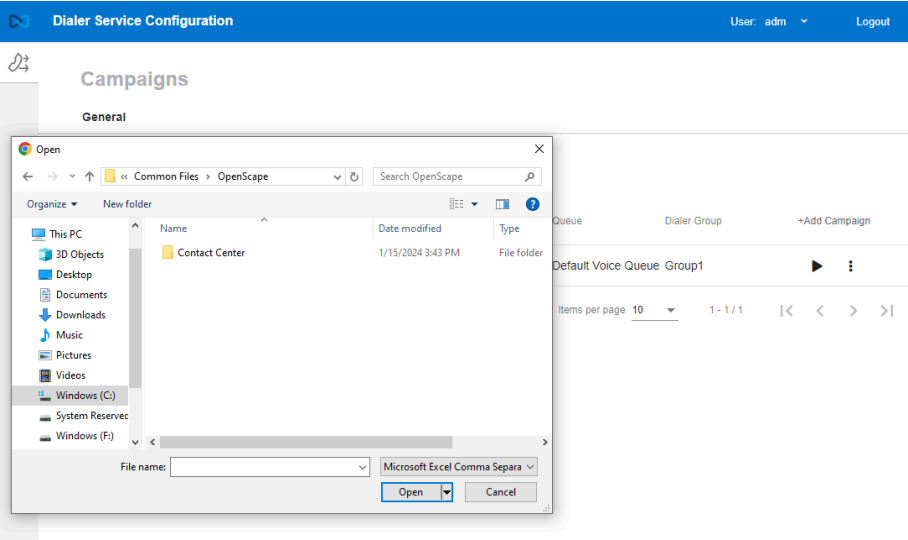


Figure 14: Upload leads

- View/Edit leads: a list of not executed leads is presented with the following fields:
  - Phone Number
  - Description
  - Name
  - Call Attempt: the number of times the dialer tried to reach the lead number, during the campaign.
  - Status: the status of the last try to dial the number, during the campaign.

The possible values for the status are:

- NOT\_CALLED: this number was not called yet.
- SUCCESS: this number was called, the customer answered the call and the call was transferred to an agent.
- FAILURE: the call was not completed.
- BUSY: the number was busy.
- DECLINE: the customer declined the call.
- AMD: the Answer Machine Detection has detected that the call was answered by an answering machine.
- SERVICE\_TEMPORARILY\_UNAVAILABLE: the call was not completed because of service unavailability. For example the outgoing trunk is out of service.
- DO\_NOT\_CALL: this number is included in a Do-Not-Call list and must not be called.
- UNKNOWN: the call was not successful for another reason.

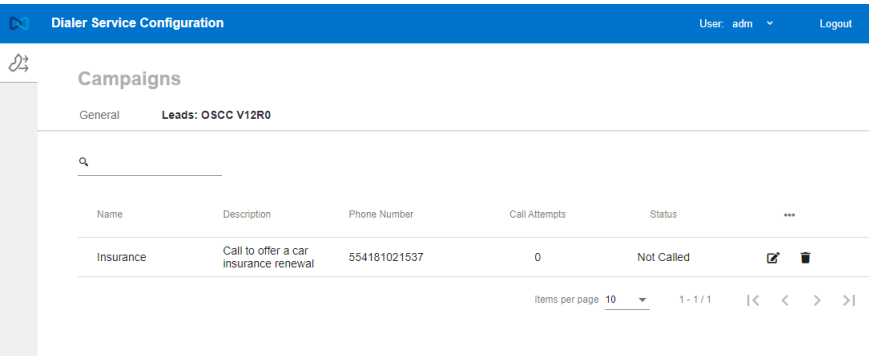


Figure 15: View/Edit Leads

By selecting a lead and clicking on the Edit Lead icon, a modal screen is opened with the following parameters: Name, Description and Phone Number.

**NOTICE:** A Campaign must be stopped before changing the Campaign parameters.



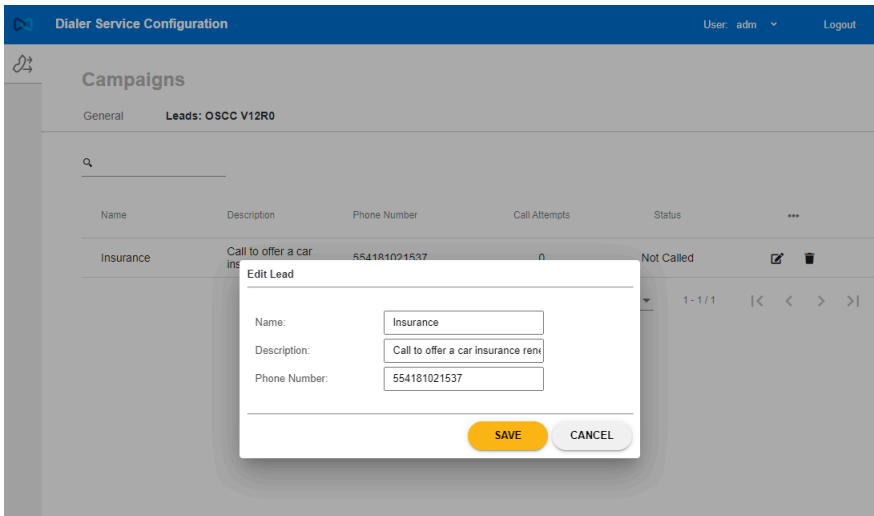
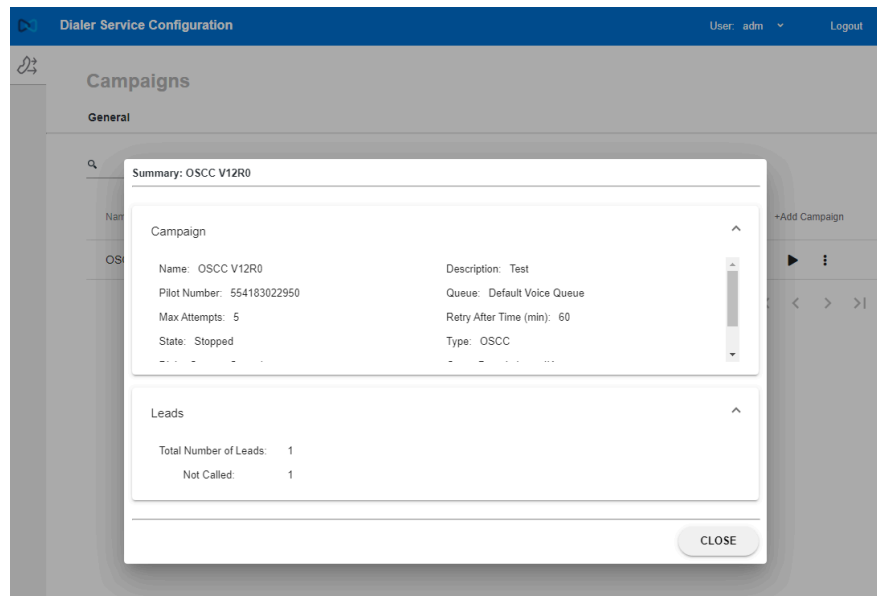


Figure 16: Edit Lead

- View Summary: a modal screen will be opened with a summary of the current campaign state. The following data is displayed:
  - Campaign area:
    - Campaign name
    - Description
    - Pilot Number
    - Max Attempts
    - Retry after time (min)
    - State: running or stopped.
    - Type: OSCC or IVR
    - Dialer Group
    - Dialer Description
  - Leads area:
    - Total number of leads: total number of leads in the campaign.
    - Not called: number of leads which have not been called yet.
    - Success: number of leads which were successfully called.
    - Decline: number of leads which were declined.
    - Busy: number of leads which were busy.
    - Unknown: number of leads whose status is unknown.



**Figure 17: View Summary**

## **7 Maintenance**

### **7.1 CMS Dialer**

The CMS logs can be downloaded via System -> Diagnostics tab.

## 8 CMS Dialer

