User manual

Version 2024-02-24

Last version of this document can be downloaded from https://help.accolades.ro

Content

Accolades

About Accolades

Accolades is a web based app developed by VoIPIT that, along with the Asterisk software can manage a fully operational phone system. Accolades can provide a variety of services:

- voice mail;
- call forwarding;
- waiting queues;
- after call survey;
- interactive voice response;
- time conditions;
- virtual fax;
- secretary services (BLF, call pickup);
- call center (with a real time interface);
- SMS services;
- call recording;
- reports;
- call center dashboard;
- CRM;
- external CRM integration (with API).

1. Interface

1.1 - App layout

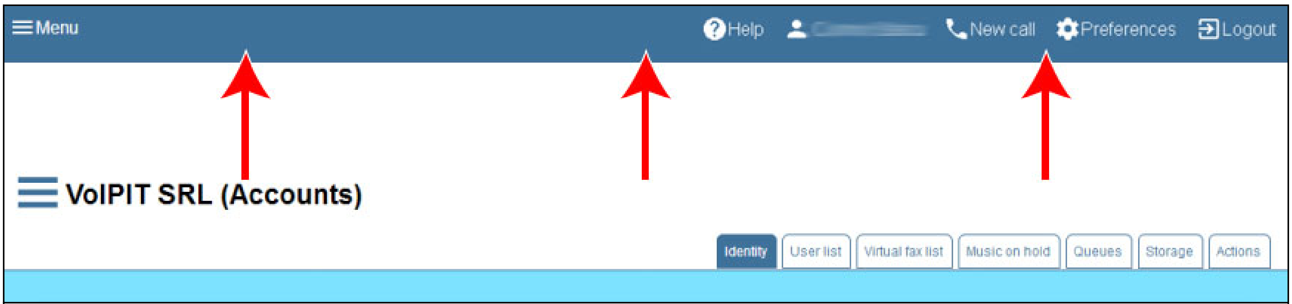
Accolades has an optimized interface for both computers and mobile devices. Keep in mind that there are some pages that are difficult to use with narrow mobile devices, like mobile phones in portrait mode (for example, the pages used for call center interactive monitoring).

Accolades has several interface elements common to all pages:

- Menu bar;
- Primary menu;
- Title and options for current page.

Menu bar

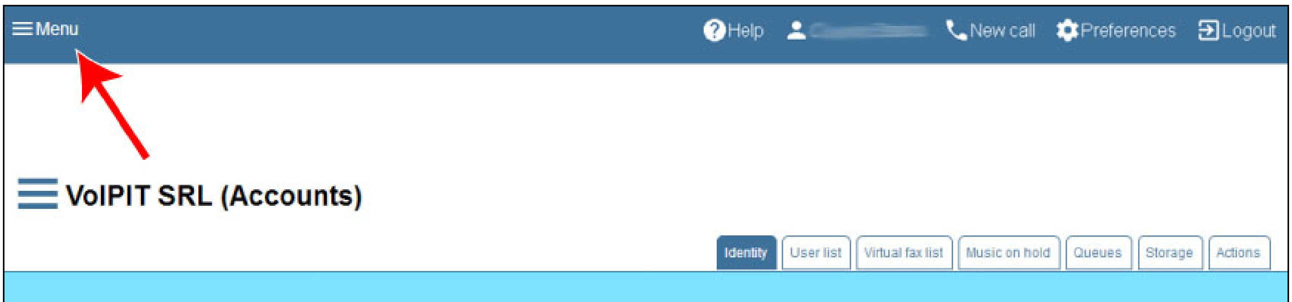
On the upper part of the page the menu bar is displayed.



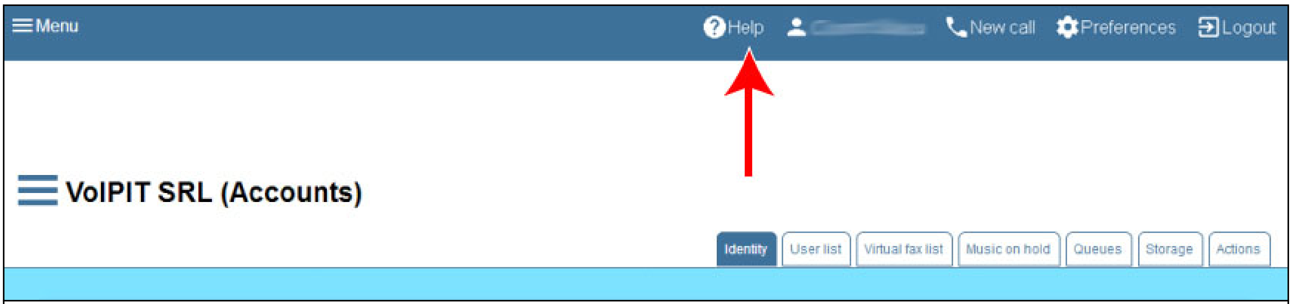
Accolades menu bar

The bar contains 4 main elements:

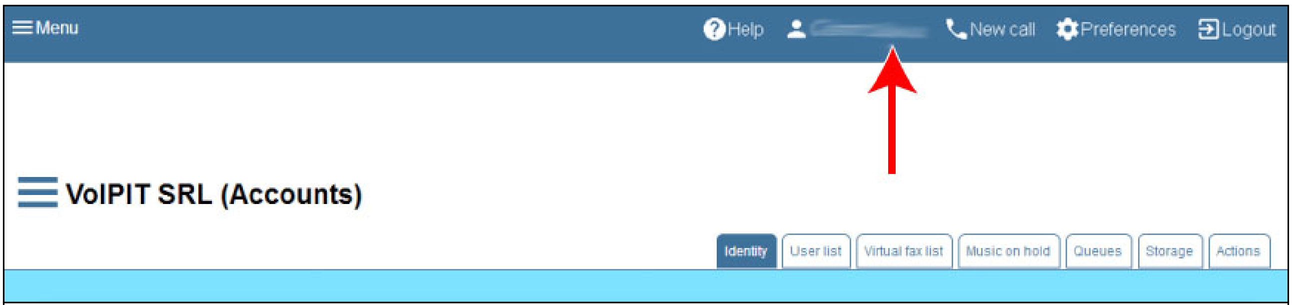
- Menu toogle button;
- Shortcut for Accolades documentation (if available);
- Shortcut to home page;
- Scurtura for starting a call (if a phone is connected to the user);
- User preferences button;
- Logout button.



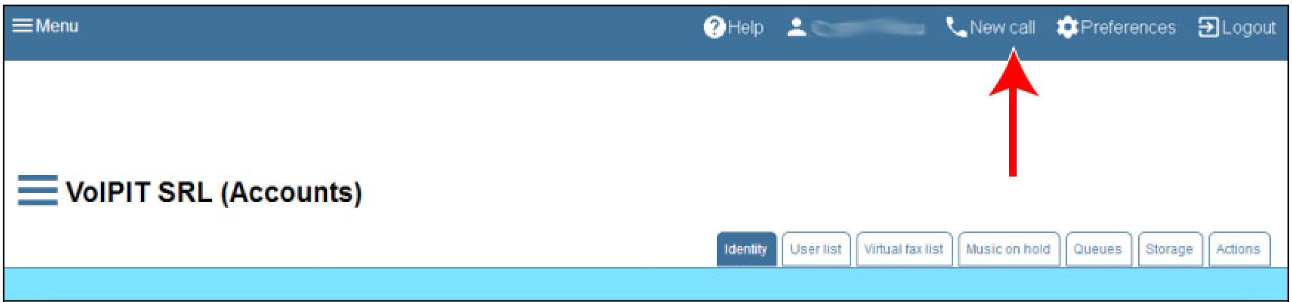
Menu toogle button



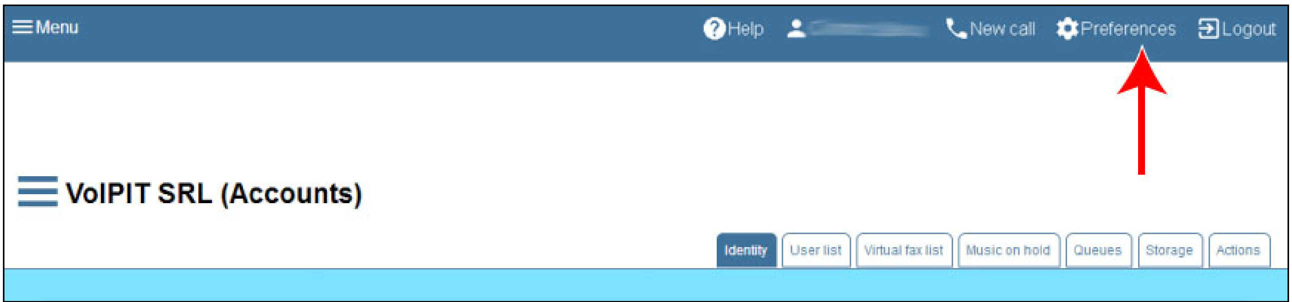
Shortcut to documentation



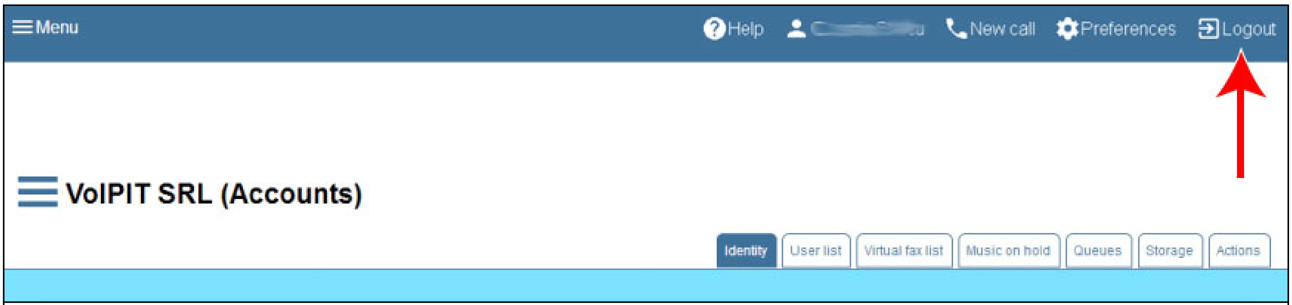
Shortcut to home page



Shortcut for starting a call



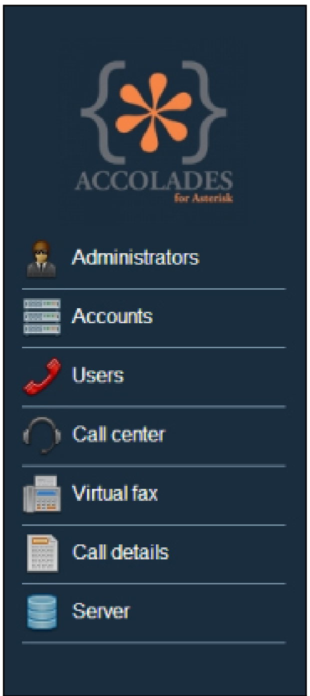
User preferences



Logout button

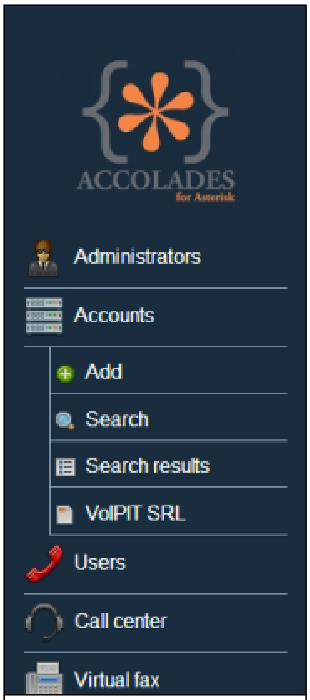
Menu toogle button

Main app menu can be toggled by pressing the MENU button from the menu bar. The main menu will slide from the left side of the page and will contain the active modules for the current user.



Main menu

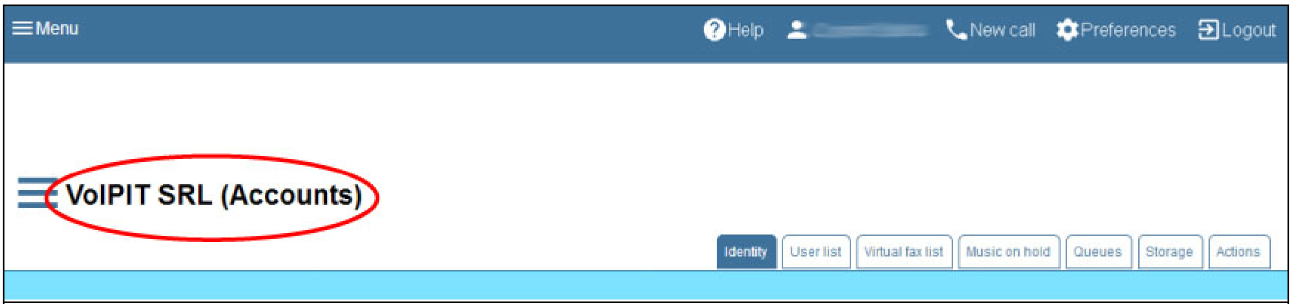
Most of the menus have additional options that can be toggled by pressing the menu button.



Active submenu

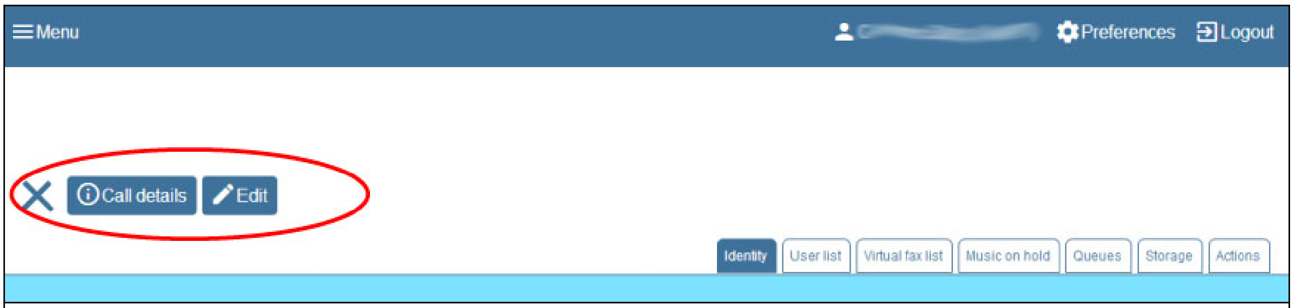
Title and options for current page

The title of the current page is displayed on the upper left part of the document.



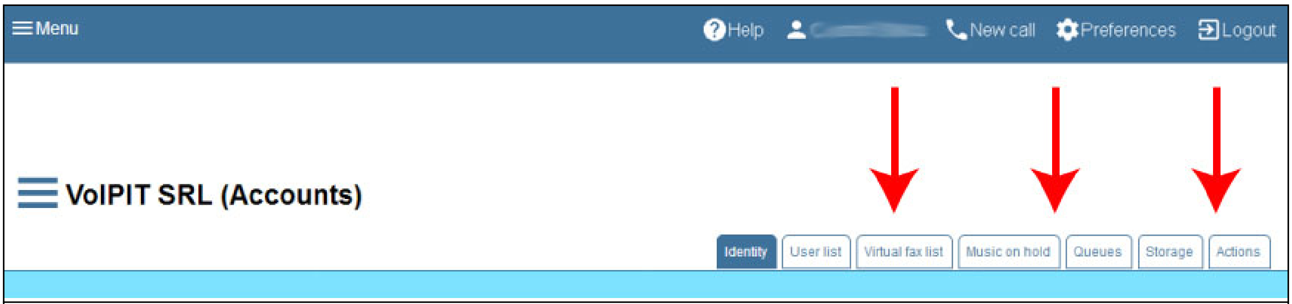
Title of the current page

Some of the pages will display, left to the title, a button for toggling the page menu.



Page menu

There are some pages that will have a tab list placed on the right side of the document. The tabs provide an easy way of grouping related data together.

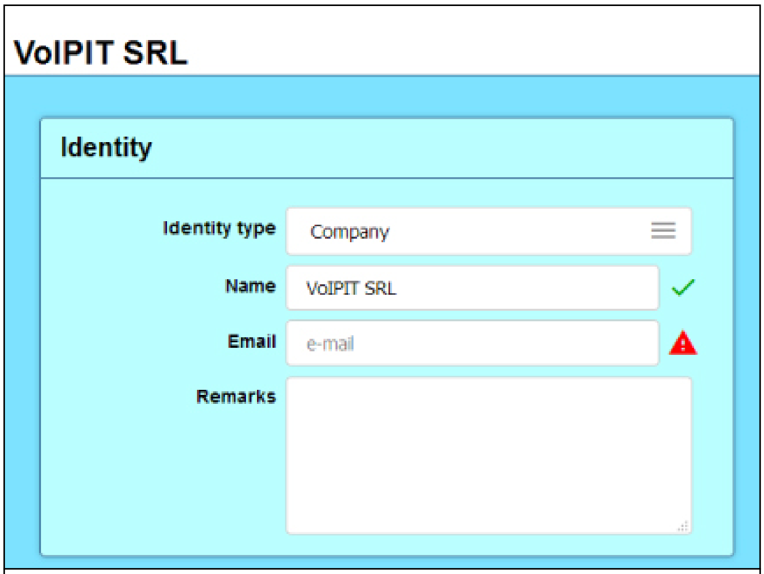


Tab list

Some pages can contain other types of elements, that will be described when it is necesarry.

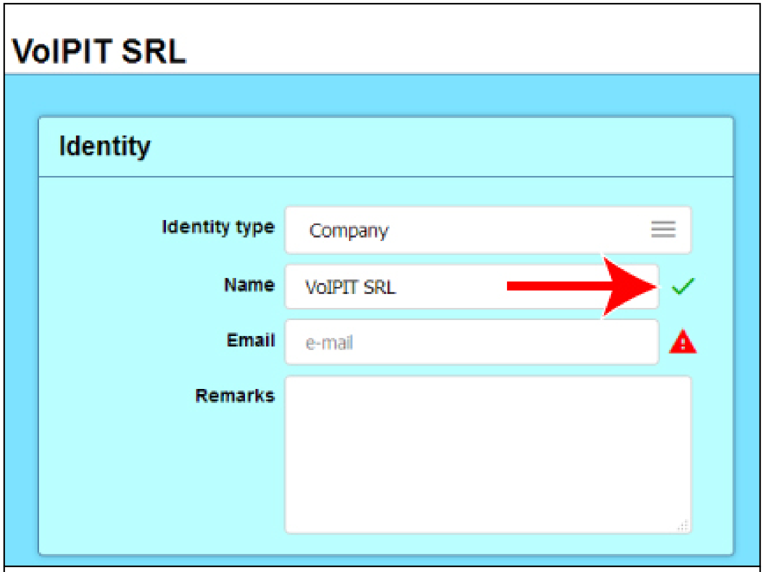
1.2 - Forms

When Accolades needs some data, for running a task, the user will have to submit a form.
A form has several element that have to be filled by the user. If is needed, the elements are grouped in containers, for a better readability.

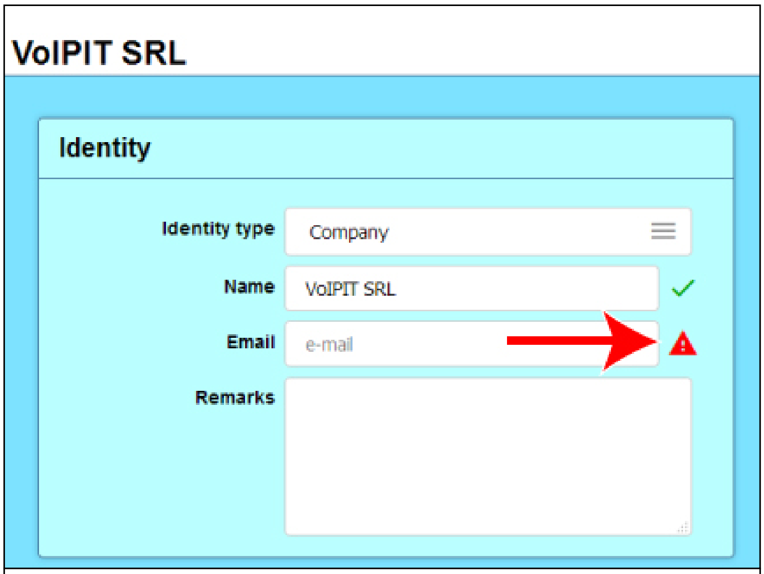


Form example

If some of the fields are mandatory or must have a specific text structure, (like phone numbers or email addresses) then left of the input an icon will be displayed, showing the status of the field: a green check mark is used for valid values and a red exclamation mark is used for invalid values. A form can not be submitted if it contains invalid fields.

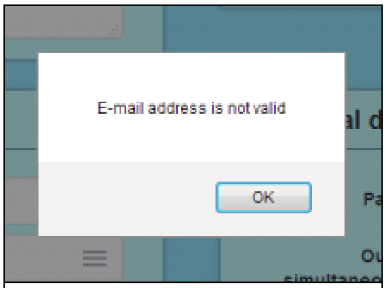


Valid field example



Invalid field example

Trying to submit a form with invalid inputs will raise a notification about the invalid value.

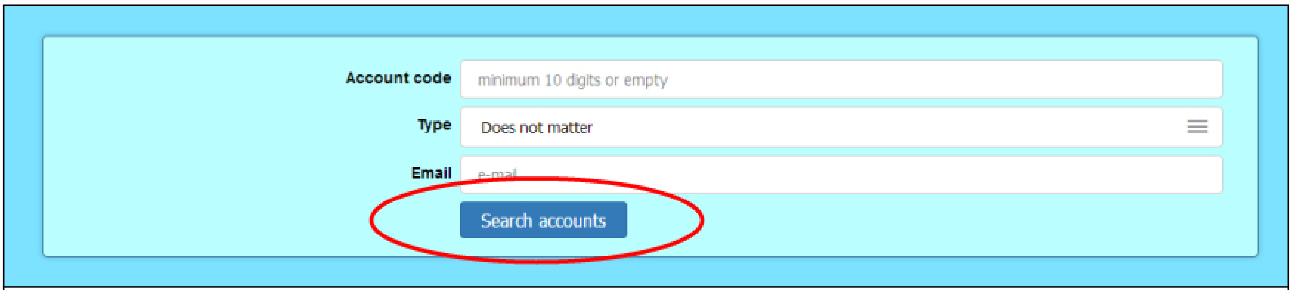


Validation error

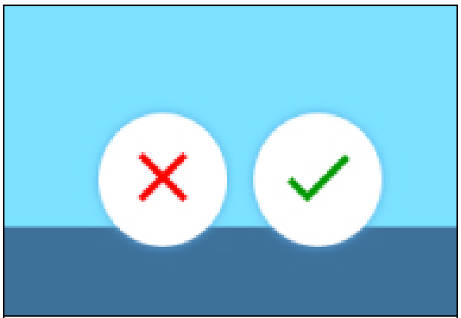
Depending on the type of operation, a form can be submitted in two ways:

- By pressing the submit button, from the form section;
- By pressing the validation button on the lower-right side of the screen. Usually the validation button has a cancel

button besides it.



Section submit button



Submit and cancel buttons

There can be additional types of user interactions in the forms content, that will be described when those type of inputs are used inside a form used in a certain situation.

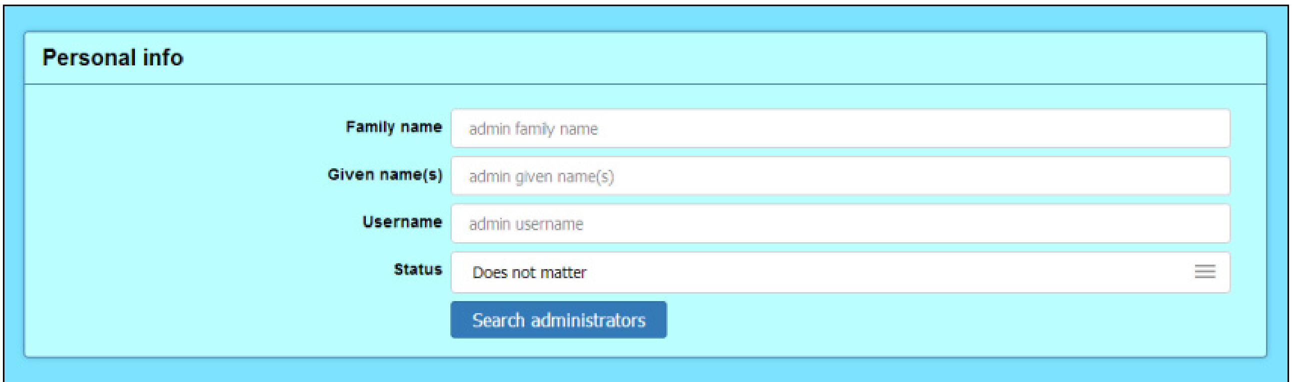
1.3 - Searches

Most of the Accolades modules have a build-in search function for quick accessing of different entities.

The search process is similar between modules, the difference comes from the available filters. Further on, a search process is explained, using the Administrators module as an example.

Search start

For starting a search, the user must select the Search option from the required module. Accolades will display a page where the user must fill in the initial search filters.



Search form

The search process will start after the user clicks the Search ... button.

Search result

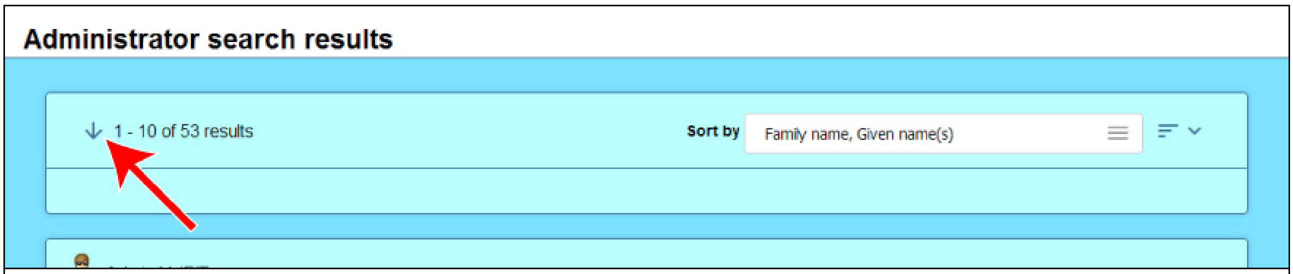
After the search has been initiated, Accolades will query the database and then the results will be displayed, grouped by pages.

The results page has several components:

- Search filters edit button;
- Total results;
- Results sorting type;
- Results sorting order;
- Active filters;
- Search results;
- Pagination.

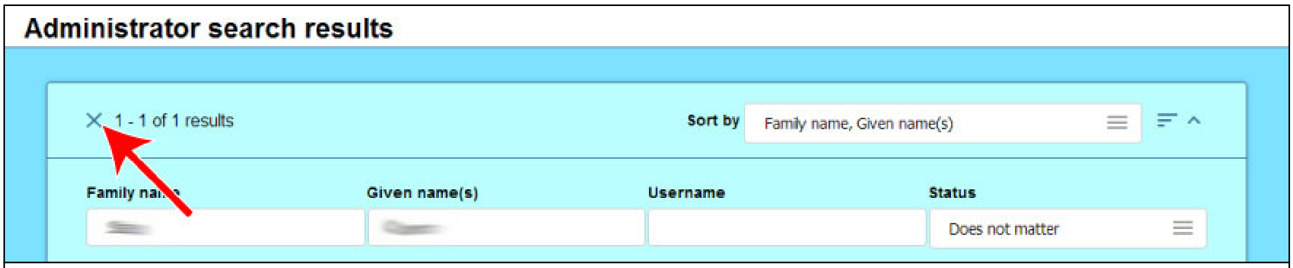
Search filters edit button

After the page has been loaded, the filters are hidden, by default. To edit the filters, the user must press the button with a down arrow. The filters will slide down, in the upper part of the page.



Filter toogle button

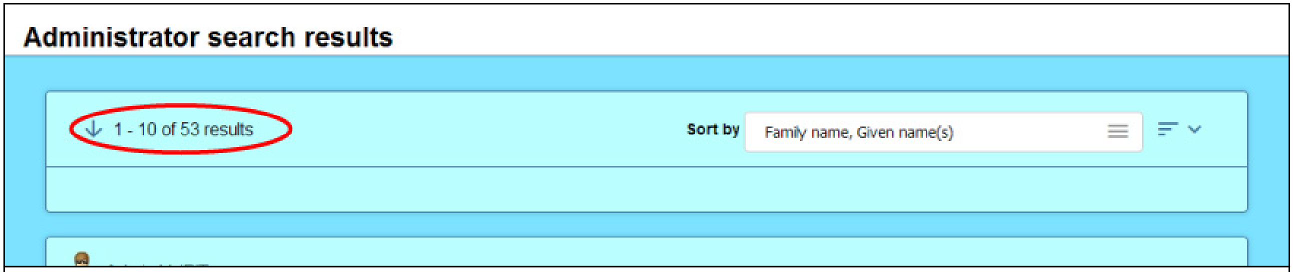
The filters can be hidden again by pressing the close button.



Filter close button

Total results

In most of the cases it is not possible to display all the search results. Because of this, Accolades will only display a limited number of elements, but it will display the total number of results on the upper part of the page.

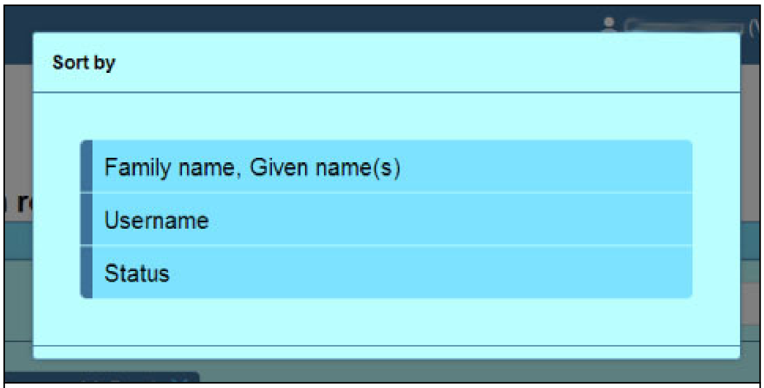


Total results

Sorting type

Most of the pages have several sorting options for the search results. The active option is displayed on the upper-right part of the page and can be changed by pressing it.

Sorting type



Sorting type active

Results sorting order

Right to the sorting type is the sorting order button. This button can have its value toggled between ASCENDING and DESCENDING.

Ascending order

Descending order

Active filters

When the area displaying all the available filters is hidden, Accolades will only display the active filters.

Active filters

An active filter has 3 components:

- Filter name;
- Filter value;
- Cancel filter button.

The user can cancel the active filter by pressing the canceling button placed right to the filter value.

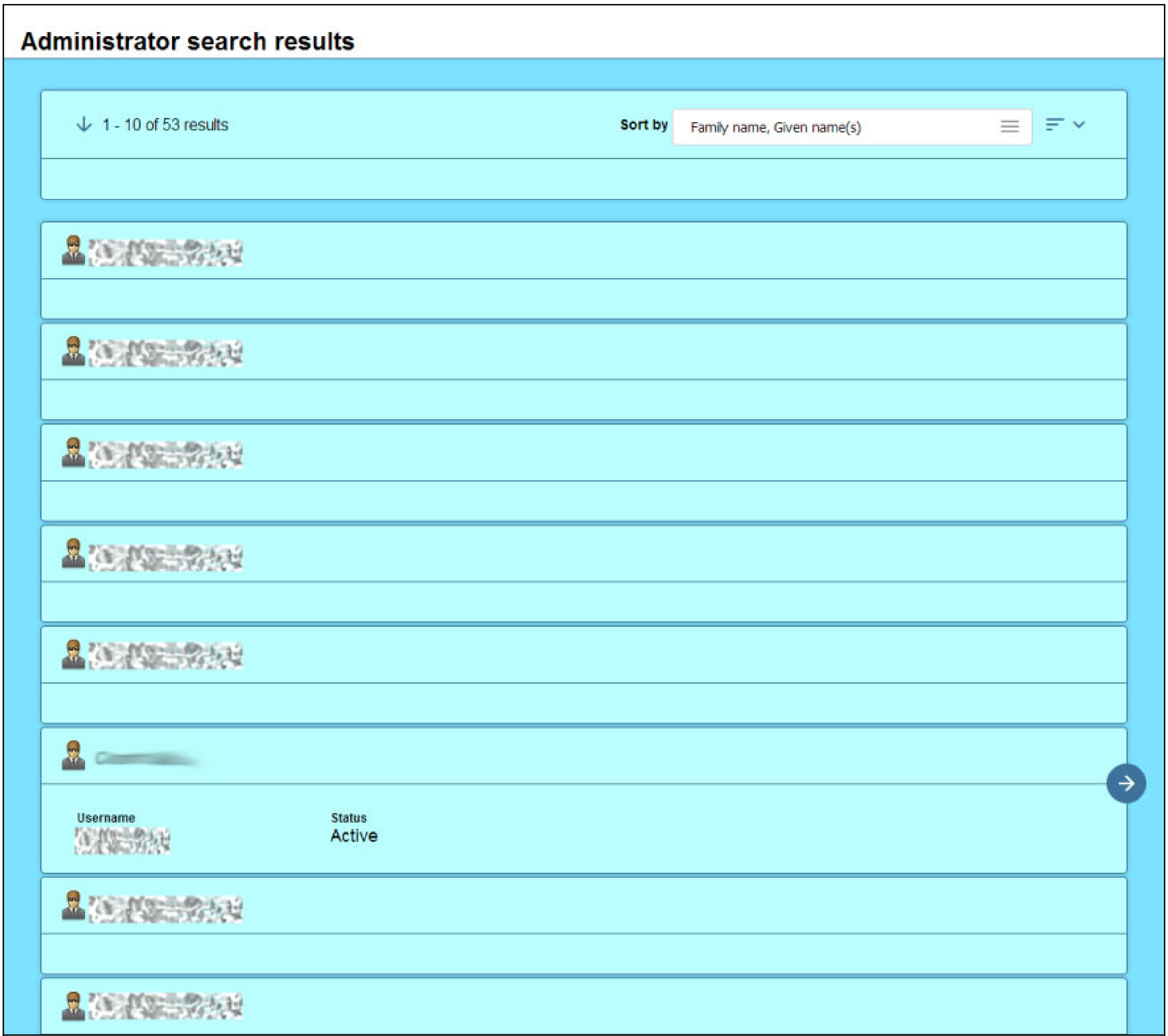
Canceling button

Search results

Depending on the active module, Accolades will display the search results using different renders.

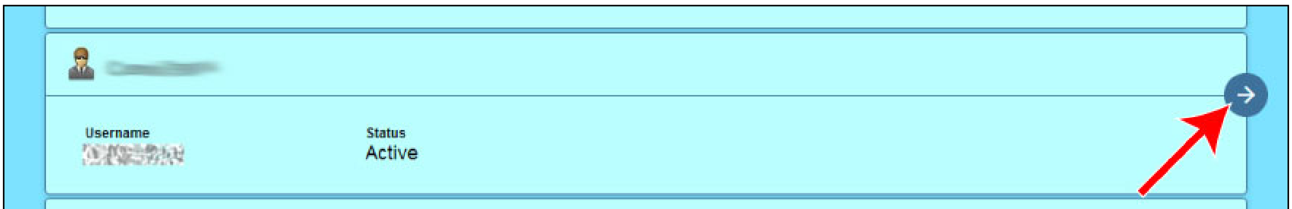
Sliders

Usualy, Accolades will display just basic info about an element. Additional info about that element can be toogled by clicking the name of the element.



Sliders

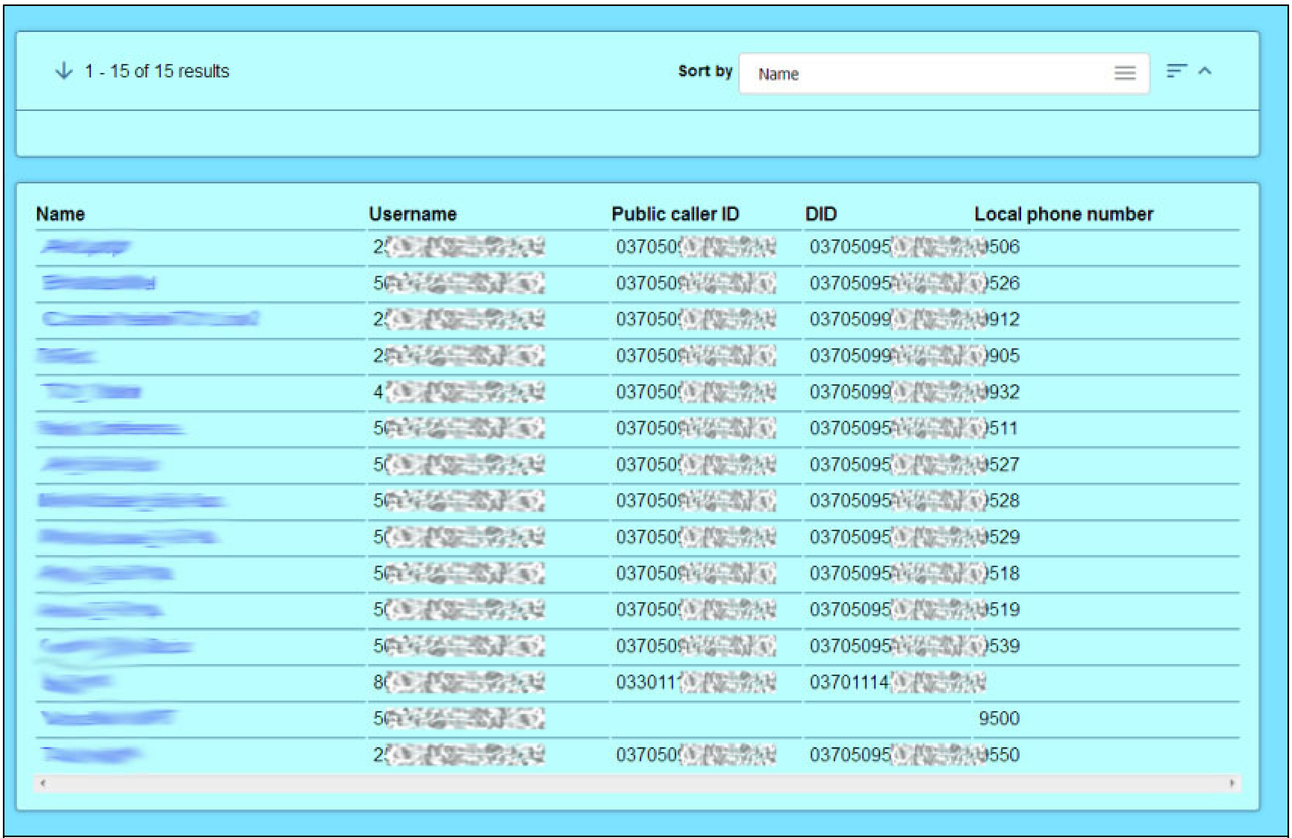
When additional info is visible, Accolades will also display a button to access the element. The button is placed on the right side of the container and it is shown as an arrow to the right.



Element access

Table

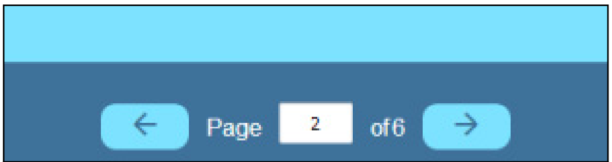
There are cases when Accolades will display the search results as a table. If the screen of the viewing device is too small, then the table will have a horizontal scroll bar.



Results table

Pagination

The controls for page navigation are placed on the lower part of the document. The user can either use the left-right buttons or can fill in the page number manually.



Pagination

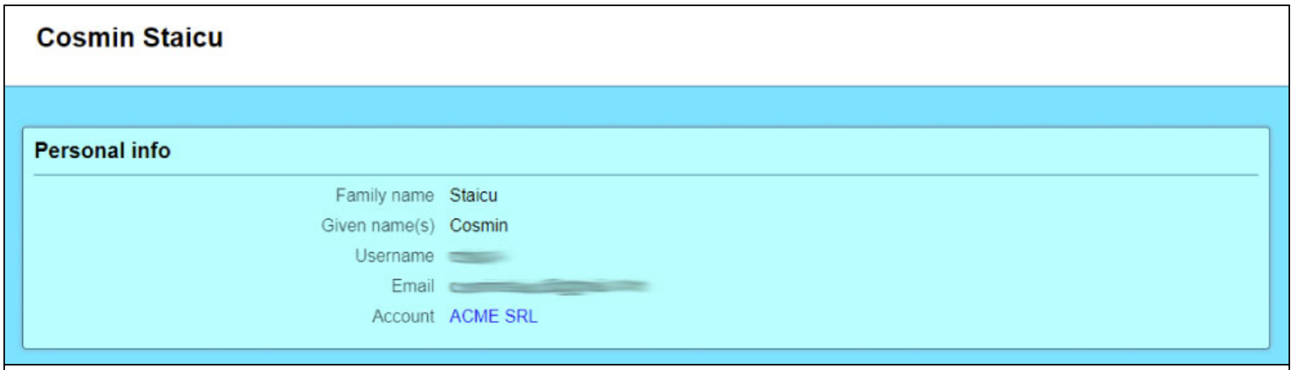
Last search history

Accolades will retain the last performed search, for each module. Last search can be accessed from the main menu, by selecting the Last search option.

2. First page

2.1 - Initial page

After logging into Accolades, the administrator will be redirected to the first page. The same page can be accessed by pressing the administrator name, displayed on the upper-right side of the page.



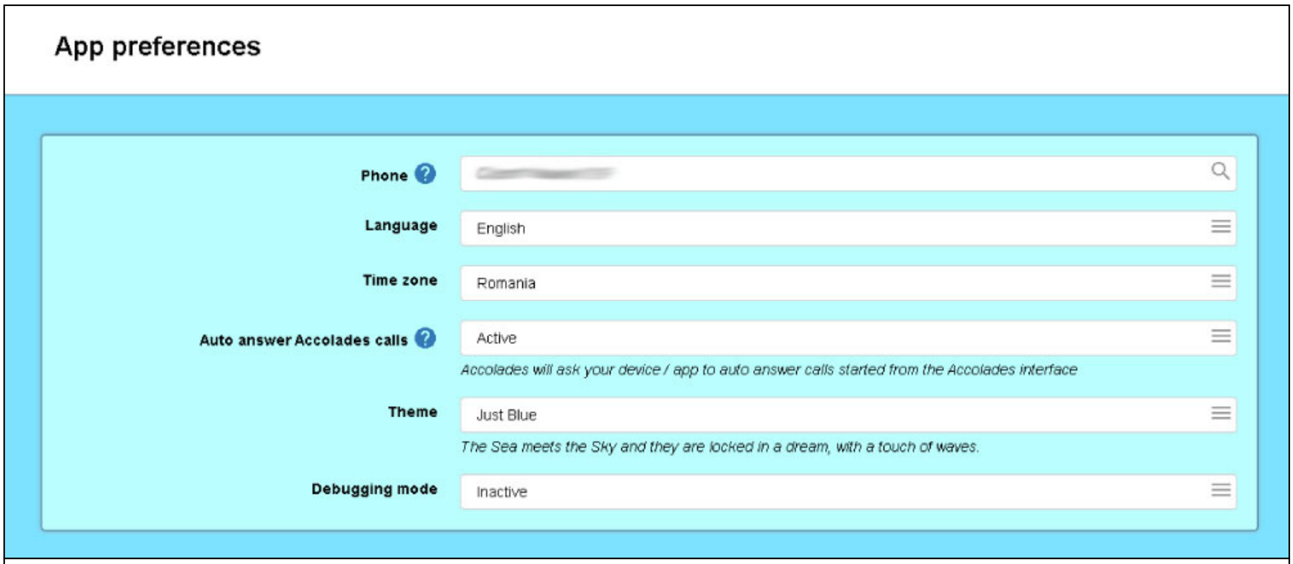
First page

The page displays some general data about the logged in administrator:

- administrator family name;
- administrator given name;
- administrator user name;
- administrator email;
- administrator linked account.

2.2 - Preferences

Using the "Preferences" menu, displayed on the upper part of the page, the administrator can set up his interface options.



App preferences

The following options can be edited:

- Phone: The phone used by the administrator for running specific tasks: starting calls from the Accolades interface, using the Call center module etc. Usually, this option contains the id of the phone on the administrator desk.

- Language: The language used for the entire application.

- Time zone: The value sets up the format for all the time values inside the Accolades app (for example the timestamp for the call records).

- Auto answer Accolades calls: This option is only used by the calls started from the Accolades interface (calls started using the button from the top menu bar or calls for the call center campaigns). If the option is active, then the server will ask the phone (or app) used by the agent to auto answer the call started by the server. Warning: not all devices (or apps) are compatible with this request.

- Theme: The theme used for displaying the interface. The administrator can use the defined account theme, any of the predefined themes or he can set up his own colors, when the "Custom" value is selected.

- Debug mode: When active, Accolades will display additional info, when running certain tasks.

3. Administrators

3.1 - Asministrators overview

Administrators module is used to configure settings for users that can log in to the server.
"Administrator" notation is used throughout the entire application, as a generic term for all users of Accolades: regular users, call center agents, supervisors for waiting queues etc.
Administrators module, accesible from the application menu is available only if Accolades has been installed on your own server. If the application is used from the cloud, using the servers provided by VoIPIT, then the module is unavailable due to data security policy. The administrators management procedures for VoIPIT servers are only performed by VoIPIT personnel.
The module can be accessed from the main menu and has the following tasks available:

- add a new administrator;
- search for administrators;
- view the last performed search;
- access the last viewed administrator.

3.2 - Add, edit, delete administrators

The option for adding additional administrators to the server is called Add and can be accessed from the module Administrators .

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The page for **editing** an administrator can be accessed from the administrator page, by clicking the page menu, placed near the name of the administrator. This menu is displayed only the required permission are in place.
For **deleting** an administrator, the current user must also use the menu near the administrator name.

3.3 - Search administrators

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

To start a search, the administrator has to access the Search option from Administrators menu.
The starting page will display the following filters:

- family name for the administrator;
- given name for the administrator;
- username for the administrator;
- status for the administrator.
- start date for the last login interval;

- end date for the last login interval;
- the account that the administrator is linked to.

The values used for the search filters can be further edited from the search result page. To start the search, the user has to press the Search administrators button, operation that will load the search results page.

3.4 - Administrator search results

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

After a search has been started Accolades will display the search results. The results will be stored in the current session and can be accessed anytime from the Administrators module, by selecting Search results option.
On the upper side of the page Accolades will display the total number of results that are matching the search criteria, along with the display order. The inactive filters are hidden and can be displayed by pressing the arrow near the total number of results value.
The results are rendered as a list. For viewing additional info about the element, along with a button to access the administrator page, the user has to click on the administrator name.
Accolades will display a total of 10 results per page. To switch between pages, the controls placed on the bottom of the page will be used.

3.5 - Impersonating an administrator

Accolades allows an administrator (with the required permissions) to impersonate another administrator. Using this technique, the first administrator can view all the data and options that are available to the second administrators, without being required to know the necessary password.

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

All the data for an administrator are displayed in the administrator info page. This page can be accessed from the search results page, by pressing the name of the administrator and then on the right arrow.
To start this operation, the authenticated administrator will have to access the info page of the administrator he wants to imitate, the Identity tab. From the page menu the administrator has to press the Impersonate button. After that Accolades will change the authenticated administrator to the second one.

3.6 - Administrator info page - identity tab

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Identity tab allows for viewing of data linked to the identity of the administrator inside the Accolades system.
The data is divided into 2 sections:

- personal info;
- credentials.

The personal data section displays the following properties:

- **Family name:** the family name of the administrator;
- **Given name:** the given name of the administrator;
- **E-mail:** the email of the administrator.

The credentials section displays the following properties:

- **Username:** the username for this administrator (this value is unique inside Accolades);
- **Password:** the administrator password, displayed as a static text;
- **Status:** an administrator can only login to the system if his status is set to active;
- **Last login:** the last login date for the administrator;
- **Account:** the account that the administrator is linked to (when the account is deleted, the administrator is also deleted).

Tot edit the data displayed on this page, the Edit button, located inside the page menu, has to be clicked.
To delete the administrator, the Delete button, located inside the page menu, has to be clicked.

3.7 - Administrator info page - permissions tab

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

An administrator can perform tasks depending on his permissions. These permissions can be viewed in the administrator page using the Permissions tab.
The page is divided into 3 main sections:

- **Account list:** the section is displayed only if the administrator has one or more permissions set to "Allowed for list (Accounts)" and it contains the accounts that the permission refers to;
- **Call center access:** The section contains the accounts that are available for call center login to the administrator. The agent can use all the queues defined in the list (the permission is global to the entire account; no specific queues can be selected);
- **Permissions:** Permissions: a details list will all the actions available inside the Accolades platform, along with the current setting for each one.

The permissions are divided into several sections, according to the parent module.

- administrators;
- accounts;
- users;
- queues;
- IVR;
- time conditions;
- call center;

- sms;
- customers;
- server.

Administrators

This section defines the permissions for managing the administrators module.

- **add:** permission for adding new administrators;
- **view:** permission for viewing administrators;
- **identity tab:** the permission for the administrator to view and edit data inside the Identity tab, for any administrator;
- **permissions tab:** the permission for the administrator to view and edit data inside the Permissions tab, for any administrator;
- **API tab:** the permission for the administrator to view and edit data inside the API tab, for any administrator;
- **delete:** permission for deleting administrators;
- **impersonate:** permission for impersonating other administrators.

Accounts

This section defines the permissions for managing the accounts module.
Besides the standard options ALLOWED and NOT ALLOWED most of the permissions also accept the value ALLOWED FOR LIST. This last value will allow the user to perform the task only for specified accounts, defined in the administrator page. Using this method an administrator can manage one or several accounts, but not all of them.

- **view:** permission for viewing accounts;
- **add:** permission for adding new accounts;
- **edit:** permission for editing accounts;
- **delete:** permission for deleting accounts;
- **view calls:** permission for viewing the call list for accounts;
- **listen to the recorded calls:** permission for listening the recorded calls;
- **view virtual faxes:** permission for viewing virtual faxes, both sent and received;
- **send virtual faxes:** permission for sending virtual faxes;
- **music on hold edit:** permission for add, edit and delete music on hold sets;
- **account limits edit:** permission for editing the various limits for an account (maximum number of elements from a group, storage space for the account etc.);
- **edit API:** permission for editing the data inside the API tab for the account;
- **edit billing information:** permission for editing the billing information for the account.

Users

This section defines the permissions for managing the users that are connecting to the asterisk server (phones).

- **add:** permission for adding new users;
- **edit:** permission for editing users;
- **delete:** permission for deleting users;
- **tab: identity:** permission for accesing and editing the identity tab, for a user;
- **tab: telephony:** permission for accesing and editing the telephony tab, for a user;

- tab: voicemail: permission for accesing and editing the voicemail tab, for a user;
- tab: outbound calls: permission for accesing and editing the outbound calls tab, for a user
- tab: call redirect: permission for accesing and editing the call redirecting tab, for a user;
- tab: call recording: permission for accesing and editing the call recording tab, for a user;
- tab: music on hold: permission for accesing and editing the music on hold tab, for a user;
- tab: after call: permission for accesing and editing the after call tab, for a user;
- tab: call center: permission for accesing and editing the call center tab, for a user;
- tab: API: permission for accesing and editing the API tab (to integrate Accolades with external systems), for a user;
- tab: operations: permission for accesing and editing the operations tab, for a user;

Queues

This section defines the permissions for managing the waiting queues for an account. Because the waiting queues are displayed on the account page, the permission for viewing the queues is inherited from the account viewing permission.
- add: permission for adding new queues;
- edit: permission for editing queues;
- delete: permission for deleting queues;
- static agents management: permission for managing the static agents for a queue;
- after call survey: permission for managing the after call survey for a queue.

IVR

This section defines the permissions for managing the IVR entities for an account. Because the IVR entities are displayed on the account page, the permission for viewing the entities is inherited from the account viewing permission.
- add: permission for adding new IVRs;
- edit: permission for editing IVRs;
- delete: permission for deleting IVRs.

Time conditions

This section defines the permissions for managing the time conditions for an account. Because the time conditions are displayed on the account page, the permission for viewing the entities is inherited from the account viewing permission.
- add: permission for adding new time conditions;
- edit: permission for editing existing time conditions;
- delete: permission for deleting time conditions.

Call center

This section defines the permissions for managing the call center module.
Besides the standard options ALLOWED and NOT ALLOWED most of the permissions also accept the value ALLOWED FOR LIST. This last value will allow the user to perform the task only for specified accounts (the call center access list), defined in the administrator page. Using this method an administrator can manage one or several

accounts, but not all of them.

- **queue management:** permision to control the waiting queues (supervisor);
- **campaign management:** permission for managing the campaigns from the call center;
- **auto break after call:** if activated, the agent will enter on a "after call break; after hanging up a call on a waiting queue (WARNING, this operation will be triggered only if the agent is viewing the call center interface for agents: Call Center , section Agent);
- **open dashboard:** permission for starting dashboard instances;
- **view calls:** permission to view the details for the call center calls;
- **edit calls:** permission to edit the details for the call center calls;
- **listen to recorded calls:** permission to listen to recorded calls from the call center (this is valid only for the calls from the lists inside the call center module and has nothing to do with the global call details for the entire account).

SMS

This section defines the permissions for managing the SMS module.
Besides the standard options ALLOWED and NOT ALLOWED most of the permissions also accept the value ALLOWED FOR LIST. This last value will allow the user to perform the task only for specified accounts (the call center access list), defined in the administrator page. Using this method an administrator can manage one or several accounts, but not all of them.

- **view:** permission for viewing the sent SMS messages;
- **send one by one:** permission for sending individual SMS messages;
- **send campaign:** permission for creating SMS campaigns.

Customers

The section defines the permissions to view and manage the customers module (CRM).

- **view:** permission for viewing customers;
- **add:** permission for adding new customers;
- **edit:** permission for editing customers;
- **delete:** permission for deleting customers.

Server

The section defines the global permission for the entire Accolades server.

- **monitoring:** permission to view the status of the server that runs the service;
- **asterisk commands:** the permission to send certain commands directly to the asterisk server;
- **time conditions:** the permission to manage time conditions available to all accounts;
- **Monitored IP:** the permission to view or delete the monitored IP on the server.

3.8 - Administrator info page - API tab

Accolades can save some data about an administrator into the database. The data is sent, using one of the available API interfaces, on request.

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info*

> *from the search result page.*

Accolades can save up to 2000 characters for each administrator.
When an application is connected to the server, using an API, Accolades will send the text, on request. It is recommended to use existing standards for saving data (JSON, XML etc.). Accolades will not perform any validation on the text, it will be saved and sent as plain text, in a raw format.
More info about the options for reading this data, using the available API interfaces can be found on the API section of this documentation.

4. Accounts

4.1 - Accounts overview

In Accolades an account is an independent entity that contains one or more phones, waiting queues, virtual faxes etc. The account has its own call details record, a limited cloud storage space, its own call center module (if it is enabled) and other specific elements to this entity.

For a better understanding of this concept, an account is the equivalent to a company that has one or more phones.

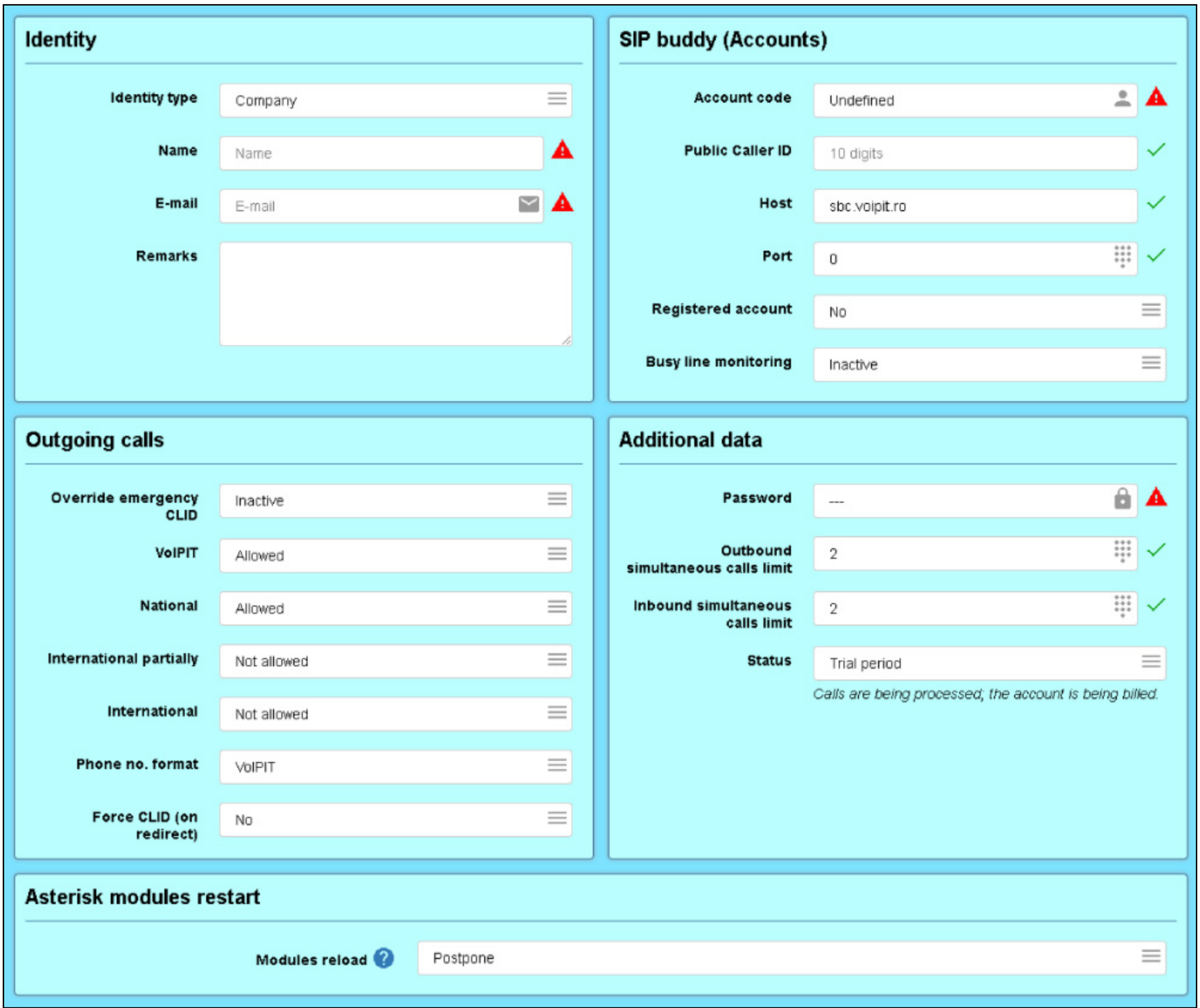
The Accounts module can be accessed from the main menu and it has the following options:

- add a new account;
- search the accounts;
- view the last search results;
- view the last accessed account.

4.2 - Add account

To add a new account, the administrator must press the Add option inside the Account menu.

The interface to add a new account is shown in the image below.



Add account

The interface contains 5 panels:

- Identity;
- SIP Buddy;
- Outgoing calls
- Additional data.

The first section is called Identity and contains general properties related to the account identity inside the Accolades server:

- **Identity type:** the identity type of the account (a person or a company);
- **Name:** the name of the company owning the account;
- **Family name:** the family name of the person owning the account;
- **Given name:** the given name of the person owning the account;
- **E-mail:** the email address of the person owning the account;
- **Remarks:** general remarks about the account.

The SIP Buddy section contains phone system specific properties:

- **Account code:** the account code number for the new account;
- **Public caller ID:** the phone number for outgoing calls, if an entity inside the account does not have a dedicated caller ID;

- Host: the name of the server running the account;

- Registered account: defines if the account should auto register on the server;

- Busy line monitoring: allows some phone devices inside the account to notify other users about their status: available or in call.

The Outgoing calls section defines the outbound permissions for the account.

- Override Emergency CLID: allows the server to user a dedicated caller ID for outbound calls to emergency numbers, to allow a dedicated line for call back;

- Emergency CLID: the caller ID used for the above option;

- VoIPIT: defines if outbound calls to VoIPIT destinations are allowed;

- National: defines if outbound calls to national destinations are allowed;

- International partially: defines if outbound calls to some international destinations are allowed;

- Templates for international: If the calls to some international destinations are allowed then the destination validation is based on this option (for example, the template 32,33,34 allows outbound international calls to countries having those codes: Nederland, Belgium, and France;

- International: defines if outbound calls to international destinations are allowed;

- Phone number format: defines the phone number format for passing phone numbers to the carrier (for VoIPIT servers, this option should be VoIPIT);

- Force CLID on redirect: Defines the phone number shown at the destinations, when a call is redirected (no means that the destination will receive the CLID of the original caller, yes will display to the destination the CLID of the device performing the redirect).

Additional data section defines some properties of the account that could not be inserted into previous panels.

- Password: the password for the account, for the phone system;

- Outbound simultaneous calls limit: the maximum number of simultaneous outbound calls (when this limit is exceeded new calls will receive a busy tone);

- Inbound simultaneous calls limit: the maximum number of simultaneous inbound calls (when this limit is exceeded new calls will receive a busy tone);

Asterisk modules restart section defines if the asterisk modules using these settings should be restarted immediately (but ongoing calls can be affected) or just marked for restart at a later date. If postponed then the modules can be later restarted by an administrator using the Asterisk commands option from the Server menu.

4.3 - Search accounts

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

To start a search, the administrator has to access the Search option from Accounts menu.

The starting page will display the following filters:

- account code;
- account type;
- account e-mail.

The values used for the search filters can be further edited from the search result page. To start the search, the user has to press the Search administrators button, operation that will load the search results page.

4.4 - Account search results

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

After a search has been started Accolades will display the search results. The results will be stored in the current session and can be accessed anytime from the Accounts module, by selecting Search results option.
On the upper side of the page Accolades will display the total number of results that are matching the search criteria, along with the display order. The inactive filters are hidden and can be displayed by pressing the arrow near the total number of results value.
The results are rendered as a list. For viewing additional info about the element, along with a button to access the account page, the user has to click on the account name.
Accolades will display a total of 10 results per page. To switch between pages, the controls placed on the bottom of the page will be used.

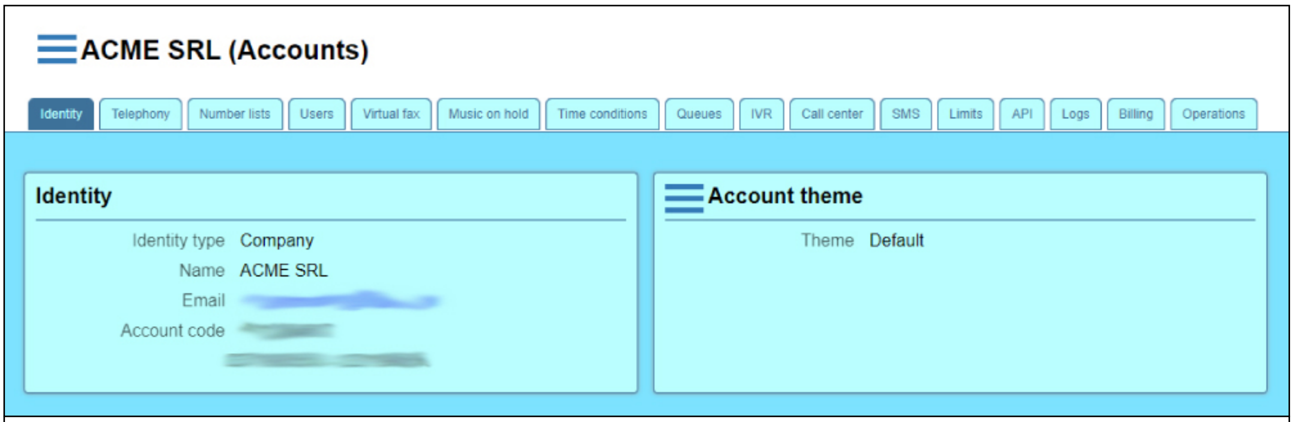
4.5 - Account identity

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Identity tab allows the administrator to view and edit the identity properties for an account inside Accolades.

View

The interface to view the identity data for the account is shown below.



Identity interface

The data is divided into two groups.

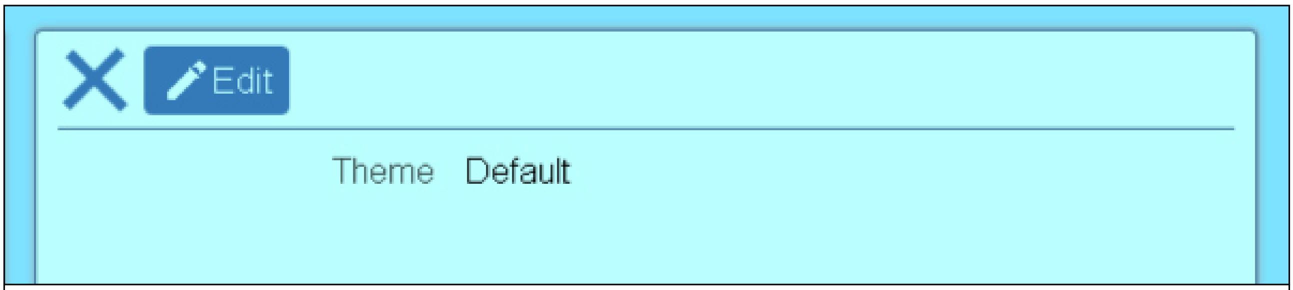
- Identity;
- Account theme.

The first section displays data about the account identity:

- **Identity type:** the identity type of the account (a person or a company);
- **Name:** the name of the company owning the account;
- **Family name:** the family name of the person owning the account;
- **Given name:** the given name of the person owning the account;
- **E-mail:** the email address of the person owning the account;
- **Remarks:** general remarks about the account.

The second section allows setting up the theme to be used by all administrator and agents that are using the account theme for the interface. The administrator can select either a predefined theme or a custom one.

To select a theme the administrator must press the Edit button, as shown below.



Edit theme

Edit

To edit the data, an administrator must press the Edit button, available inside the page menu.

Delete

Account deletion is available only if the account has no children (users, queues, ivr etc.).

If an administrator has credentials then the delete process can be started by pressing the Delete button inside the page menu.

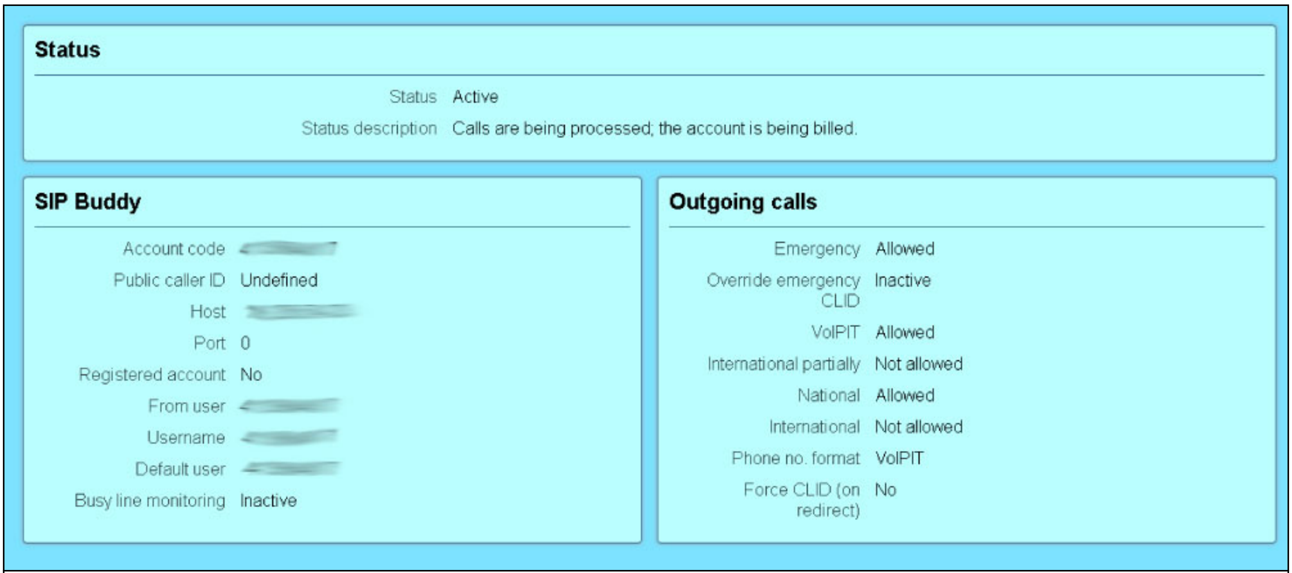
4.6 - Account telephony

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Telephony allows for viewing and editing account properties related to the telephony system, inside the Accolades system.

View

The interface for viewing the account telephony properties is shown inside the image below.



Telephony interface

The page is divided into 3 sections:

- Status;
- SIP Buddy;
- Outgoing calls.

The Status section defines the account status: active, trial period, suspended, inactive, test.

The SIP Buddy section contains phone system specific properties:

- **Account code:** the account code number for the new account;
- **Public caller ID:** the phone number for outgoing calls, if an entity inside the account does not have a dedicated caller ID;
- **Host:** the name of the server running the account;
- **Port:** the port for sip transaction;
- **Registered account:** defines if the account should auto register on the server;
- **From user:** value used by the Asterisk software;
- **Username:** value used by the Asterisk software;
- **Default user:** value used by the Asterisk software;
- **Busy line monitoring:** allows some phone devices inside the account to notify other users about their status: available or in call.

The Outgoing calls section defines the outbound permissions for the account.

- **Emergency:** allows the users inside the account to call emergency numbers (always allowed);
- **Override Emergency CLID:** allows the server to user a dedicated caller ID for outbound calls to emergency numbers, to allow a dedicated line for call back;
- **Emergency CLID:** the caller ID used for the above option;
- **VoIPIT:** defines if outbound calls to VoIPIT destinations are allowed;
- **National:** defines if outbound calls to national destinations are allowed;
- **International partially:** defines if outbound calls to some international destinations are allowed;
- **Templates for international:** If the calls to some international destinations are allowed then the destination validation is based on this option (for example, the template 32,33,34 allows outbound international calls to countries having those codes: Nederland, Belgium, and France;

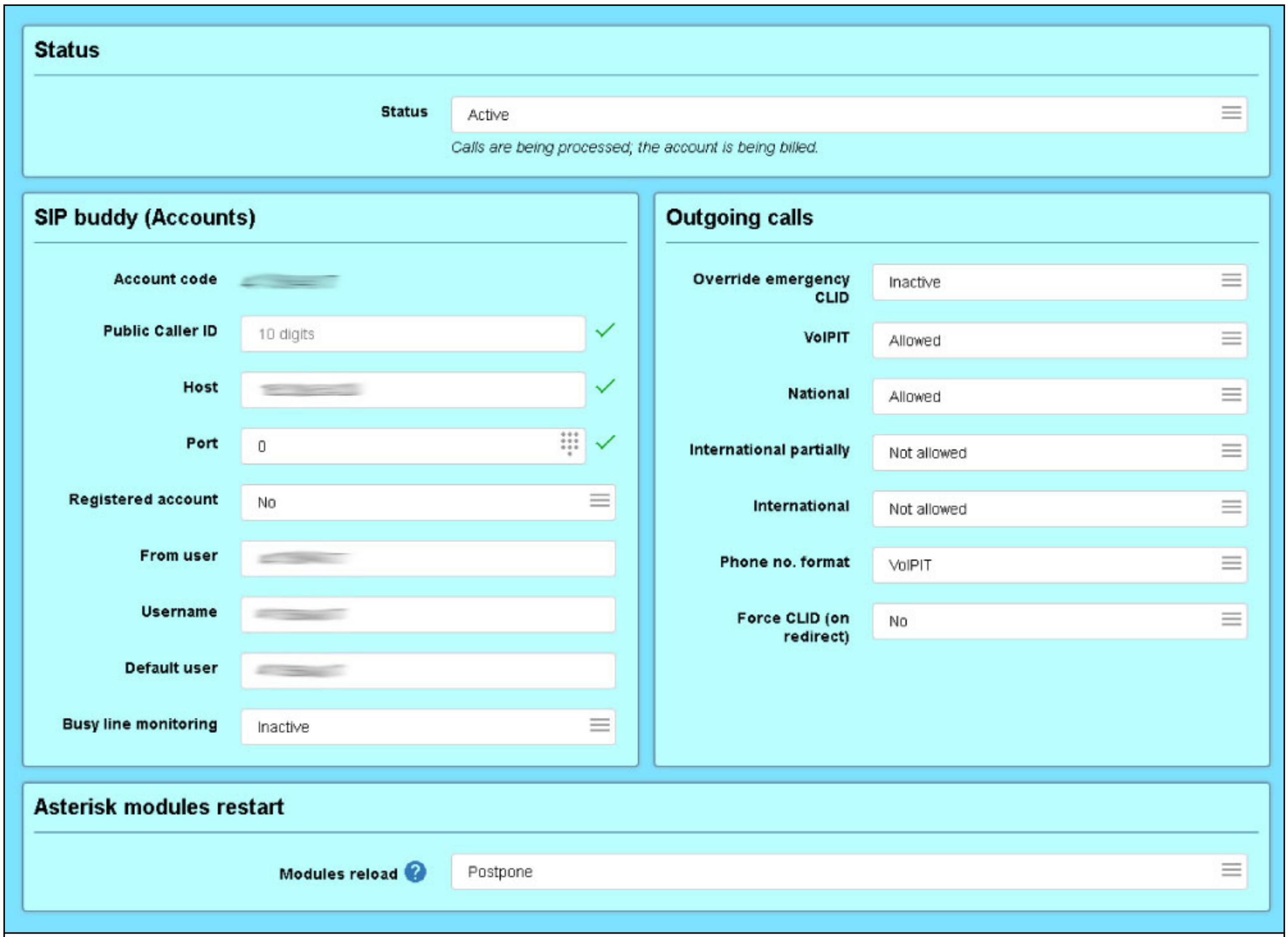
- **International:** defines if outbound calls to international destinations are allowed;

- **Phone number format:** defines the phone number format for passing phone numbers to the carrier (for VoIPIT servers, this option should be VoIPIT);

- **Force CLID on redirect:** Defines the phone number shown at the destinations, when a call is redirected (no means that the destination will receive the CLID of the original caller, yes will display to the destination the CLID of the device performing the redirect).

Edit

The edit interface for the telephony settings can be accessed using the Edit button available inside the page mentu.



Edit telephony settings

Asterisk modules restart section defines if the asterisk modules using these settings should be restarted immediately (but ongoing calls can be affected) or just marked for restart at a later date. If postponed then the modules can be later restarted by an administrator using the Asterisk commands option from the Server menu.

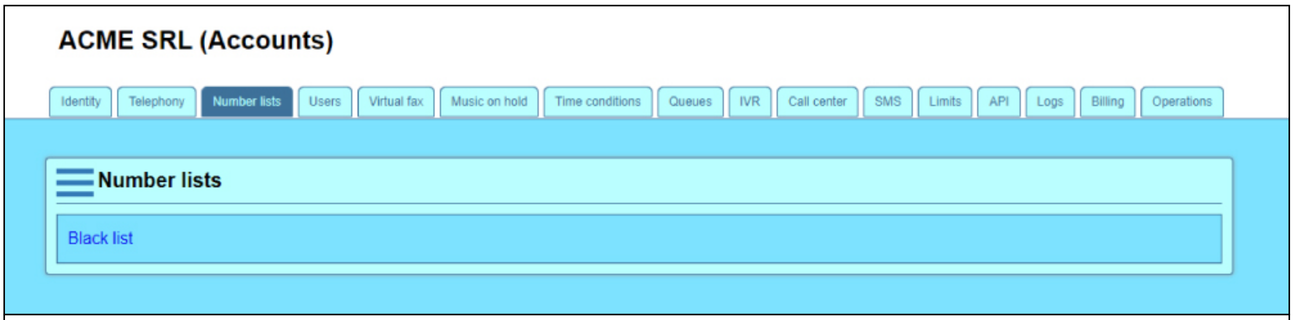
4.7 - Number lists

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The number list tab allows the administrator to view and edit number lists defined for the account. These lists can be used to filter callers, based on their caller ID. For example, a list can be created, named "Black List" that will be processed by an IVR step. The calls from the numbers defined inside the list can be routed on a separate branch.

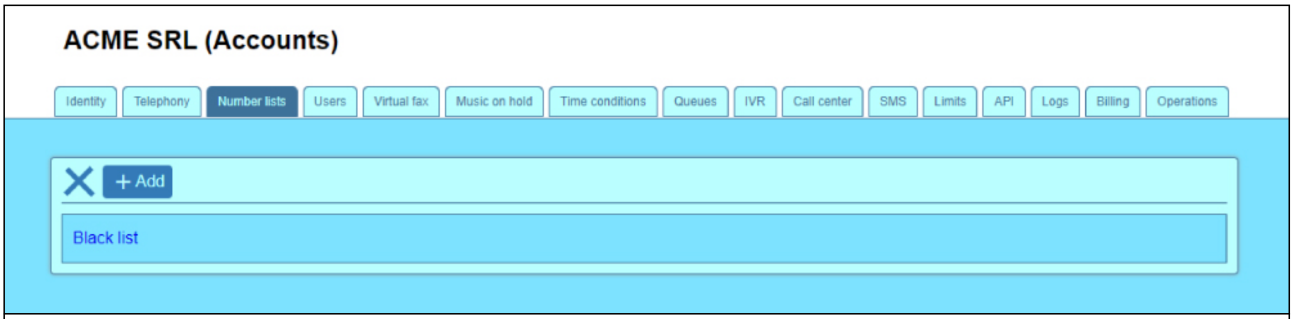
List management

The interface for viewing lists is shown in the image below.



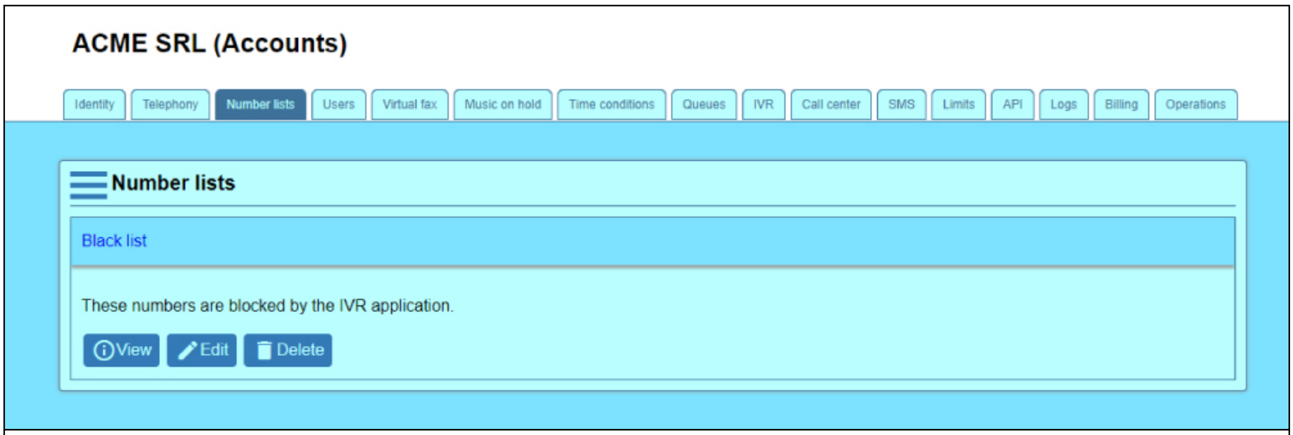
Lists interface

To add a new list, the administrator has to press the Add button, from the list panel menu.



Add lists

The options for list management are available after pressing the list name, as it is shown below.



List options

Phone number management

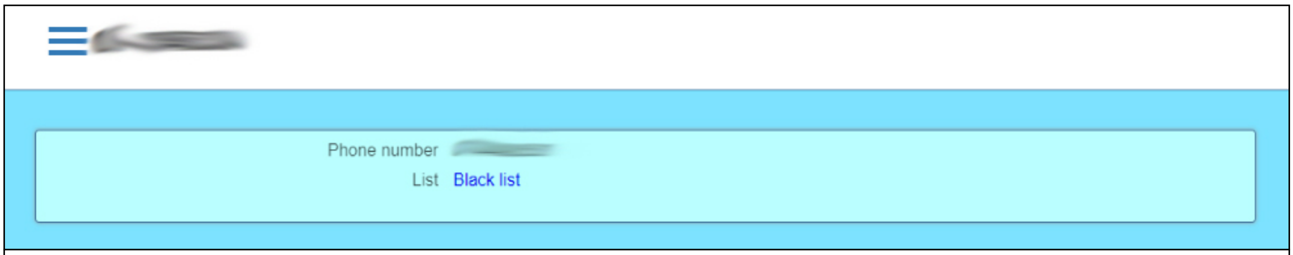
The content of a phone number list can be displayed by clicking the View button, from the option list menu, previously described. After clicking the button, Accolades will display the content of the list.

List content

Accolades allows the administrator to empty the list, by using the Delete all numbers button, inside the page menu.

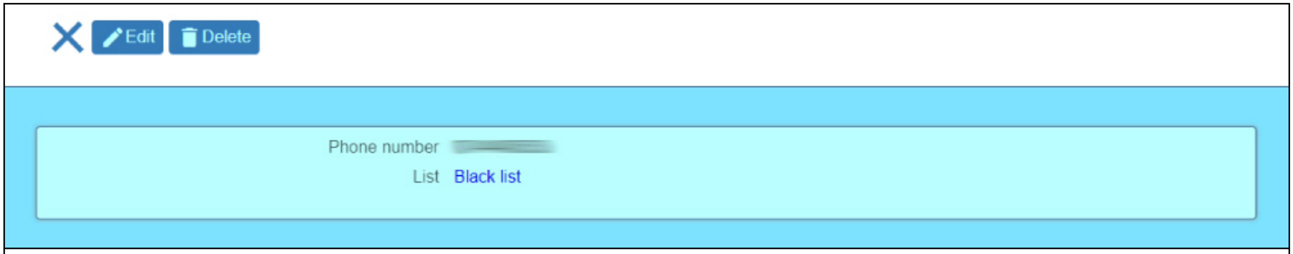
Delete all numbers

After a phone number has been selected from the list, Accolades will display the number info page.



Phone number info page

Phone number management is done using the two buttons inside the page menu: Edit and Delete.



Number options

4.8 - User list

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The User list tab will display all the users from the account. A user can be either a software app or a physical device.
On the first access, all the users from the account will be displayed. Later, the results can be filtered using the search fields on the top of the page.

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

4.9 - Virtual fax list

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Virtual fax list tab will display all the virtual faxes from the account.
On the first access, all the faxes from the account will be displayed. Later, the results can be filtered using the search fields on the top of the page.

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

4.10 - Music on hold

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The `music on hold` tab is used for managing the music on hold sets defined for the account.
A music on hold set is defined globally on the account and then can be attached to a phone, waiting queue etc.
An account can have a limited number of music on hold sets. To modify this limit you need to access the `Limits` tab from the account info page.
The music on hold sets can be viewed in the **Music on hold sets** section. The `Add` button from the section menu can be used for adding a new music on hold set.
The management operations for the sets are available after the user clicks the name of the music on hold set.
A set can be deleted only if that set is inactive (that is the only case when the delete button is available).
To **add** a file the user has to press the `Add file` button, available after clicking on the name of the set. The files have to be in the .wav format and can not exceed 3 MB each.
To **delete** a file, the user has to select the `Delete` button, displayed after clicking on the name of the file.

4.11 - Time conditions

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The `time condition` tab allows for managing the time condition processed defined for an account.

> *A detailed description for the time conditions (regardless of the module that implements it: IVR, waiting queues, regular phones) can be found inside the Time Condition section of this manual.*

The page contains 3 sections, as described below.

Set of days

This section displays all sets of days defined for this account. A set of days is used when a time condition process is added or edited. To add a new set of days the user must access the menu places just on the left of the section title (Set of days) and then by pressing the `Add` button. The info page for a set of days can be viewed by first clicking the `Info` button, visible only when a set of days is selected (by clicking on its name).

Daily schedule

This section displays all daily schedules defined for this account. A schedule is used when a time condition process is added or edited. To add a new daily schedule the user must access the menu places just on the left of the section title (Daily schedule) and then by pressing the `Add` button.
The info page for a daily schedule can be viewed by first clicking the `Info` button, visible only when a set of days is selected (by clicking on its name).

Processes

The last section displays all processed defined for this account. A process is the element that is verified when the time condition is required by the app. To add a new process the user must access the menu places just on the left of the section title (Processes) and then by pressing the Add button. The info page for a process can be viewed by first clicking the Info button, visible only when a set of days is selected (by clicking on its name).

4.12 - Waiting queues

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Queues tab containes the options for managing the waiting queues defined for this account.
An account can have a limited number of waiting queues. The total number of spots, used and available is displayed on the upper part of the page. To modify this limit you need to access the Limits tab from the account info page.
The waiting queues can be viewed in the **Queues** section.
The Add button from the section menu can be used to add new queues.
The **management** for one particular queue is done from the queue page. To acces that page, the user has to click the Info button, visible after clicking on the queue name.

4.13 - IVR

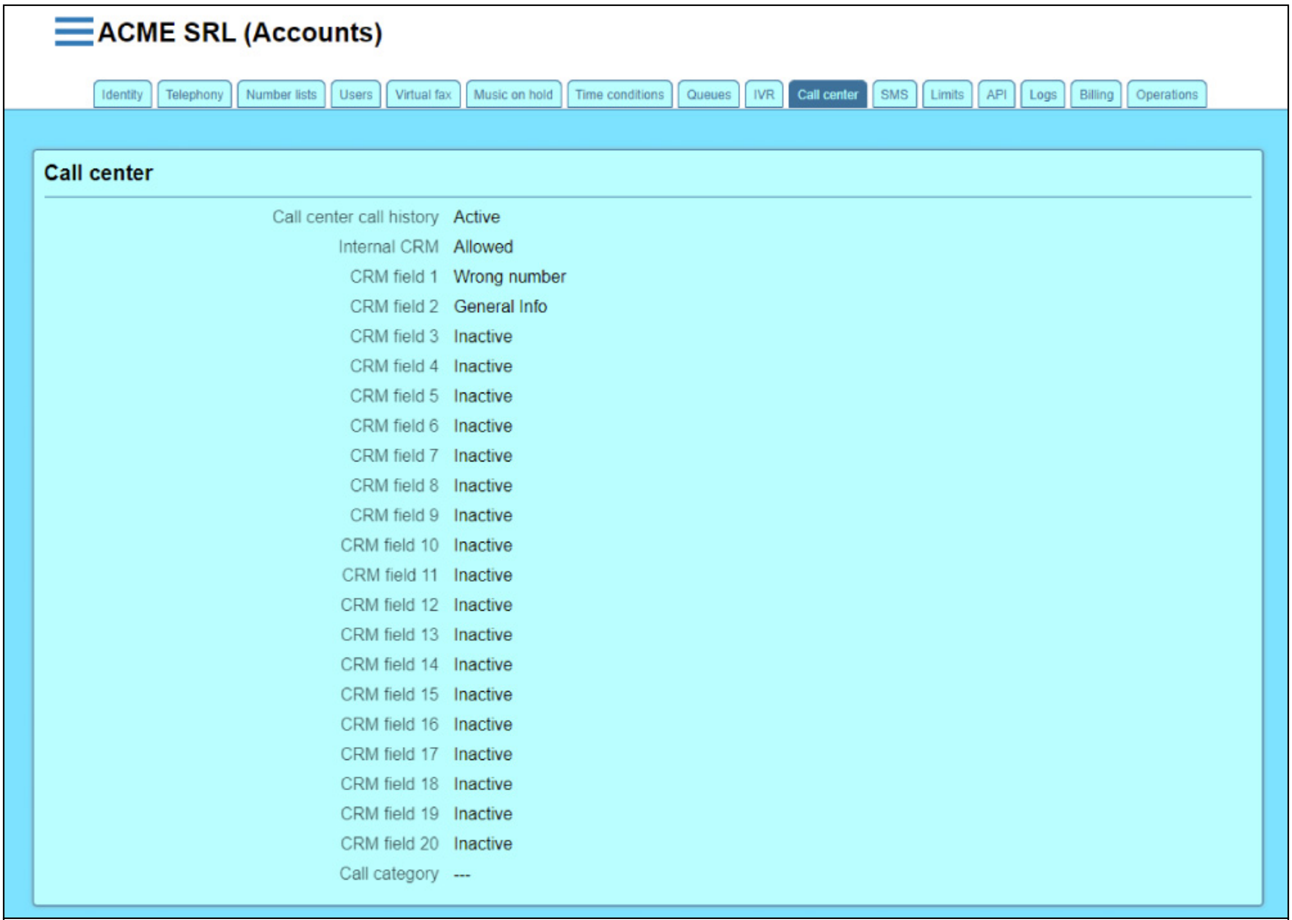
> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The IVR tab is used for managing the IVR entities linked to the account. The tab allows for viewing the existing IVRs (and to access the info page for each one) along with adding new IVRs.
To **add** a new IVR the user must press the Add button available in the page menu.
To **view** an IVR info page the user must press the Info button, visible after a click on the IVR name.
The edit and delete procedures for each IVR are available on to the IVR info page (see the "IVR management" section inside the "IVR" chapter).

4.14 - Call center

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Call center tab allows configures the modules required for the call center procedures, for this account.



Call center properties

Using the interface the properties for the call center module can be set up: call center call history, internal CRM status, call categories for the account.

Call center call history

This option allows for showing the call history, to a call center agent for the number being used, either for inbound queue calls or outbound campaign calls.

If the option is active, then the call history will be displayed. Because this operation is quite intensive for the database (especially if the account has a lot al calls stored â€“ over 100k). In that case, the agent needs to wait quite some time for the interface to be updated.
If the option is inactive then the call history will not be shown but all other info about the caller will be displayed almost instant.

Internal CRM

The property defines if the 

module is active for this account.
By enabling the Internal CRM module, Accolades will display additional fields, used for setting up to 20 custom properties for the customers of this account (for example, after the regular properties, like family name, given name, date of birth, remarks, the administrator can define additional fields, like customer group, delivery zone or any other property).
The fields can be `Inactive` (that property will not be used for the customers) or `Active`. When the field is

Active, the administrator has to define the name of the property that will be appended to the customer model.

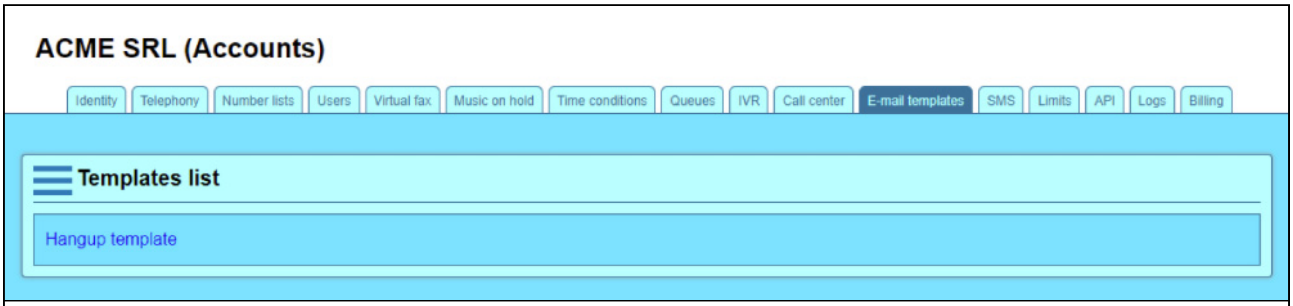
Call category

The section displays a list with the available categories for the processed calls inside the call center. An agent can select one value from this list, when processing a call. From the account interface the administrator can define up to 20 call categories. If one or more values are left blank, then those categories will not be displayed to the agent.

4.15 - Sabloane email

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

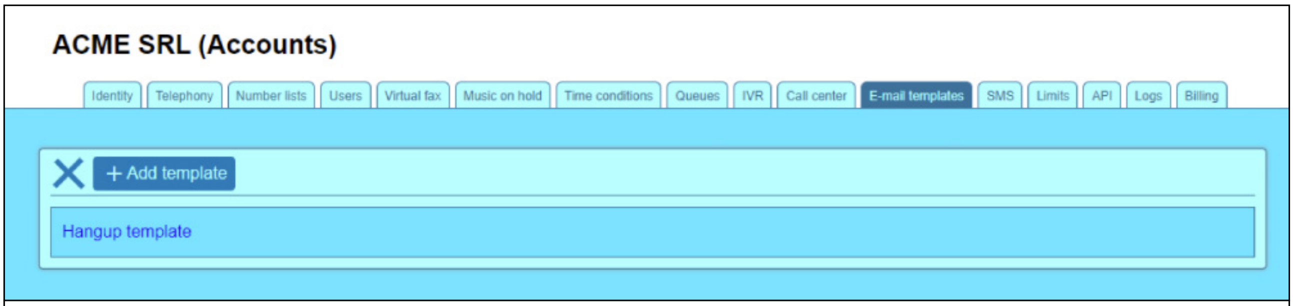
The The Email templates tab allows the administrator to configure email messages to be sent when a call event is triggered.



Email templates interface

Add new template

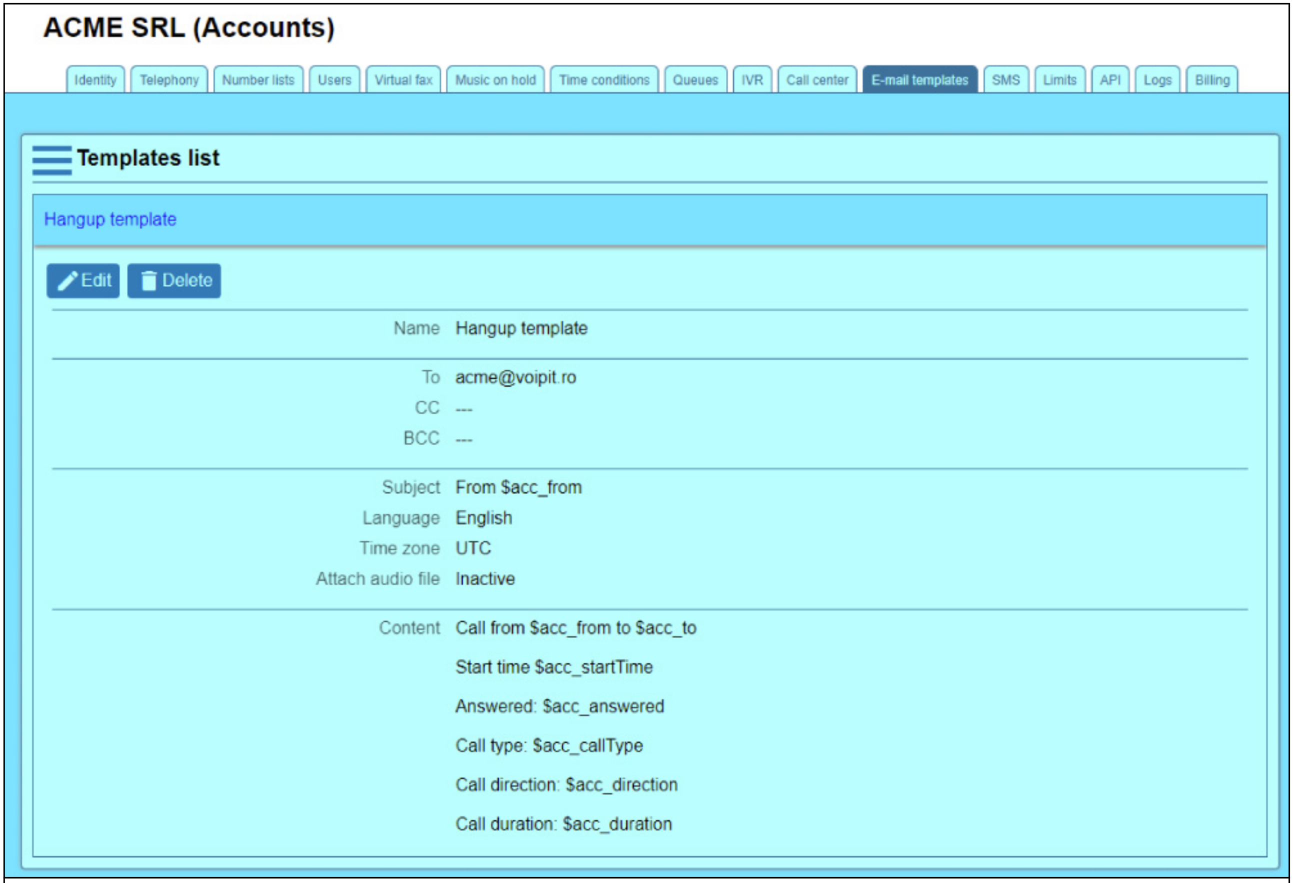
To add a new template the administrator must press the Add button, visible after the "Template list"section menu is toggled..



Add new template button

Edit and delete

To edit or delete an existing template the user must press the template name, to display detailed information about the template, along with the available actions.



Detailed template info

Template properties

The interface shown below is used for both adding new templates and editing existing ones.

Template properties

The "Template info " section contains general data about the template.

- **Name:** the name of the template;

- **Remarks :** remarks for the template.

The "Email destination" section contains the addresses where the email will be sent.

- **To:** one or more addresses, comma separated;
- **CC:** one or more addresses, comma separated;
- **BCC:** one or more addresses, comma separated.

The "Variables" section just shows the available variables that can be used inside the "Subject" and "Content". When the mail is about to be sent, Accolades will update the variables with their values when the mail is about to be sent.

The following variables can be used:

- **$acc_uniqueId:** (number.number) the unique id for the call, inside the Accolades system;
- **$acc_startTime:** (DD-MM-YYYY HH:MM:SS) date and time when call started;
- **$acc_answerTime:** (DD-MM-YYYY HH:MM:SS) date and time for the answer event;
- **$acc_hangupTime:** (DD-MM-YYYY HH:MM:SS) date and time when call ended;
- **$acc_duration:** (MM:SS) call duration in minutes and seconds;
- **$acc_from:** the caller id for the call;
- **$acc_to:** destination call number;
- **$acc_finalDestination:** final destination call number (different from $acc_to for redirected calls);
- **$acc_answered:** ("yes" or "no") call answer status;
- **$acc_callType:** ("external" or "local") type of call, relative to the user account;
- **$acc_direction:** ("inbound" or "outbound") direction of call, relative to the user.

The "Email" section contains several properties used for email generation.

- **Subject:** the email subject;
- **Language:** the language used for text based variables;
- **Time zone:** the time zone used for time based variables;
- **Attach audio file:** if active then the email will have the audio file attached as long as the file exists and it does not exceeds 10MB.

Using the last interface section the administrator can edit the body of the mail.

4.16 - SMS

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The SMS tab sets up the SMS sending permission for this account, along with the SMS monthly limit

- **Send SMS:** defines if the current account can be used for sending SMS messages;
- **Monthly send SMS limit:** defines the maximum number of SMS that can be send from this account.

4.17 - Limite

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Limits tab sets up the various limits for different types of elements for the account.

- **Storage limit for recorded calls:** storage space in cloud (on the server) for storing the audio files with recorded calls;
- **Storage limit for virtual faxes:** storage space in cloud (on the server) for the virtual faxes files;
- **Maximum number of queues:** numarul maxim de cozi de asteptare care pot fi definite pe cont;
- **Maximum number of music on hold sets:** the maximum number of queues that can be defined for this account;
- **Call center campaign limit:** the maximum number of call center campaigns available (either active on inactive) for this account.

When the available storage limit is reached, Accolades will delete the oldest documents, until the total size of the files is below the limit.
Accolades will start the procedure for deleting old files once every 24 hours, usually at night time. For this reason it is possible, in some cases, that the total size of the stored files will exceed the defined threshold, until the next run of the procedure.

4.18 - Accounts API

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The API tab allows the current administrator to manage the parameters for integrating the account with external applications, using the available API interfaces.
The page is divided into 3 sections:

- Call center;
- API REST;
- Configuration.

Call center

This section is used for setting up a connector that will link Accolades with an external CRM, available on the call center agent computer. The connector will run inside the agent browser (Agent menu from the Call center module), inside a hidden iframe.
The section contains two properties:

- **External CRM API connector:** sets up the connector that will be autoloaded into the agent interface (can be undefined, one of the available connectors from the server or a connector personalized for this account);
- **Custom API CRM connector:** this property displays the custom connector loaded for this account.

More information about setting up the connectors is available in the API chapter of this documentation, the External CRM section.

API REST

Accolades allows for external applications to send commands to the server, using HTTPS. This section displays the elements needed for configuring the API.

- **Status:** the status for this module (active: the server allows API requests, inactive: the server does not allow API requests);

- **Username:** the username (same as the account code) used for authenticating the requests;
- **Password:** A symbolic text, composed of 6 stars, indicating that a password is required to authenticate a HTTPS request.

More information about setting up the connectors is available in the API chapter of this documentation, the API REST section.

Configuration

Accolades can save up to 2000 characters for each account.
When an application is connected to the server, using an API, Accolades will send the text, on request. It is recommended to use existing standards for saving data (JSON, XML etc.). Accolades will not perform any validation on the text, it will be saved and sent as plain text, in a raw format.
More info about the options for reading this data, using the available API interfaces can be found on the API section of this documentation.

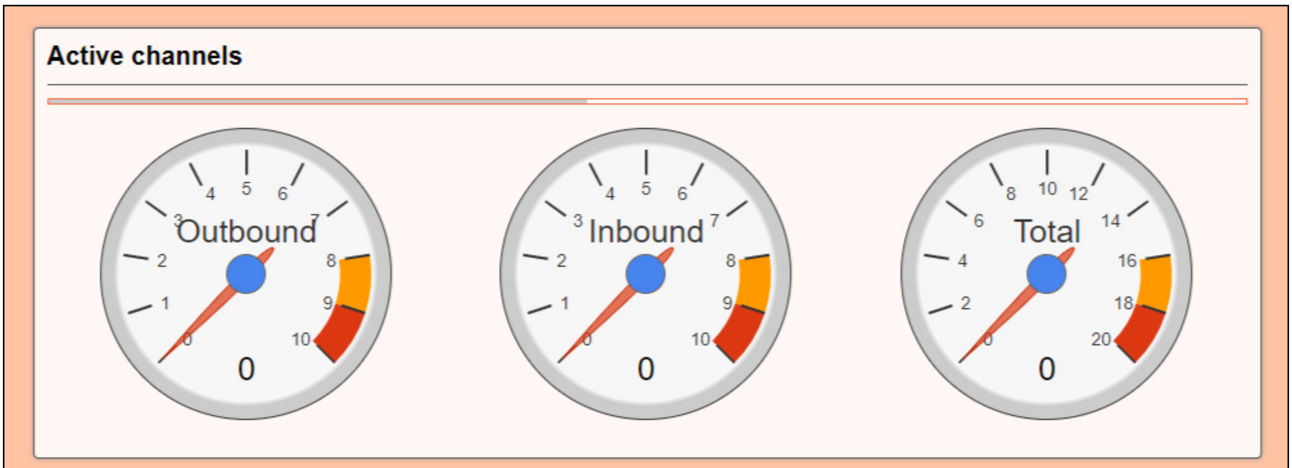
4.19 - Logs

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Logs displays a history for different events within the account. The page has 3 main sections: Active channels, channels history, and logs.
The panels containing channels data are divided into 3 parts: outbound (calls from within the account, to an external destination), inbound (calls from an external destination to an entity within the account), total (inbound and outbound calls).

Active channels

The "active channels" section contains 3 dials with the active channels within the account.



Real time channel usage

The value of each dial is updated every 10 seconds. The update process is displayed using the progress bar, on the upper part of the panel.

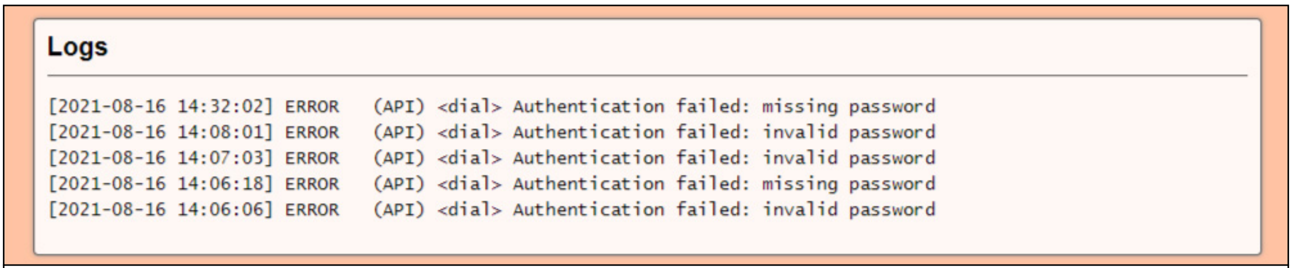
Channels history

The value of each dial is updated every 10 seconds. The update process is displayed using the progress bar, on the upper part of the panel.

Istoric canale

This panel displays the channel usage, in a selected interval. The default interval, on the first page load, is the current day..

Logs



Jurnal

The server stored the events for only 2 months. Older data is deleted, as it is replaced by newer events.

A row describing an event contains the following data:

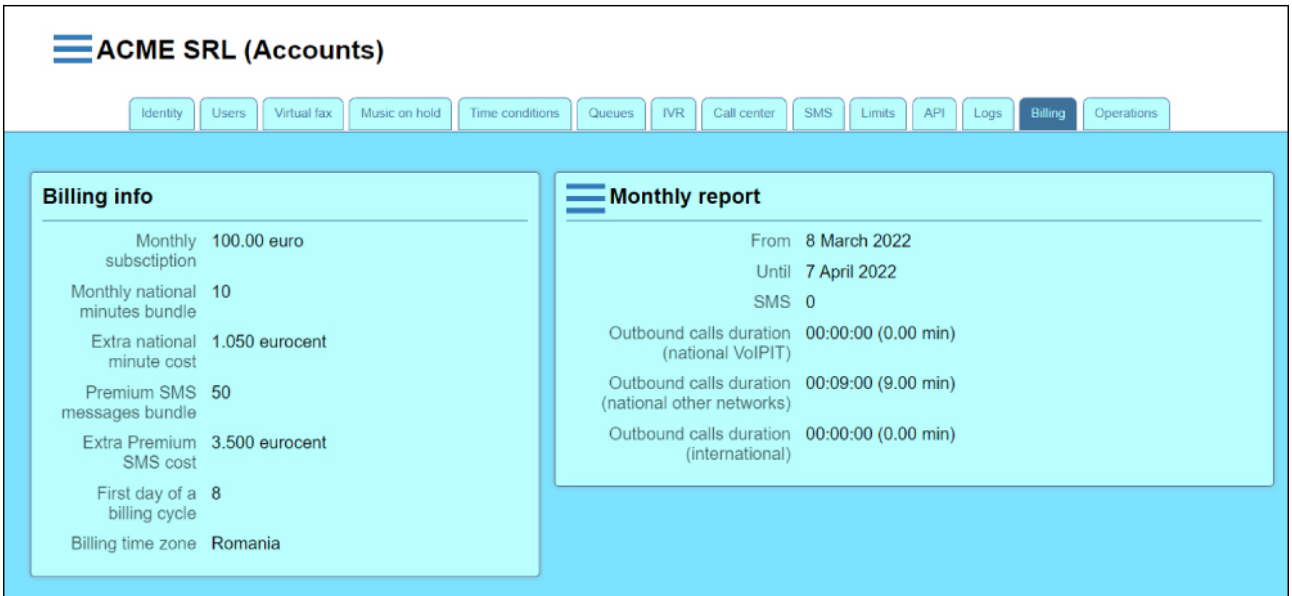
- **Timestamp:** the timestamp of the event;
- **Type of event:** can be an empty area, indicating some type of information or the text ERROR, indicating that the event describes an error inside a module;
- **Module:** the module that generated the event (API or IVR);
- **Description:** A short description of the event.

The events are listed from the newest (the top one) to the oldest (the lower one).

4.20 - Billing

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Billing tab allows the current administrator to view (and edit if it is the case) the billing information for the current account, along with a monthly report with the account activity during a billing month.



Billing interface

Billing info

The section displays the following data:

- **Monthly subscription:** the total value of the monthly subscripton, in euros;
- **Monthly national minutes bundle:** the total number of minutes, included in the monthly subscription;
- **Extra national minute cost:** the cost for one minute exceeding the minutes included in the monthly subscription, in eurocents;
- **Premium SMS message bundle:** the total number of premium SMS messages, included in the monthly subscription;
- **Extra premium SMS cost:** the cost for one premium SMS message exceeding the sms included in the monthly subscription, in eurocents;
- **First day of a billing cycle:** represents the day of the month when the monthly limits for the account are reset and, also, the day that is used for generating the monthly reports;
- **Billing time zone:** is used for computing the 00:00 hour within the first day of a billing cycle.

To edit the values inside the billing info panel, the administrator must press the Edit button available inside the page menu.

Edit button

The edit button is only available to the administrator having the required credentials.

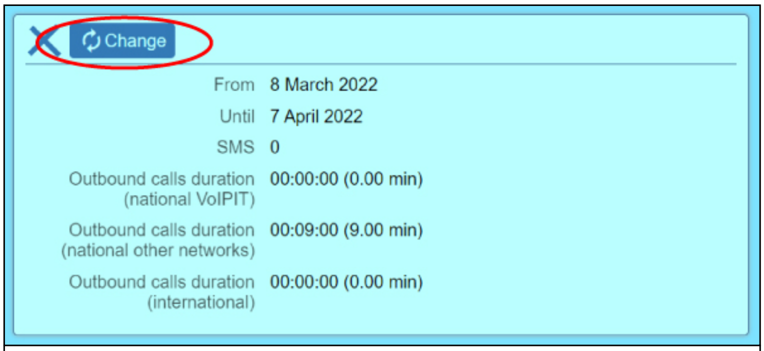
Monthly report

This section displays data about the account activity within a billing month.

The report contains the following data:

- **From:** The first (included) day of the report.
- **Until:** The last (included) day of the report.
- **Sent SMS:** Total number of SMS messages send within the interval.
- **Outbound calls duration (national VoIPIT):** The total duration for outbound calls inside the VoIPIT network.
- **Outbound calls duration (national other networks):** The total duration for outbound calls in other national networks.
- **Outbound calls duration (international):** The total duration for outbound calls to international destinations.

On the first page access the data for the current month is displayed. The user can select a previous month by pressing the Change button available within the section menu.



Month change button

The duration for each value is calculated in a "billing" mode. The first minute will not be truncated. For a 40 seconds call, the counter will add a full minute.

4.21 - Account operations

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Operation tab allows the administrator to run different tasks on the account.

Regenerate dial plan

Call processing inside Asterisk is done based on instructions, dynamically generated by Accolades. When the user runs operations that require regenerating the instructions, Accolades will do that automatically, just for the modified element (for example, when editing a waiting queue).
By running this option, Accolades will delete and regenerate ALL the instructions associated with this account. It is possible that while running this task, some on the features of the account, including calls management will not function properly. In a normal use, this task should never be used.

Modify call permissions

This template can modify permissions for a call type on all the entities of the account (users, waiting queues etc). For example, all international calls for an account can be enabled.

5. DID

5.1 - DID

The DID term is a shorthand for Direct Inward Dialling and defines the external phone number for a user (the phone number that must be dialled so the Accolades phone rings).

The phone numbers (DIDs) are unique at a server level (there can not be two entities sharing the same DID).

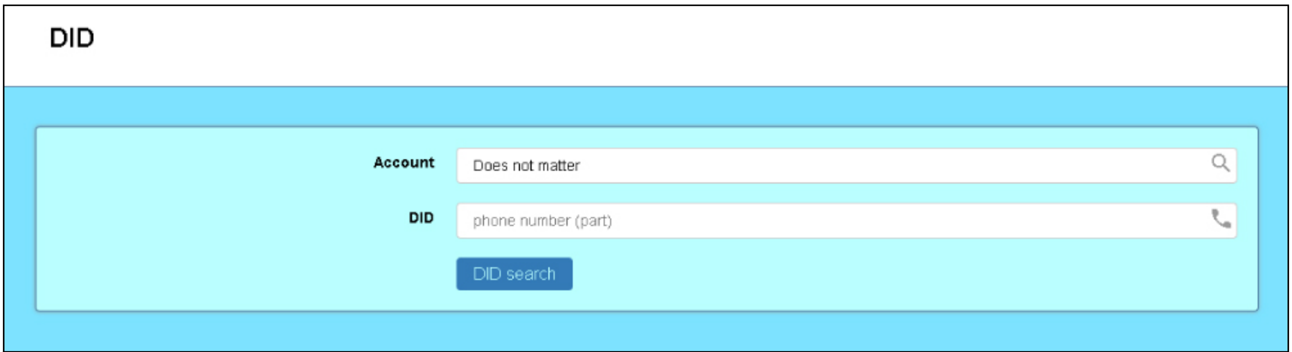
The DID module allows viewing the phone numbers defined for all entities inside the Accolades server.

The DID module can be accessed from the main menu.

5.2 - Search DID

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

To start a search, the administrator has to access the Search option from DID menu.



Search interface

The starting page will display the following filters:

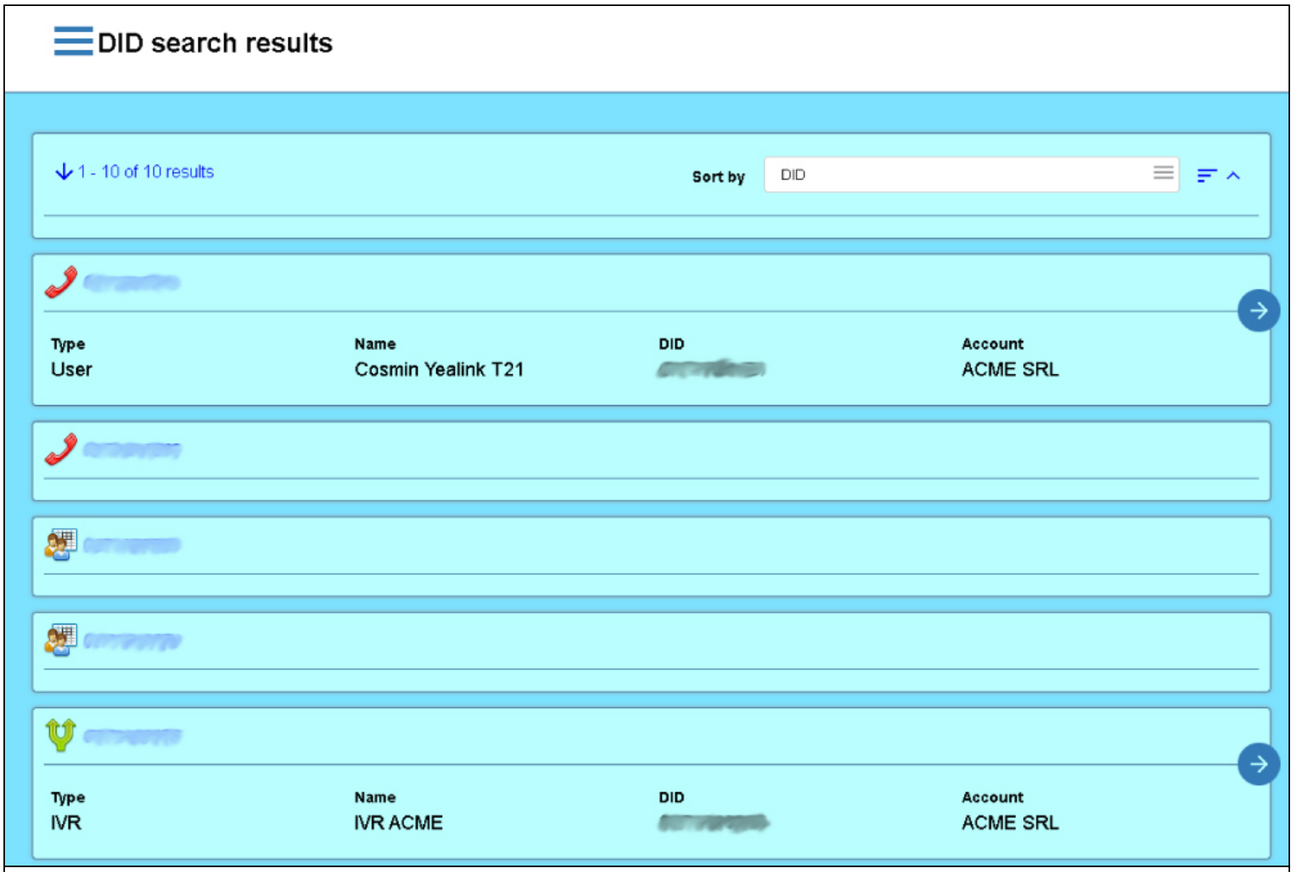
- the account to be searched;
- the searched phone number.

The values used for the search filters can be further edited from the search result page. To start the search, the user has to press the Search DID button, operation that will load the search results page.

5.3 - DID search results

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

After a search has been started, Accolades will display the page with the search results. This page will be stored for the current session and can be accessed anytime from the DID menu, Search results section.



Search interface

On the upper side of the page Accolades will display the total number of results that are matching the search criteria, along with the display order. The inactive filters are hidden and can be displayed by pressing the arrow near the total number of results value.

The results are rendered as a list. For viewing additional info about the element, along with a button to access the entity page, the user has to click on the did number.

Accolades will display a total of 10 results per page. To switch between pages, the controls placed on the bottom of the page will be used.

6. Users

6.1 - User overview

In Accolades a user is either a phone device or a software that will connect to the Asterisk server. A user is always attached to an account.

Notice! The user entity must not be misunderstood as an administrator. A user is short for Asterisk user. The entity that has access to Accolades is called Administrator, Agent or Supervisor.

The Users module can be accessed from the main menu and can be used for the following procedures:

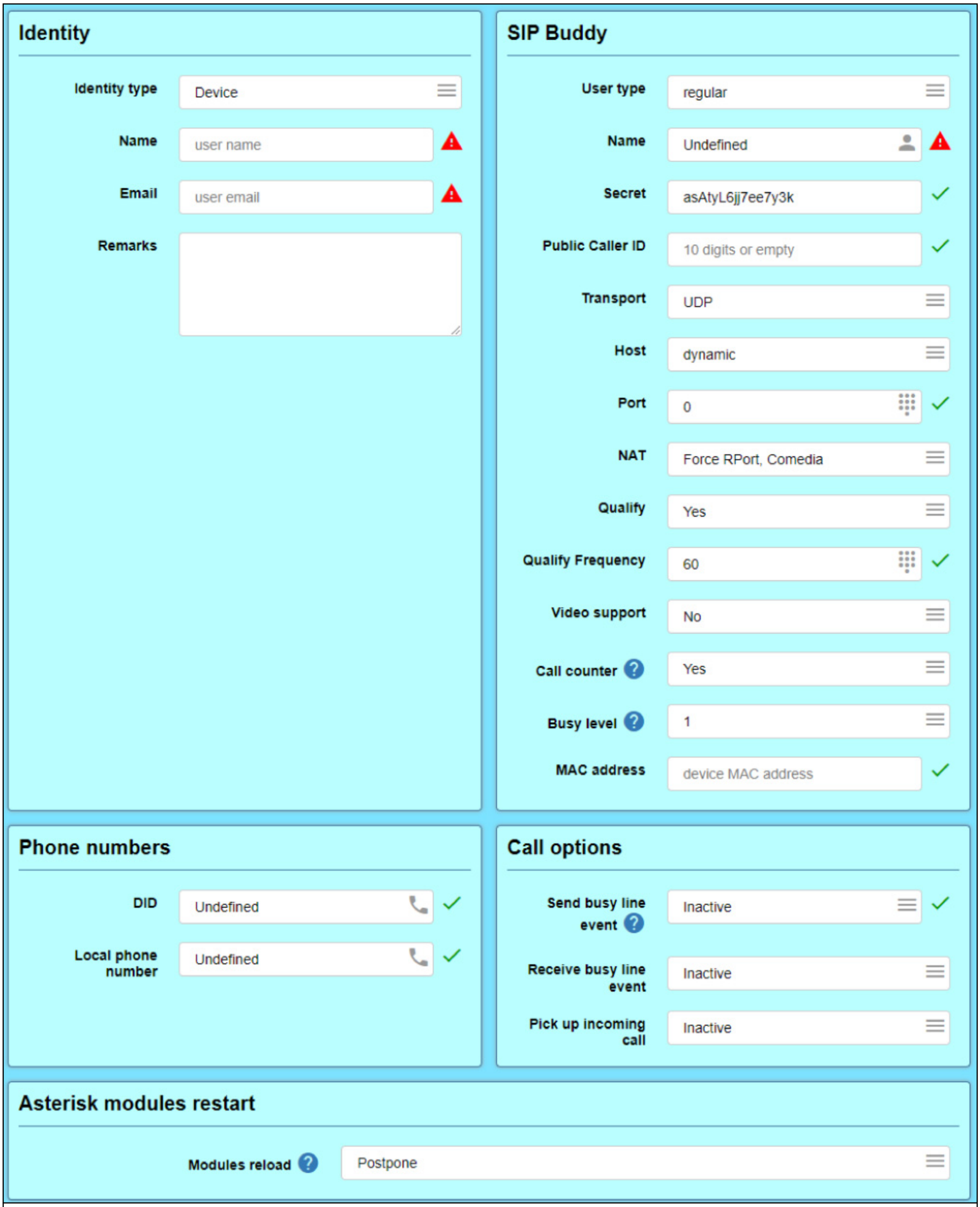
- search for specific users;
- view the last search results;
- view the last accessed user.

If the administrator needs to display all users from an existing account, then it is recommended to use the User list tab from the account info page. Using this procedure, the search result will be a lot smaller as the search will be restricted only to the selected account users.

6.2 - Add user

To add a user, the administrator has to access the User list tab from the account page. You can not add a user without selecting an account first. The add procedure is initiated by clicking the Add button from the page menu. This button is available only if the administrator has the required permissions.

After the administrator has selected the Add menu, Accolades will display the interface to add an user (phone) to the account.



Add user

The interface to add a user is divided into 5 sections:

- Identity
- SIP Buddy
- Phone numbers
- Call options

- Asterisk modules restart

Identity

The section defines the user identity inside the system. The data is used to display the user inside the Accolades platform. Identity can store data about the person / company using the phone or just regular device data.

SIP Buddy

The SIP Buddy term is specific to the Asterisk server. This section contains properties specific to the telephony services for the user.

- **User type:** the account type that can be `regular` or `web-socket` and defines the type of connection used by the user, to communicate with the server;
- **Name:** defines the name used by the user to login to the Asterisk server. This name has to be unique at a server level. The name can only be defined when adding a new account and can not be changed afterwards;
- **Secret:** the password for the credentials used by the user to register to the Asterisk server;
- **Public Caller ID:** the phone number that will be displayed when the user places a call outside the account;
- **Transport:** defines the protocol used by the client to communicate with the Asterisk server. It accepts either TCP value or UTP value (Transport layer);
- **Host:** defines the method for getting the IP of the user: dynamic (the server is listening for registration requests) or IP (the user has a static IP);
- **Port:** the port used by the user to connect to the server;
- **NAT:** defines if a Network Address Translation is used when communicating with this user;
- **Qualify:** defines if the server should periodically check the user status;
- **Qualify frequency:** the interval used for checking the user status (in seconds);
- **Video support:** defines if the user has the support for video calls enabled;
- **Call counter:** instructs the Asterisk server to monitor the number of simultaneous calls for this user;
- **Busy level:** defines the number of allowed simultaneous calls for the user (the calls above the threshold will receive a busy tone);
- **MAC Address:** the device MAC address, used by the provisioning procedure.

Phone numbers

This section defines the phone numbers defined for this user.

- **DID:** (Direct Inward Dialing) property defines the phone number on which the user can be called (for incoming calls) from outside of the account (this number has to be unique at a server level);
- **Local phone number:** defines the number used for calling the user from inside the account (this number must contain at least 3 digits and has to be unique at an account level).

Call options

This section defines the properties for managing the calls, for this user.

- **Send busy line event:** defines if the server will send a notification when the user is in a call (the property can be active only if the property **call counter** is `YES` and **busy level** is `1`);
- **Receive busy line event:** defines if the user will listen for notifications for a busy line, issued by other users (it is mostly used by the phone devices inside a secretary office that can display the status of the phone used by the

manager);

- Pick up incoming call: defines if the user can pick up an incoming call, from another user (for example, when the device on the manager desk is ringing, but the manager is out of office, the assistant can pick up the call).

Asterisk modules restart

Asterisk modules restart section defines if the asterisk modules using these settings should be restarted immediately (but ongoing calls can be affected) or just marked for restart at a later date. If postponed then the modules can be later restarted by an administrator using the Asterisk commands option from the Server menu.

6.3 - Search users

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

User searching can be run in two ways.

- Searching users for a defined account (recommended);
- Searching all users in Accolades.

Searching users for a defined account

When the administrator is viewing an account, Accolades will display on the upper part of the page several tabs. The users are listed inside the User list tab.

The user list can be refined by using the filters on the upper part of the page (just like any other search procedure in Accolades).

The search started from the User list tab is the recommended way for searching for users. This process is faster than searching all users defined on the server, because the process is limited to the entities defined inside the account that is viewed.

Searching all users in Accolades

The search will be initiated from the Search menu, inside the Users module.

The initialization page will display some filters for the process:

- account;
- name;
- username;
- public caller ID;
- DID;
- local phone number.

To start the search, the administrator has to press the Search user button.

6.4 - User search results

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

After a search has been started, Accolades will display the page with the search results. This page will be stored for the current session and can be accessed anytime from the Users menu, Search results section.
On the upper part of the page Accolades will display the total number of results for this search, along with the sorting order. The search filters are inactive and can be toggled by pressing the down arrow near the text with the total number of results.
The results are displayed using a table. The user page can be accessed by pressing the name of the user.

6.5 - User identity

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Identity tab is used for viewing and editing of the users identity properties, stored in Accolades.
For a better structure, the data is divided into several sections:

- Identity;
- Account info.

Identity

The section contains the following properties:

- **Type of identity:** a person, a company or a device;
- **Name / Family name and given name:** depending on the type of identity, additional fields will be displayed: family name and given name for a person, name for a company or for a device;
- **Email:** the address used for sending notifications to the user;
- **Id API:** the unique id of the user inside the Accolades platform (used by out API systems);

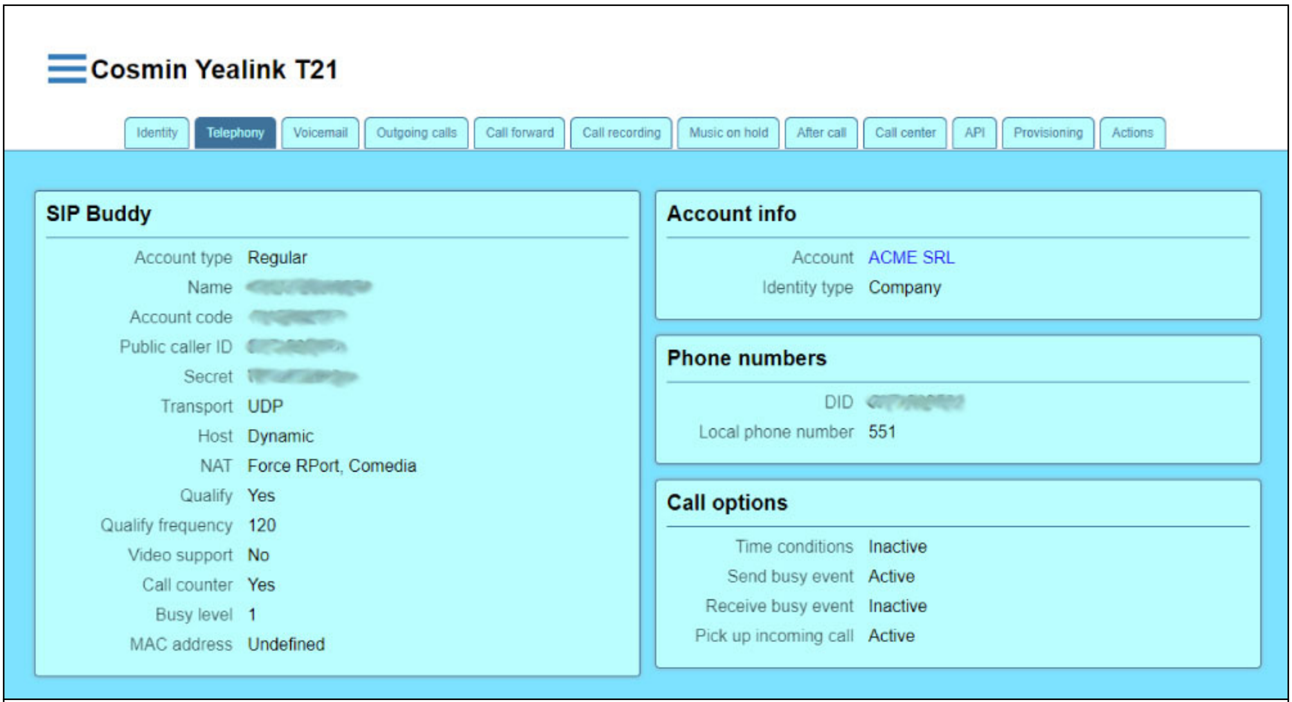
Account info

This section contains some data about the account that contains this user: the name and the type of the account.

6.6 - User telephony

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Telephony tab is used for viewing and editing user data, about the telephony service.



Telephony tab

For a better structure the data has been divides into several sections:

- SIP Buddy;
- Account info;
- Phone numbers;
- Call options.

SIP Buddy

The SIP Buddy term is specific to the Asterisk server. This section contains properties specific to the telephony services for the user.

- **Account Type:** the account type that can be `regular` or `web-socket` and defines the type of connection used by the user, to communicate with the server;
- **Name:** defines the name used by the user to login to the Asterisk server. This name has to be unique at a server level. The name can only be defined when adding a new account and can not be changed afterwards;
- **Account code:** displays the name of the account that contains the user and can not be changed;
- **Public Caller ID:** the phone number that will be displayed when the user places a call outside the account;
- **Secret:** the password for the credentials used by the user to register to the Asterisk server;
- **Transport:** defines the protocol used by the client to communicate with the Asterisk server. It accepts either TCP value or UTP value (Transport layer);
- **Host:** defines the method for getting the IP of the user: dynamic (the server is listening for registration requests) or IP (the user has a static IP);
- **NAT:** defines if a Network Address Translation is used when communicating with this user;
- **Qualify:** defines if the server should periodically check the user status;
- **Video support:** defines if the user has the support for video calls enabled;
- **Qualify frequency:** the interval used for checking the user status (in seconds);
- **Call counter:** instructs the Asterisk server to monitor the number of simultaneous calls for this user;

- **Busy level:** defines the number of allowed simultaneous calls for the user (the calls above the threshold will receive a busy tone);
- **MAC Address:** the device MAC address, used by the provisioning procedure.

Account info

This section displays the info about the account that the user is linked to.

Phone numbers

This section defines the phone numbers defined for this user.

- **DID:** (Direct Inward Dialing) property defines the phone number on which the user can be called (for incoming calls) from outside of the account (this number has to be unique at a server level);
- **Local phone number:** defines the number used for calling the user from inside the account (this number must contain at least 3 digits and has to be unique at an account level).

Call options

This section defines the properties for managing the calls, for this user.

- **Time condition:** defines the time condition process that will be applied to this user or "Inactive" if no time condition is applied;
- **Send busy line event:** defines if the server will send a notification when the user is in a call (the property can be active only if the property **call counter** is `YES` and **busy level** is `1`);
- **receive busy line event:** defines if the user will listen for notifications for a busy line, issued by other users (it is mostly used by the phone devices inside a secretary office that can display the status of the phone used by the manager);
- **pick up incoming call:** defines if the user can pick up an incoming call, from another user (for example, when the device on the manager desk is ringing, but the manager is out of office, the assistant can pick up the call).

6.7 - User voice mail

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The voice mail tab is used for viewing and editing of the voicemail properties, for the user.

Voicemail settings not defined

If the voicemail for the user is not defined then a warning is displayed, along with an Edit button, for opening the interface for editing.

Voicemail defined

If the settings for the voicemail have been defined, then Accolades will display the following options:

- **password:** (displayed only as a static text) is the digit combination the user has to type for listening the voicemail;

- send to email: defines if the voicemail messages will be sent by email to the user;

- email: defines the email address used for sending the voicemail recordings, in the send to email option is active.

The properties of the voicemail can be edited by using the Edit button from the page menu.

Listening to voicemail

The messages received by a user can be accessed and listen by dialing the *98 phone number, from the user device.
If a user has the mail notification active, for the voicemail messages, then the server will send emails for each recorded voicemail message. The audio file will be attached to the email.

6.8 - User outgoing calls

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Outgoing calls tab allows for viewing and editing the properties for different types of calls that can be initiated by the user.
For a user to be able to start a certain type of call, that type must be active both on the user level and on the account level.
Emergency calls (to the unique emergency number 112) are always active and can not be deactivated.
VoIPIT property defines the permission to start outgoing calls to other numbers inside VoIPIT network.
The **International partial** property defines the permission to start outgoing calls to some international destinations. Those destinations are defined from the account interface (the account linked to this user).
The national property defines the permission to start national calls (in Romania).
The **international** property defines the permission for the account to start international calls.

6.9 - Call forwarding for user

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Call forwarding tab allows for viewing and editing the call forwarding rules for this user.
Each type of forwarding has 3 options:

- Inactive: no calls will be forwarded;

- Voicemail: the calls will be forwarded to the (only if the voicemail has been initialized);

- Internal: the calls will be forwarded to another user, from the same account;

- External: the calls will be redirected to a number outside the account.

All calls option will redirect all calls received by the user. This option will disable all other types of forwarding.
Unavailable option will redirect all calls when the user is unavailable.
Busy option will redirect all calls when the user sends a busy tone.
No answer option will forward all calls when the user does not answer an incoming call, after a defined number of

seconds.

The **Call Transfer** option allows the user to transfer active calls to another phone number. The Call Transfer option allows the user to transfer active calls to another phone number. It is recommended that this option to be activated for all users (this is why, when adding a new user, this option is active, by default).

6.10 - User call recording

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Call recording tab allows for viewing and editing the options for recording the user calls.
The **outgoing calls** option defines if the user''s outgoing calls are recorded.
The **incoming calls** option defines if the user's incoming calls are recorded.
The recorded audio files can be downloaded from the server from the modules that can display call details lists: Call Center, Customers, Call details. Each module has a page that displays call lists as a table, for certain situations. If the administrator has the permissions to listen to recorded calls, then the tables will have a column called "Download" that will contain a symbol for starting the download, if a file is available.
The storage space for audio files is limited for each account. When the limit is reached, Accolades will automatically delete the oldest files.

6.11 - User music on hold

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Music on hold tab is used for setting a music on hold set to be active on this user.
To edit the active set, the administrator has to press the Edit button, placed in the container menu.
The available music on hold sets are defined on the account page, in the Music on hold tab.
The audio files from the selected music on hold set will be played to the person talking to the user, during a call, when the call is set to on hold or when the user starts to transfer the call to another phone number.

6.12 - After the user call

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The After call tab is used for advanced call management function. Using the Accolades interface the administrator can define instructions (also known as extensions) that will be executed by Asterisk after the call has been completed.
To edit the instructions the administrator has to press the Edit button, from the page menu.

Each extension has 3 attributes:

- **Priority:** the index number of the instruction. Asterisk server will execute the instructions based on this index.
- **App:** is the application (as it is defined in the Asterisk environment) that will be run;
- **App data:** the parameters that will be passed to the application.

6.13 - User call center

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

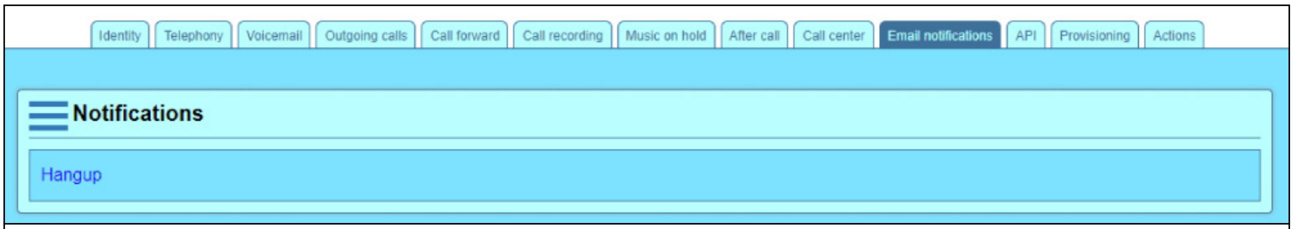
The Call center tab defines the properties of this user when it is used inside a call center envoirement.
The **call center user** property defines if this user can be selected by the agents of the call center, for this account.
A agent needs a user (a phone) to login to the call center. When the agent selects the user, the list will display only the available users that have the **call center user** property active.
The **channel spy** property defines if this user will have the functions for listening to other calls active (this functions are specific to the call center activity). This property can have one of the following values:

- **Inactive:** the user can not be used for listening to ongoing calls;
- **Listen:** the user can only listen to ongoing calls, without any interaction;
- **Whisper:** the user can listen to an ongoing call and can only talk to the agent;
- **Barge-in:** the user can listen no an ongoing call and can talk to both the agent and the caller.

6.14 - Notificari email utilizator

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

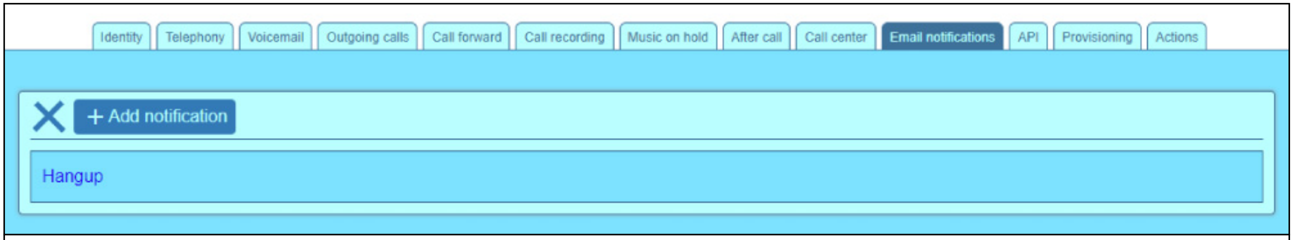
The Email notification tab is used for setting up email notifications that can be sent when a defined event is triggered on a call.



Email notification interface

Add new notification

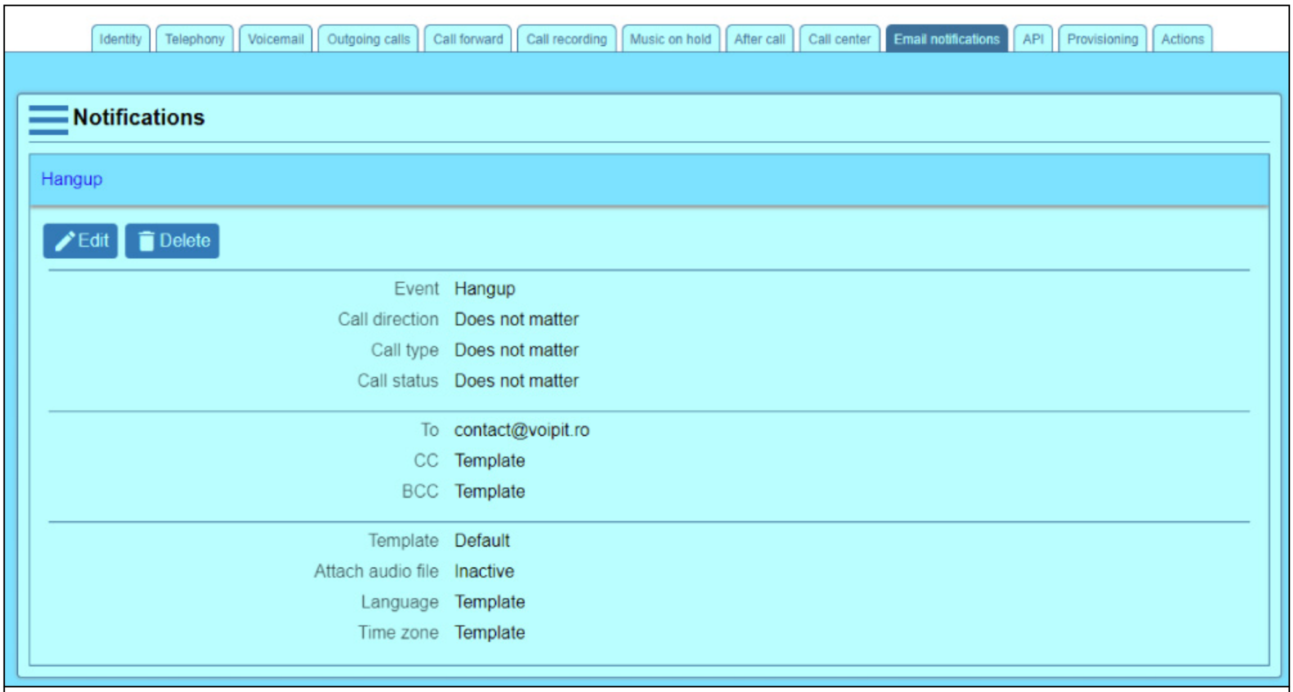
To add a new notification the administrator must press the Add button, visible after the "Notification list" menu has been toggled.



Add notification button

Edit and delete

To add or delete an existing notification the administrator must first press on the notification name to toggle the display of details about the notification, along with the available operations.



Notification details

Notification properties

The interface shown below is used for both add and edit notifications.

Notification properties

The "Event" section contains information about the event that will trigger the notification email.

- **Event:** the type of event that will trigger the notification;
- **Call direction:** The direction for the call that will trigger the notification, relative to the user;
- **Call type:** The type for the call that will trigger the notification;
- **Call status:** The status for the call that will trigger the notification;
- **Remarks:** General remarks for the notification.

The "Email destination" section contains data about the addresses where the notification will be sent. It is possible to use the addresses defined in the template or use custom addresses.

The "Content" section contains data about the email that will be sent.

- **Template:** the name of the template used for the email (the templates can be set up using the Email template tab inside the account info page);
- **Attach audio file:** if active then the audio file for the call will be attached to the email (as long as it is available and it does not exceeds 10MB);
- **Language:** the language used for the text variables inside the template;

- **Time zone:** The time zone for date-time variables inside the template;.

Errors

If a mail can not be send then an error will be appended to the account log file available at the Log tab.

6.15 - User API

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The API defines the methods used for integrating a user with an external system.

Call notification

This option allows for an external system to be notified when a call (that the user is a part of, either outgoing or incoming) is answered of hung up. The communication between Accolades and the external service consists of HTTP or HTTPS requests.
The following parameters can be defined:

- **Status:** (active or inactive) if active then Accolades will send the notification, if inactive then the rest of the parameters are not available;
- **Protocol:** (http sau https) defines the protocol used to send the notification;
- **Server:** the server (IP of FQDN) where the notification is sent to;
- **Port:** the port used for sending the notification;
- **Cale:** the path for the file that will receive the notification (the path cannot be empty and it has to start with "/");

The structure used for a notification is detailed inside the API chapter of this document, the "Call notification" section.

Configuration

Accolades can save up to 2000 characters for each plarform user.
When an application is connected to the server, using an API, Accolades will send the text, on request. It is recommended to use existing standards for saving data (JSON, XML etc.). Accolades will not perform any validation on the text, it will be saved and sent as plain text, in a raw format.
More info about the options for reading this data, using the available API interfaces can be found on the API section of this documentation.

6.16 - Provisioning

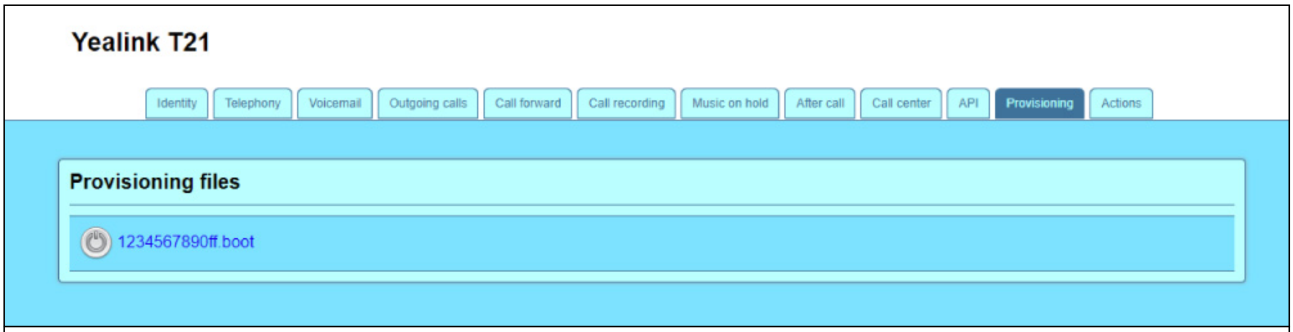
> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Provisioning tab allows the administrator to create provisioning files to be used for device configuration. Provisioning files management can only be done for users that have the MAC address defined.

The files generated using the interface are saved in the folder defined inside the Accolades configuration file (/etc/accolades/configurare.ini), using the folderProvizionare parameter.

Interface

The interface for managing the provisioning files is displayed below.



Provisioning interface

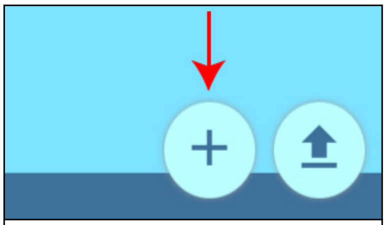
Add / Edit a file

Accolades has two methods for creating new provisioning files:

- Creating new files using the interface;
- Uploading existing files.

Creating and editing files using the interface

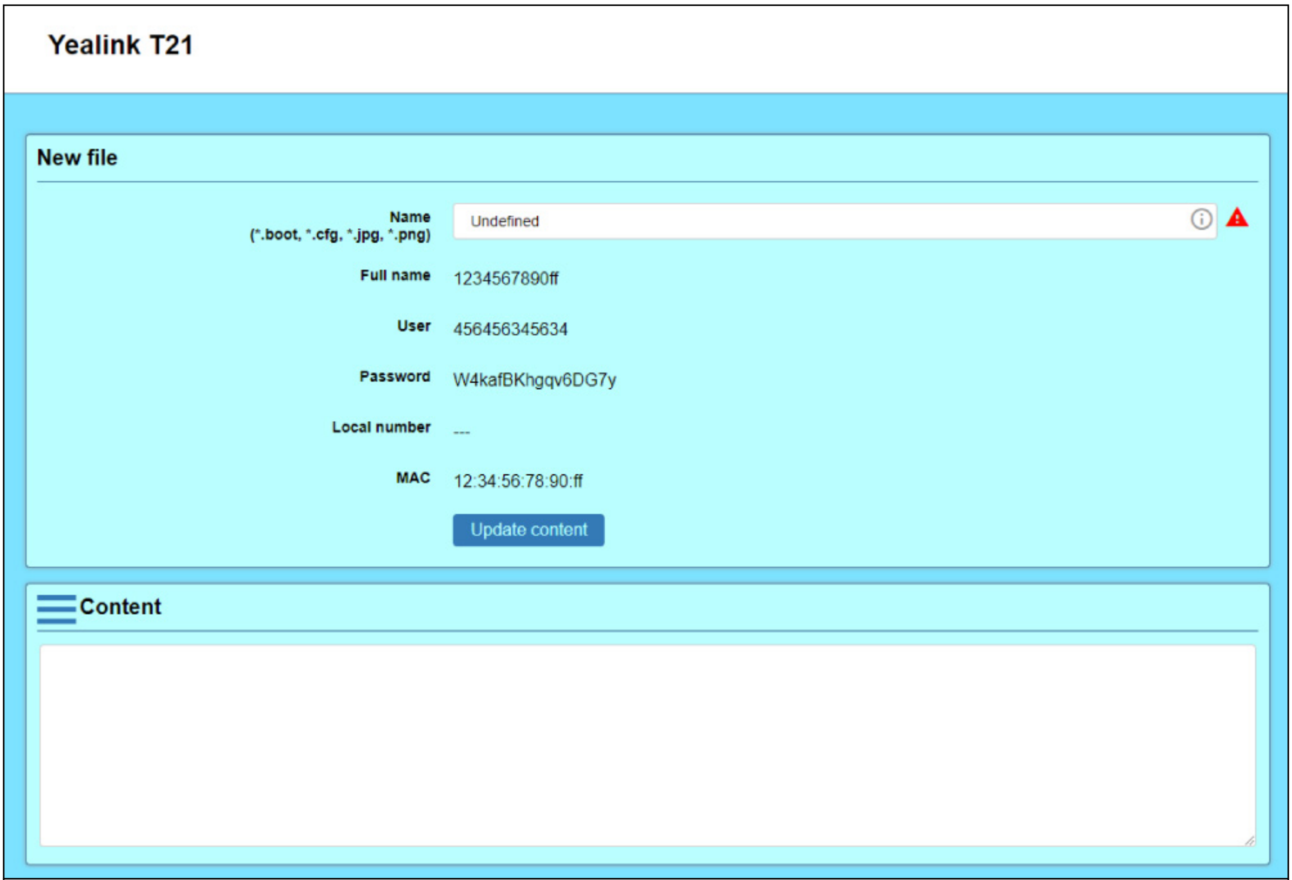
To create a new file, the administrator must press the add button, from the bottom of the page.


Add button

To edit an existing file, the administrator must press the Edit button, displayed after clicking on the file name.

File options

Accolades will display the interface for editing a provisioning file.



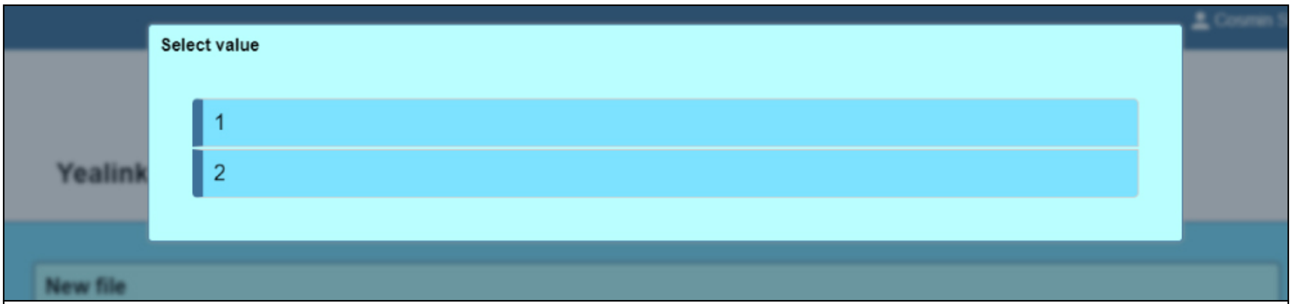
Add / edit file interface

The interface is divided into two main sections: the file info panel and the content panel.

The file info panel contains the following properties:

- **Name:** The name of the provisioning file, along with the extension.
- **Full name:** The full name of the provisioning file, as it will be saved (all files have the MAC value as a prefix).
- **User:** The username of the user for whom the file is created.
- **Password:** The password of the user for whom the file is created.
- **Local number:** The local number (interior) assigned to the user.
- **MAC:** The MAC address of the device being used by the user.
- **Update content:** The button is used when provisioning templates are used. Pressing the button will update the variables defined inside the template with the user values.

The Update content button will update any existing parameters inside the content with this user values. Because a template can contain parameters for more than one user (a phone with 2 lines, for example) Accolades will check the content for available paramters sets. Then it will ask the user to select the parameter set to be updated..



Parameter set selection

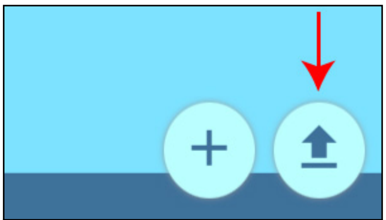
Last section allows the administrator to edit the content of the provisioning file. The user can load a template by pressing the Load template button, available inside the Content panel menu.

> *The provisioning templates can be set up from the*
>
> *menu, by selecting the*
>
> *submenu.*

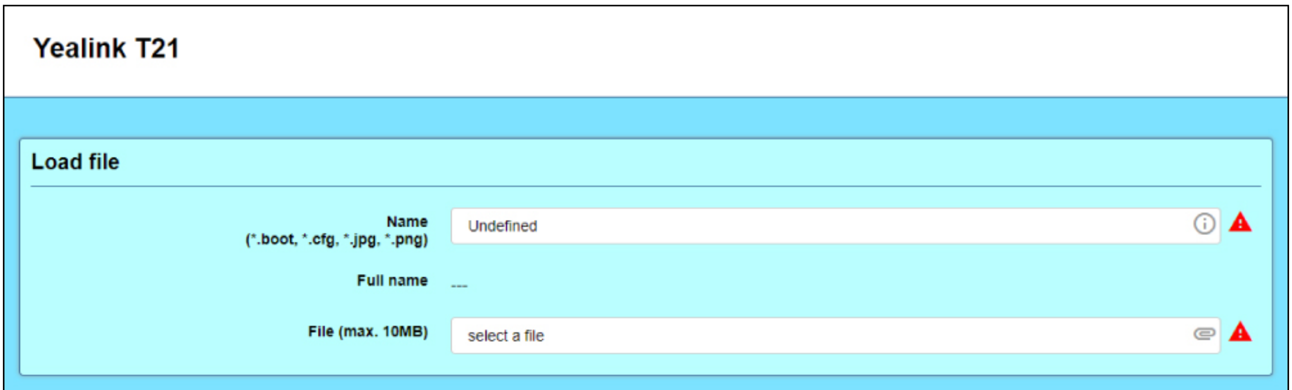
To submit / cancel the process, the corresponding button from the bottom of the page has to be pressed.

Uploading a file

The upload process can be started by pressing the upload button, displayed on the bottom of the page.


Upload button

Accolades will display the provisioning file upload interface.



Upload interface

The interface contains the following options:

- **Name:** The name of the provisioning file, along with the extension.
- **Full name:** The full name of the provisioning file, as it will be saved (all files have the MAC value as a prefix).

- File: The file being uploaded.

To submit / cancel the process, the corresponding button from the bottom of the page has to be pressed.

Delete a file

To delete an existing file, the administrator must press the Delete button, displayed after clicking on the file name.

File options

6.17 - Operations

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Operation tab allows the administrator to run different tasks on the user.

Regenerate dial plan

Call processing inside Asterisk is done based on instructions, dynamically generated by Accolades.

By running this option, Accolades will delete and regenerate ALL the instructions associated with this user. It is possible that while running this task, some on the features of the user, including calls management will not function properly. In a normal use, this task should never be used.

7. Virtual fax

7.1 - Virtual fax overview

In Accolades, a virtual fax is an entity used for sending and receiving faxes, using the online interface, with no need for a physical device. Received documents will be sent automatically to an email address defined in the fax info page.

Virtual fax module can be accessed from the main menu and allows the following operations:

- sending a fax;
- view all the sent faxes;
- view all the received faxes.

To add, modify or delete a virtual fax, the administrator has to access the Virtual fax list tab from the account info page.

7.2 - Sending a fax

Sending a virtual fax is initiated from the Virtual fax module, by selecting the New document menu.

Using the Accolades interface the administrator can send by fax pdf files with a maximum size of 3 MB.

To send a fax, the following inputs have to be set up:

- **sender account:** represents the virtual fax used for sending the document;
- **destination phone number input:** is used for specifying the phone number of the destination;
- **document input:** is used for selecting the pdf file to be sent.

After all the inputs are checked, the administrator has to press the validate button on the bottom of the page.

Accolades will start sending the document. The confirmation message notifies the user that the sending is in progress.

The interface does not wait for the sending process to finish, as this process can take several minutes, depending on the number of pages to be sent.

All the sent documents (with no restriction to the status of the finished transmission) can be viewed inside the Virtual fax module, by selecting the Sent option.

A document will be displayed only if the transmission has been completed. No listing is done for the ongoing transmissions.

7.3 - Received fax list

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

The list with the received documents for a virtual fax can be accessed from the Virtual fax module, by selecting the Received option. All documents received by the selected virtual fax will be displayed.

To change the virtual fax the administrator has to press the Change fax button from the page menu.

By pressing the date an hour on a document additional info about the fax will be displayed, along with the option for viewing the fax, by pressing the right arrow, on the right side of the document container.

7.4 - Sent fax list

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

The list with the sent faxes can be accessed from the Virtual fax module, by selecting the Sent option. This interface does not display the ongoing transmissions, only the finished processes.
To change the current virtual fax, the administrator has to press the Change fax button, from the page menu.
The documents are displayed as a list, preceded by an icon. If the icon has a red exclamation mark, then the transmission encountered an error (additional info can be viewed from the transmission log).
By clicking on the date and time for a document, additional info about the process will be displayed, along with the option for downloading the sent file, by clicking the right arrow button on the right margin of the container.
The detailed slider allows for viewing the transmission log, by pressing the View log button.
The log will display all the steps in the transmission process, including the errors, if it is the case.

7.5 - Add, edit, delete virtual fax

To **add** a virtual fax, the administrator has to access the Virtual fax list tab from the account page. You can not add a virtual fax without selecting an account first. The add procedure is initiated by clicking the Add button from the page menu. This button is available only if the administrator has the required permissions.
When adding a fax, the administrator has to fill in the info from the Identity tab and from the Telephony tab.
To **delete** a virtual fax, the administrator has to access the Identity tab from the fax info page. Then, from the page menu the administrator has to click the Delete button. This button is available only if the administrator has the required permissions.
To **edit** some data about the fax, the administrator has to click the Edit button from the page menu, on any of the fax page tab.

7.6 - Virtual fax identity

Info about the properties of the virtual faxes can be viewed and edited from the account info page of the fax, by accessing the Fax list tab, followed by clicking the virtual fax name.
The Identity tab allows for viewing and editing the properties of the virtual fax, specific to the identity of the fax, inside Accolades.
For a better structure, the info is divided into several sections:

- Identity
- Multiple emails
- Account info

Identity

Each virtual fax defined in Accolades requires some data about its identity.
First, the **type** of identity has to be defined: a person, a company or a device. Depending on the type of identity, additional fields will be displayed: family name and given name for a person, name for a company or for a device.
For sending notifications, including the received faxes an **email** address is required.

The administrator can also define the **language** used for sending emails, using the email language option.
The administrator can also fill in some **remarks** about the user, just for general use.

Multiple emails

This section allows setting up additional email addresses for sending the emails with received documents.

Account info

This section contains some data about the account that contains this user: the name and the type of the account.

7.7 - Virtual fax telephony

Info about the properties of the virtual faxes can be viewed and edited from the account info page of the fax, by accessing the Fax list tab, followed by clicking the virtual fax name.
The Telephony tab allows for viewing and editing the properties of the virtual fax, specific to the fax protocol.
For a better structure, the info is divided into several sections:

- Telephony
- Phone numbers
- Account info

Telephony

The telephony section defines the specific properties for sending and receiving the fax documents.
The **wait time** parameter defines the duration (in seconds) the server will wait for a fax tone.
The **ECM** (Error Correction Mode) option allows for verifying the data packets sent between machines, throughout the transmission. If errors are encountered then the data will be resent. If the phone line is weak, then this option can make the fax unusable.
The **Header info** option is used for defining the text that will be displayed in the header of the send pages.
The **Local station ID** defines the ID of the of this virtual fax.
The **min rate** and **max rate** options are used for setting up the bandwidth of the transmission.
No info on the **gatweay** and **fax detect** options.

Phone numbers

This section defines the phone numbers used by the virtual fax.
The **public caller id** option defines the phone number used by the virtual fax when sending document.
The **DID** (Direct Inward Dialing) defines the phone number that will be linked to the virtual fax, for receiving documents. This phone number has to be unique, at a server level.
The **Local phone number** defines the phone number that will be linked to the fax, from inside the account. This number has to be unique at a server level.

Account info

This section contains some data about the account that contains this user: the name and the type of the account.

7.8 - Virtual fax outgoing calls

Info about the properties of the virtual faxes can be viewed and edited from the account info page of the fax, by accessing the Fax list tab, followed by clicking the virtual fax name.

The Outgoing calls tab allows for viewing and editing the properties for different types of calls that can be initiated by the virtual fax.

For a virtual fax to be able to start a certain type of call, that type must be active both on the user level and on the account level.

Emergency calls (to the unique emergency number 112) are always active and can not be deactivated.

VoIPIT property defines the permission to start outgoing calls to other numbers inside VoIPIT network.

The **International partial** property defines the permission to start outgoing calls to some international destinations. Those destinations are defined from the account linked to the virtual fax and are unique for the entire account (are applied to the faxes, users, waiting queues etc.).

The **national** property defines the permission to start national calls (in Romania).

The **international** property defines the permission for the virtual fax to start international calls.

7.9 - Virtual fax operations

Info about the properties of the virtual faxes can be viewed and edited from the account info page of the fax, by accessing the Fax list tab, followed by clicking the virtual fax name.

The Operation tab allows the administrator to run different tasks on the virtual fax.

Regenerate dial plan

Call processing inside Asterisk is done based on instructions specific to Asterisk environment (also known as extensions), dynamically generated by Accolades.

When some types of fax settings are changed, these instructions needs to be regenerated. Accolades will run the procedures automatically, only for the necessary features.

By running this option, Accolades will delete and regenerate ALL the instructions associated with this fax. It is possible that while running this task, some on the features of the fax will not function properly.

In a normal use, this task should never be used.

8. Queues

8.1 - Waiting queues overview

In Accolades a waiting queue is an entity that allows for several callers to wait until an agent is available to answer the call.

The waiting queues do not have a dedicated module, the management is done from the account page, using the Queues tab.

The waiting queues can be used in two ways:

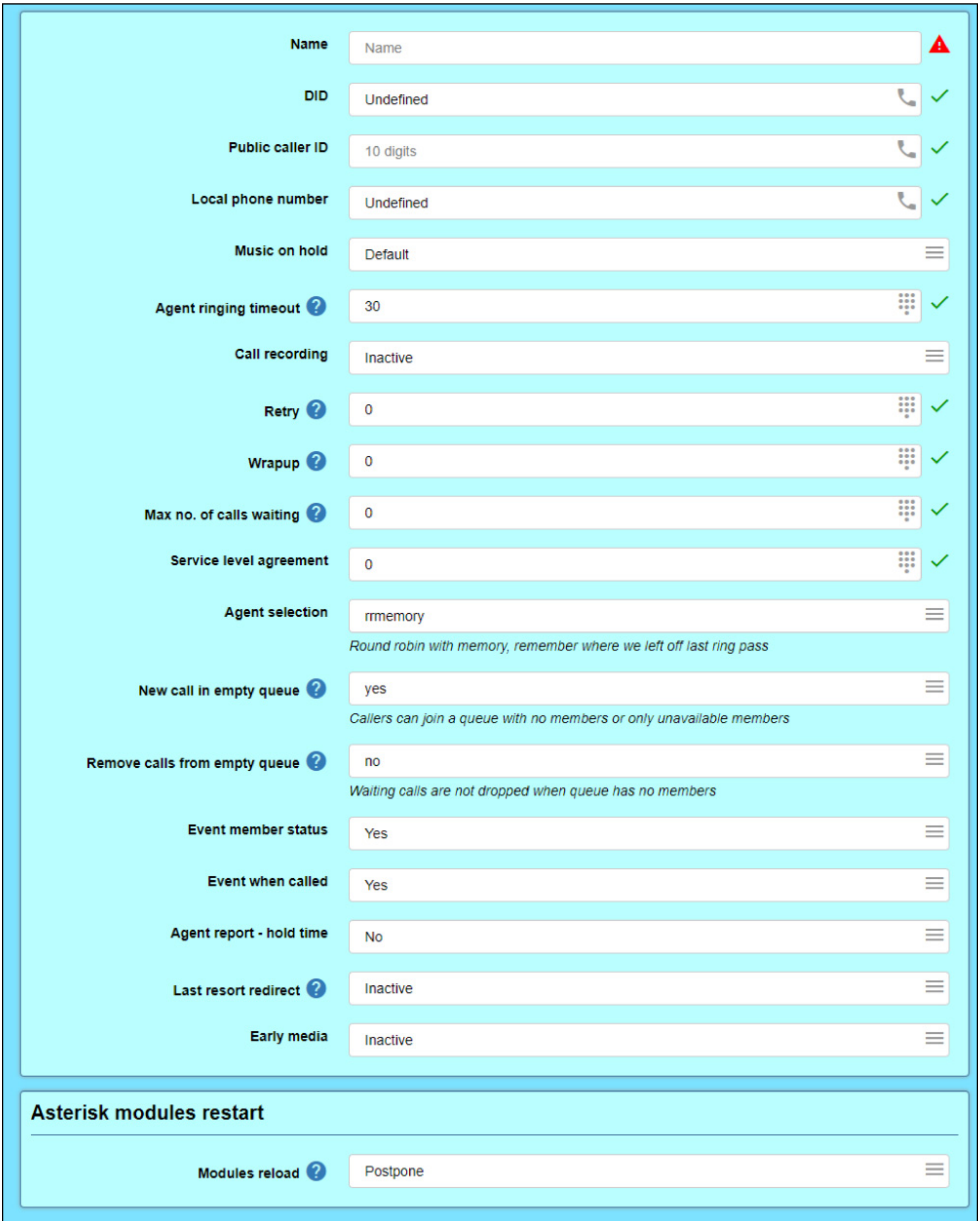
- static;
- dynamic.

The static waiting queues are specific to some offices that offers support, inside a company. For example, the phones inside the IT department can be linked to a waiting queue. When a person calls the department, all the phones linked to the queue will start to ring. The call can be answered from any ringing device. This type of usage is also called "offline" (the persons using the queue are not required to use the Accolades interface, as the phones are always connected to the queue.

The dynamic waiting queues are specific to call centers. The agents have to use the Accolades interface to perform different operations specific to the call center activity ("online usage"). They can log in or log out to / from queues, can put them self on pause etc.

8.2 - Add a waiting queue

To add a waiting queue, the administrator has to access the Queues tab from the account page. You can not add a queue without selecting an account first. The add procedure is initiated by clicking the Add button from the page menu. This button is available only if the administrator has the required permissions.



Add a waiting queue

To add a waiting queue the following properties must be set up:

- Name: The generic name of the queue inside Accolades.

- DID: The phone number that the queue is reachable, for incoming calls outside the account. This number has to be unique at a server level.

- Public caller ID: The phone number that will be displayed to the called device when the queue initiates a call.

- **Local phone number:** The number that the queue is reachable from inside the account. This number has to be unique at an account level.
- **Music on hold:** Allows the administrator to select a music on hold set (from the sets defined for the account) that will be played to the waiting calls.
- **Agent ringing timeout:** The number of seconds that the queue will leave a call to an agent, before considering a timeout.
- **Call recording:** Defines if the calls for the queue are recorded to the server.
- **Retry:** Defines the interval (in seconds) that the queue will wait before retrying to reassign a call to agents. If none of the agents answers a call, then the queue will wait a number of seconds before restarting to call all agents again.
- **Wrapup:** The interval (in seconds) that an agent will not receive any calls, after finishing a call. For the queues with dynamic agents, this value can be overrode by setting up the agent to automatically start an after call pause after a call has been finished. In this case, the agent will have to manually exit the break, when he is ready to receive calls again.
- **Max no. of calls waiting:** The maximum number of allowed waiting calls, for the queue. The incoming calls, above this threshold will receive a busy tone. If the parameter is set to 0 then no limit is set.
- **Service level agreement:** The number of seconds for calculating the call level. Two types of indicators are used: SL and SL2.
SL is computed using the formula:
(total answered calls in threshold / total answered calls) * 100.
SL2 is computed using the formula:
((total calls answered in threshold + total calls abandoned in threshold) / (total calls answered + total calls abandoned)) * 100.
- **Agent selection:** The algorithm used for selecting the agent for a call. A description for each algorithm is displayed under the value of the property.
- **New call in empty queue:** Defines the way that the queue will manage the case when an incoming call is received by the queue, but no agent are logged in to the queue.
- **Remove calls from empty queue:** Defines the way that the queue will manage the case when no agents are logged in to the queue.
- **Event member status:** Defines if QueueMemberStatus events should be emitted (along with many other events) for further processing. The events are emitted by the Manager application (from Asterisk).
- **Event when called:** Defines if events are emitted when an agent is called. The events are emitted by the Manager application (from Asterisk).
- **Agent report - hold time:** Defines if, before connecting the call the agent will be informed with the waiting time of the caller.
- **Last resort redirect:** Defines if the call will be redirected to a phone number when no agents are logged in. Depending on the property value, the interface will display additional inputs for selecting the target for redirecting.
- **Early media:** Defines if an audio file will be played to the agent instead of the usual ringing tone..

Asterisk modules restart section defines if the asterisk modules using these settings should be restarted immediately (but ongoing calls can be affected) or just marked for restart at a later date. If postponed then the modules can be later restarted by an administrator using the Asterisk commands option from the Server menu.

8.3 - Waiting queues identity

Info about the queues properties can be viewed and edited from the corresponding account page, by accessing the Queues tab and then pressing on the queue name.

The identity tab allows for viewing and editing of the identity info for the selected queue, inside the Accolades platform. Keep in mind that the properties displayed inside the identity tab have no influence over the call processing procedures inside Asterisk engine, they are used only for displaying the queue throughout the application.

The **account** property shows the account that this queue is assigned to.

The **name** property defines the generic name of the queue. This name will be displayed when Accolades has to refer to the queue.

To **delete** the queue, the administrator has to access the page menu then click the Delete button. This button is available only if the administrator has the required permissions.

To **edit** some data about the queue, the administrator has to click the Edit button from the page menu.

8.4 - Waiting queues telephony

Info about the queues properties can be viewed and edited from the corresponding account page, by accessing the Queues tab and then pressing on the queue name.

The telephony tab allows for viewing and editing the queue properties specific to the telephony protocol used by Accolades.

Info

The **account** info shows the account that contains the current waiting queue.

The **name** property defines the generic name of the queue inside Accolades.

The **DID** property defines the phone number that the queue is reachable, for incoming calls outside the account. This number has to be unique at a server level.

The **Time condition** property defined the time condition process that will be applied to this queue or "Inactive" if no time condition is applied.

The **public caller id** defines the phone number that will be displayed to the called device when the queue initiates a call (for the last resort redirect, for example).

The **local phone number** defines the number that the queue is reachable from inside the account. This number has to be unique at an account level.

The **agent announce** property defines if the agent or user that takes a call will have an audio file played before connecting the call. Usually the audio file states the name of the queue and is used when an agent or user is assigned to several queues. When this option is enabled an additional input is displayed, allowing the administrator to upload a .wav file with a maximum size of 3 MB.

The **music on hold** property allows the administrator to select a music on hold set (from the sets defined for the account) that will be played to the waiting calls.

The **agent ringing timeout** defines the number of seconds that the queue will leave a call to an agent, before considering a timeout.

The **call recording property** defines if the calls for the queue are recorded to the server.

The **retry** property defines the interval (in seconds) that the queue will wait before retrying to reassign a call to agents. If none of the agents answers a call, then the queue will wait a number of seconds before restarting to call all agents again.

The wrapup property defines the interval (in seconds) that an agent will not receive any calls, after finishing a call. For the queues with dynamic agents, this value can be overrode by setting up the agent to automatically start an after call pause after a call has been finished. In this case, the agent will have to manually exit the break, when he is ready to receive calls again.

The **max no. of calls waiting** property defines the maximum number of allowed waiting calls, for the queue. The incoming calls, above this threshold will receive a busy tone. If the parameter is set to 0 then no limit is set.

The **service level agreement** defines the number of seconds for calculating the call level. Two types of indicators are used: SL and SL2.

SL is computed using the formula:

(total answered calls in threshold / total answered calls) * 100.

SL2 is computed using the formula:

((total calls answered in threshold + total calls abandoned in threshold) / (total calls answered + total calls abandoned)) * 100.

The **agent selection** property defines the algorithm used for selecting the agent for a call. A description for each algorithm is displayed under the value of the property.

The **new call in empty queue** property defines the way that the queue will manage the case when an incoming call is received by the queue, but no agent are logged in to the queue.

The **remove calls from empty queue** defines the way that the queue will manage the case when no agents are logged in to the queue.

The **event member status** property defines if QueueMemberStatus events should be emitted (along with many other events) for further processing. The events are emitted by the Manager application (from Asterisk).

The **event when called** property defines if events are emitted when an agent is called. The events are emitted by the Manager application (from Asterisk).

The **agent report - hold time** defines if, before connecting the call the agent will be informed with the waiting time of the caller.

The **periodic announce** property defines if additional messages will be played to the caller, along with the music on call set defined for the queue.

The **periodic announce frequency** defines the frequency for playing periodic announces to the caller.

The **last resort redirect** defines if the call will be redirected to a phone number when no agents are logged in. Depending on the property value, the interface will display additional inputs for selecting the target for redirecting.

The **early media** property defines if an audio file will be played to the agent instead of the usual ringing tone.

Periodic announce to caller

This section is available only from the queue info page (it is not available from the editing page). The interface allows for managing the files that will be played to the waiting calls. To add a new file the user has to click the Add button. For deleting the file, the user has to press the name on the file. The Delete button will be displayed in the window with additional info about the file, after the user pressed the Details button.

Static users

A queue has two types of agents (users): static and dynamic.

The static agents (called users, because they do not have an administrator attached) are always connected to the queue, can not login or logout and they do not need the graphical interface for using the queue. The dynamic agents are the ones that need to login to one or more queues, can put themselves on breaks, can edit the info about the callers (can use the CRM module). This type of agents are specific to the call center activity.

This section is available only in the queue info page (is not available in the editing interface). The interface allows for managing the static users for the queue. For adding a user (phone) the Add button has to be pressed. For deleting a user the Delete button has to be pressed, displayed after clicking on the user name.

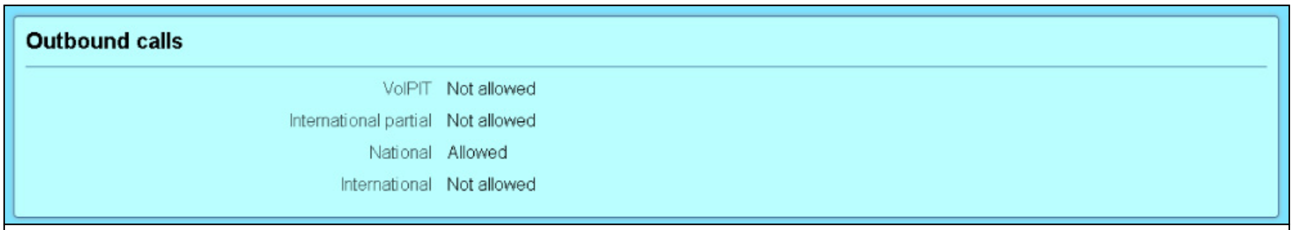
8.5 - Waiting queues outgoing calls

Info about the properties of the queues can be viewed and edited from the account info page of the queue, by accessing the Queues tab, followed by clicking the queue name.

View

The Outgoing calls tab allows for viewing and editing the properties for different types of calls that can be initiated by the queue.

For a queue to be able to start a certain type of call, that type must be active both on the user level and on the account level (that can be set up from the Outgoing calls tab on the Account info page).



Outgoing calls

The following types of calls can be set up:

- **VoIPIT:** defines the permission to start outgoing calls to other numbers inside VoIPIT network;
- **National:** the national property defines the permission to start national calls (in Romania);
- **International partial:** defines the permission to start outgoing calls to some international destinations (defined from the queue account interface);
- **International:** property defines the permission for the queue to start international calls.

Edit

The outbound calls permissions can be set up by clicking the Edit button available inside the page menu.

Edit outbound calls

Asterisk modules restart section defines if the asterisk modules using these settings should be restarted immediately (but ongoing calls can be affected) or just marked for restart at a later date. If postponed then the modules can be later restarted by an administrator using the Asterisk commands option from the Server menu.

8.6 - Waiting queues operations

Info about the properties of the queues can be viewed and edited from the account info page of the queue, by accessing the Queue tab, followed by clicking the queue name.
The Operation tab allows the administrator to run different tasks on the queue.

Regenerate dial plan

Call processing inside Asterisk is done based on instructions (also called extensions), dynamically generated by Accolades. When some operations are performed by the administrators, Accolades has to regenerate some extensions, just for the selected item.
By performing this task Accolades will delete and regenerate ALL the extensions associated with this queue. It is possible that, while this task is being performed, the queue will not function properly.

9. After call survey

9.1 - After call survey overview

To review the quality for the incoming calls on a waiting queue, Accolades can run after call surveys. Using this procedure Accolades will dial the caller id for a finished call and will ask one or more questions (using prerecorded audio files). Accolades will store the answers given by the caller using the keypad.
As an example, a question can refer to the quality of the call: "How do you rate the information provided by the agent, using a scale from 1 to 5 where 1 means not useful and 5 means very useful. Please press the corresponding key on the keypad." After that, Accolades can generate reports based on the answers received by the server using the Call Center module, Reports option.
The management for the surveys is performed from the info page of a waiting queue, using the After-call survey tab.

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

9.2 - After call survey management

After call survey management is performed from the info page for the waiting queue attached to the survey, using the After-call survey tab.

Add, delete

The procedures for adding and deleting the survey are initiated by pressing the corresponding button from the page menu.

Info

The Info section displays the general data about the survey, using two properties:

- **Name:** the generic name of the survey, as it will be displayed throughout Accolades;
- **Status:** defines the status of the survey (active - the survey runs, inactive - the survey does not run);

To edit these properties the user must press the edit button from the section menu.

Call consent

This section defines the process that Accolades uses to ask the caller for the consent to run the survey, after the current call ends.
The process will play back one or more audio files to the caller, before adding the call to the waiting queue. The keys used for accepting or rejecting the survey are also defined here.
Audio file example: "Do you agree to answer some questions regarding the quality of the information received, after the current call has finished? Press 1 for yes and 2 for no."
The section contains the following properties:

- **Media playback:** sets up the playback of the media files to the caller. If the property is inactive then Accolades will ignore any media files and the consent will be set up according to the Default consent property;

- Consent timeout: defines the interval that Accolades waits for a selection to be made by the caller, before defining the consent as it is set up within the Default consent property;

- Default consent: defines the survey running status when the caller does not select any option or when no options are defined;

- Key for allow: the key that the caller has to press to agree with the survey;

- Key for deny: the key that the caller has to press to reject with the survey.

On the lower part of the section a list with the audio files that will be played to the caller is listed. The files are sorted alphabetically before being played. To add a new file the administrator has to press the Add file from the section menu.

By pressing the file name, the administrator can download or delete the selected file.

Questions

The section defines the questions that will be played to the caller, if it agreed to the survey.

To add a question the user has to press the Add button from the section menu.

By pressing the question name, the user can edit the question, download the audio file or delete the question from the survey. Under this menu a list with the available answers for the caller.

A question has the following properties:

- Question: defines the text of the question (a transcript of the audio file) to be used when creating reports;

- Audio message: defines the audio file to be played to the caller.

For each question a set of answers can be defined. A response has two properties: the key that the caller has to press and the text describing the question.

Warning! If a question has no key defined, then the audio files will be played to the caller without the option to skip them. This case is used when setting up info messages (Ex: "Thank you for your time and have a nice day!").

10. IVR

10.1 - IVR overview

The IVR notation is an acronym for Interactive Voice Response. An incoming call will be processed by the Accolades server and based on the options selected by the caller, using the keypad, the call will be redirected to a phone number, waiting queue or any other type of service.

Usually the IVR is the first interaction between a caller and your company.

The IVR feature does not have a dedicated module, the management operations are initiated from the account page, the IVR tab.

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

10.2. IVR Management

10.2.1 - Add, edit, delete IVR

To **add** an IVR entity the user has to first access the IVR tab inside the account page. No IVR can be added without first selecting an account. The adding procedure is started by selecting the Add button from the page menu. This button is displayed only if the required permissions are valid.

When adding an IVR, the administrator has to fill in the data from both the Identity tab and Telephony tab.

To **delete** an IVR the administrator has to access the page menu from the Identity tab and press the Delete button. This button is only displayed if the administrator has the necessary permissions.

To **edit** the IVR properties, the Edit button has to be pressed from the page menu, inside the desired tab.

10.2.2 - IVR identity

The IVR properties can be viewed and edited from the IVR account info page, by accessing the IVR tab, pressing the IVR name and then the Info button.

The Identity tab allows for viewing and editing the IVR properties that are linked to the IVR identity inside the Accolades application. The properties displayed inside this tab have no effect over the call management procedures. The properties are only used to display the IVR inside Accolades.

The **name** property defines the IVR name, as it will be displays inside Accolades.

The **remarks** property defines any additional info about this IVR.

The **account** property defines the account that contains this IVR.

To **delete** an IVR the page menu, displayed near the IVR name has to be accessed and then the Delete button has to be pressed. This button is only displayed if the administrator has the necessary permissions.

To **edit** the IVR properties the administrator has to press the Edit button, from the page menu.

10.2.3 - IVR telephony

The IVR properties can be viewed and edited from the IVR account info page, by accessing the IVR tab, pressing the IVR name and then the Info button.

The Telephony tab allows for viewing and editing the IVR properties, specific to the telephony protocols.

The **DID** property defines the direct phone number (from outside the account) that this IVR responds to. This phone number has to be unique throughout the entire Accolades server.

The **Time condition** property defined the time condition process that will be applied to this IVR or "Inactive" if no time condition is applied.

The **Internal phone number** defines the phone number that the IVR responds to, from inside the account. This phone number has to be unique inside the account.

10.2.4 - IVR outgoing calls

The IVR properties can be viewed and edited from the IVR account info page, by accessing the IVR tab, pressing the IVR name and then the Info button.

The Outgoing calls tab allows for viewing and editing the properties for different types of calls that can be initiated by the IVR.

For an IVR to be able to start a certain type of call, that type must be active both on the IVR level and on the account

level (that can be set up from the Outgoing calls tab on the Account info page).
Emergency calls (to the unique emergency number 112) are always active and can not be deactivated.
VoIPIT property defines the permission to start outgoing calls to other numbers inside VoIPIT network.
The **International partial** property defines the permission to start outgoing calls to some international destinations.
Those destinations are defined from the account interface (the account linked to this queue).
The national property defines the permission to start national calls (in Romania).
The **international** property defines the permission for the queue to start international calls.

10.2.5 - IVR structure

The IVR properties can be viewed and edited from the IVR account info page, by accessing the IVR tab, pressing the IVR name and then the Info button.
The structure tab allows the logged in administrator to define and edit the IVR structure (the steps that a call will take through the app).
A description for each type of step inside the IVR structure is available in the next chapter: Structure management.

Basic concepts

The IVR is a sequence of steps, placed in a tree like structure. At a given moment, a call is placed inside one of these steps and is being processed based on the step properties.
To better understand the IVR-step concept, this model can be visualized as a folder structure inside a computer. The entire IVR is like a full folder structure and a step is like a single folder. At a given moment, a call is inside a step (a folder). Depending on the caller option, the call can revert to the previous step (just like "up one level") or can move further to a new step (enter into a subfolder of the current one).
When a new call enters the IVR, it is always landing into the first step, called **IVR configuration**. This step will configure the call based on the specific properties of the current IVR. After the configuration has been completed, the call will be passed on to the next step, inside the **Ok** folder.
If a call reached a folder that has no step defined, then Accolades will create (automatically) a hang up step and the call will be terminated.
For example, when a new IVR is added to the database, the **IVR configuration** step will be created. After the configuration step, the call will access the **Ok** folder where a hangup step will be defined.

IVR Structure

The tree like structure is displayed on the left side of the page, with a graphical layout similar to the computer folders.
A step has one or more sets options displayed. The first option is always named after the step type and, when selected, will display, on the right side of the page, some info about the selected step. Additional options for the current step are displayed under the current step name, when available.
For a better visibility, the options containing the step type are being displayed using a border.
Depending on the step type, Accolades can have additional options under the step type.

Selection info

On the right side of the page the properties of the selected option (from the tree structure on the left side) will be displayed.

Add step

The administrator can add a new step in front of an existing one, by pressing the Add button, available in the container menu that displays the step properties (the container that is being displayed when the administrator presses on the step name).
After the Add button has been pressed, Accolades will add a new Advance step in front of the current one.

Changing the step type

Accolades allows for changing a step from one type to another. For example, an **Advance** step can be changed into a **Selection** type step.
The administrator can change the type of the current step by pressing the Change button, available in the container menu that displays the step properties (the container that is being displayed when the administrator presses on the step name).

Delete step

Only **Advance** type of steps can be deleted from a structure (to ensure that the IVR remains online). If the administrator wants to delete another type of step then he has to first change the step type to **Advance**.
Only the selected step will be deleted (the previous step will be linked to the next one).

Delete branch

The IVR interface allows the administrator to delete an entire branch of the structure. Just like deleting a single step, a branch can be removed only from an **Advance** type of step.

10.2.6 - IVR operations

The IVR properties can be viewed and edited from the IVR account info page, by accessing the IVR tab, pressing the IVR name and then the Info button.
The Operation tab allows the administrator to run different tasks on the queue.

Regenerate dial plan

Call processing inside Asterisk is done based on instructions (also called extensions), dynamically generated by Accolades. When some operations are performed by the administrators, Accolades has to regenerate some extensions, just for the selected item.
By performing this task Accolades will delete and regenerate ALL the extensions associated with this queue. It is possible that, while this task is being performed, the queue will not function properly.

10.3. Structure management

10.3.1 - IVR structure overview

The IVR structure represents the steps that a call will take, after it is answered by the sistem. The step management procedures are available from the Structure tab, inside the IVR info page.
A step from the IVR structure is displayed on the left side of the page. The step type has a border around it.
Under the step name Accolades will display any additional options for the step type.

10.3.2. Common options

10.3.2.1 - Common options for IVR steps

Each step from an IVR structure can have one or more sets of additional properties, displayed under the type of the step, inside the IVR structure (on the left of the page).
This chapter is describing the options that are common to more than one type of steps.

10.3.2.2 - IVR media

The container for managing the media files inside a step is only available to the steps that require media playback to the caller:

- **Media playback** - one or more audio files will be played to the caller and after that the call will advance to the next step;
- **Selection** - one or more audio files will be played to the caller. The call will move further only when the caller selects an option (by pressing a key on the keypad);

Accolades will play the files to the caller one by one, sorted alphabetically. To better control the playback order we recommend to prefix each file with an index: 1_file_name.sln, 2_another_file.wav, 3_last_file.wav.

Add media file

To add a media file, the administrator has to press the Add button from the container that displays the file list. Only .wav or .sln files can be added, having an individual size not larger than 3 MB.

Media file list

The interface will display all available media files, alphabetically sorted (the order that will be played back to the caller).
By pressing the file name, Accolades will display some specific options for each file:

- **Download** - the administrator can download the file from the server;
- **Rename** - the file will be renamed;
- **Delete** - the file will be deleted from the server.

10.3.2.3 - IVR folders

Overview

The container for managing existing folders inside a step is always displayed, no matter the displayed step type.
The interface allows for the following procedures to be run:

- Rename folder
- Delete folder

The administrator can not add new folders. The folders are created automatically based on the step type. For example an **Advance** step or a **Media Playback** step needs to have a folder called "Ok". This folder will contain the next step, to be accessed after the current one is completed. If the administrator deletes the "Ok" folder from this type of step, then Accolades will recreate it, almost instantly.

I can not delete a folder

You are trying to delete a folder, the procedure seems to work without errors but, at the end, the folder is still there.
This situation occurs when you are deleting a folder required for the current step to run. For example, inside an Advance step you are trying to delete the "Ok" folder. This step expects that folder to exist, in order to send the call to the step inside that folder.
You are starting the deletion procedure, Accolades will delete it but after that, the IVR module will notice that one of the required folders for the step is missing and it will create it.
The only steps that are allowing the deletion of all folders are the terminal ones (the ones from which the call is leaving the IVR):

- Hangup;
- Internal transfer.

I am renaming a folder, but another one with the initial name is created also

This situation is similar to the one described above (deleting a folder that is instantly created afterwards).
For example, if in an **Advance** type step the "Ok" folder is renamed to "Ok_backup", then Accolades will perform the request without any problems. But, after the request has been completed, Accolades will detect that the step is missing on of the required folders, so it will create it. Because of this feature, the user will notice the new "Ok" folder near the renamed "Ok_backup" one.
The only steps that allow the renaming of any folders inside are the terminal ones (the ones from which the call is leaving the IVR):

- Hangup;
- Internal transfer.

Renaming a required folder, inside a step

For example, if inside a "Selection" type step the branch "2" needs to be swapped with the branch "3", then the following issues will arise:

- the folder "2" can not be renamed directly into "3", as "3" already exists;
- if I rename the folder "3" with a temporary name ("3_temporary" for example) then, after the request is completed Accolades will generate another "3" folder almost instantly (see the "I am renaming a folder, but another one with the initial name is created also" section).

To successfully complete the task, the administrator will follow up the next steps:

- the step type will be changed to a terminal one, that does not have any required files ("Hang up" or "Internal transfer"). The "Hang up" type is recommended.
- The folders will be freely renamed, as Accolades will not generate any folders (as the hangup step has no required folders);
- After all the renaming has been completed, the step type can be changed back to the initial one ("Selection" for this example).

10.3.3. Step types

10.3.3.1 - IVR configuration step

The step called "IVR configuration" is created automatically by Accolades when a new IVR is defines. This step can not be deleted, changed into another type. Also, no steps can be added in front of it.
Any call answered by this IVR will start from this step.
Accolades will set up the call and then it will send it further into the IVR structure, using the step defined inside the "Ok" option.

Variabiles

During this step, the variables that will be needed further on, must be defined (maximum 10 variables). The name of a variable can only contain letters (lowercase or uppercase) and digits. The name is case sensitive. Later in the IVR process, the variables can be accessed using a dollar prefix ($) and the variable name: $variableName.
Besides the variables defined by the administrator, accolades have some globally defined variables (available without any prior actions):

- **$_callerId:** contains the phone number of the caller;
- **$_callId:** contains the call ID inside Accolades and it can be used for call matching between different APIs.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Continue

After the step has been finished, the call will move further into the IVR structure, by accessing the step defines in the "Continue" option.

10.3.3.2 - IVR advance step

This step does not process the call in any way. It just transfers the call to the next step. This type of step is used for management purpose, for the other step types.
When adding a new step, in front of an existing one, (by using the Add button from the step menu), Accolades will add an "Advance" type step that will be change later by the administrator, using the Change button.
The process for deleting a step is like the adding one, but in reverse. Because Accolades allows only the deletion of the "Advance" type steps, the administrator must first change the type of the step he intends to delete to an "Advance" type.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Continue

After the step has been finished, the call will move further into the IVR structure, by accessing the step defines in the "Ok" option.

10.3.3.3 - IVR HTTP Request step

This step starts a HTTP request (or HTTPS) to an external server. Using this step Accolades can send data to the server, using the methods available in the protocol (GET or POST).
If it is the case, then Accolades can process the answer received from the server, if the answer is JSON formatted. If the answer is valid and the resulting object contains properties that have the same name as some of the IVR variables (defined in the configuration step) then those values will be imported to the current call.

Properties

This type of step has the following properties:

- **Protocol:** defines the protocol used for the connection (http or https);
- **Server (URL):** the address of the destination server (IP or FQDN) without any delimiter at the end (example.com is valid but example.com/ is invalid);
- **Port:** the port for the connection (80 is the default one for http and 443 for https);
- **Path:** the path to the destination file, that must start with a forward slash "/" (for example "/" or "/processing.php");
- **Method:** sthe method for sending variables to the server (POST or GET), used only if there are any variables to send;
- **Variables:** the parameters that will be sent to the server, using an URL type encoding: name1=value1&name2=value2 (this format is used regardless of the selected method for sending);
- **Wait for confirmation:** if set to No then after the HTTP request has been initiated, the call will move to the next step (without waiting for the server response), if the parameter is set to Yes then the call will move to the next step only after the server response has been processed;
- **JSON response processing:** (available only if the "Wait for confirmation parameter" is set to Yes) if it is set to Yes then Accolades will parse the server response as an JSON object and if the result is valid then all the variables that have identical names with the IVR ones (defined during the configuration step) will be imported as values to the current call.

The parameters that have the dollar sign ($) in their name (server, port, path and variables) can contain variables (defined during the configuration step) using the format $variableName. When the step is being processed, the variables will be replaced with their current values.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Continue

After the step has been finished, the call will move further into the IVR structure, by accessing the step defines in the "Ok" option.

10.3.3.4 - IVR DTMF input step

This step allows the caller to input a value (using the phone keypad, by DTMF tones) and store the value to a variable (defined during the configuration step of the IVR).
To confirm the value, the caller will press the hashtag key (#).

Properties

The step has the following properties:

- Media: a list with the media files that will be played to the caller;

- Error file: if one of the media files is called eroare.sln then this file will be played to the caller only when an invalid key is pressed (a key with no action defined);

- Variable name: the name of the variable that will store the input from the caller (the variables are defined during the IVR configuration step);

- Interval between media replay: if after the last media files is played and the caller does not press any key then Accolades will replay the audio files after this number of seconds;

- Maximum media playback: the total number of repeats for the media files, before the action defined from the "fter maximum media playback" property;

- After maximum media playback: the action that will be triggered after the total number of media playbacks has been reached and the caller does not press anything;

- Timeout between keypress: the maximum number on seconds that Accolades will wait between keypresses (if the timeout is reached then the call is dropped);

- Minimum value: the minimum value (as a numerical value) that the input needs to have, to be valid;

- Maximum value: the maximum value (as a numerical value) that the input needs to have, to be valid;

- Minimum length: the minimum length (number of characters) that the input needs to have, to be valid;

- Maximum length: the maximum length (number of characters) that the input needs to have, to be valid;

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Continue

After the step has been finished, the call will move further into the IVR structure, by accessing the step defines in the "Ok" option.

10.3.3.5 - IVR condition step

This step compares the value of a variable and, based on that, it will send the call to one of the available branches.

Properties

The step has the following properties:

- Variable: the name of the variable being compared;

- Case #: enables (or disables) the testing of the variable against a fixed value (if the parameter is active then 2 more properties will be displayed for this case: value and folder);

- Value #: (available only if the "Case#" property is active) the value that the variable must have, to send the call to the corresponding branch (folder#);

- Folder #: (available only if the #"Case ##" property is active) the folder (branch) that the call will be sent to if the value is valid;

- For any other value: the branch that the call will be sent to in none of the above cases are valid.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Branch list

A list with all the available branches for the current condition.

10.3.3.6 - IVR hang up step

A call that reaches this step will be dropped.

Step options

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.
Because this type of step has no required folders to run, the administrator can delete or rename any folder in the list, without any restriction.

10.3.3.7 - IVR media playback step

This type of step will play to the caller one or more audio files, alphabetically sorted. The caller have to listen to all the files, without the option to skip any message. After all files have been played the call will advance to the next step, defined in the "Ok" option.

Step options

Media

The media files management is made using the "Media" option. A description for this set of options has been made inside the section "Common options" of this chapter.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the section "Common options" of this chapter.

Continue

After the step has been finished, the call will move further into the IVR structure, by accessing the step defined in the "Ok" option.

10.3.3.8 - IVR selection step

The selection type steps will play back to the caller one or more audio files. Usually the files are explaining the available options: "For a new order, press 1", "For an existing order status, press 2". When the caller pressed a key Accolades will stop the playback and will process the received input.
The "Selection" type steps have the following properties:

- **Media**: a list with the media files that will be played to the caller;
- **Error file**: if one of the media files is called "eroare.sln" then this file will be played to the caller only when an invalid key is pressed (a key with no action defined);
- **Interval between media replay**: the number of seconds between the last file from the list has been played and the first one will be replayed.
- **Maximum media replay**: the maximum number of repeats for the media file list (0 means that the files will be

played once and will not repeat, 1 means that files will be played to the caller then the list will be replayed one more time);

- **After maximum media playback**: the property defines the action that will be triggered after media list has been repeated more than "Maximum media replay" value;
- **Maximum invalid selections**: the value defined the maximum number of invalid selections that the caller can perform on this step;
- **After maximum invalid selections**: the value defined the action Accolades will perform after the total number of invalid selections exceeds the value defined by the "Maximum invalid selections" parameter.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Media

The media files management is made using the "Media" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Key status

This option allows the administrator to enable or disable the action for each key of the phone.
A key can have one of the next values:

- **Inactive**: The key has no action defined and, when pressed, Accolades will play the error message (if available) and then the playback list will restart;
- **Active**: The call will move forward by accessing the folder with the key name (1, 2, 3, ...);
- **Back**: The call will move back to the previous step.

To change the status, the administrator has to click the key name (from the "Key status" container) and then click one of the displayed buttons: Active , Inactive or Back .
The keys with the "Active" status will be displayed just under the "Folder" option set. They can be accessed to view and manage the step that will receive the call.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Active keys list

The active keys (defined using the "Key status" option set) will be displayed automatically, sorted ascending, under the "Folder" option set.
Each active key will contain one step that will receive the call for further processing, when the caller selects that option.

10.3.3.9 - IVR internal transfer step

This type of step will transfer the call to another entity defined inside the account. The call will exit the current IVR. The step has only one parameter that can be edited by the administrator:

- **To**: defines the entity that will receive the call (user, waiting queue, another IVR etc.).

Step options

Edit

The option set allows the administrator to edit the parameter for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

10.3.3.10 - IVR send e-mail step

This step sends an e-mail using an external mail server. The server can be the one defined in the Accolades configuration file or any external server.

Properties

The send email step has the following properties:

- **Server:** the server used for sending the email: Accolades (the server defined inside the Accolades configuration file) or Custom (in this case additional fields will be displayed, to input the credentials for the server);
- **Host:** (only for a custom server) the address of the server (as an IP or a FQDN);
- **Port:** (only for a custom server) the port for the connection to the server;
- **TLS:** (only for a custom server) if a secure connection should be used;
- **Username:** (only for a custom server) the username for the mail server;
- **Password:** (only for a custom server) the password for the mail server;
- **Sender email:** (only for a custom server) the address from where the email will be sent;
- **Wait for confirmation :** if active, then the call will only move to the next step after the connection with the server is closed (and the process is finished), otherwise the call will move to the next step without waiting for a response from the server;
- **To:** the email address where the message will be sent;
- **CC:** an additional email address where the message will be sent;
- **Subject:** the title of the email message;
- **Body:** cthe content of the email message.

The parameters that have the dollar sign ($) in their name (to, cc, subject and body) can contain variables (defined during the configuration step) using the format $variableName. When the step is being processed, the variables will be replaced with their current values.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Continue

After the step has been finished, the call will move further into the IVR structure, by accessing the step defined in the "Ok" option.

10.3.3.11 - IVR time condition step

Accolades will parse a time condition and determine if the current call has been made during the defined work hours or not. Based on that, the call will be processed accordingly.

Properties

The step has the following properties:

- **Time condition:** Defines the time condition that will be parsed. The time conditions can be defined inside the account, using the Time conditions tab.
- **Media playback (when unavailable):** This option defines if the audio files available inside the time condition will be played to the caller when the call has been made outside the working hours.
- **Offline step:** The option defines the action to be taken when the call is made outside the working hours. The "Default" value will take the call out of the IVR system and run the action defined inside the time condition. The "Offline step" value will ignore the action defined inside the time condition step and move the call forward to the Offline step.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Branch list

A list with all the available branches for the current condition.

10.3.3.12 - IVR step: Mathematical operation

The step computes a mathematical operation, using any of the variables defined inside the configuration step of the IVR. The result of the operation will be stored inside a variable.

Properties

The step contains the following properties:

- **Variable name:** the name of the variable used to store the result;
- **Operation:** the operation that will be performed (previously declared variables can be used: $totalCalls + 1).

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

Continue

After the step has been finished, the call will move further into the IVR structure, by accessing the step defines in the "Ok" option.

10.3.3.13 - IVR step: Back X steps

The step returns the current call back inside the IVR algorithm with a certain number of steps.

Properties

The step contains the following properties:

- **No. of steps:** the number of steps that the call will be send back.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

10.3.3.14 - IVR step: Soubroutines

Using subroutines, it is possible for the IVR to join several branches into just one.
As an example, let us assume the case where the IVR needs to greet the caller with "Good morning", before 11:00, "Good afternoon" between 11:00 and 18:00 and "Good evening" after 18:00. After the greeting, the called must press a key to be transferred to the desired department.
In this case, using time conditions the call will be checked and send to one of 3 branches: morning, day, evening. After the greeting has ended, a selection step is needed. You can define 3 identical selection steps, one for each branch, but this solution is inefficient. This case can be managed using subroutines.
A subroutine from the IVR has 2 types of steps:

- Start subroutine;
- Stop subroutine.

The "Start subroutine" step has 2 further steps (folders) Sub and Ok. On the first access, the call will be sent to the Sub folder. In our case, the Sub folder will contain all time conditions and the media playback steps (so 3 branches).
After the media playback step the administrator will insert a "Stop subroutine" step (each branch will end with this type of step). When the call reaches the end step, the IVR will return the call to the Ok folder from the "Start subroutine" step. In our case, the Ok folder will contain the department selection step.

Step options

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

10.3.3.15 - IVR step: CLID check

The step will check the caller ID of the inbound call against a number list defined on the account (using the Number list tab from the account info page).
If the phone number is found inside the list then the call will move forward to the "Tracked" step, otherwise the call will continue to the "Ok" step.

Step options

Edit

The option allows the administrator to edit the parameters for this step.

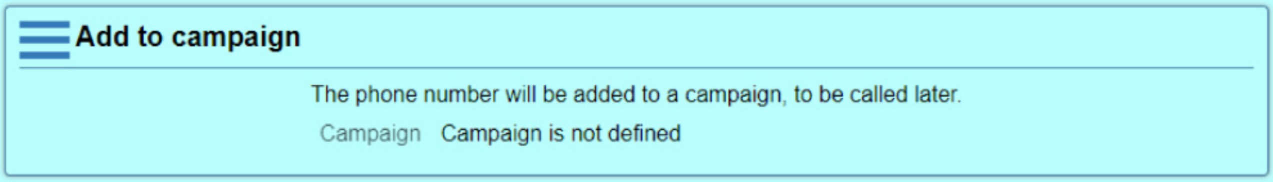
Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

10.3.3.16 - IVR step: Add to campaign

This step adds the caller phone number to an existing campaign, to be called at a later time.

Step options



Add number to campaign

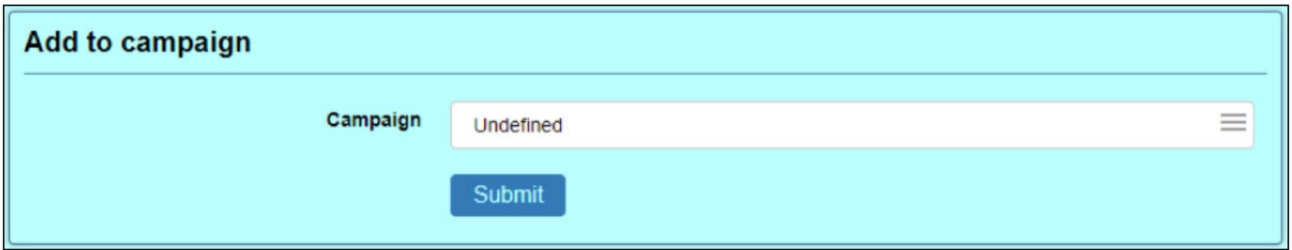
The step has the following properties:

- **Campaign:** the campaign where the phone number will be saved.

Step options

Edit

The option allows the administrator to edit the parameters for this step.



Add number to campaign

Folders

The folder management is made using the "Folders" option. A description for this set of options has been made inside the "Common options" section of this chapter.

11. Time conditions

11.1 - Time conditions overview

Time conditions can filter incoming calls based on the time and date. Using this concept, Accolades can inform the caller that did not call during work hours (and thus avoiding the situation where a caller keeps on ringing, without any feedback).

The time conditions are defined at an account level and can be attached to any instance that can receive external calls (users, waiting queues, IVR etc) by using the Telephony tab.

The following criteria can be used for filtering incoming calls:

- Hour and minute;
- Weekday;
- Day and month;
- An exact date.

Basic concepts

The time condition module uses the following concepts:

- set of days;
- daily schedule;
- rule;
- process.

Set of days

A set of days consists of a list of recurring days (weekly, yearly, unique).

For example, a "Working days" set can be defined, for each week, that contains the weekdays between Monday and Tuesday.

Another example can be a set of legal holidays: 1st of January, 2nd of January, 25th of December etc.

Also, a set containing unique days can be defined (for example legal holidays with variable dates: 8th of April 2018, 28th of April 2019, 19th of April 2020).

Daily schedule

A daily schedule consists of one or more intervals. Depending of these settings calls can be allowed or rejected.

For example, a schedule named "Regular schedule" can be defined, having the following structure:

- 00:00 - 08:00 no incoming calls allowed;
- 08:00 - 16:00 incoming calls are allowed;
- 16:00 - 00:00 no incoming calls allowed.

Rules

A rule consists of a pair between a set of days and a schedule. The rule will check the date of the call and will compare it to the selected set of days. If the date is defined inside the set of days, then Accolades will check the time of the call and, based on the defined schedule, will decide if the call is allowed of rejected.

According to the previous examples, a rule can be defined by linking the "Working days" set with the "Regular

schedule" timetable.
When an incoming call is received, Accolades will check the current day of the week and, if it is between Monday and Friday then Accolades will apply the "Regular schedule" timetable.

Process

A process has one or more rules that Accolades will process, one by one, based on their priority, to determine the status of the call.
The process is the final object that is selected by the Accolades administrator and applied to an IVR, waiting queue or user.

11.2 - Time conditions day sets

A set of days consists of a list with one or more days that Accolades will use for determining the action for an incoming call.

Types

Based on their frequency 3 types of sets can be defined in Accolades:

- **weekly:** the set contains one or more days of the week: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday;
- **yearly:** the set contains one or more days from a year: 1st of January, 2nd of January, 25th of December;
- **unique:** the set contains exact days: 8th of April 2018, 28th of April 2019, 19th of April 2020;

Usually the weekly type is used for defining the regular schedule for an account. The yearly type is used for defining the legal holidays that have the same date, from one year to another. The unique set of days is used for the legal holidays that have a changing date, based on the year (for example, the Easter).
Based on the level they are defined, there are 2 types of sets:

- **Defined on a server level:** these types can be selected in any account and are usually used for defining the legal holidays;
- **defined on an account level:** these types can only be selected inside the account (on a regular basis, these types of sets are not used).

Management

The sets of days defined at an account level can be added and viewed from the account info page, using the Time conditions tab.
The page has many sections, one of them being called "Sets of days". Here all the sets for this account are displayed.
To add a new set, the administrator must click the Add button from the section menu.
The sets of days defined at a server level can be accessed from the main menu, using the Server module and the Time condition option.
To edit or delete a set of days, the administrator must first access the set info page and then press the Edit or Delete button, from the page menu.

Properties

A set of days has the following properties:

- **Name:** the generic name for the set;
- **Description:** an info text, that will be displayed to the administrator, when this set is selected for creating a rule;
- **Frequency:** the frequency for the defined days: weekly (Monday, Tuesday etc.), yearly (1st of January, 2nd of January, 25th of December) or unique (8th of April 2018, 28th of April 2019).
- **List of days:** A list with the defined days for this set.

11.3 - Time conditions daily schedule

A daily schedule defines one or more intervals inside a full day. Based on those intervals, a call can be allowed or rejected. Any number of daily schedules can be defined for an account (for example, regular work hours, short schedule etc.).
The schedule is defined by setting up any number of thresholds, that change the status of the previous interval ("available" or "unavailable").
For example:

- 00:00 - unavailable;
- 08:00 - available;
- 16:00 - unavailable.

The above example defines the intervals in a chronological order. Starting with 00:00 the calls are rejected. Starting with 08:00 and until 16:00 the calls are processed. And finally, after 16:00 the calls are rejected (until the end of the day).

Management

The daily schedule management is performed from the account info page, using the Time conditions tab.
The schedules are listed inside the "Daily schedule" section.
To add a new schedule, the Add button must be pressed, from the section menu.
The schedule info page can be accessed by pressing the Info button, displayed after the administrator clicks on the name of the schedule.
To edit or delete a schedule, the administrator must click the Edit or Delete button, from the page menu.

Properties

A daily schedule has the following options:

- **Name:** a generic name for the schedule;
- **Account:** the account that contains the schedule;
- **Description:** a generic description for the schedule (that will be displayed to the administrator, when selecting it for a rule)
- **Schedule (threshold list):** A list with the hours and minutes that are used for changing the status of the incoming calls.

11.4 - Time conditions processes

A process inside the "Time condition" is the object that an administrator will attach to an instance that can receive incoming calls (IVR, waiting queue, user).
A process is composed of one or more rules that Accolades will check to allow or reject the call.

Management

Time condition process management is performed from the account info page, using the Time conditions tab.
The processed are defined inside the "Processes" section.
To add a new process the administrator must click the Add button, displayed inside the section menu.
The process info page can be accessed by clicking the Info button, displayed after the administrator clicks on the process name.
To edit or delete a process the administrator must access the process info page and then click on the Edit or Delete button, from the page menu.

Properties

A process from the time conditions has the following properties:

- **Name:** The generic name of the process;
- **Account:** The account linked to the process;
- **Forcing:** Property with 3 possible values: inactive (calls will be processed according to the defined rules), available (all calls will be accepted, regardless of the defined rules), unavailable (all calls will be rejected, regardless of the defined rules);
- **Unavailable notice:** The property defines a file to be played to the caller when the incoming call is places outside of the working hours. If a file is defined, then the administrator can download the file and in the edit window a file can be selected for upload).
- **Unavailable action:** The property defines the action to take when an incoming call is received outside of the working hours (hang up the call or transfer it to another entity);
- **Time zone:** The time zone for computing the hours defined in the process;
- **Description:** A short description for this process;
- **Schedule (rules):** A list of instructions that will be processed when the process handles a call.

If the process has a file defined as an unavailable notice and the call is placed outside of the working hours, then Accolades will play that file before the action defined as an "Unavailable action" is triggered.

List of rules (schedule)

When the process receives a call, Accolades will process all the defined rules, sorted ascending, based on their priority. If a rule matches the current day, Accolades will store the schedule defined for that rule and then will keep on processing the following rules.
WARNING! The processing of rules is not halted when a valid rule is processed. All the rules will be checked, always and the schedule will be checked afterwards.
Rules management is made from the process edit window, by using the "Rules" section.

12. Call center

12.1 - Call center module overview

Accolades can provide all the necessary features for a regular call center:

- Call center management (supervisor features);
- Call spy;
- Device management (for hot seat features);
- Agent interface;
- Call details records;
- Campaigns management;
- Reports;
- Dashboard for a fast call center overview;

The options displayed above are available from the Call Center module. This module is visible only if the logged in administrator has the necessary permissions to access at least one of the module options (the administrator is a supervisor, an agent, can view call details from the call center, can generate activity reports or can start dashboard instances).

Some options of the Call center module can be accessed only if the administrator has a phone device connected to his account, to perform some specific procedures (placing and receiving calls and call spy functions).

12.2. Agent

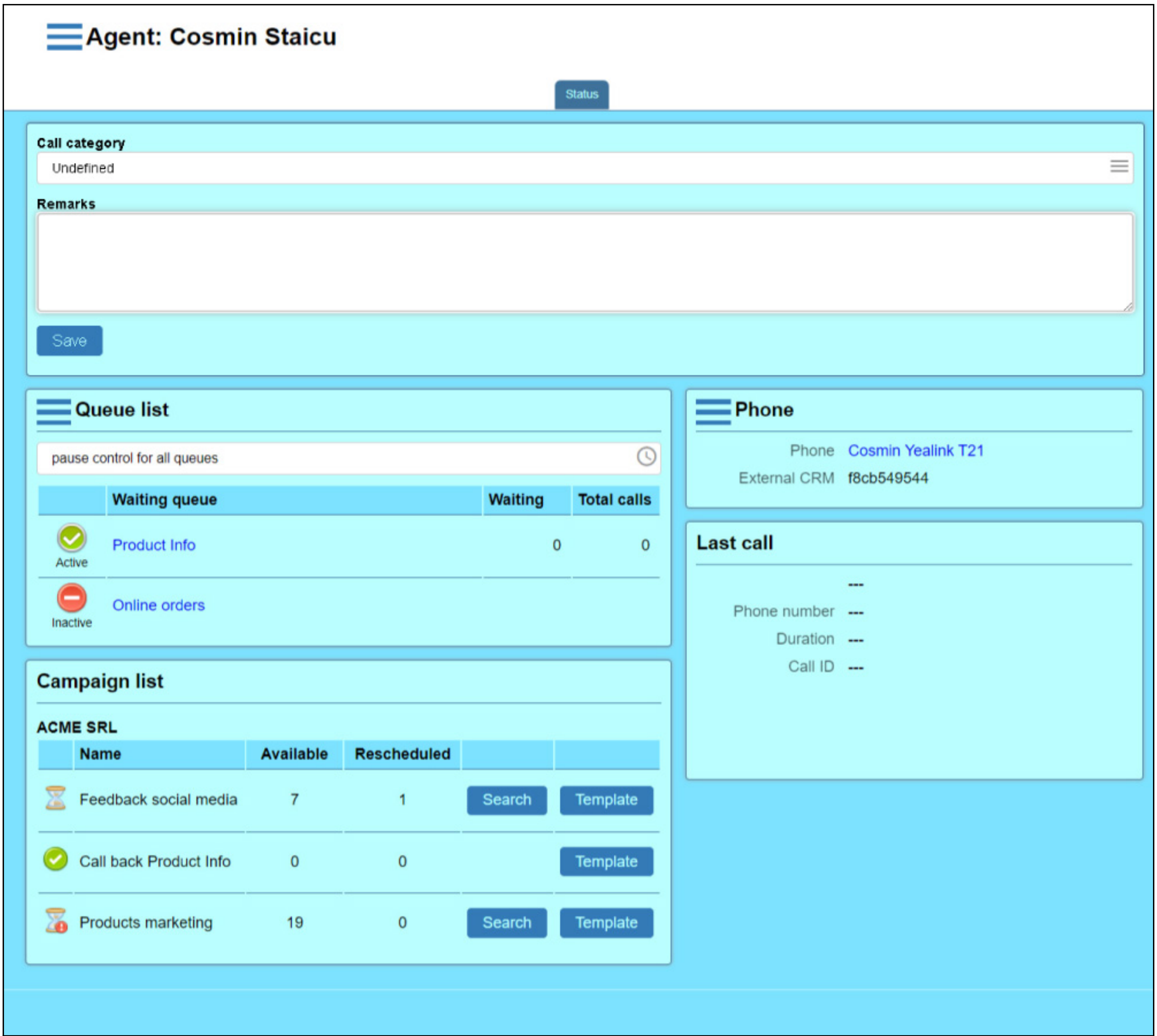
12.2.1 - Call center agent overview

The agents that are using the call center will perform the required tasks from the Call center module, by selecting the Agent section.
On a normal use of the application, the agent does not need to access other modules and / or options from the main menu, all the required functions are available in the Agent interface.
To use the interface, the agent has to have a phone device linked to his Accolades account.
If no device is linked to his account, then Accolades will ask the agent to link a phone, before displaying the call center interface.
You can not use the Call Center interface without linking a phone first.
Based on the agent status, on the upper part of the page one or more tabs will be displayed: Status, Identity, Edit identity, Edit address, Edit phone, Unknown caller, Reschedule call, Add to campaign, Contact selection, Call history Agent template.
The tabs are not always visible. They are shown according to the agent status in call center, the agent permissions and the active modules on the company account (for example, the tabs for the CRM module will be displayed only if the module is enabled on the account that the agent is using).

12.2.2 - Call center agent: Status

The agents logged in the call center will perform any necessary procedures from the Call Center module, by selecting the Agent section.
The Status tab is divided into 4 or 5 sections, depending on the agent permissions:

- Remarks for the current call (available if at least one call has been processed since the interface has been loaded);
- Queues list;
- Active campaigns list;
- Phone
- Last call / current call.



Status interface

Remarks for the current call

This section allows the agent to save some data about the current call. The saved data can be later viewed on the call history page.

Call remarks

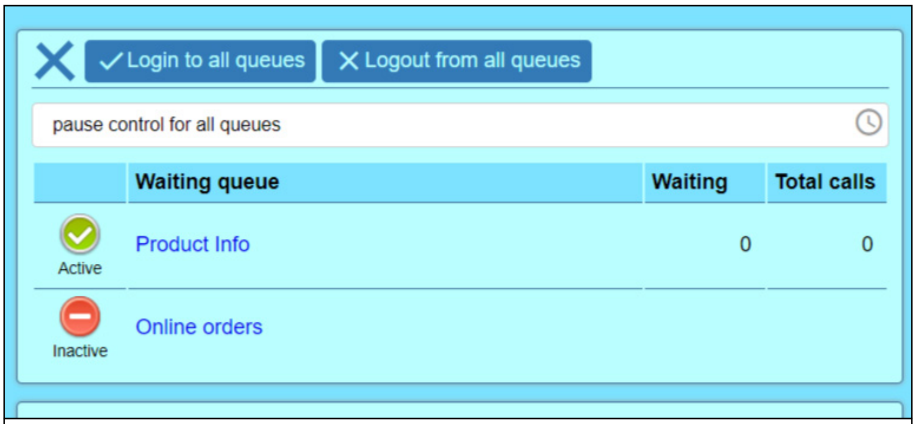
All information about the call can be edited using the container on the upper part of the page. Two properties can be edited:

- **Call category:** The category for the call. The available categories can be defined for each account using the account info page, the call center tab.
- **Remarks:** The agent can input a text description for the call.

To validate the data the agent must click the Save button. After the data has been saved, Accolades will display the remarks using a non-editable view. To further edit the data, the agent must first press the Edit button.
The agent can save the remarks for the current call as many times as he wants.

Queues list

The section displays a list with all the waiting queues available to the agent. On the upper part of the container (placed near the "Queues" text) the menu for log in and log out from the queues is placed. The menu has two buttons for these procedures: Login to all queues and Logoff from all queues . The buttons are hidden (and are available after pressing the menu button, placed near the "Queues list") to avoid pressing it by mistake.
The **Pause** button allows for controlling the agent status on all logged queues.



Waiting queues management

The waiting queues are displayed as a table with 4 columns:
- Agent status;
- Queue name;
- Total waiting calls;
- Total processed calls;

Agent status

The agent status is displayed on the first column, as an icon and a text.
The status can have one of the following values:
- **Active:** the agent can receive incoming calls from the queue;
- **Personal pause:** the agent is on a personal break (and will not get any calls from the queue);
- **Business pause:** the agent is on a business break (and will not get any calls from the queue);
- **After call pause:** the agent is on a after call break, to wrap up any procedures, after the call has been finished (the agent will not get any calls from the queue);
- **Inactive:** the agent is not logged in to the queue;

The "after call" break can be triggered manually, by the agent or automatically, by Accolades. To set up an automatic after call pause, the "Auto break after call" option has to be enabled, from the administrator (agent) info page, the "Call center" section.

Queue name

The second column from the table displays the name of the waiting queue. The agent can press the queue name to display a menu for controlling the queue status. The options are displayed based on the queue status. Using this menu the agent can log in and log out from the queue or toggle different types of breaks.

Total waiting calls

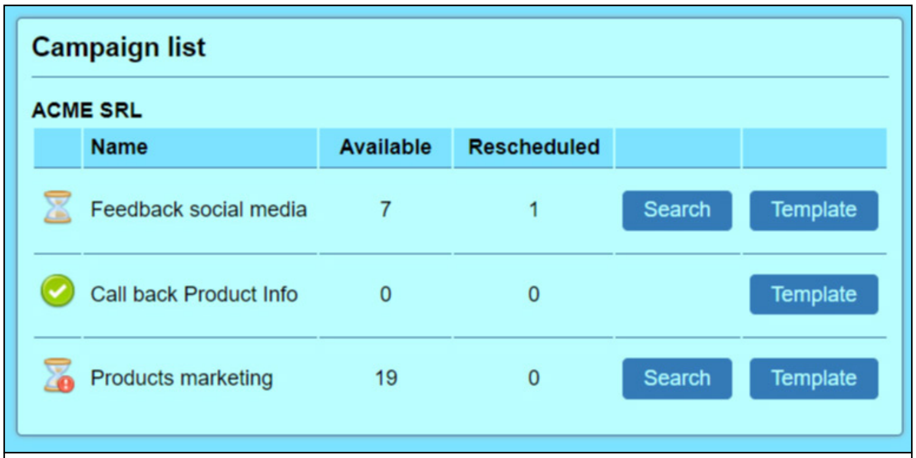
The value indicate, in real time, the total number of calls waiting for an available agent to be processed.

Total processed calls

Displayed value stated the total number of calls processed by the agent, since he logged in to the queue. The value will be reset (will be changed to 0) only when the agent logs out from the queue. The value is not reset if the agent closes the Accolades interface (the browser) or shuts down his computer.
The value will also be set to 0 if the Accolades server is reset.

Campaign list

The section displays the active campaign for the accounts that the agent has permissions.



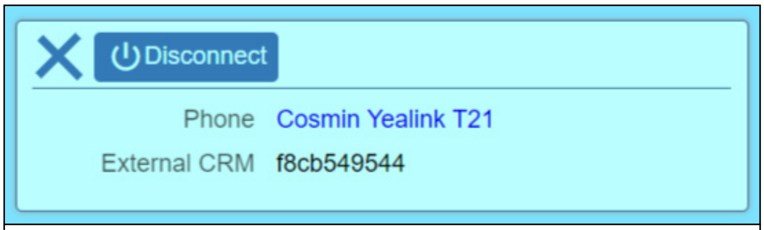
Campaign control

The campaigns are displayed using a 6 column table:

- The campaign status, as in icon: an hourglass for the campaign that have contacts waiting to be processed and a check icon for the completed campaigns. If the campaign has rescheduled calls that are waiting to be called then a red exclamation mark will be displayed to the right of the hourglass.
- The campaign name.
- The number of contacts waiting to be processed by the agent.
- The number of contacts rescheduled for a later date.
- The Search contact button, used for assigning an available contact to the agent, for starting a call (this button is only displayed for the campaigns that have contacts with the "waiting" status).
- The Template button will display the Agent template tab, that contains the text with the information that the agent has to provide to the called person, during this campaign.

Phone

This section allows for management of the phone used by the agent, for call center procedures.



Phone device management

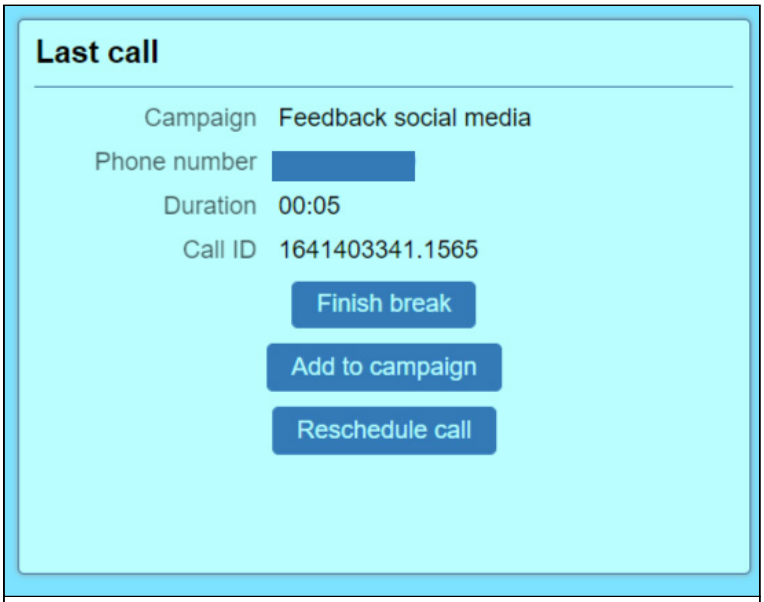
The section menu can be used for disconnect the agent from the phone, by pressing the Disconnect button. This operation will log out the agent from any active queues (and the phone will be available for any other agent).

The section displays two properties:

- **phone:** the generic name of the device used by the agent;
- **External CRM:** in ID used to connect an external CRM software to the Accolades server (see the External CRM API).

Last call / current call

Depending on the agent status, the interface will display information about the last call or current call.



Last call

The following properties can be viewed:

- the name of the queue / campaign for the current / last call;
- the phone number of the caller;
- the call duration;

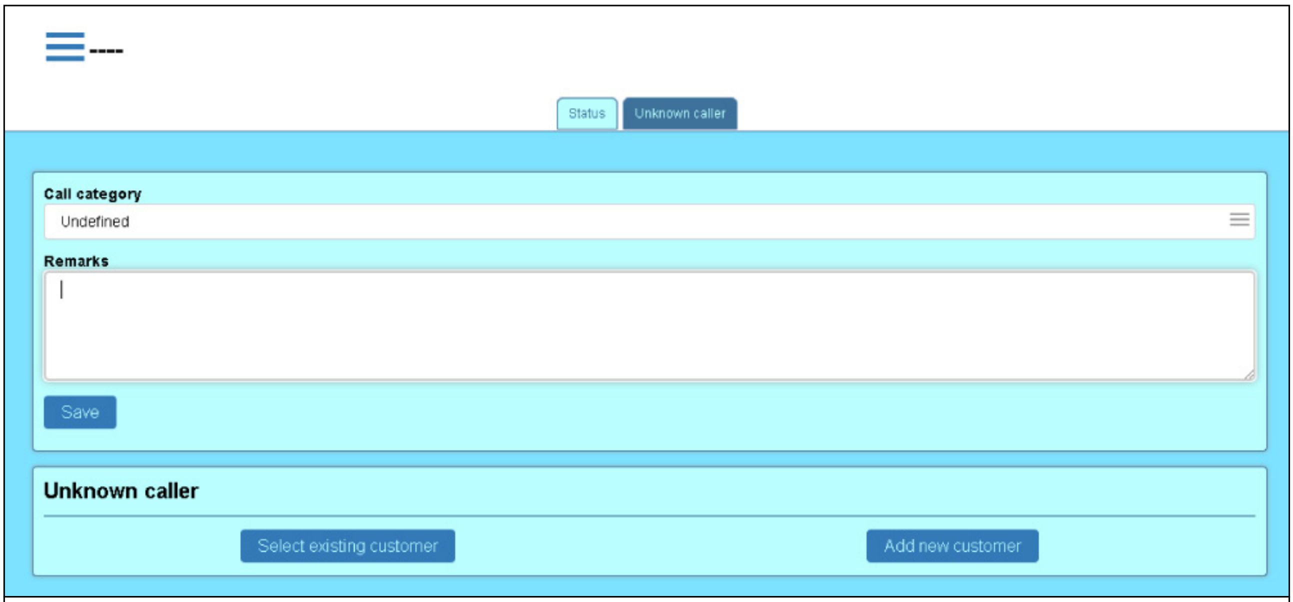
If the agent is on a break, on at least one queue, then the section will display the Finish break button, that will set the Active status on all logged in queues.

After the agent has received at least one call, this section will display the Add to campaign button. Using it the agent can easily add the current call to a campaign (for example, a campaign named "to be called tomorrow"). This

way, the agent can very easily save contacts into several groups (campaigns). Only the campaign that have the "Add current call" property set to "active" can receive contacts this way.
If the call belongs to a campaign and the campaign has the reschedule call enabled then the Reschedule call button will be displayed. Using it the call can be rescheduled to la later date.

12.2.3 - Call center agent: Unknown caller

The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.
The Unknown caller tab is only displayed if the agent has the necessary permissions for viewing customers and if the Customer module is active on the account.

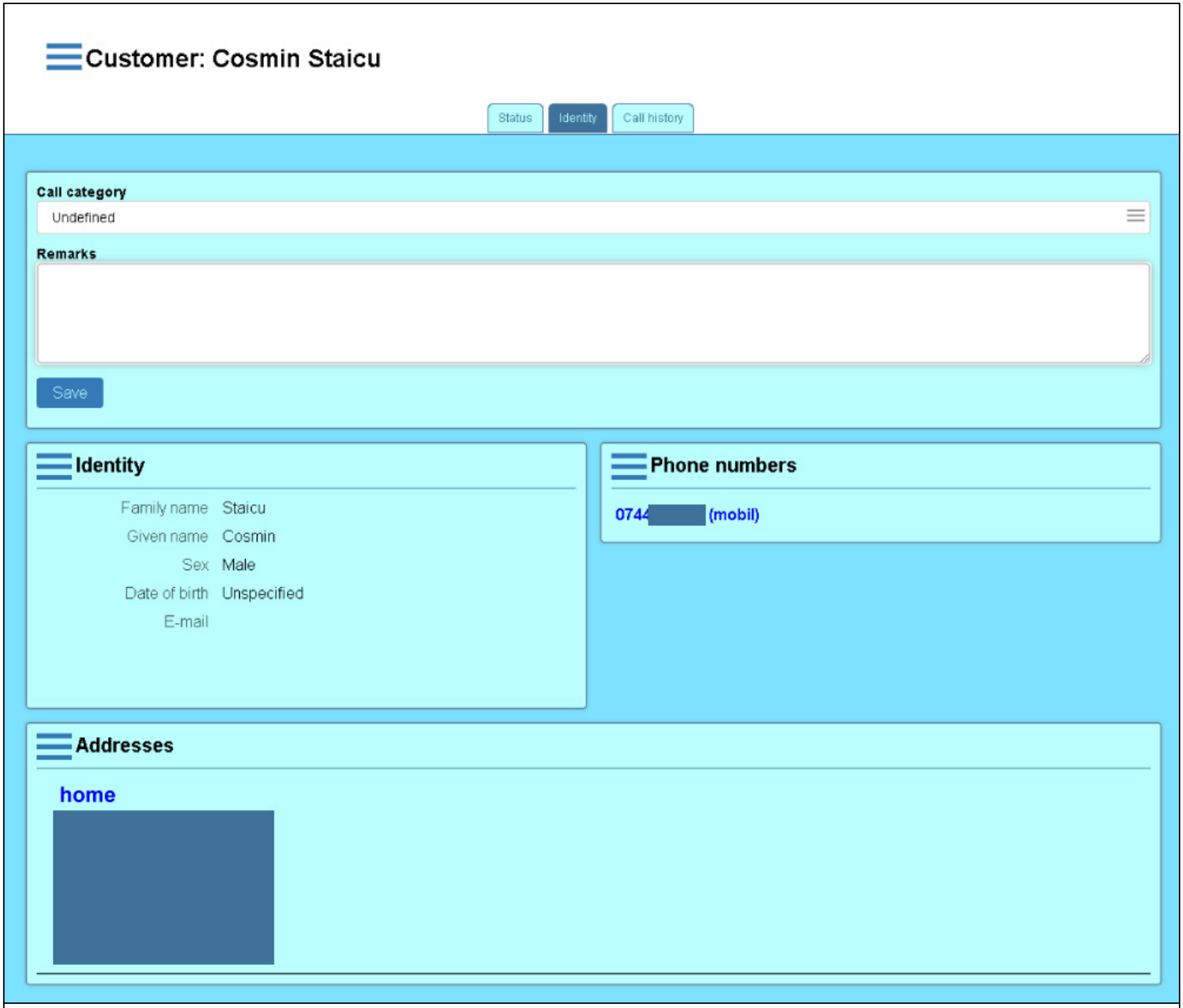


Unknown caller tab

If the phone number of the caller has not been found in the database, Accolades will display an interface that allows the agent to select an existing client of add a new one. To make the selection, the agent has to press either the Select existing customer or Add a new customer.
It is not mandatory to select a customer for each call. If the agent does not wish to assign a customer to an ongoing call, then the interface will only allow for the remarks field to be filled in and saved.

12.2.4 - Call center agent: Identity

The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.
The Identity tab is only displayed if the agent has the necessary permissions for viewing customers and if the Customer module is active on the account.



Identity tab

The interface allows for viewing and editing data about the customer for the current call. The tab is divided into 4 sections:

- Remarks;
- Identity;
- Phone numbers;
- Addresses.

Remarks

This section will be displayed only if the Customer (CRM) module is active for the account, if the agent has the permissions to edit the customers and if the agent has been called at least once.

Call remarks

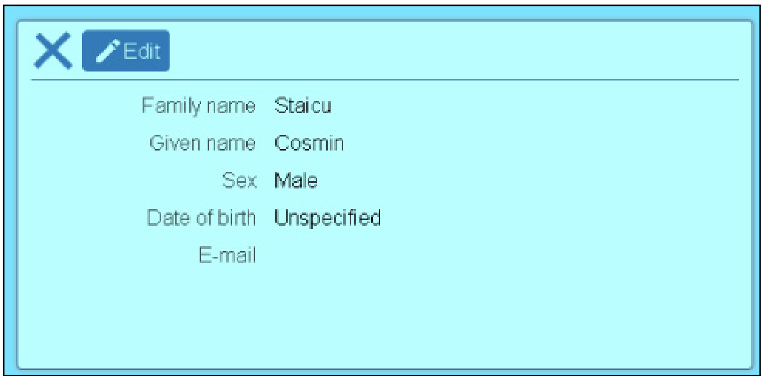
The section allows the agent to store remarks about the current call, remarks that will be saved to the database for later viewing in the call history.

The agent has to fill in the remarks in the editable area of the section. After the remarks have been completed, the agent will press the Save button, to store the text in the database. The saved remarks for the current call are displayed above the editable area, in the Saved remarks zone.

The agent can save the remarks as many times as he wants.

Identity

The section displays info about the identity of the customer of the current call.



Caller identity

The agent can **edit** the displayed data by pressing the Edit button. This action will load the interface for editing the customer identity.

Phone numbers

A customer can have one or more phone numbers attached to his account. Based on these numbers, Accolades will search the customer in the database to display the data to the agent, during a call.

Phone numbers

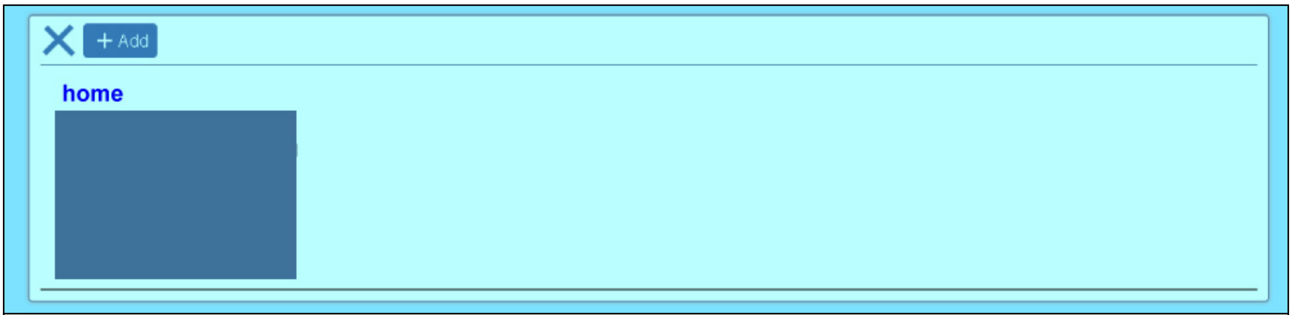
The current phone number (the one that is in used for the call) is displayed in bold.

To **add** a phone number, the agent has to press the Add button, from the section menu.

The interface for **editing** and **deleting** a phone number can be enabled by pressing on the phone number.
If the agent deletes the phone number currently in use (the number that the customer is calling from) then Accolades will not be able to identify the client in the database. Because of this, the interface for adding a new customer or selecting an existing one will be displayed to the agent.
If the phone number used by the caller does not match with any number stored for the displayed customer, then Accolades will display the Add ... button, to quick add the number to the phone list, for the customer.

Addresses

Accolades allows for storing one or more addresses for each customer.



Address list

To **add** an address the agent has to press the Add button, from the section menu.
To **edit** or **delete** an address, the agent has to first press the name of the address and then select the desired option from the available buttons.

12.2.5 - Call center agent: Call history

The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.
The Call history tab is displayed when the agent receives a call.

Call history

The interface allows for a fast viewing of the call history for the customer.

The calls are displayed as a list, sorted from the newest call to the oldest. Each call contains the following data:

- date and time of the call;
- call direction (inbound / outbound) and call status (answered / abandoned);
- remarks saved by the agent, for the call.

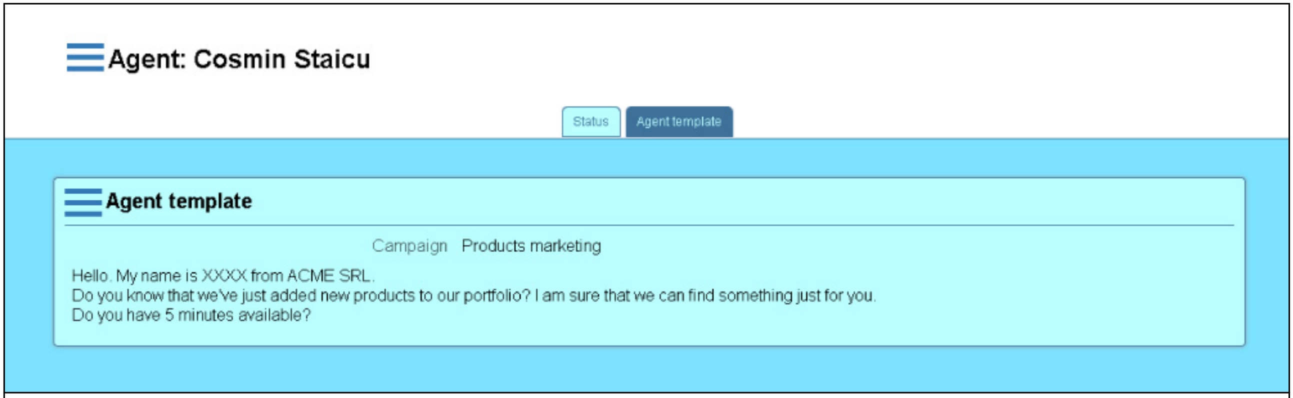
Depending on the agent permissions, the interface can display all the calls for the selected customer or just the calls processed by the agent (if the agent has the permission to view only his own calls).

To reduce the data displayed, the call list does not contain anything about the current call (time, direction or even remarks). The data about this call will only be visible in the list when a new call will be processed by the agent, for the same customer.

12.2.6 - Call center agent: Agent template

The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.

The Agent template tab will be displayed when the agent is initiating a call from an outbound campaign or when the agent presses the Template button, from the campaigns table inside the Status tab.



Agent template

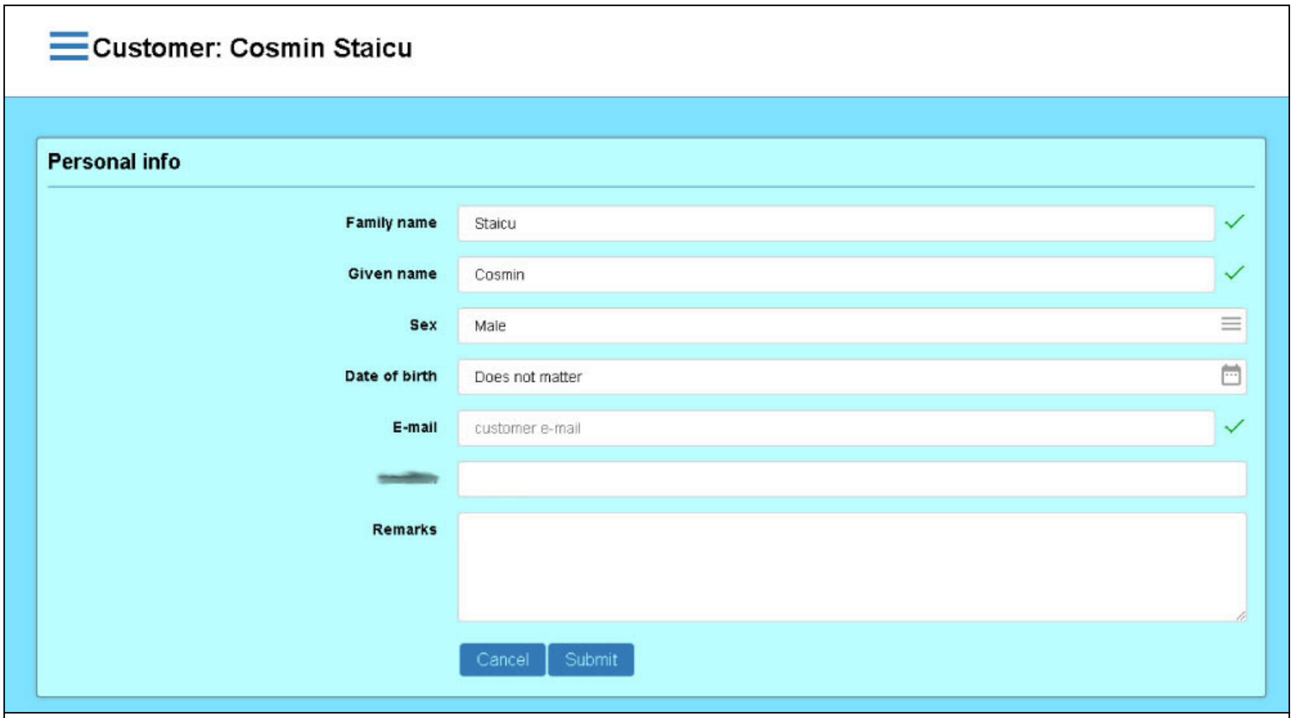
The tab will remain available (displayed near the other active tabs):

- until the agent selects the Close button, available inside the container menu for the current template;
- until the agent receives a call from a waiting queue.

12.2.7 - Call center agent: Edit identity

The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.

The Edit identity tab will be displayed after the agent clicks on the Edit button from the Identity panel, on the Identity tab.



Agent template

The interface allows setting up the following properties:

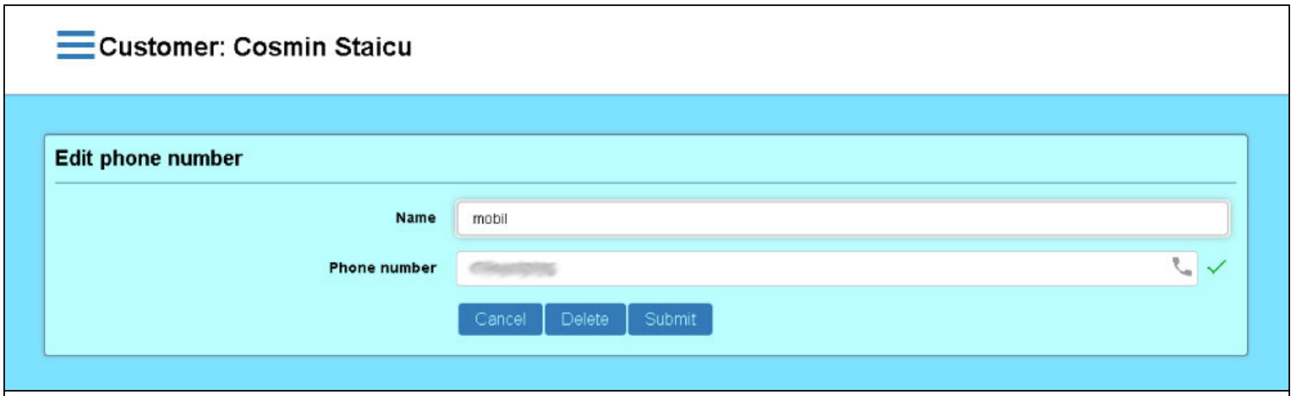
- **Family name:** the family name of the caller;
- **Given name:** the given name of the caller;
- **Sex:** the sex of the caller;
- **Date of birth:** the date of birth of the caller;

- **E-mail:** the email address of the caller;
- **Additional fields:** from the Call centre tab of the account, additional fields can be defined, for the identity set;
- **Remarks:** remarks for the caller.

12.2.8 - Call center agent: Edit phone

The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.

The Edit phone tab is displayed after the agent clicks on the phone number from the Phones container, inside the Identity tab.



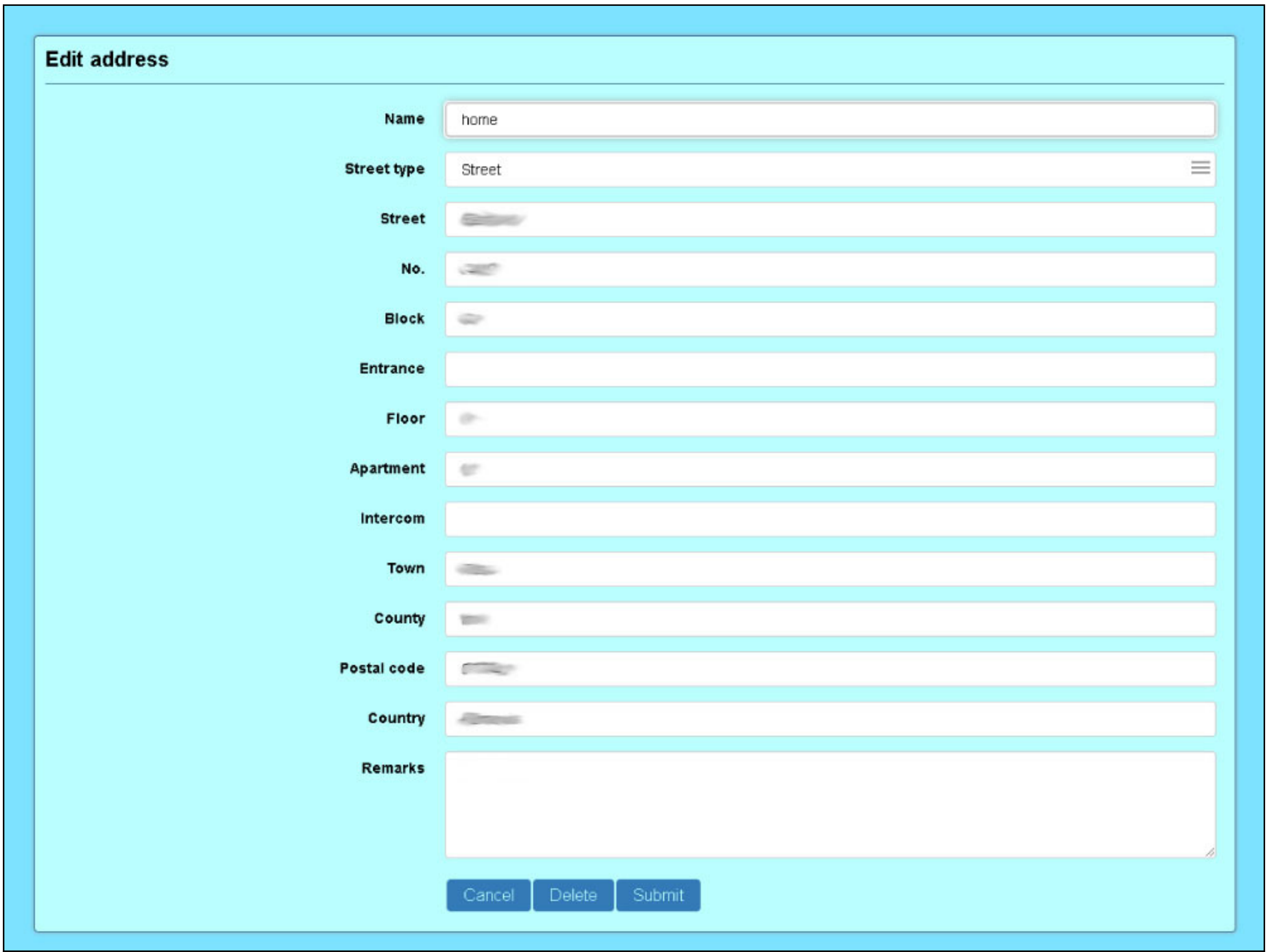
Edit phone

The phone definition contains two properties: the phone name and the phone number.

12.2.9 - Call center agent: Edit address

The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.

The Edit address tab is displayed after the agent clicks on a address name from the Addresses container, inside the Identity tab.

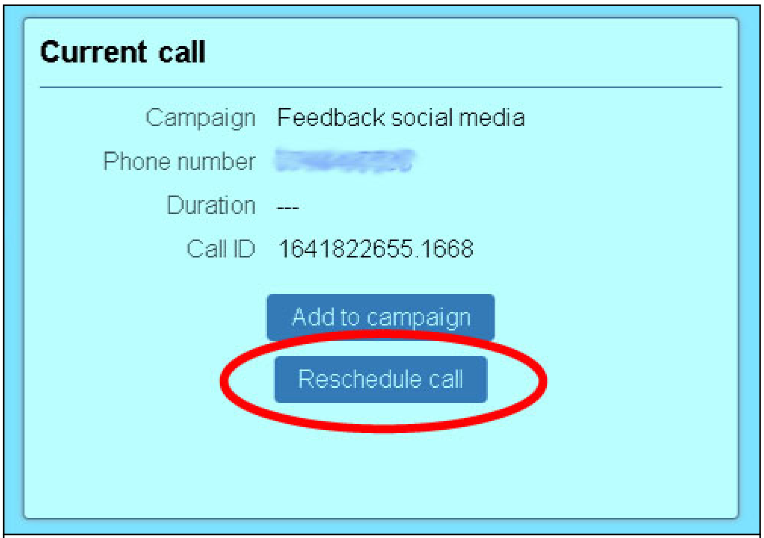


Edit address

12.2.10 - Agent call center: Reschedule call

The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.

The Reschedule call tab allows the agent to reschedule a campaign call to a later date. To start the reschedule process, the agent must press the Reschedule call button from the Status tab, during or after a campaign call.



Reschedule call button (status tab)

The button for call rescheduling is only displayed for a call that belongs to a campaign with the Reschedule call feature enabled. More info about the reschedule feature can be found in the Info section from the Campaigns chapter. The interface for the tab can be visualized below.

Call reschedule interface

The following properties can be defined, for a rescheduled call:

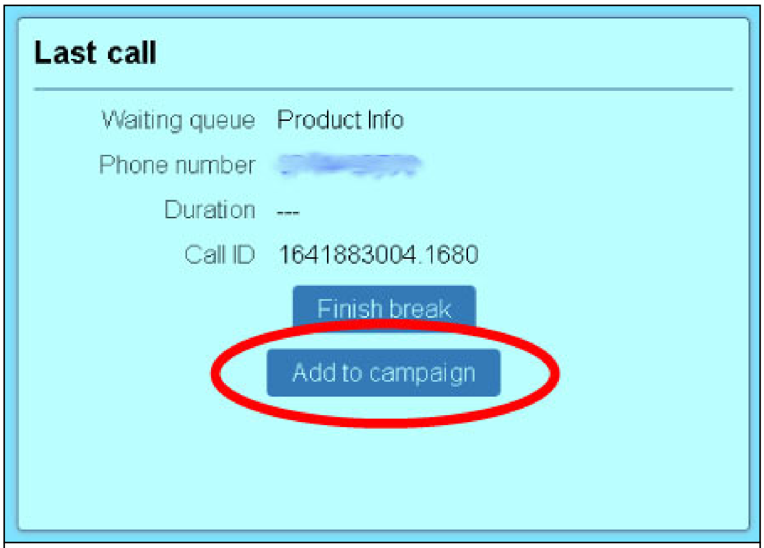
- **Call can be started:** Defines the agent that will be notified about the call, at the defined date. Can be "by any agent be " (the contact will be called by the first available agent) or be "only by me be " (the contact will not be visible to any agent, just to the agent that reschedules the call).
- **Scheduled date:** The day for the future call.
- **Scheduled time:** The time for the future call.

The interval between the current time and the rescheduled time can not be smaller than one hour.
The campaigns that have rescheduled contacts, that can be called (the rescheduled time has passed) are shown with an exclamation mark. An example is shown in the description of the Status tab, from this documentation.

12.2.11 - Call center agent: Add to campaign

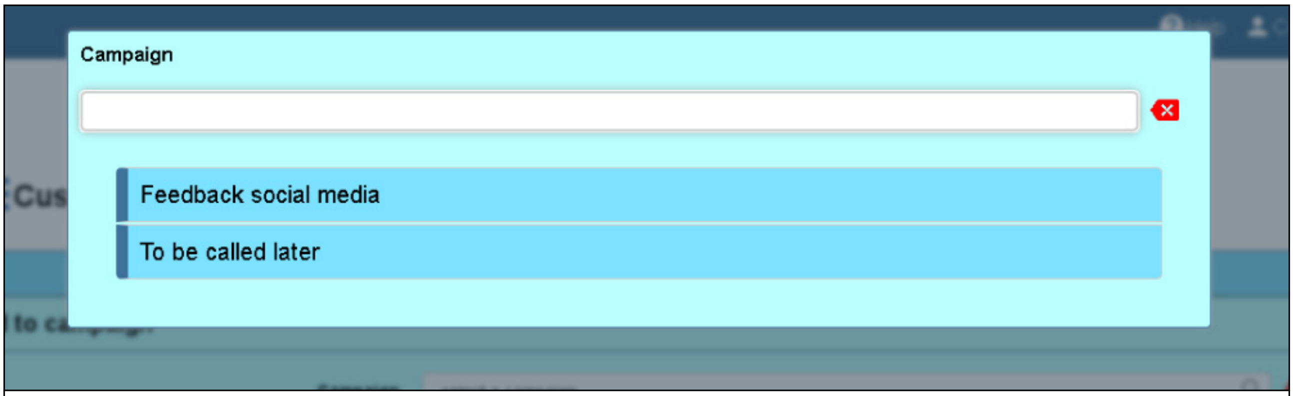
The agents that are using the call center will perform any procedures from the Call Center module, by selecting the Agent option.

The Add to campaign tab allows the agent to add the current call to a campaign, to be calledlater. To start the process, the agent must press the Add to campaign button from the Status tab, during or after a call.



Add to campaign button (Status tab)

After the button has been pressed, the agent must select the campaign where the call will be added.



Campaign selection interface

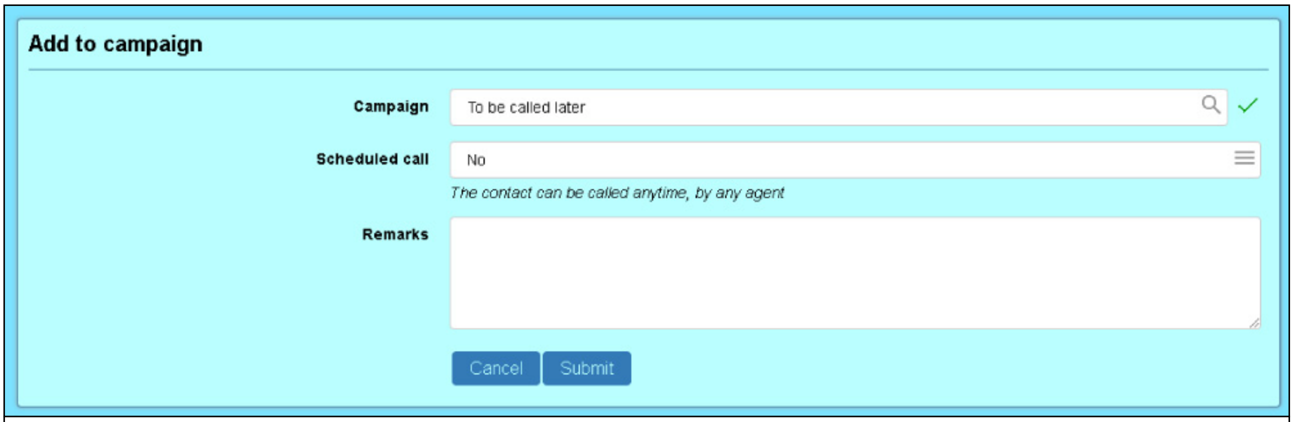
The list for the campaign selection only contains the campaigns that have the "Add current call" option enabled. More info about enabling the option can be found in the Campaign chapter, Info section.

A call can be added to a campaign using two methods:

- Unscheduled call
- Scheduled call for a defined date and time

Unscheduled call

An unscheduled call can be called from a campaign at any time, by any agent. This method needs the "Scheduled call" parameter to be set to "No".



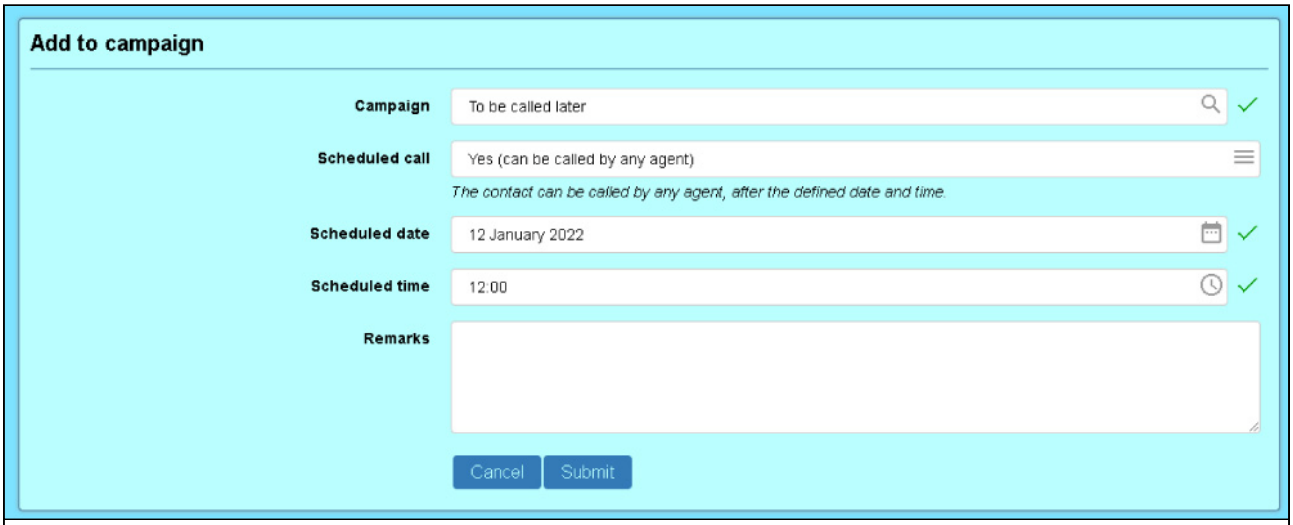
Unscheduled call interface

The following parameters will be defined:

- **Campaign:** The campaign where the call will be added to
- **Scheduled call:** defines if the called will be scheduled to a defined date and time or not (unscheduled call will have this parameter set to "No");
- **Remarks:** remarks for the call, that will be displayed to the agent, before starting the call.

Scheduled call

A scheduled call will be available for calling only after a defined date and time. The campaigns that have scheduled contacts, that can be called (the scheduled time has passed) are shown with an exclamation mark. An example is shown in the description of the Status tab, from this documentation.
The interface for scheduled called is shown below.



Scheduled call interface

- **Campaign:** The campaign where the call will be added to
- **Scheduled call:** defines if the called will be scheduled to a defined date and time or not. If set to "No" then the call is not scheduled. If set to "Yes" then two additional options are available: "can be called by any agent" (the contact will be shown to the first available agent) and "can be called only by me" (the contact will be shown only to the agent that does the reschedule)
- **Scheduled date:** The day for the future call;

- **Scheduled time:** The time for the future call;
- **Remarks:** remarks for the call, that will be displayed to the agent, before starting the call.

The interval between the current time and the rescheduled time cannot be smaller than one hour.

12.2.12 - Call center example (queue): existing customer with a known number

The Accolades interface for agents is quite flexible and allows for performing several tasks, according to the specific demands for the current call.

The following steps are just an example that can be applied in most cases. But keep in mind that there will be situations where the agent has to perform additional tasks, depending on the call nature. For a high efficiency, the agent has to be familiar with the entire Accolades interface, for the Call center agents.

The example assumes that the agent already has the Accolades Agent interface opened, from the Call Center module, the Agent option. Also, the agent needs to have a phone device attached to his account (if not, then Accolades will ask for this step to be competed, before accessing the Agent interface).

When an agent receives a call from a customer that has the phone number stored in the database, the agent can follow the next steps:

- the agent phone is ringing;
- Accolades will search the database for the phone number, it will find the number and it will display to the agent the customer identity (the Identity tab will be displayed);
- the agent processes the call;
- the agent can view the call history, for the customer, by accessing the Call history tab;
- the agent can fill in remarks for the call, on the top of the page and save them, using the Save button.

12.2.13 - Call center example (queue): unknown customer

The Accolades interface for agents is quite flexible and allows for performing several tasks, according to the specific demands for the current call.

The following steps are just an example that can be applied in most cases. But keep in mind that there will be situations where the agent has to perform additional tasks, depending on the call nature. For a high efficiency, the agent has to be familiar with the entire Accolades interface, for the Call center agents.

The example assumes that the agent already has the Accolades Agent interface opened, from the Call Center module, the Agent option. Also, the agent needs to have a phone device attached to his account (if not, then Accolades will ask for this step to be competed, before accessing the Agent interface).

When an agent receives a call from a customer with no mach in the database, the agent has to follow the next steps, to add him to the database:

- the agent phone is ringing;
- Accolades will search the database for the phone number without any result so Accolades will display the Unknown caller tab;
- the Agent will select the Add new customer button;
- Accolades will display the interface for adding a new identity;
- after the data for the customer identity has been filled in and validated, Accolades will display to the agent the Identity tab;
- in the "Phone Numbers" section from the Identity tab the agent has to press the Add ... to add the phone number of the current call to the identity.

12.2.14 - Call center example (queue): existing customer with a wrong phone number

The Accolades interface for agents is quite flexible and allows for performing several tasks, according to the specific demands for the current call.

The following steps are just an example that can be applied in most cases. But keep in mind that there will be situations where the agent has to perform additional tasks, depending on the call nature. For a high efficiency, the agent has to be familiar with the entire Accolades interface, for the Call center agents.

The example assumes that the agent already has the Accolades Agent interface opened, from the Call Center module, the Agent option. Also, the agent needs to have a phone device attached to his account (if not, then Accolades will ask for this step to be competed, before accessing the Agent interface).

During the call processing a situation where an agent receives a call from a customer whose phone number is registered to another customer, can occur.

This can happen when, for example, customer A has been saved to the Accolades database with a phone number and, after that, customer A has given away his phone number to customer B.

When customer B calls the call center, Accolades will automatically display the customer A identity.

To fix this situation, the next three steps have to be followed:

- the phone number will be deleted from the existing identity (customer A);
- the agent will search for customer B (and if he has no records in the database, the agent can add him to the database);
- the phone number will be added to the customer B identity.

The detailed steps for the above procedure are as it follows:

- the agent phone is ringing;
- Accolades will search the database for the phone number, it will find it and will automatically display to the agent the identity info for customer A (the Identity tab);
- the agent will process the call, the customer will state the fact that he is not customer A;
- from the Identity tab, "Phone numbers" section the agent will click the current phone number (the number displayed with bold characters);
- Accolades will display the interface for editing the phone number, with several options on the bottom part, one of them being the Delete button;
- the agent will click the delete button and, after confirming the operation, the phone number will be deleted from the database (without deleting the customer A identity);
- Accolades will automatically perform a new search based on the calling phone number and, because no records will be found, the Unknown caller tab will be displayed;
- the agent can either select an existing customer, with the Select existing customer button, or add a new one, by selecting the Add new customer button;
- after the identity has been established, the agent will add the phone number, by pressing the Add ... button from the Identity tab, "Phone numbers" section.

12.2.15 - Call center example (campaign): starting a call

The Accolades interface for agents is quite flexible and allows for performing several tasks, according to the specific demands for the current call.

The following steps are just an example that can be applied in most cases. But keep in mind that there will be situations where the agent has to perform additional tasks, depending on the call nature. For a high efficiency, the agent has to be familiar with the entire Accolades interface, for the Call center agents.

The example assumes that the agent already has the Accolades Agent interface opened, from the Call Center module, the Agent option. Also, the agent needs to have a phone device attached to his account (if not, then Accolades will ask for this step to be competed, before accessing the Agent interface).

An agent can start a call to an available contact from a campaign straight from the interface, with no need to dial the phone number. First the agent will select an available contact and then he will start the call. The following steps need to be followed, to achieve that:

- The agent asks for an available contact, from the server, by pressing the Search contact button, placed right to the campaign name (the button is displayed only for the campaigns that have available contacts);
- If no contacts are available, Accolades will display a message indicating this and the procedure will end;
- If the server found an available contact, Accolades will display info about the contact in the Select contact tab;
- The agent can view info about the contact, as they are defined inside the campaign, in the INFO section (name of the campaign, phone number and remarks about the contact);
- Accolades will also search the phone number from the campaign in the customer database for the account and if a customer is found the interface will display info about the customer (identity info, call history);
- The agent can request another contact from the server by using the Previous and Next buttons;
- If the displayed info is OK then the agent can start the call to the contact, by pressing the Call button (the agent phone will start ringing and after it is answered the server will automatically dial the contact phone number);
- After the agent has picked up the phone, the interface will change to the editing mode, to allow the agent to fill in all the info about the call in progress.

Keep in mind that a displayed contact is reserved to the agent viewing the info. That means that, when an agent requests a contact, the server will search the available contacts, excluding the ones that are being viewed by other agents (it is not possible for two different agents to view the same contact, at the same time). Because of this, a contact from a campaign is displayed to an agent for only 2 minutes, while the contact is being excluded from searches. After 2 minutes, the contact will become available once again and it will disappear from the agent interface.

The call to a contact has to be initiated within the 2 minutes interval, started when the contact has been requested from the server.

12.3. Management

12.3.1 - Call-center supervisor interface

The page for managing the call center can be accessed from the Call Center module, by selecting the Management option.

The interface will display a list with all the waiting queues that can be managed by the administrator (supervisor). A call back campaign can be initiated (or edited) by pressing the Call back campaign from each queue menu

For every waiting queue the following information will be displayed:

- a list with all the agents assigned to the queue;
- total count of the waiting calls, on the queue;
- a list with all the waiting calls (including the waiting time for each call).

Below the section with the waiting queues, Accolades displays a list with the active campaigns for the accounts that the administrator has permissions.

Agents list

From the waiting queue menu, the administrator can choose the type of agents that are displayed (all agents, only the active agents, only the inactive agents), along with the sorting order (alphabetical or by total number of processed calls).

The agents are listed in a 5 columns table:

- agent status in the queue;
- phone device status (used by the agent) in the queue;
- name of the agent;
- current call duration;
- total calls processed by the agent, since he logged in to the queue;

Agent status in queue

The agents list contains all agents assigned to the queue.

Each agent has a status, as it follows:

- Active - The agent is logged on the queue (he can receive calls);
- Inactive - The agent is not logged to the queue (he can not receive calls from the queue);
- Pause - (personal, business, after call) The agent is active on the queue, but he is on a break (he can not receive calls from the queue);

The agents can start a break on any active queue. For example, an agent active on 3 queues will receive calls only from one of them, if he has breaks set up for the other two.

If an agent is active on a queue, then he can be logged out from the queue, by selecting the respective option from the menu displayed when the agent name is being clicked. If the agent is inactive then no actions can be triggered.

Phone device status

The phone status is displayed only for the active agents on the queue.
The status can have any of the following values:

- Available - the phone is not used at this time, the agent can receive calls, if he is not on pause;
- Ringing - the phone is ringing;
- In call - the phone is in use;
- Offline - No connection can be established between the phone and Accolades server, the agent will not receive any calls.

Unlike the agent status, which is different for each queue, the phone status is the same for every queue. For example, if a phone is used in a call, then its status will be "in call" on every queue (the status can not be "available" if the phone can not receive calls). Also, if the agent uses the phone for outgoing calls, then the phone status will be set to "in call" for all waiting queues.

Agent name

The column displays the agent name, as it is defined in Accolades. A menu with actions will be displayed when the administrator (supervisor) clicks on the agent name.

Agent priority

The column displays the agent priority, for receiving incoming calls. The value 0 is for an agent that receives calls in a regular manner. Higher values will indicate that an agent will receive fewer calls, compared to someone with a lower value. The value 15 indicates that the agent will receive as fewest calls as possible.
The priority value can be defined by clicking on the agent name and then selecting the appropriate option.

Call duration

The column displayed the current call duration.

Total calls

The column displays the total number of calls, processed by the agent, on the queue. The value is counted from the last login of the agent to the queue. When the agent logs out of the queue, the value is set to 0.

Total waiting calls

The section displays, in real time, the number of waiting calls (calls that are waiting for an agent to become available) for the queue.

Waiting calls list

The section displays a list with all the waiting calls, along with the waiting time (in real time) for each call.

Campaign list

The section displays the active campaigns for the accounts that the administrator has access to. For each campaign the following info will be displayed:

- Campaign name (if the supervisor clicks the campaign name then Accolades will load the campaign info page);
- Total - total number of contacts for the campaign;

- Waiting - total number of contacts waiting to be processed;
- In call - total number of contacts being processed right now;
- Finished - total number of contacts that had been processed successfully;
- Unavailable - total number of contacts that had been called by the agents, but there were no answer (Accolades defines the unavailable status if the number of calls is equal or greater than the Maximum calls for contact value, defined in the campaign info page);
- Error - total number of contacts that could not be called because the phone number was invalid.

12.3.2 - Listening to ongoing calls

Accolades allows for the supervisors (if they have the necessary permissions) to listen to ongoing calls, from the call center. This process can be managed from the Accolades interface.
A call spy (listening to an ongoing call) can be started from the Call Center module , Management section.
The administrator (supervisor) can listen to ongoing calls only if he has a device linked to his account (see the preferences menu from the upper-right side of the page).
If the administrator (supervisor) has the permission to listen to the agents calls, then the icons that display the device status "in call" (the second column of the "agent list" table (device status) can be pressed to display a menu for starting a call spy.
Based on the administrator permissions, the menu can display up to 3 types of spying:

- listen - the supervisor can only listen to the ongoing call (he can not be heard in the main call);
- whisper - the supervisor can only be heard by the agent;
- barge in - the supervisor can be heard by both the agent and caller.

After selecting a spying mode, the administrator phone will start ringing.

12.4. Devices

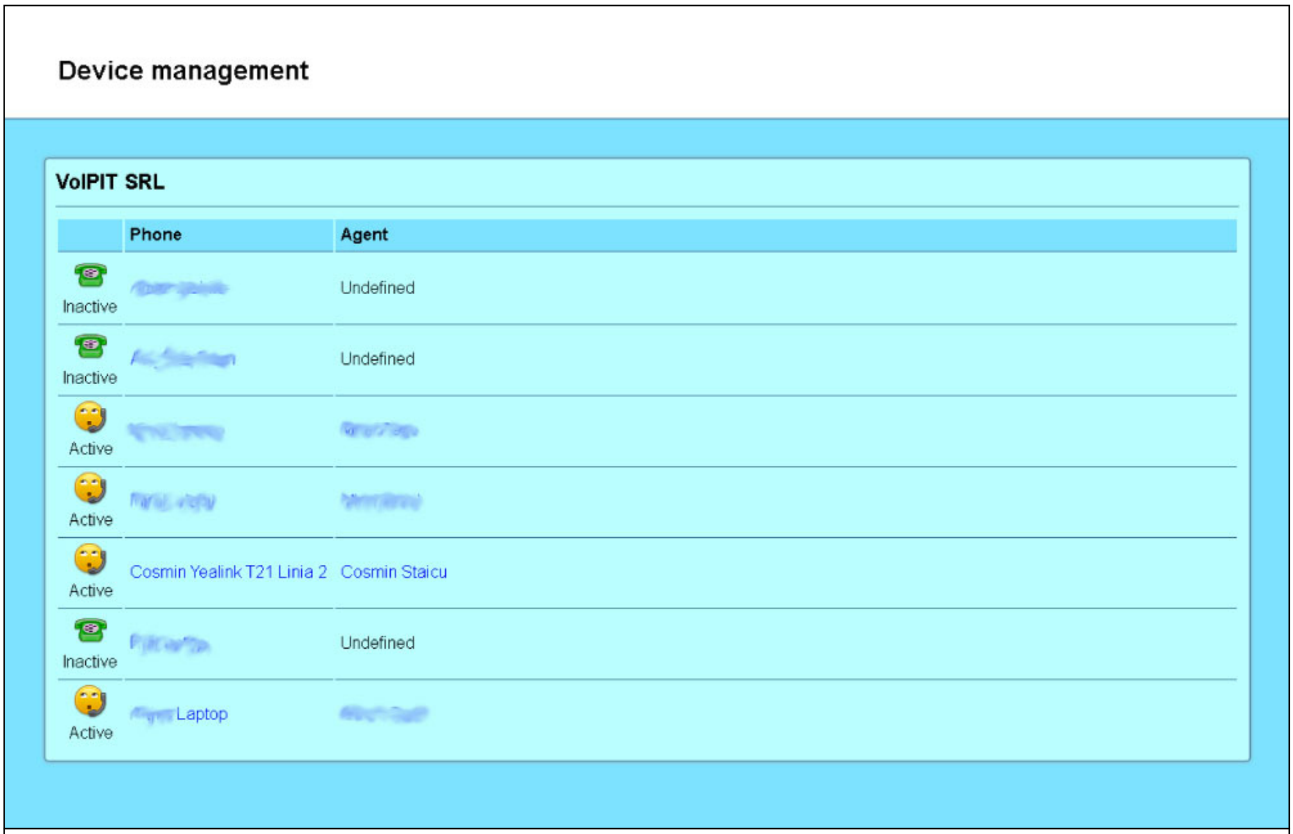
12.4.1 - Devices connected to the call center interface

For an agent or a supervisor to be able to use the call center features, he has to have a phone device linked to his account. This type of operation allows the call center to use shifts (the same phone can be used by several agents, one at a time).

A phone can be linked to a single administrator (agent) at a time.

If an administrator / agent forgets to unlink the device, when logging out of the call center, then the supervisor can force this action, from the Call center module, by selecting the Device management section.

The page will display a list with all accounts that the administrator is allowed to manage, as a call center. For each account a list with all the devices that can be linked to an account is displayed.



Device management interface

The devices are listed as a table, with 3 columns:

- device status;
- device name;
- linked agent name.

Device status

Each device can be "Active" on "Inactive". The status is listed as an icon, with a text under it. The "Active" status describes a device that has an administrator / supervisor / agent linked to it. The "Inactive" status shows that the device has no account linked to it.

Device name

For a better management workflow, Accolades allows to define a generic name for each device. The second column of the table shows the name stated above. If the administrator has the necessary permissions, then the name can be clicked, to access the device info page.

The name of the linked account

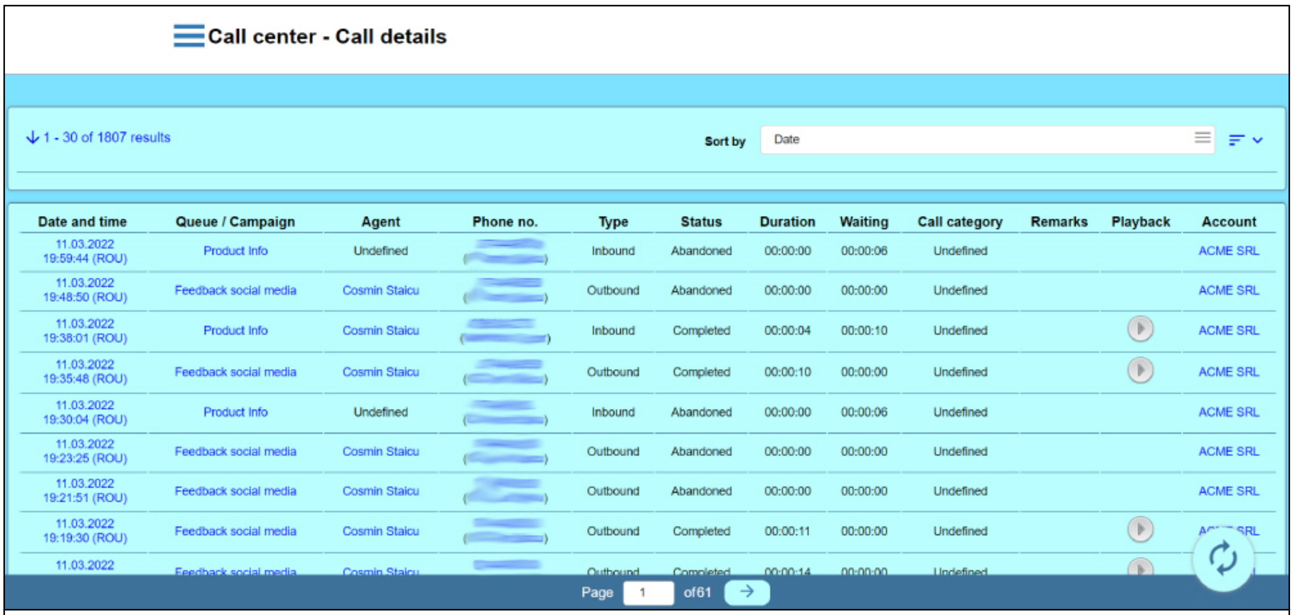
The third column lists the name of the linked administrator / supervisor / agent. If no account is linked to this device, then the "undefined" value will be displayed. If the administrator has the necessary permissions, then the name can be clicked, to access the account info page.

12.5. Call details

12.5.1 - Call center call search

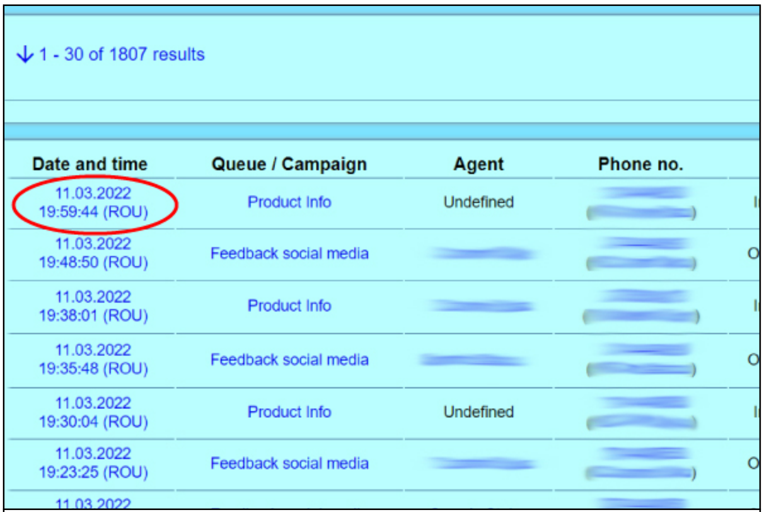
> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

The call details section displays all calls processed by the call center and can be accessed from the Call Center module, by selecting the Call Details option.



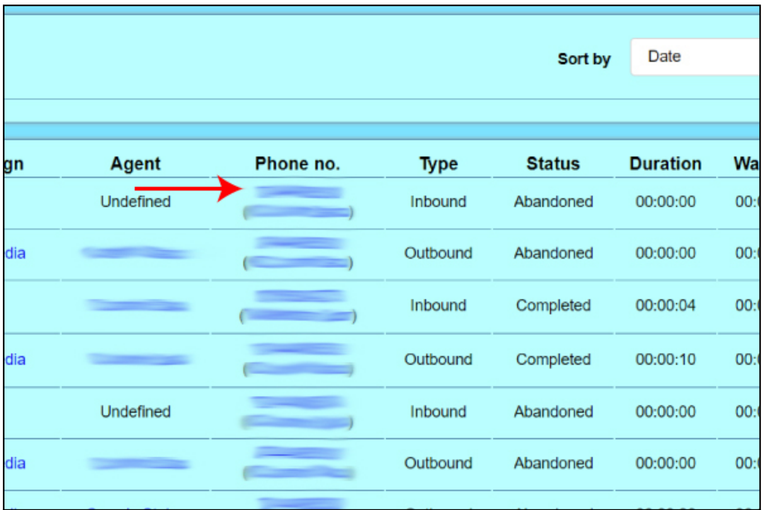
Call details

On the upper side of the page Accolades will display the total number of results that are matching the search criteria, along with the display order. The inactive filters are hidden and can be displayed by pressing the arrow near the total number of results value.
The call info page, for each call, can be accessed by pressing the date and time of the call (if the administrator has the required permissions).



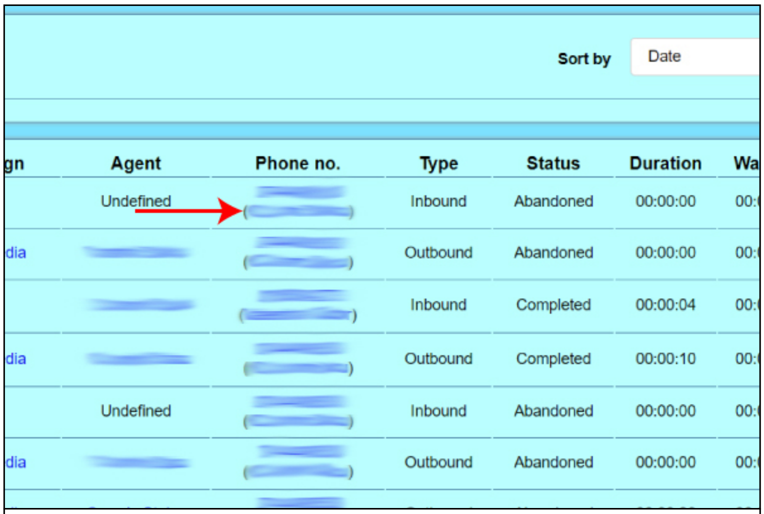
Call info page

If the agent has a phone attached to his account, then the "Phone Number" column will display the phone number as a link. By clicking this link, a call can be started, using the linked phone device.



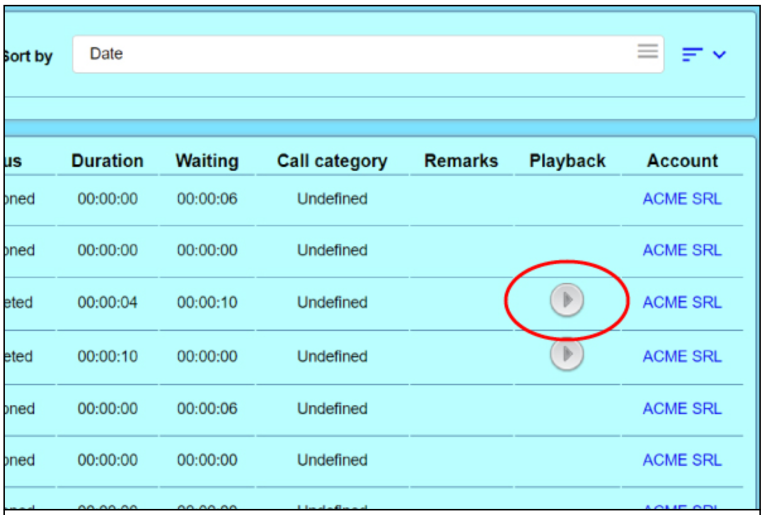
Quick dial link

If the CRM module is enabled on the account and the call belongs to a CRM contact then the interface will display a link with the contact name. By clicking on the link, Accolades will load the info page for the CRM contact.



CRM contact

If a call has been recorded and the administrator has the required permissions, the Accolades will display the "Download" column. The calls that are available for download will have a link displayed, as a down arrow.
If a call has been recorded and the administrator has the required permissions, then Accolades will display the "Download" column. The calls that have been recorded will display a button to listen or download the audio file.



Recorded call

12.5.2 - Call center call info page

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The call info page can be accessed from the call details page, by pressing the date and time of the call.
Any administrator (no matter if it is a supervisor or an agent) that can perform searches in the call center calls, can also access the call info page, for any search result.
The page displays the following data:

- The waiting queue for the call or the campaign that was used for starting the call;

- The agent that processed the call;
- The phone number;
- The call status;
- Call duration;
- The account for the call;
- The customer (from the CRM module) assigned to the call;
- Remarks (probably filled in by the agent, during the call).

Two buttons can be displayed on the page menu, depending on the administrator permissions:

- The Edit button will access the page for editing the customer and the remarks for the call;
- The Download button allows for downloading the recorded audio file of the call (if it is available).

If the call has been followed by an After call survey, successfully finished, then Accolades will display an additional section, called "After call survey", that displays the answers given by the caller.

12.5.3 - Call center call data edit

To start editing the data about a call, the administrator has to press the Edit button, from the call info page, on the page menu.

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The interface allows for editing the customer assigned to the call and the remarks of the call. If Accolades is operated in a regular mode, this interface should not be used.

To be able to perform the stated procedures, the administrator has to have the required permissions and the CRM module has to be active on the account.

12.6. Campaigns

12.6.1 - Campaign overview

A campaign is the process by which the agents in a call center are calling a list of phone numbers (called contacts) from a list previously defined by a supervisor.

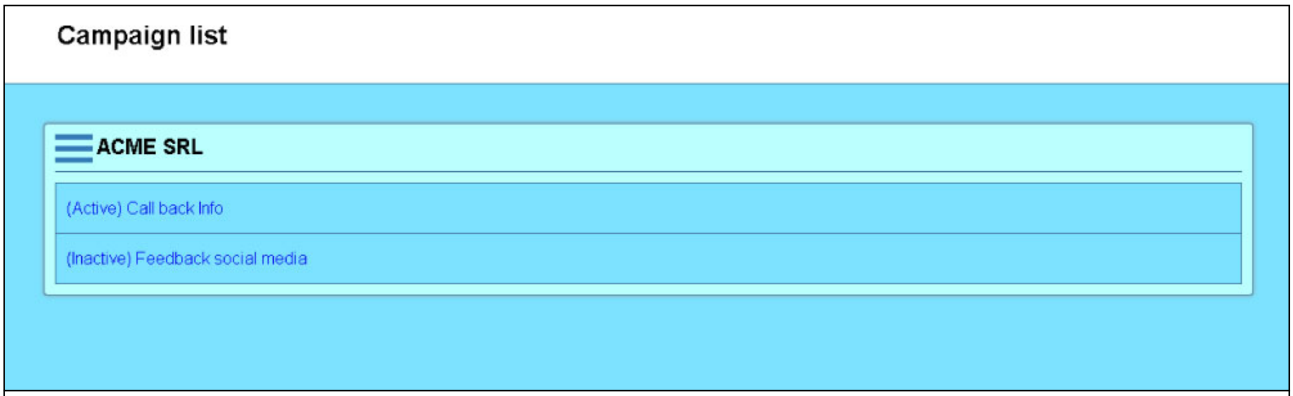
To run a campaign the following steps have to be followed:

- The supervisor will define a new campaign, having the INACTIVE status;
- The supervisor will set up the contacts to be called by the agents (the contacts can be defined one by one, from the Accolades interface or can be loaded from a .csv file);
- The supervisor will turn on the campaign (the status will become ACTIVE);
- The campaign will show up on the agents interface;
- The agents will call the contacts in the list, one at a time;
- The campaign will be finished after all the contacts have been processed;
- The supervisor can download a list with each contact status;
- If it is the case, the supervisor can decide to rerun the campaign for the contacts that did not answer;
- The supervisor will delete the campaign.

12.6.2 - Campaign management

The campaign management for the accounts that the supervisor has access to is done from the Call center module, by clicking on the Campaigns option.

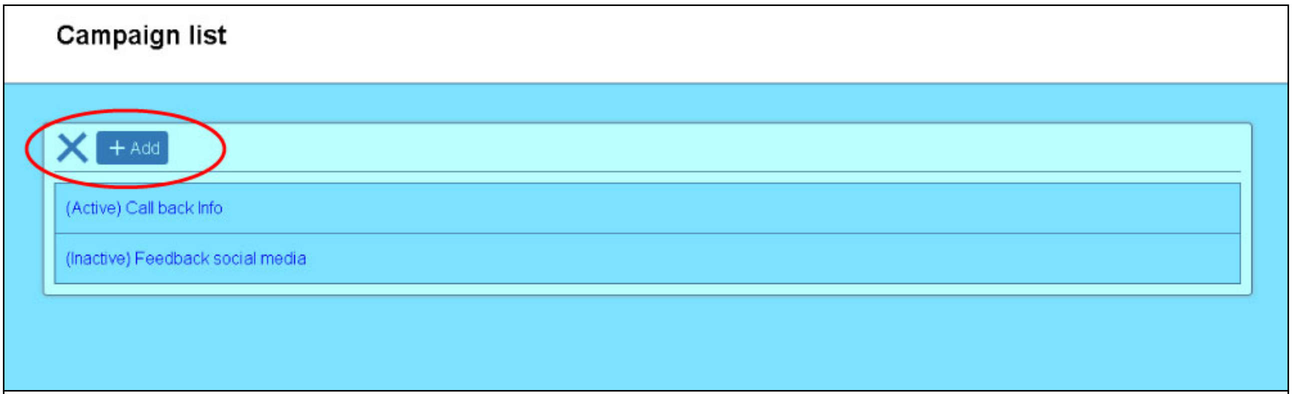
The interface will display a list with all the available accounts for campaign management. For each account a list with the defined campaigns is displayed.



Campaign management interface

Adding a campaign

To add a new campaign, for an account, the supervisor has to click the Add button, available in the section menu, left to the account name. Because there is a limited number of campaigns for each account, there are cases when the button is not available. The maximum number of campaign does not check the campaign status (it does not matter if the campaign is Active or Inactive).

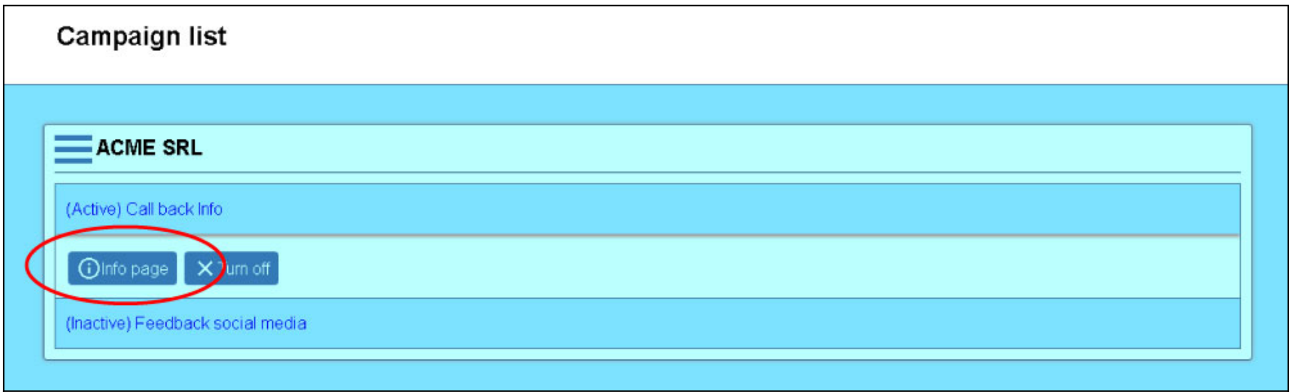


Add campaign button

When adding a campaign the supervisor has to fill in all the information described in the Information tab.

View, edit and delete a campaign

The procedures for viewing, editing and deleting a campaign are done from the campaign info page, that can be accessed by pressing the Info button, visible after pressing the campaign name.

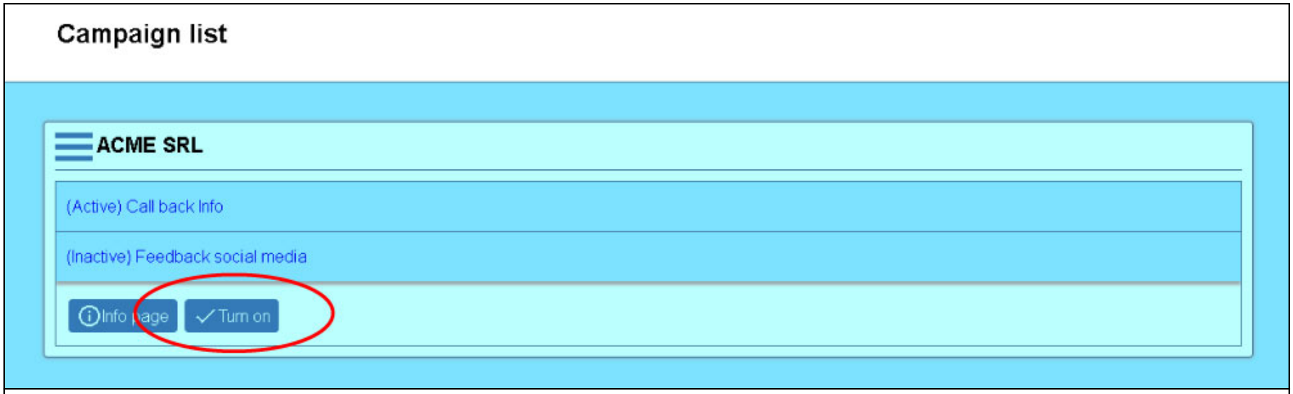


Campaign info button

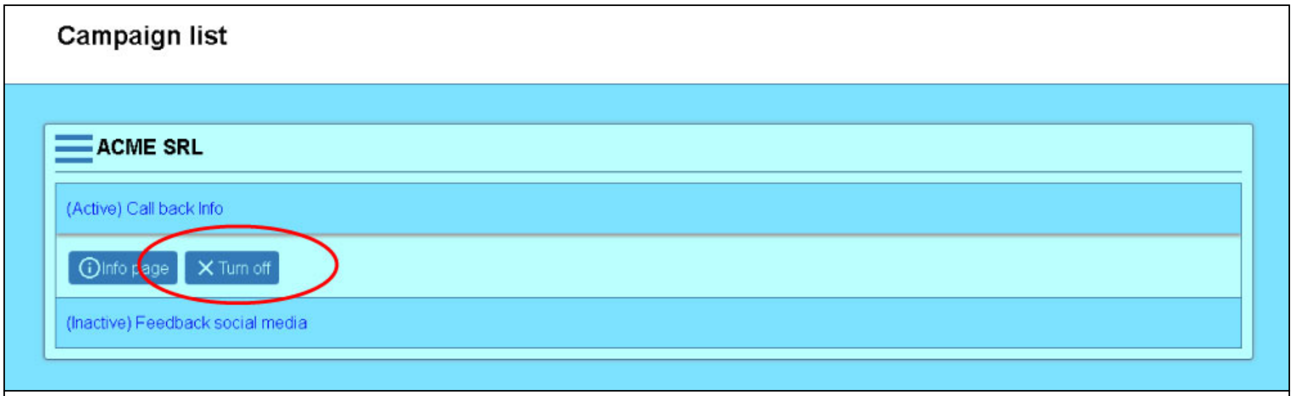
Turning on or off the campaign

The campaigns can have an Active (the campaign will be visible to the agents) or Inactive (the campaign will not be visible to the agents) status.

The status can be modified by pressing the Turn on or Turn off button, visible after the supervisor pressed the campaign name.



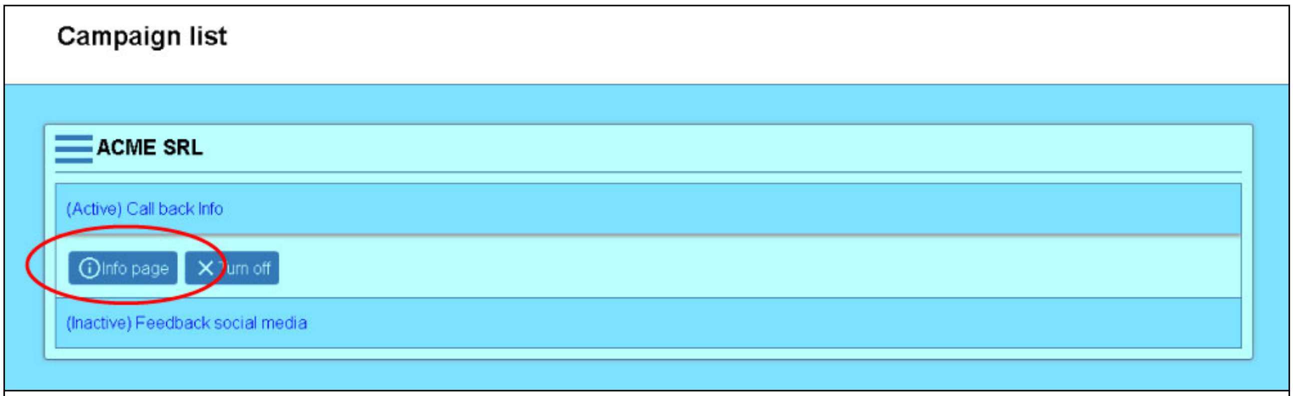
Start campaign



Stop campaign

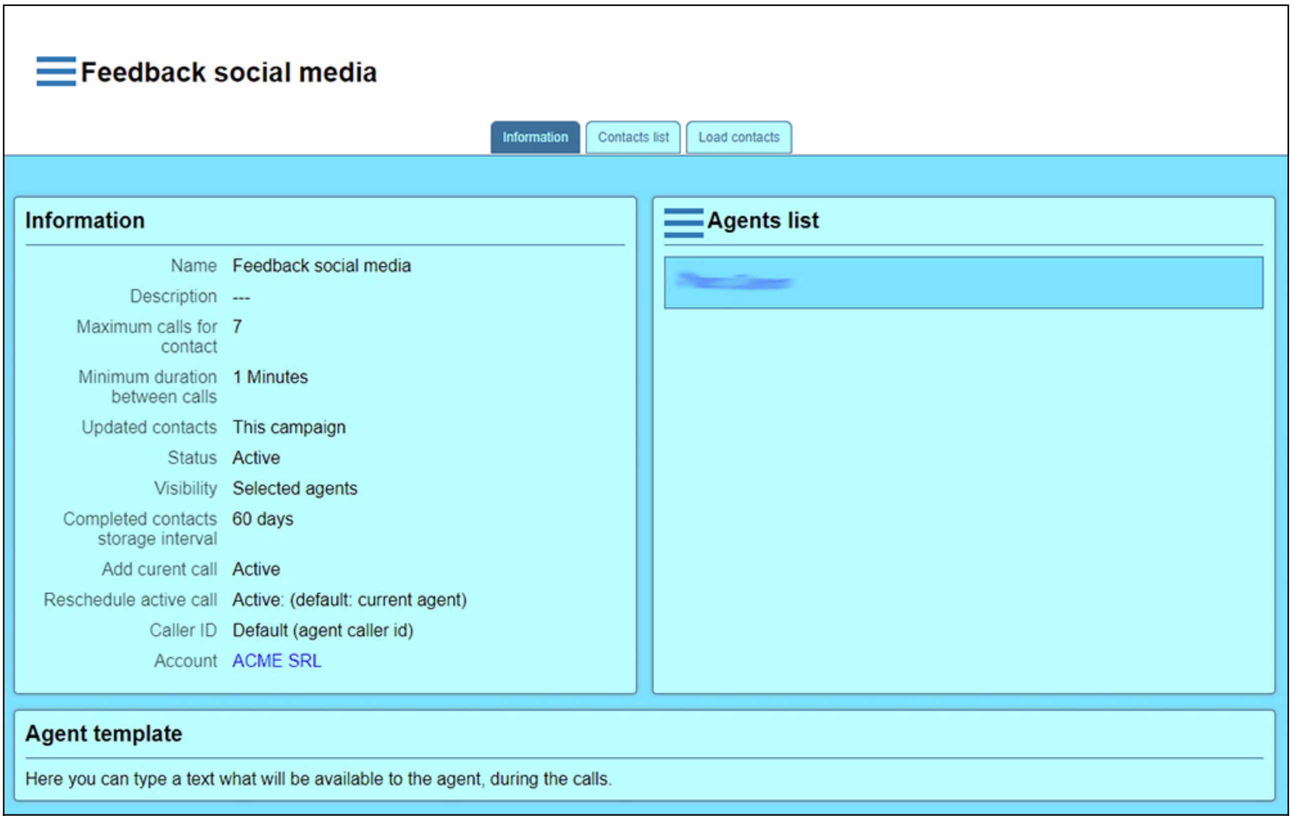
12.6.3 - Campaign information

The info about a campaign properties can be viewed and edited from the Call center module, by selecting the Campaign option. After pressing on the campaign name, the interface will display the Info button that, if pressed, will load the campaign info page.



Campaign info access

The Information tab displayes general info about the selected campaign.

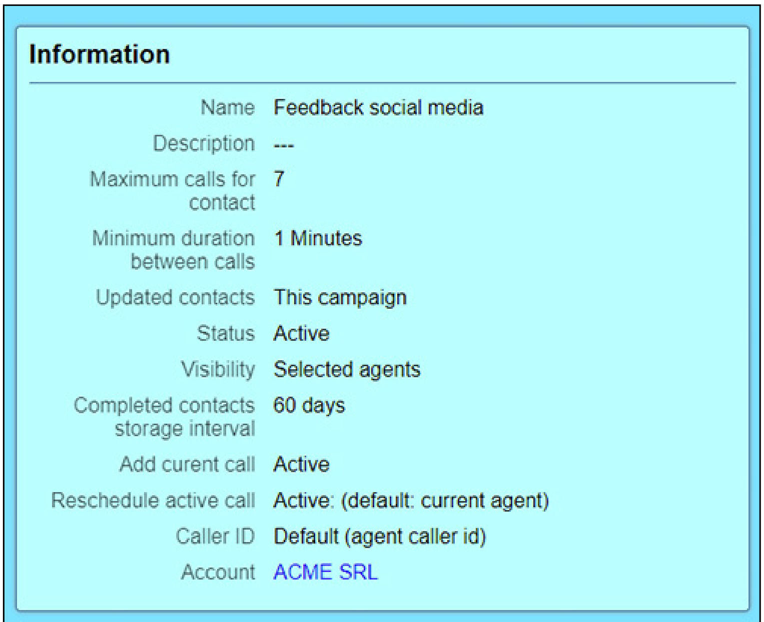


Campaign info page

To edit the info, the Edit button has to be pressed, from the page menu. To delete a campaign, the supervisor has to press the Delete button, from the page menu.

Information

The first panel of the interface contains general info about the campaign.



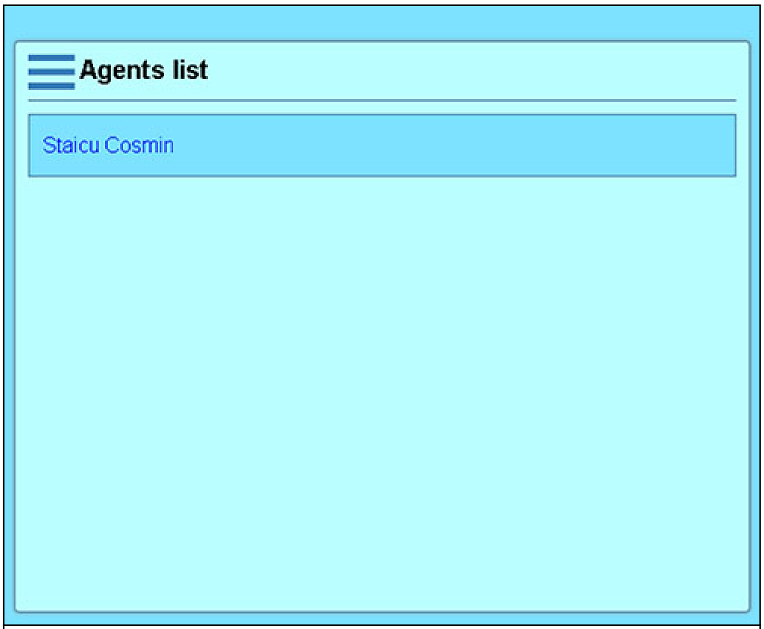
Campaign info

The "Information" section contains the following properties:

- **Name:** The property defines the name of the campaign as it will be displayed in the Accolades interface (to the supervisors and to the agents).
- **Description:** The property defines a description of the campaign, as it will be displayed in the Accolades interface (to the supervisors and to the agents).
- **Maximum calls for contact:** The property defines the maximum number of attempts to call a contact. When the total calls for a contact is equal or greater than this value, the server will consider that the contact is unavailable.
- **Minimum duration between calls:** The value defines the time interval between two consecutive calls for the same contact, if the previous attempts were unsuccessful. The property is used when an agent asks for an available contact from the Accolades server, by pressing the Search contact button.
- **Updated contacts:** The property defines what happens when a contact from this campaign, that answers a call, is also present in other active campaigns within the account. The property can have one of the following values: This campaign (will update just the contact from this campaign, the other campaigns will be ignored), All call-back campaigns (will update all the call-back type campaigns), All campaigns (will update all contacts from all active campaigns within the account).
- **Autoupdate:** (available only for the callback campaigns) defines if an unanswered call will be automatically added to the campaign or not.
- **Status:** The property defines the status of the campaign (Active or Inactive). The campaign status can be modified from the campaign management page (the Call center module, the Campaign option).
- **Visibility:** The property defines the agents that can view the campaign. Can be set up to "All agents" (the campaign is visible to all agents) or "Selected agents" (the campaign is visible only to selected agents from the list attached to the campaign).
- **Completed contacts storage interval:** The maximum amount of time for keeping the completed contacts (with status "completed" or "error"). The contacts having the last call before this interval will be automatically deleted.
- **Add curent call:** (not available for call-back campaigns) The value allows the call center agents to add the contact from the current call to this campaign. It is used for making the current call for future follow (for example, you can add the current call contact to a "call tomorrow" campaign, straight from the agent interface)
- **Reschedule current call:** Defines if a contact can be rescheduled to a later date, for another call. If INACTIVE then no rescheduling is allowed. If ACTIVE (DEFAULT: CURENT AGENT) then the contact can be rescheduled to a later date and, if the agent does not edit the default option from his interface, the contact will be shown only to the current agent. The ACTIVE (DEFAULT: ANYONE) states that the contact can be rescheduled and can be called by any available agent.
- **Caller ID:** Defines the phone number used as a caller ID, when starting calls from this campaign. If the option is set to DEFAULT then the caller id of the agent placing the call will be used. Using this option the administrator can select another entity from the account (an waiting queue, an IVR or another user) so all calls from this campaign will be initiated using the caller ID of the selected item.
- **Account:** The campaign account.

Agent list

This section is available when viewing the campaign info and only if the "Visibility" property is set to "Selected agents". The list defines the agents that can view the campaign.

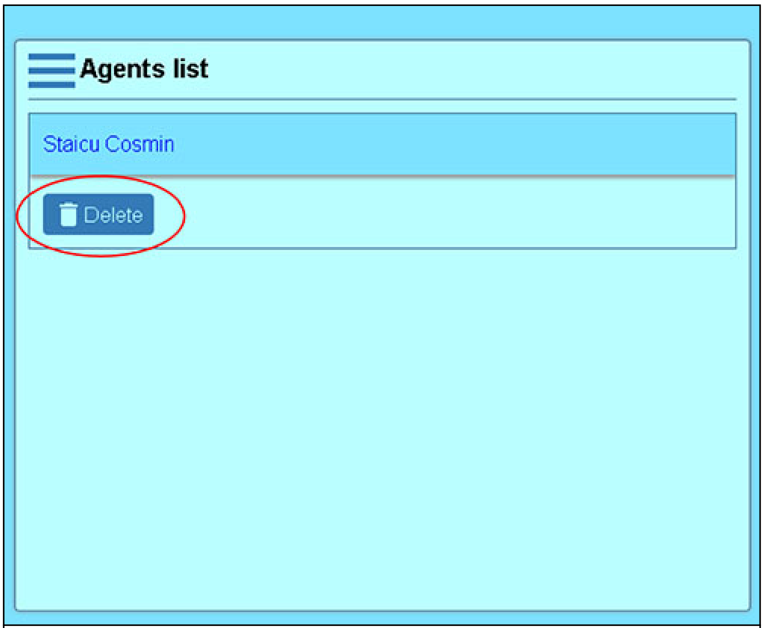


Agent list

To add an agent, the administrator must press the Add button from the section menu.

Add agent

To delete an agent, the administrator must push the Delete button, visible after clicking on the name of the agent in the list.



Delete agent

Agent template

Accolades allows the administrator to define a template text that will be displayed to the agent when he starts a call.

Agent template

Usually the text contains the information that the agent has to provide to the called contact.

12.6.4 - Campaign contact list

The info about a campaign properties can be viewed and edited from the Call center module, by selecting the Campaign option. After pressing on the campaign name, the interface will display the Info button that, if pressed, will load the campaign info page.

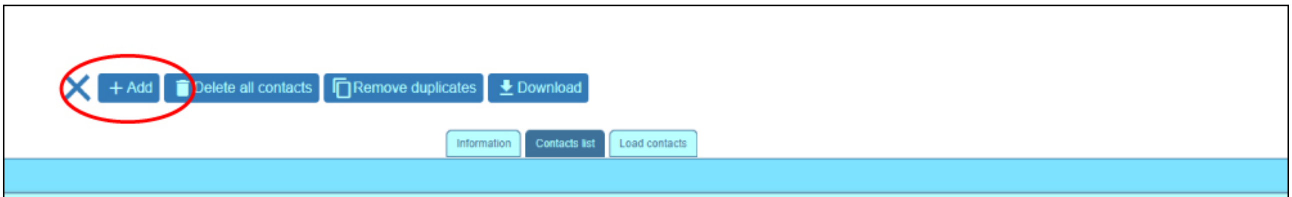
The management of the contacts for a campaign is done from the Contacts List tab from the Campaign info page. The tab displays all the contacts from the campaign, their status along with the total calls number for each element.

Contact list

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

Add contacts

Accolades allows for adding contacts to the campaign one by one. The procedure can be started by pressing the Add buton from the page menu.



Add button

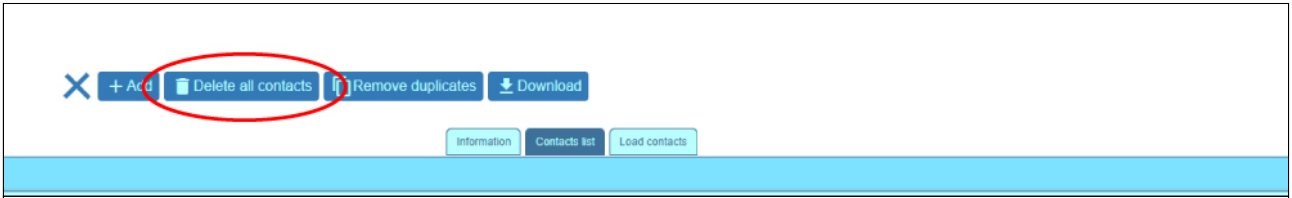
When adding a contact, the supervisor has to fill in all the info presented in the contact info page.
To add multiple contacts, from a .csv file, the Load contacts tab has to be used.

Delete contacts

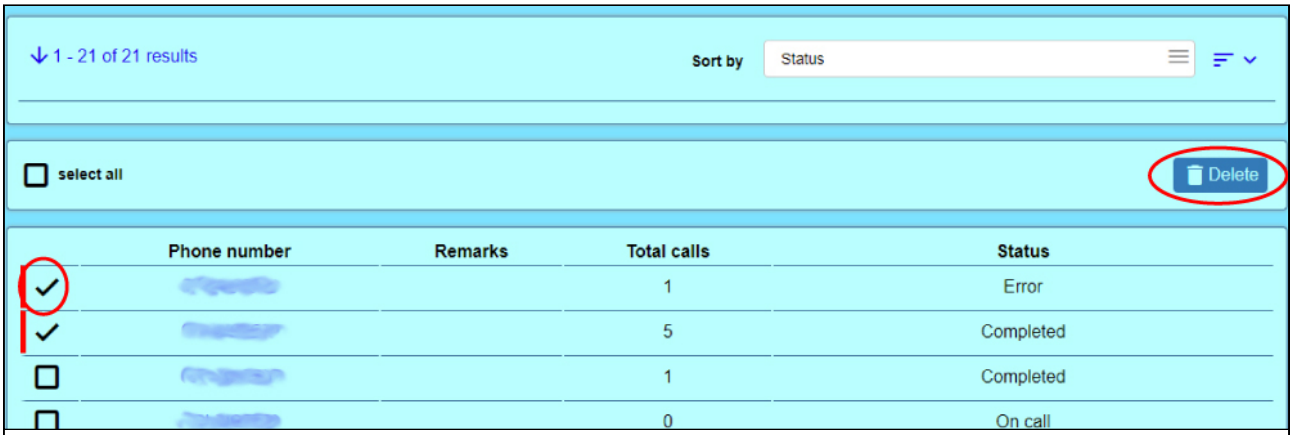
From this tab, the contacts can be deleted in two ways:

- using the Delete all contacts button, displayed in the page menu;
- by selecting contacts, using the checkbox left to the contact and then pressing the Delete button (the button is

displayed only if at least one element is selected);



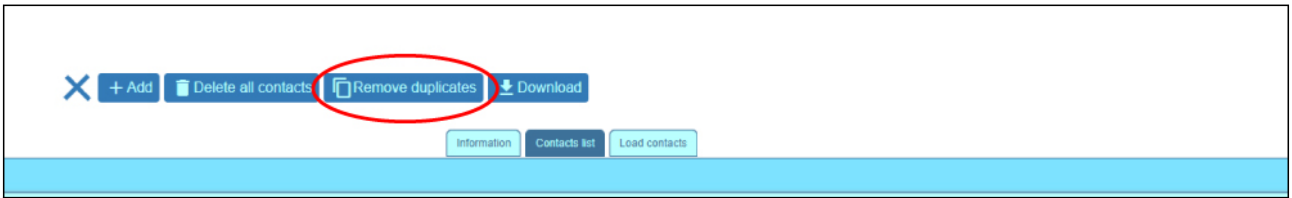
Delete all button



Delete button

Remove duplicates

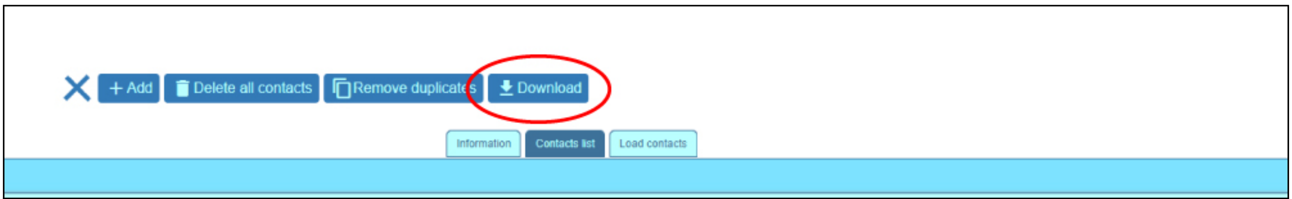
Accolades can auto remove the duplicated contacts inside the list. The check is based on the last 10 digits of the phone number (the numbers 0722123456 and +40722123456 are identical). To start the process, the administrator must press the Remove duplicates button inside the page menu.



Remove duplicates button

Download list

The displayed list can be downloaded using the Download button, from the page menu.



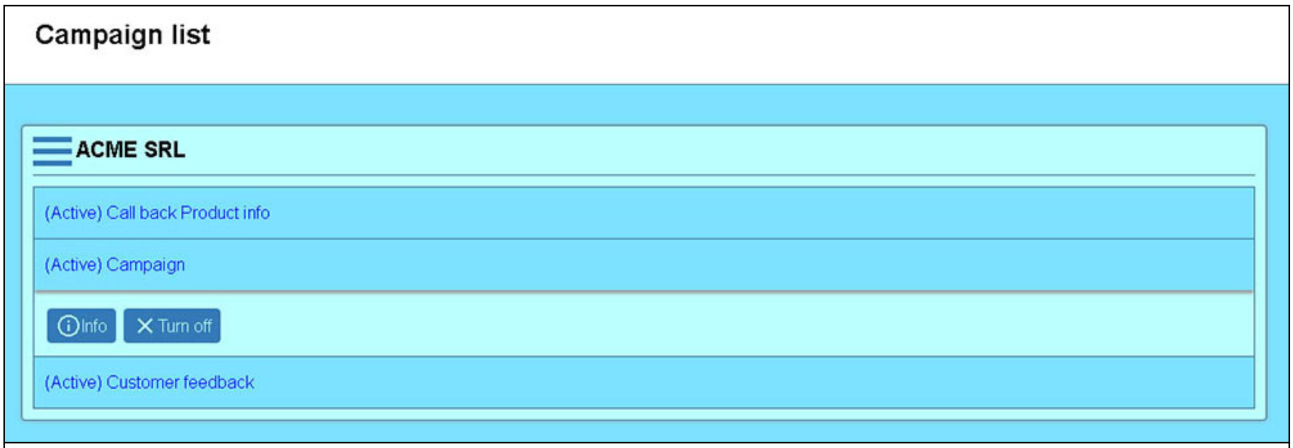
Download button

Contact info page

The contact info page, for a certain contact can be accessed by pressing the phone number for the contact.

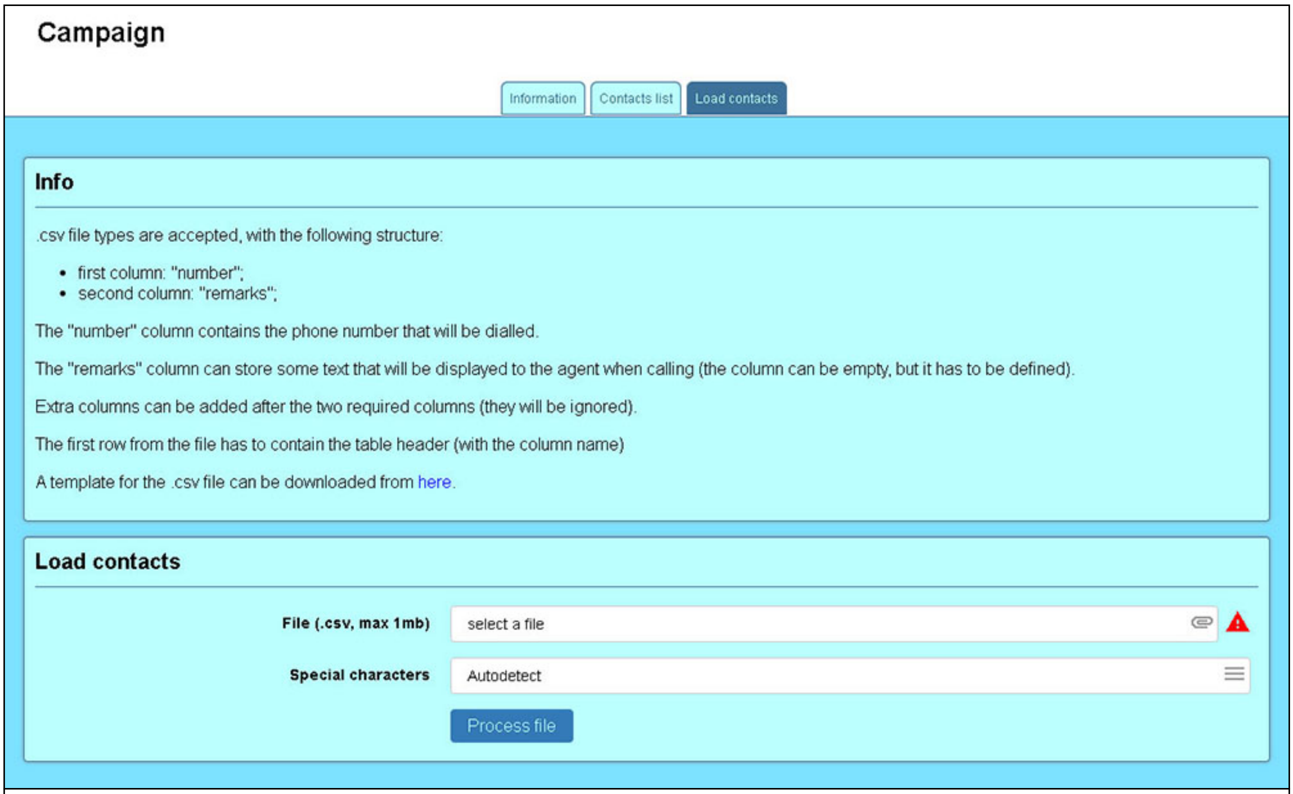
12.6.5 - Load contacts

The info about a campaign properties can be viewed and edited from the Call center module, by selecting the Campaign option. After pressing on the campaign name, the interface will display the Info button that, if pressed, will load the campaign info page.



Available campaign list

Using the Load contacts tab, the administrator can load contacts into a campaign from a .csv file, that will be uploaded to the server. Accolades will process the file and will display to the supervisor the results.



Load contacts tab

On the first part of the page some properties for the .csv file are displayed:

- the first row has to contain the name of the column (header row);
- the first column will be called **number** and it will contain the phone number to be called;
- the second column of the file will be called **remarks** and it will contain remarks about the contact (remarks that will be displayed to the agent);
- if the file has additional columns, after the previous two, then Accolades will ignore them;

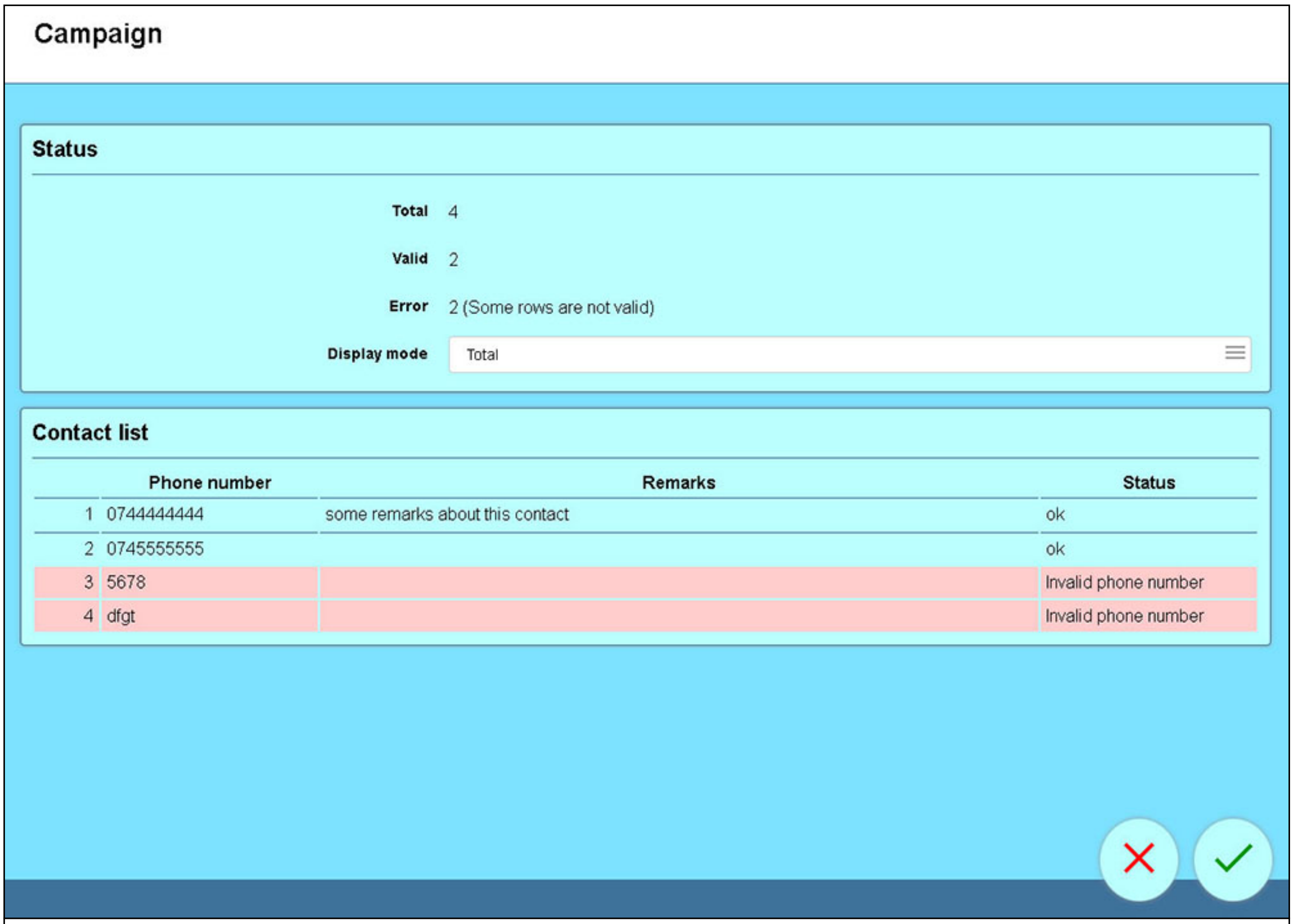
The supervisor can download a template for the .csv file (with the table header already defined) from the interface.

Selecting and uploading the file

The file will be selected from the **File** input field and it will be sent to the server using the Process file button.
CSV file types are using 2 types of special characters: a value separator (semicolon or comma) and an encapsulating character (a double quote) used for enveloping the values containing the value separator. If the **Special Characters** option is set to Autodetect then Accolades will try to detect the characters directly from the file. The Manual option allows the user to directly select the values.
Accolades will process the file and after that the processing result will be displayed to the administrator.
If the file is not valid, then Accolades will display an error message, where the reason for rejection of the file will be explained.

File processing result

If the file is valid then Accolades will display the results of the file processing.



Processing result

When the result is displayed, the contacts are not added to the campaign, they are just shown to the administrator, for validation.

On the upper part of the page the global results of the processed file are displayed:

- Total contacts processed;
- Total valid contacts;
- Total invalid contacts.

The displayed results can be filtered using the "Display mode" option.

The lower part of the page contains a list with all the contacts processed from the .csv file. The invalid contacts are displayed using a red background.

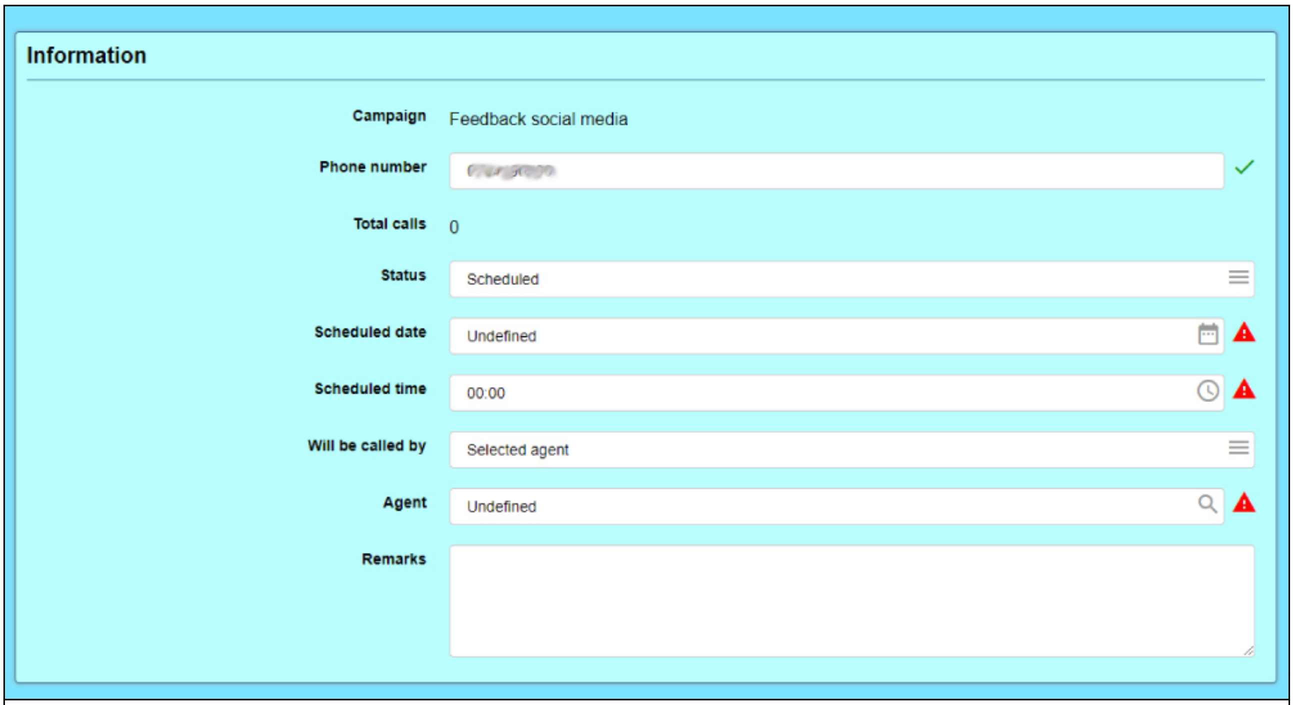
Load contacts into the campaign

After checking the processed results, the administrator can load the valid contacts into the campaign, by pressing the validation button placed on the lower part of the page.

12.6.6 - Contact info page

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The contact info page for a campaign can be accessed from the Contact list tab, displayed inside the campaign info page.



Contact edit interface

The contact info page allows both viewing and editing the data about a contact.

The following properties of the contact are displayed on the page:

- **Campaign:** the campaign the contact belongs to;
- **Phone number:** the phone number to be called;

- **Total calls:** (only for existing contacts) total number of calls made to this contact;
- **Status:** the contact status (in some cases the status can be updated);
- **Scheduled date:** (only for scheduled contacts) the starting date for the availability of the contact;
- **Scheduled time:** (only for scheduled contacts) the starting time for the availability of the contact;
- **Will be called by:** (only for scheduled contacts) the agent that will call the contact (any agent or a selected agent);
- **Agent:** (only if "Will be called by" is set to "Selected agent") the agent that will call the contact;
- **Remarks:** the remarks to be shown to the agent, before starting the call.

After viewing the data, the administrator can validate any editing done to the contact or he can return to the contact list, using the buttons, placed on the lower side of the page.

12.7. Callback

12.7.1 - Call back campaign description

The call-back system allows Accolades to select the calls received by a waiting queue that have not been processed by any agent.

The following cases are valid as callback contacts:

- A caller rang once and the call has not been answered;
- A caller rang 6 times and no call has been answered;
- A caller rand 3 times with no answer. The 4th time an agent processed the call. After that, the caller rand again and the final call was unanswered.

A caller is defined as a callback contact when the last call from this caller has not been answered.

The following cases are NOT valid for callback:

- A caller rang last week, with no answer but the callback campaign has been defined for this week.
- A caller rang 4 times on the waiting queue with no answer. After that, he called on another queue from the same account and the call has been processed;
- A caller rang on 2 different queues, with no answer. Later, he was called by an agent, during a campaign.

A contact will be added to a callback campaign as long as the last call was unanswered, at an account level.

After the selection has been done, the contacts can be automatically added to a callback campaign. The management procedures for the new campaign are similar to the ones described in the "Campaigns" chapter.

There are some differences between the regular campaigns and the callback ones.

- the callback campaigns are not counted in the campaign limit for the account;
- a waiting queue can only have one callback campaign (active or inactive);
- manual adding of contacts is disabled (only callers that were in the waiting queue and have not been answered can be added, using the graphic interface).

The callback campaigns are partially real-time. Contacts can be added only by a supervisor. But the deletion of contacts will be done automatically by Accolades. If a contact is defined in a callback campaign and, while the campaign is running that contact calls a waiting queue and gets an answer, then that contact will be deleted from all the callback campaigns defined for that account.

12.7.2 - Call back campaign initialization

The callback campaigns can be initialized from the supervisor interface, by accessing the Call Center module and selecting the Management option.

The interface will display each waiting queue that can be managed by the supervisor. The button for editing the campaign is called Call back campaign and it is placed in the menu corresponding to each waiting queue. By pressing the button, the campaign info page will be accessed. If no campaign is defined for the waiting queue, then it will be defined automatically. By accessing the campaign info page using this button Accolades will display the interface from where the supervisor can define the campaign properties, along with the starting date for the interval to be analysed.

12.7.3 - Add contacts to a call back campaign

To add new contacts to the callback campaigns the supervisor can only use the interface for this type of campaigns. No contacts can be added one by one or by using .csv files (these features are only available to the regular campaigns). The interface for adding new contacts can be accessed in two ways:

- from the queue management interface (the option Management from the Call Center module), by using the Call back campaign inside the menu attached to each waiting queue;
- from the Contact list tab, by using the Update button placed in the page menu, in the campaign info page.

The second option can only be used for existing campaigns. For new campaigns only the first method is available (as there is no campaign info page to be accessed).

For the new campaigns, the first procedure for adding contacts allows for setting up the starting date for the interval in which the calls will be searched. For example, a callback campaign can be defined, using the calls from the last 7 days.

If the supervisor adds contacts to an existing campaign, then the starting date for the interval will be automatically set to the last update of the campaign.

After the search has been finished, Accolades will display a list with all contacts that qualify for the callback. The contacts are only displayed, but they are not added to the campaign. To finish the procedure, the supervisor has to validate the operation, by pressing the validation button displayed on the lower part of the page.

If the supervisor does not want to add the contacts to the campaign, then he can cancel the operation by pressing the cancel button placed on the lower part of the page.

12.8. Dashboard

12.8.1 - Dashboard overview

Accolades can display various data about the call center as a dashboard.

This layout is optimized for large screens, running without any user interaction.

A dashboard has one or more slides that will be displayed one after the other. A slide can contain indicators about a single waiting queue. If it is desired, a dashboard can have more slides for the same waiting queue.

Each slide can have one or more indicators, according to the user preferences.

The slides will be displayed one after the other at 1 minute intervals. If the dashboard has only one slide, then the indicators will be updated every minute.

The layout is very flexible and can be configured in a lot of ways. Each indicator can be individually selected, in any order.

Example: Call center with just one waiting queue

A dashboard with only one slide

The layout will be initialized with only one slide that will have 4 indicators for the waiting queue:

- Top agents based on processed calls;
- Average call duration
- Average waiting time for the callers;
- Average queue load for the last hour.

Because just one slide is displayed, the data will be updated every minute.

A dashboard with 2 slides, for the same waiting queue

The first slide will contain the following indicators:

- Top agents based on processed calls;
- Average queue load for the entire interval.

The second slide will contain the following indicators:

- Average call duration for the entire interval;
- Average call duration for the last hour;
- Average waiting time for the entire interval;
- Average waiting time for the last hour.

Because there are 2 slides displayed, Accolades will change them every minute.

Example: Call center with 3 waiting queues

A dashboard with only one slide

The layout will start with only one slide that will contain 4 indicators, for a single waiting queue (the other queues will be ignored by the dashboard):

- Top agents based on processed calls;
- Average call duration;

- Average waiting time for the callers;
- Average queue load for the last hour.

Because the dashboard has only one slide, the indicators will be updated every minute.

A dashboard with three slides, one for each waiting queue

The layout will start with only three slides (one for every queue) that will contain 4 indicators each:

- Top agents based on processed calls;
- Average call duration;
- Average waiting time for the callers;
- Average queue load for the last hour.

Because there are three slides, Accolades will switch between them every minute.

12.8.2 - Dashboard indicators

A slide from the dashboard can have one or more indicators specific to the call center workflow.

Calls

This indicator displays as a chart, the percentage of processed calls from the total number of received calls. Under the chart Accolades will display two more values, as a text: the total number of calls and the total number of abandoned calls.

Average call duration (overall)

The indicator displays the average call duration, for the entire interval. Also, on the lower part of the indicator the shortest duration and the longest duration of a call will be displayed, for the entire interval.

Average call duration (last hour)

The indicator displays the average call duration, for the last hour. Also, on the lower part of the indicator the shortest duration and the longest duration of a call will be displayed, for the last hour.

Average waiting time (overall)

The indicator displays the average waiting time for a caller (for the entire interval), before being answered by an agent. On the lower part of the indicator the shortest duration and the longest waiting time for a call (for the entire interval) will be displayed.

Average waiting time (last hour)

The indicator displays the average waiting time for a caller (for the last hour), before being answered by an agent. On the lower part of the indicator the shortest duration and the longest waiting time for a call (for the last hour) will be displayed.

Queue load

The indicator displays the queue load for the waiting queue, divided into intervals. Depending on the entire duration, an interval can stretch between 10 minutes and an hour.
The interval length is determined by Accolades, according to the length of the displayed interval. For example, if the

first shift is displayed (08:00 to 16:00) then at 09:00 Accolades will display 6 intervals of 10 minutes each. But at 15:00 the intervals will have a length of 30 minutes each.
The values are calculated using the following formula: (total call duration + total breaks duration) / (entire interval duration * number of agents).

Queue load (overall)

The indicator displays the queue load for the entire interval.
The values are computed using the following formula: (total call duration + total breaks duration) / (entire interval duration * number of agents).

Queue load (last hour)

The indicator displays the queue load for the last hour.
The values are calculated using the following formula: (total call duration + total breaks duration) / (3600 * number of agents).

Top agents

The indicator displays the top agents, sorted by total number of processed calls.
The value is calculated based on the total number of calls, regardless of the corresponding waiting queue. For example, if agent A has 10 calls on the current queue and 5 calls on another queue and agent B has 5 calls on the current queue and 15 calls on another queue then, regardless of the displayed queue agent B will always be on top of agent A.
For each agent the total number of calls for all queues and total number of calls for the current queue is displayed.

12.8.3 - Dashboard configuration and initialization

The section for configuring and starting a dashboard can be accessed from the Call Center module, by selecting the Dashboard option.

Add slide

A dashboard has one or more slides. To add a new slide the Add button has to be pressed, from the page menu. This action will display the interface to configure the properties of a new slide.
After the slide has been configured, the user has to press the Save button (to save the configuration) or the Cancel button (to cancel the operation).

Slide properties

A slide contains the following properties:
- **Name** - the name of the slide, shown on the upper part of the layout, when the dashboard is displaying this slide (for example, "Shift 1");
- **Queue** - the waiting queue for this slide;
- **From hour** - the starting hour for the interval;
- **Until hour** - the end hour for the interval;
- **indicators** - indicators that will be displayed inside the slide.

When a slide is added or edited, the interface displays 10 slots for loading indicators. These indicators will fill in the dashboard on the order of the slots. If a slot is not being used, then it will have the "Inactive" value. It is not mandatory to fill the slots continuously (for example slot 1 can be "Average call duration", slot 2 can be "Inactive" and slot 3 can be "Top agents". The dashboard will ignore the inactive slots.

Editing or deleting the slide

To edit an existing slide, the user has to press the Edit button, from the slide menu.
To delete a slide, the user has to press the Delete button, from the slide menu.

Initialization

For the dashboard to be started, at least one slide has to be defines. Also, the dashboard can not be started if there is a slide being edited.
To start the dashboard, the user has to press the launch button, placed on the bottom of the page. Accolades will start the dashboard in a new window.

12.8.4 - Dashbaord templates

To simplify the dashboard initialization process, Accolades allows for saving up to 6 templates for each administrator account. This way, when your workflow requires starting up the dashboard each day, you will not have to configure the interface each time. You will configure the layout just once, you will save the configuration as a template and, when you have to start the dashboard, you will only have to load up the template.
The page for configuring the dashboard has a section called "Templates". Using this interface, the administrator can load or save up to 6 templates.

Save template

After a dashboard layout has been configured, with one or more slides defined, the user can save the configuration by pressing the Save template button, from the "Templates" section.
After the button has been pressed, the user has to select one of the 6 slots for saving the configuration. If the user select a slot that already contains a template, then it will be overwritten.
The next screen, after the slot selection asks the user to fill in a name for the template. It is recommended to also input some remarks, to better identify the template, when loading it up later.

Load template

To load an existing template, the user will have to press the Templates button from the section with the same name.
Accolades will display the 6 slots for saving templates, from which the user has to select the required one.
If the selection has a template (the user has selected a slot that does not have the Undefined value) then Accolades will display the description of the template (if it has one) along with the Load button. By pressing the button, the template will be loaded.

Starting the template

After the template has been loaded, the user can start the dashboard in the normal way, by pressing the button placed on the lower part of the page.
If it is necessary, the user can edit the loaded configuration. The edited fields will not be saved to the template, but they will be processed by the dashboard.

12.9. Call center reports

12.9.1 - Call center reports overview

> *Call center reports can be generated only for the past 120 days (approx. 4 months). Earlier records are deleted from the database*

Accolades can generate several types of reports based on the call center activity. To enable further processing of data, the reports can be downloaded to the supervisor computer.
The report page can be accessed from the Call Center module, by selecting the Reports option.
To generate a report, the supervisor will have to first fill in the fields from the corresponding report section and after that the View button has to be clicked.

View and download

A generated report will be displayed first to the Accolades interface. If the supervisor desires, he can download the report by pressing the Download button, placed in the page menu.

Templates

Some types of reports can save up to 6 templates for certain types of data. For example, a template can be defined for all calls processed today, from 08:00 to 16:00 (first shift). Using templates, the supervisor does not have to set up the input fields each time a repetitive report is generated.
The steps for **adding a new template** are as it follows:

- To save a template, the "Template" field has to have the "Custom" value selected, for all fields to be visible;
- The supervisor will set up all the fields for generating the report;
- The fields with dates can only have relative values (today, yesterday), exact days are not allowed;
- After the fields have been set up, the supervisor has to press the Save template button, visible after the section menu button is clicked (the button near the report name);
- The supervisor will select one of the 6 slots for saving the template (if a slot with an existing template is selected, it will be overwritten);
- After selecting a location, Accolades will ask for a name and a description for the template;
- The template will be saved after pressing the Save template button, placed under the description field.

To **edit an existing template**, the supervisor has to take the following steps:

- The supervisor will select the existing template, using the "Template" field;
- After the template has been selected, the supervisor will select the "Custom" option for the "Template" field;
- The fields for the report will be displayed, with the values of the previously selected template;
- The steps from the add template section will have to be followed.

12.9.2 - Call center report: Agents activity

> *Call center reports can be generated only for the past 120 days (approx. 4 months). Earlier records are deleted from the database*

The report will generate an activity overview off all agents, for each waiting queue, for each campaign with at least one call and for each agent logged in to the call center.

For each agent logged in to the queue in the selected interval, the following data will be displayed:

- **- Agent:** the name of the agent;
- **- Active:** total time spent by the agent, logged in to the waiting queue;
- **- In call:** the duration of all agent calls;
- **- Pause - after call:** the total duration of all after call breaks, for the agent;
- **- Pause - business:** the total duration of all business breaks, for the agent;
- **- Pause - personal:** the total duration of all personal breaks, for the agent;
- **- Available:** the total time spent by the agent waiting for a call;
- **- Total calls:** total number of calls processed by the agent.

For each campaign with at least one call in the selected interval, the following data will be displayed:

- **- Agent:** the name of the agent;
- **- Total calls:** total number of calls started by the agent;
- **- Total answered calls:** total number of calls answered by the calee.
- **- In call:** the duration of all agent calls, from the campaign.

The last table of the report displays global information about the agents with some activity during the selected interval. The following columns are displayed:

- **- Agent:** given name and family name for the agent;
- **- Total calls:** Total calls the total number of calls processed by the agent (the number of incoming calls from the waiting queues added with the number of calls started by the agent from the campaigns);
- **- Total answered calls:** the total number of calls answered (the total number of incoming calls from the waiting queues added with the number of answered calls from the campaigns);
- **- In call:** The total duration of calls processed by the agent in the selected interval.

12.9.3 - Call center report: Agents pause

> *Call center reports can be generated only for the past 120 days (approx. 4 months). Earlier records are deleted from the database*

The report will display all the breaks for each waiting queue, grouped by agents.

The reports lists all agents for each queue and, for each break the duration, type, start date and hour will be displayed.

12.9.4 - Call center report: Call statistics

> *Call center reports can be generated only for the past 120 days (approx. 4 months). Earlier records are deleted from the database*

The report displays data about the calls for all waiting queues available to the supervisor.

The report is generated as a table, with the following columns:

- **- Total calls received:** total number of calls received by the waiting queue;
- **- Total calls answered:** total number of calls answered by the agents;
- **- Percent of calls answered:** the percent of answered calls, from the total number of calls received by the queue (the value is computed based on the first and second column of the table);
- **- Total waiting time:** total duration spend by the callers waiting for an available agent;

- **Minimum waiting time:** the shortest interval spent by a caller, waiting for an available agent;
- **Average waiting time:** the average interval spent by a caller waiting for an available agent;
- **Maximum waiting time:** the longest interval spent by a caller, waiting for an available agent;
- **Average waiting time:** the average interval spent by a caller waiting for an available agent;
- **Total talk time:** total duration of calls, during the selected interval;
- **Minimum talk time:** the duration of the shortest call, during the selected interval;
- **Average talk time:** the average duration of a call, during the selected interval;
- **Maximum talk time:** the duration of the longest call, during the selected interval.

12.9.5 - Call center report: After call survey

> *Call center reports can be generated only for the past 120 days (approx. 4 months). Earlier records are deleted from the database*

The section computes two types of reports:

- a report with the status of the calls initiated by Accolades to perform the after-call survey;
- a report with the answers to the survey.

The process for generating a report uses the following properties:

- **report type:** defined the analyzed data: the status of the initiated calls or the given answers;
- **waiting queue:** defines the waiting queue to be analyzed;
- **analyzed calls:** defines the call category to be processed: all calls from the queue or just the calls from the current survey (ignoring the calls from previous surveys);
- **From date:** the starting date for the report;
- **From hour:** the starting hour for the report;
- **To date:** the finishing date for the report;
- **To hour:** the finishing hour for the report.

Calls report

The report contains the status of the outgoing calls started by Accolades. It is displayed as a table with the following columns:

- **Total:** total number of initiated calls;
- **Completed:** total number of completed surveys;
- **Partial:** total number of partially completed surveys;
- **Error:** the number of calls that could not be started (for example, to an anonymous number);
- **Unavailable:** total number of calls that were started without being able to contact the destination (for example: no signal on the mobile device);
- **No answer:** the total number of calls that did not get an answer;
- **Busy:** the total number of calls with a busy signal.

Answers report

The report displays the answers given by the callers to one or more surveys, for one waiting queue. It is displayed as one or more tables, one for each survey.

A table has the following columns:

- **Question:** the text of the question, as it was filled up in the question definition;
- **PPairs of columns Key 0-9, Total 0-9:** the key column displays the text for the corresponding answer, for the given key and the total column displays the total number of answers for that key.

13. SMS

13.1 - SMS overview

Sending methods

Accolades can send SMS messages to mobile phone numbers using 3 main methods:

- Sending to arbitrary numbers;
- Sending to a CRM customer;
- Sending a large number of messages by uploading a .csv file (SMS campaign).

The SMS management is available by accessing the SMS module from the Accolades menu.

Limitations

Because of the procedures used to send messages to the mobile network carriers Accolades has a couple of restrictions for the messages:

- Messages longer than 160 characters are truncated;
- No diacritical marks are allowed (letters with diacritical marks are automatically converted to their Latin counterparts).

SMS status

The process of sending a SMS message is not instant. When a user sends a message (regardless of the method used), the SMS is just queued by the Accolades server, for further processing. The processing interval is usually just a couple of seconds but, in certain situations it can take a few minutes.

Because of this process, a message can have one of the following states:

- **Waiting:** the message has been received by the Accolades server and it is waiting to be sent to the mobile carrier;
- **Sending:** the message has been sent to the mobile phone carrier and it is waiting for a confirmation;
- **Send:** the mobile phone carrier acknowledged that the message has been received;
- **Error:** the message cannot be sent.

Warning: Not all the carriers can confirm that the message has been received by the mobile device. There are cases when the mobile phone in unreachable (for example without signal). In this case the mobile carrier will retry to send the message later. Although the message has not yet reached the mobile device, the carrier notifies the Accolades server that the message has been sent.

13.2 - Sending SMS to an arbitrary number

The procedure for sending a SMS message to an arbitrary number can be started by accessing the New SMS menu from the SMS module.

The interface will display 3 parameters to be filled up by the user:

- **Account:** the account used for sending the sms;
- **Phone number:** the phone number for the destination;
- **Message:** the message to be sent.

The message will be send after the user presses the validation button on the bottom of the page.

13.3 - Sending SMS to an CRM customer

To send a SMS to a CRM customer from the database the user has to access the customer info page and then the Identity tab.

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

In the displayed page the **Phone numbers** container shows the customer phone numbers. To send a SMS message to one of those phone numbers, the user has to click on one of the numbers and then press the SMS button. Accolades will display the fields for composing the message.
For more information check the "Identity" section inside the "CRM (customers)" chapter.

13.4 - Search SMS

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

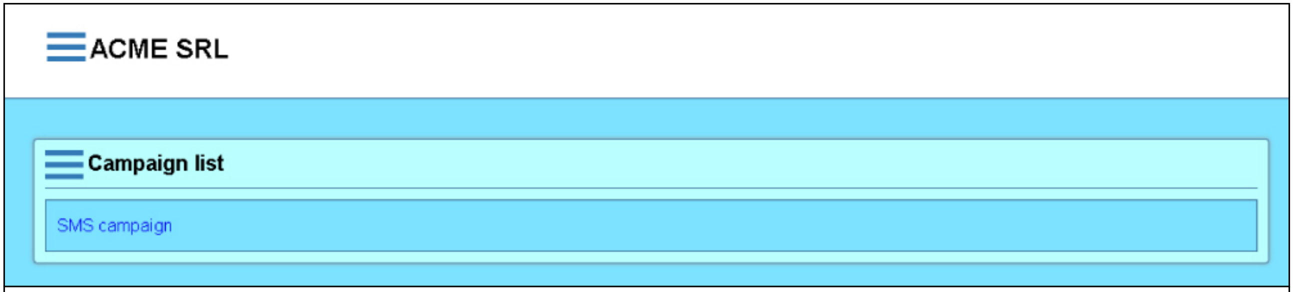
To start a search inside the sms messages stored inside the database the user has to access the Search menu from the SMS module.
The following search criteria can be set up for the search:

- **Account:** the account that sent the messages;
- **Phone number:** the destination phone number;
- **From / until:** the time limits for the messages;
- **Campaign:** the campaign that has been used for sending the messages;
- **Status:** the message status.

The values used for the search filters can be further edited from the search result page. To start the search, the user has to press the Search SMS button, operation that will load the search results page.

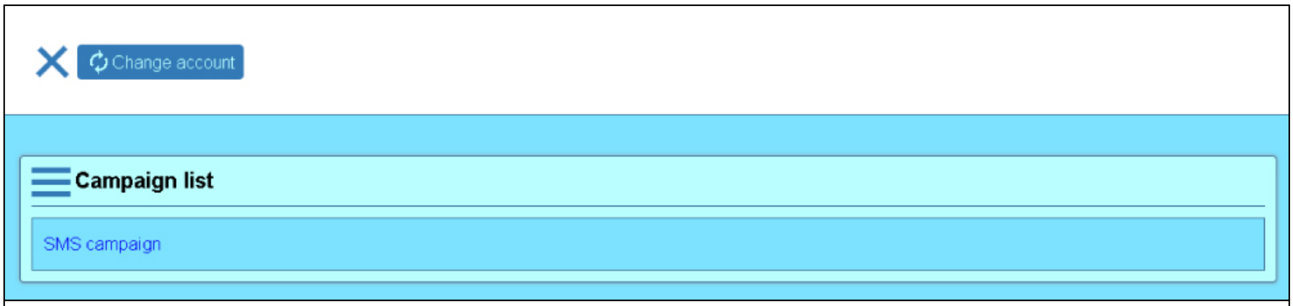
13.5 - SMS campaigns

Accolades allows for sending a large number of SMS messages, using a SMS campaign.
The SMS campaigns are managed from the Campaign list menu inside the SMS module from the Accolades menu.
By accessing the page, Accolades will display a section that contains the list of campaigns for the selected account.



Campaign list interface

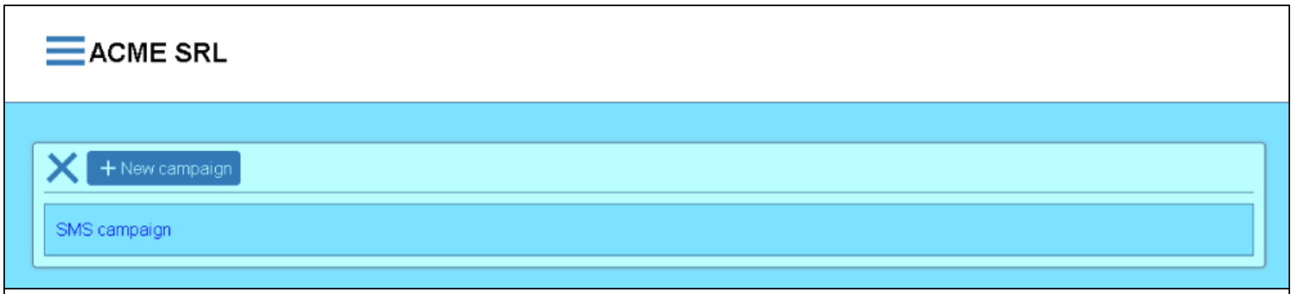
To change the account, the use has to press the Change account button from the page menu.



Change account button

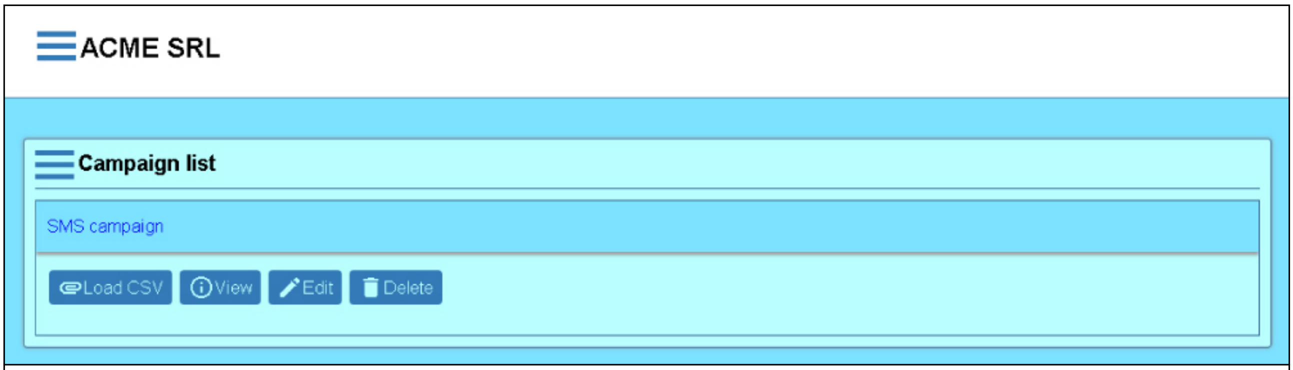
Adding / editing a campaign

To add a campaign, the user has to click the New campaign from the "Campaign list" section menu.



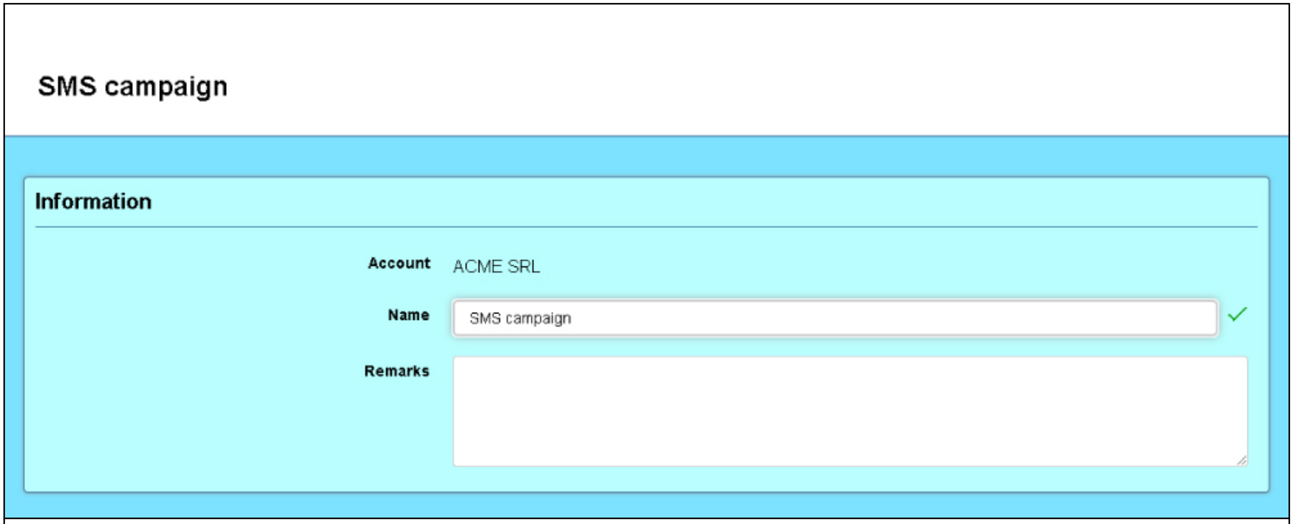
New campaign button

To edit an existing campaign, the administrator must press the Edit button, visible after the campaign has been selected.



Campaign options

The interfaces for adding and editing a campaign are similar, as shown in the image below.



Adding / editing a campaign

Accolades will then display the interface for setting up the properties of the campaign:

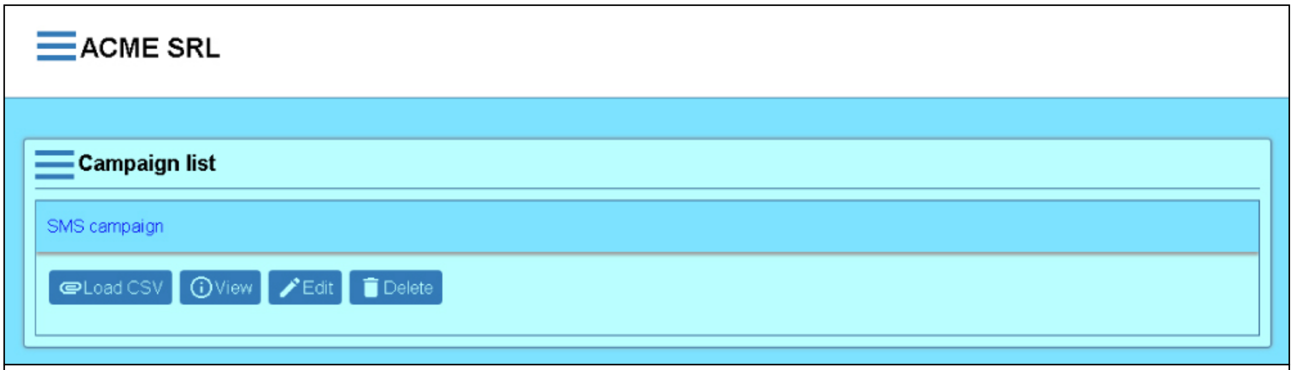
- **Name:** the name of the campaign, as it will be displayed to the Accolades users;
- **Remarks:** (optional) remarks for this campaign.

To confirm or cancel the process, the user has to press one of the buttons placed on the bottom of the screen.

After the procedure has been completed, Accolades will load the campaign list for the current account.

Delete

To delete the campaign the user has to press the Delete button, visible after the user clicks on the campaign name.



Campaign options

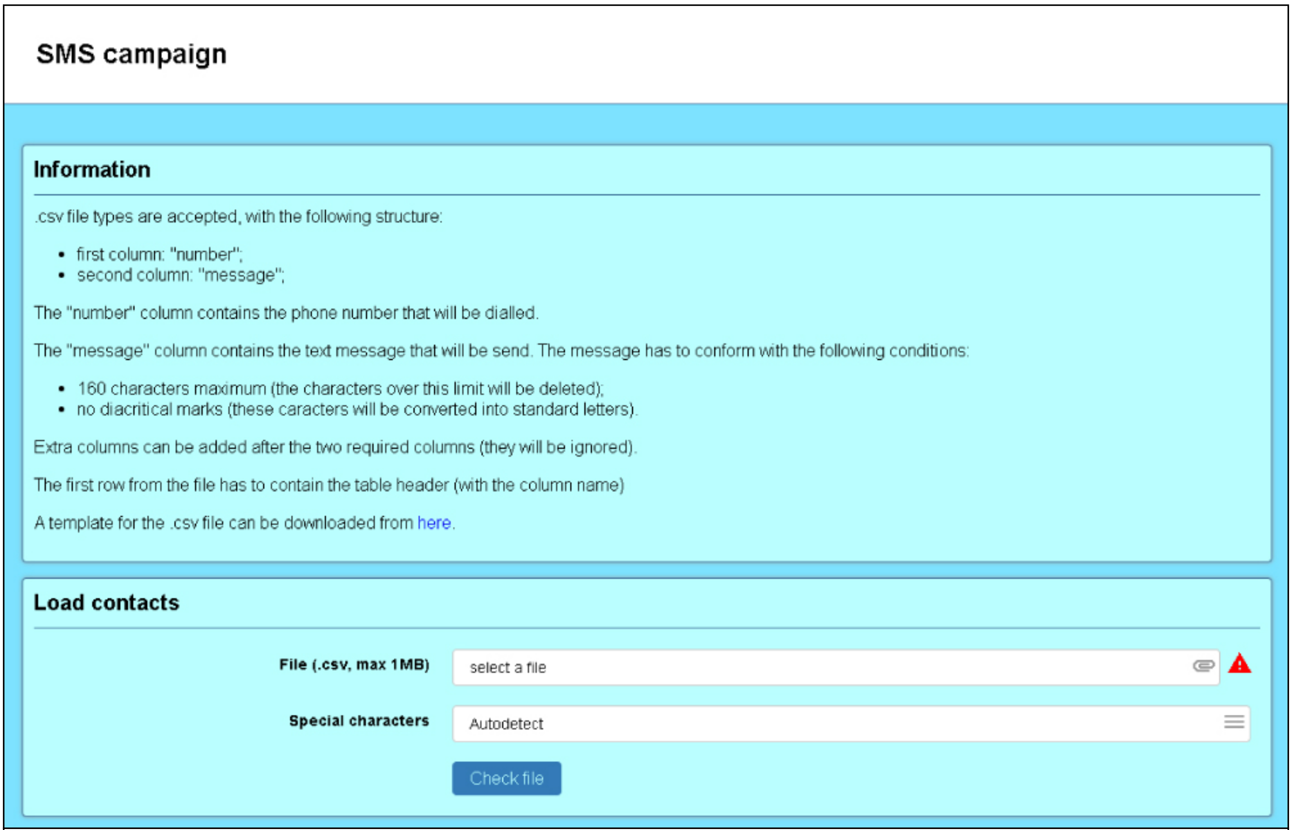
When a campaign is deleted the messages are NOT deleted but will be unlinked from any campaign.

Loading a .csv file

Accolades allows uploading a .csv file (created using a spreadsheet application, like Excel) to one of the existing SMS campaigns. Accolades will parse the content of the file and will extract the messages that will be send.

File selection

To upload a file, the user has to first click the Load csv button, visible after clicking on the campaign name. Accolades will then display a page with two sections: info about the csv file structure and the form for uploading.



CSV uploading interface

The .csv file must have the following structure:

- First column will be named "number" and it will contain the phone number where the message will be sent;
- The second column will be named "message" and will contain the message that will be sent to the phone number from the first column;
- Any number of additional columns (will be ignored by Accolades);
- File size cannot exceed 1MB.

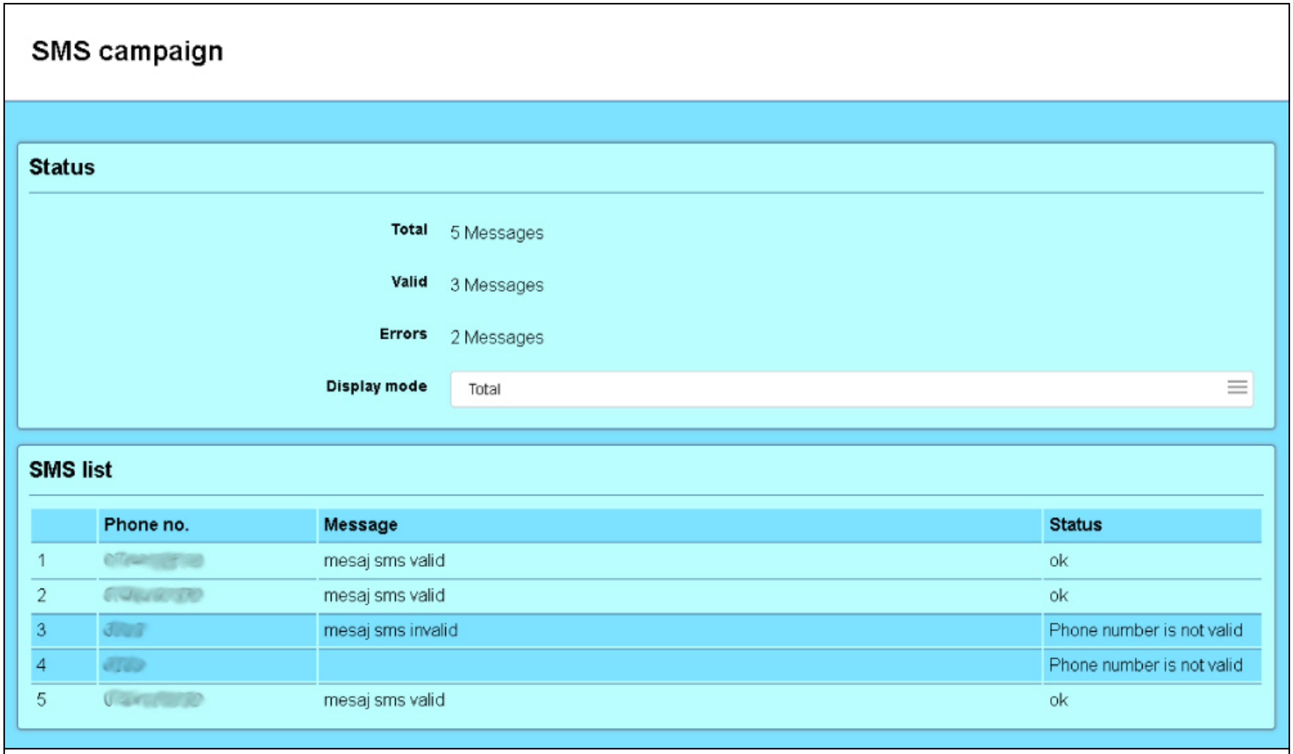
If it is the case, the user can download a template for the file, from the page.

The file will be selected using the form on the lower part of the page and uploaded to the server, using the Check file button.

Accolades will parse the file and display the results to the user, using the next window. The messages are not queued for transmission yet, so that the user can have a final look at the file.

Checking the process result

After the file has been parsed, Accolades will display the result.



Results

The following information will be presented:

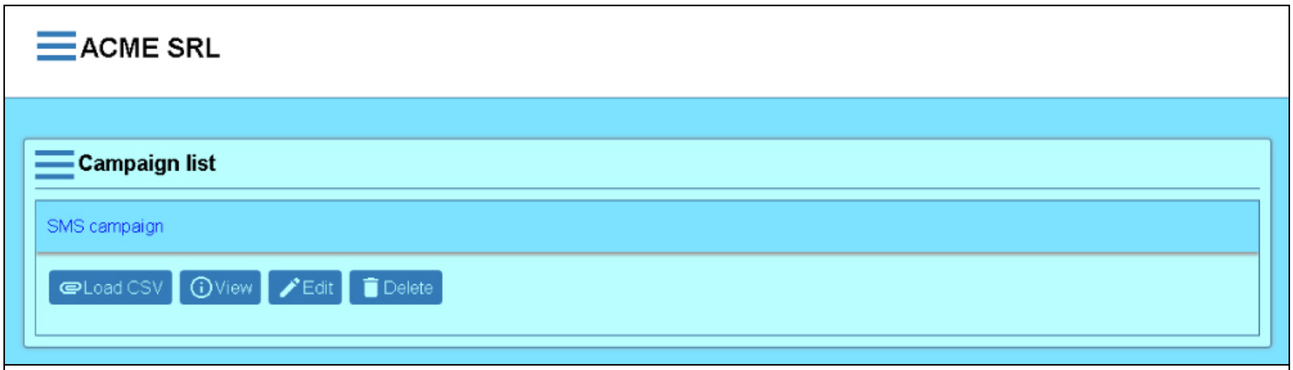
- Total number of contacts;
- Total number of valid contacts (that will be queued for sending);
- Total number of invalid contacts (only if there are any);

All valid messages will be displayed to the user for a final checkup. If it is the case Accolades will display the contacts using multiple pages.

If the user finds the information ok, then the messages can be queued for sending using the validation button on the bottom of the screen.

View contacts

The View button (visible after the user pressed the campaign name) will start a search in all SMS messages, using the campaign as a filter (see the "Search" section of this chapter).



Campaign options

14. CRM (Customers)

14.1 - CRM module overview

The customers module enables basic data management features for the account customers: name and surname, date of birth, phone numbers, address, call history with individual remarks for each call.

You can use the module in two ways:

- From the Customers menu.
- during a call, from the Agent menu, inside the Call Center module.

Usually, the Customers module is used for general management procedures: searching, adding, deleting etc.

The Call Center interface is used by the agents registered to waiting queues. When an agent receives a call, Accolades will search the phone number and will display info about the caller. If the phone number is not found then the agent can add the caller to the database. The call center interface is optimized for operational speed.

The call center interface is explained in the "Call center" chapter, the "Agent" section.

14.2 - Add CRM customers from a CSV file

Accolades allows for a fast add of a batch of customers, from a .csv file (a file format that can be managed using spreadsheet applications like Excel).

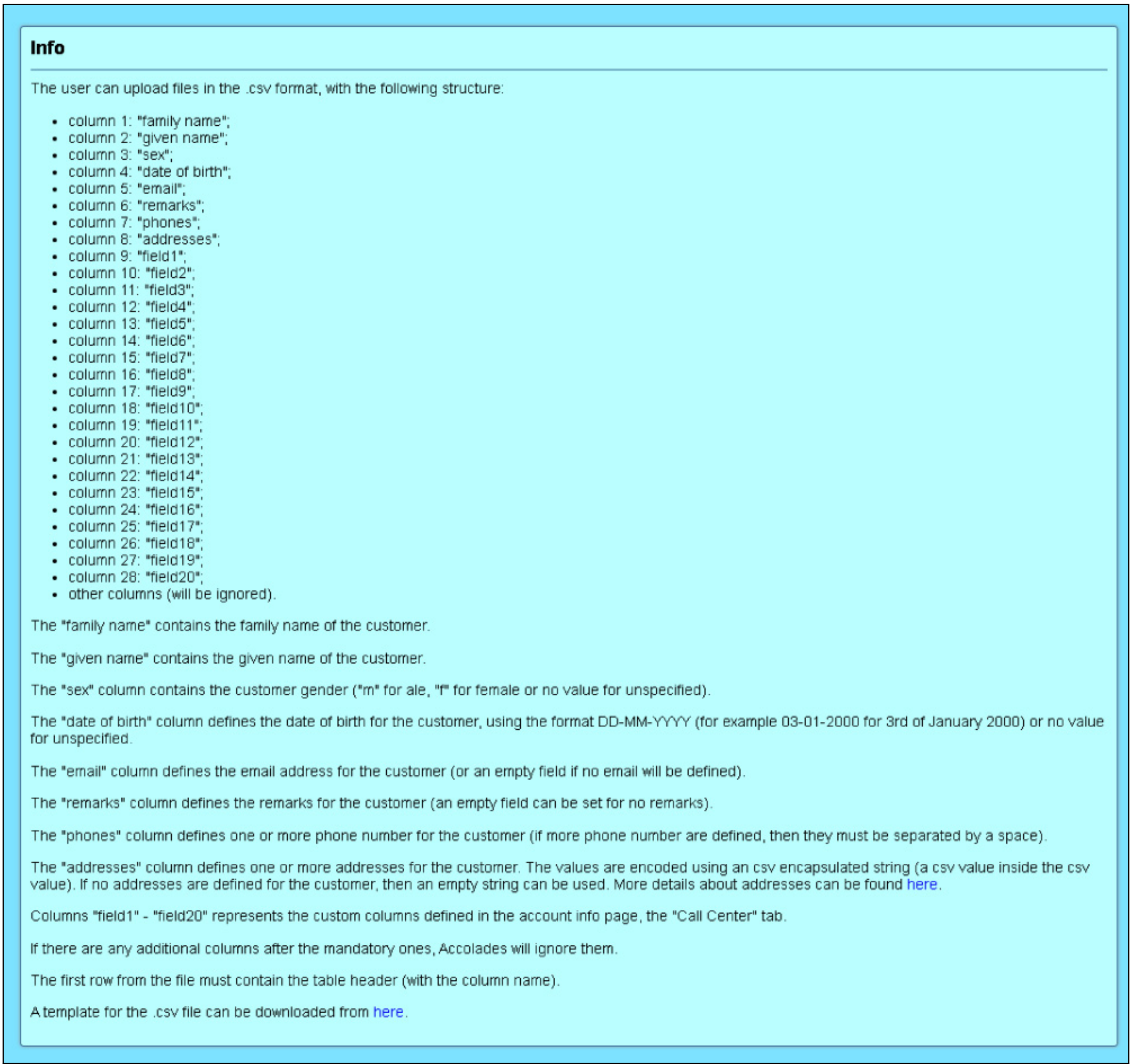
The process for adding multiple customers to the database can be started from the Customers module, by selecting the Load csv option.

To complete an upload process, the administrator has to go through the following steps:

- Creating and uploading the .csv file;
- File processing and result validation;
- Adding the valid results to the database.

Creating and uploading the .csv file

The first page displayed to the administrator has on the upper part, some info about the expected structure for the .csv file to be uploaded. If it is the case, the administrator can download a file with a table header, using the link provided at the end of the info section.



Info

The user can upload files in the .csv format, with the following structure:

- column 1: "family name";
- column 2: "given name";
- column 3: "sex";
- column 4: "date of birth";
- column 5: "email";
- column 6: "remarks";
- column 7: "phones";
- column 8: "addresses";
- column 9: "field1";
- column 10: "field2";
- column 11: "field3";
- column 12: "field4";
- column 13: "field5";
- column 14: "field6";
- column 15: "field7";
- column 16: "field8";
- column 17: "field9";
- column 18: "field10";
- column 19: "field11";
- column 20: "field12";
- column 21: "field13";
- column 22: "field14";
- column 23: "field15";
- column 24: "field16";
- column 25: "field17";
- column 26: "field18";
- column 27: "field19";
- column 28: "field20";
- other columns (will be ignored).

The "family name" contains the family name of the customer.

The "given name" contains the given name of the customer.

The "sex" column contains the customer gender ("m" for ale, "f" for female or no value for unspecified).

The "date of birth" column defines the date of birth for the customer, using the format DD-MM-YYYY (for example 03-01-2000 for 3rd of January 2000) or no value for unspecified.

The "email" column defines the email address for the customer (or an empty field if no email will be defined).

The "remarks" column defines the remarks for the customer (an empty field can be set for no remarks).

The "phones" column defines one or more phone number for the customer (if more phone number are defined, then they must be separated by a space).

The "addresses" column defines one or more addresses for the customer. The values are encoded using an csv encapsulated string (a csv value inside the csv value). If no addresses are defined for the customer, then an empty string can be used. More details about addresses can be found here.

Columns "field1" - "field20" represents the custom columns defined in the account info page, the "Call Center" tab.

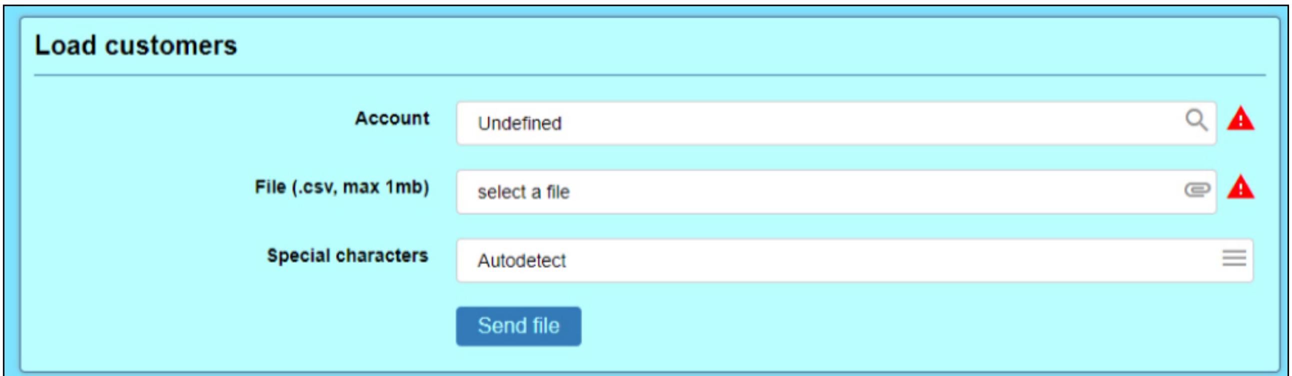
If there are any additional columns after the mandatory ones, Accolades will ignore them.

The first row from the file must contain the table header (with the column name).

A template for the .csv file can be downloaded from here.

File structure

To start the upload process, the administrator has to select the account where the customers will be added, from the "Account" field. Also, the file to be uploaded will be selected using the "File" input, from the "Load customers" section, placed on the bottom of the page.

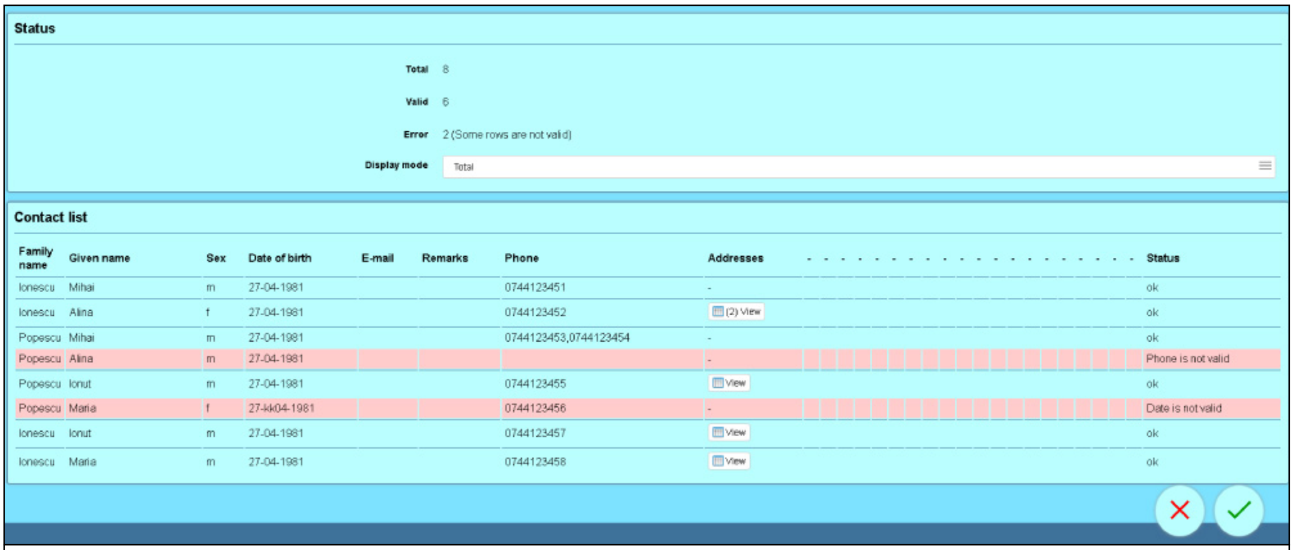


File upload form

CSV file types are using 2 types of special characters: a value separator (semicolon or comma) and an encapsulating character (a double quote) used for enveloping the values containing the value separator. If the **Special Characters** option is set to Autodetect then Accolades will try to detect the characters directly from the file. The Manual option allows the user to directly select the values.
The file will be uploaded to the server, after pressing the Send file button.

.csv file processing and checking the results

After the file has been sent to the server, Accolades will first check the file structure. If the file does not comply with the requirements from the first step (info section) then the interface will display an error (along with a reason).
If the file structure is correct, Accolades will check each row of the file. The interface will display a summary of the validation process: the total number of records processed, the number of valid records and the number of invalid records. For a record to be valid, each column format has to comply with the data presented on the first page of the procedure. Also, **the customer has to have at least one phone number defined**.
Keep in mind that at this moment the customers have not been added to the database, but just displayed for validation purpose.



Customer validation

The rows with validation errors (that will not be added to the database) are being displayed using a red background. Using the "Display mode" option, the administrator can view all records, just the valid rows or just the rows with errors.

Adding the valid results to the database

After the rows have been checked, the administrator can load the valid customers to the database or he can cancel the operation, by using the validation button or the cancel button from the lower part of the page.
If the validation button has been pressed, Accolades will start to add the customers, while displaying the procedure status.

14.3 - Add, edit, delete CRM customers

The page for **adding** a new customer is called Add and it can be accessed from the Customers module.

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

To **edit** an existing customer, the Edit button from the Identity tab has to be clicked (the tab can be found in the client info page).
To **delete** an existing customer, the Delete button from the Identity tab has to be clicked (the tab can be found in the client info page).

14.4 - Search CRM customers

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

To start a search, the administrator has to access the Search option from Customers menu.
The starting page will display the following filters:

- the account where the customer will be searched;
- the name of the customer;
- the surname of the customer;
- the phone number.

To start the search the Search customers button has to be pressed.

14.5 - CRM customers search results

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

After a search has been started Accolades will display the search results. The results will be stored in the current session and can be accessed anytime from the Customers module, by selecting Search results option.
On the upper side of the page Accolades will display the total number of results that are matching the search criteria, along with the display order. The inactive filters are hidden and can be displayed by pressing the arrow near the total number of results value.
The results are rendered as a list. For viewing additional info about the element, along with a button to access the customer info page, the user has to click on the customer name.
Accolades will display a total of 10 results per page. To switch between pages, the controls placed on the bottom of the page will be used.

14.6 - CRM identity

> *Accolades displays data about an element using a page called "Element info" (ex: Administrator info, Account info, Virtual fax info etc.). To access an info page the administrator, usually, has to start a search in the required module (ussualy by selecting the "Search" option from the module menu) then access the element info from the search result page.*

The Identity tab allows for viewing and editing the identity related data about the customer.
For a better management, the properties are grouped into several sections.

- Personal info;
- Phone numbers;
- Addresses.

Personal info

The section contains info about the identity of the customer. If an email address is defined for this customer then the user can press on it, to start composing an email (an external e-mail software is required).

Phone numbers

The section contains the phone numbers for this customer. A phone number has two properties the phone number and a generic name (ex: home, work, mobile etc.).
To **add** a phone number the user has to click the Add button, available in the Phone numbers section menu.
The phone number has to be unique at an account level. You can not have two customers with the same phone number.
To **edit** a phone number, the Edit button has to be pressed, displayed after clicking on the phone number.
To **delete** a phone number, the Delete button has to be pressed, displayed after clicking on the phone number.
If the user has a phone device selected (from the preferences menu, phone option) then Accolades will display the Call button, for the click to call feature. When pressed, this button will start the procedure for calling the customer:

- The user phone will ring;
- The user has to answer the call;
- After the user has answered, Accolades will dial the customer;
- The call is started.

If the SMS module is active on the account that the customer belongs to then the administrator can send a SMS message to one of the phone numbers for the customer, by pressing the SMS button.

Addresses

The section contains a list with the addresses defined for this customer. An address has several properties along with a generic name (like home, work etc.).
To **add** an address the Add button has to be pressed (available in the Address section menu). After clicking on the button the interface for adding a new address will be displayed.
To **edit** an address the user has to press the Edit button, displayed after the generic name of the address has been clicked.
To **delete** an address the user has to press the Delete button, displayed after the generic name of the address has been clicked.

14.7 - CRM customer call list

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

The Calls tab allows for viewing the call history for the selected customer.
On the upper side of the page Accolades will display the total number of results that are matching the search criteria, along with the display order. The inactive filters are hidden and can be displayed by pressing the arrow near the total number of results value.

14.8 - Customer SMS list

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

The SMS tab allows for viewing the SMS history for the selected customer.
On the upper side of the page Accolades will display the total number of results that are matching the search criteria, along with the display order. The inactive filters are hidden and can be displayed by pressing the arrow near the total number of results value.

15. Calls details

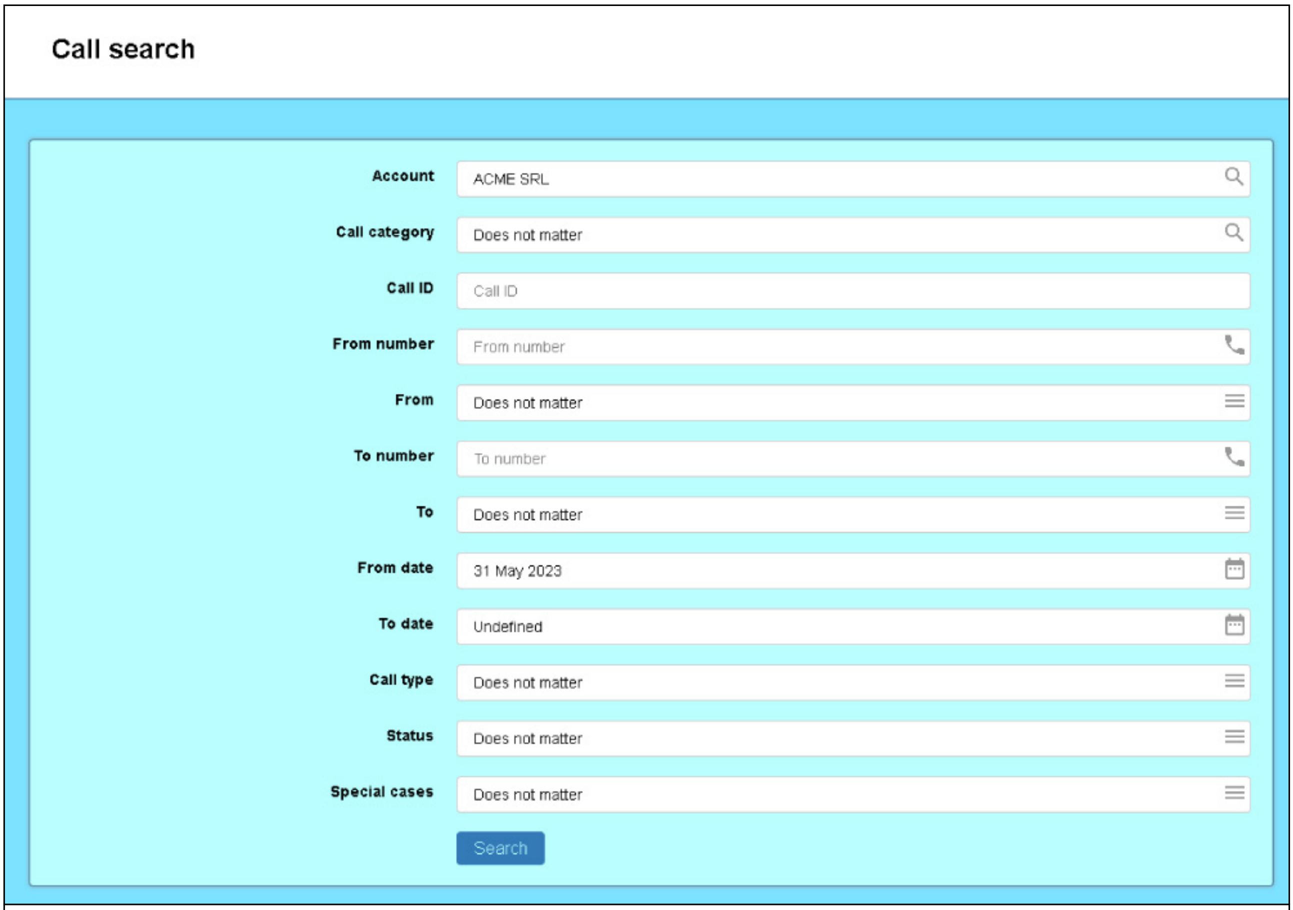
15.1 - Call details records search

> *The procedure for searching entities managed by Accolades is similar to all modules inside the application. Because of this, a detailed description of the procedure for searching the database (not depending on the search result type) has been done on the first part of the documentation, inside the chapter. Interface - Searches*

Using this section an administrator can view all calls processed by the accounts, where he has credentials.

Start a search

To start a new search within the call records, the administrator needs to access the Call details (Beta) section, from the app menu, then click on the Search button.



Call records search interface

Available filters

The results can be filtered, using the following options:

- **Account:** If enabled, then only the calls from the selected account will be shown. Otherwise, all calls from all accounts (according to the administrator credentials) will be available.

- **Call category:** The filter is available only if an account is selected. The administrator can select one of the call categories defines on the selected account (using the Call Center tab, inside the account info page).
- **Call ID:** Each call processed by the server has an unique ID, formatted as number.number (ex: 1687969668.949). Using this filter an existing call, with a known identifier, can be quickly viewed.
- **From number:** The phone number from where the call started.
- **From:** The Accolades entity (user, waiting queue, fax etc.) from where the call started.
- **To number:** The destination phone number.
- **To:** The Accolades entity (user, waiting queue, fax etc.) where the call has been sent.
- **From date:** The date from where the search will start (by default this filter is enabled, going back one month).
- **To date:** The last date of the searched calls.
- **Call type:** The call type as one of the values: inbound (from an external number to an account), outbound (from an account to an external destination), local (a call inside an account).
- **Status:** The final status of the call: answered, no answer, busy, error.
- **Special cases:** The following options are available: error (ex: invalid phone number), voicemail (the call reached a user voicemail), time condition (the call was blocked from the regular path, due to an active time condition, like outside working hours), channel limit exceeded (the call has been blocked as the maximum concurrent calls limit, purchased for the account, has been reached), account suspended (the account has been suspended, due to various reasons, usually unpaid invoices).

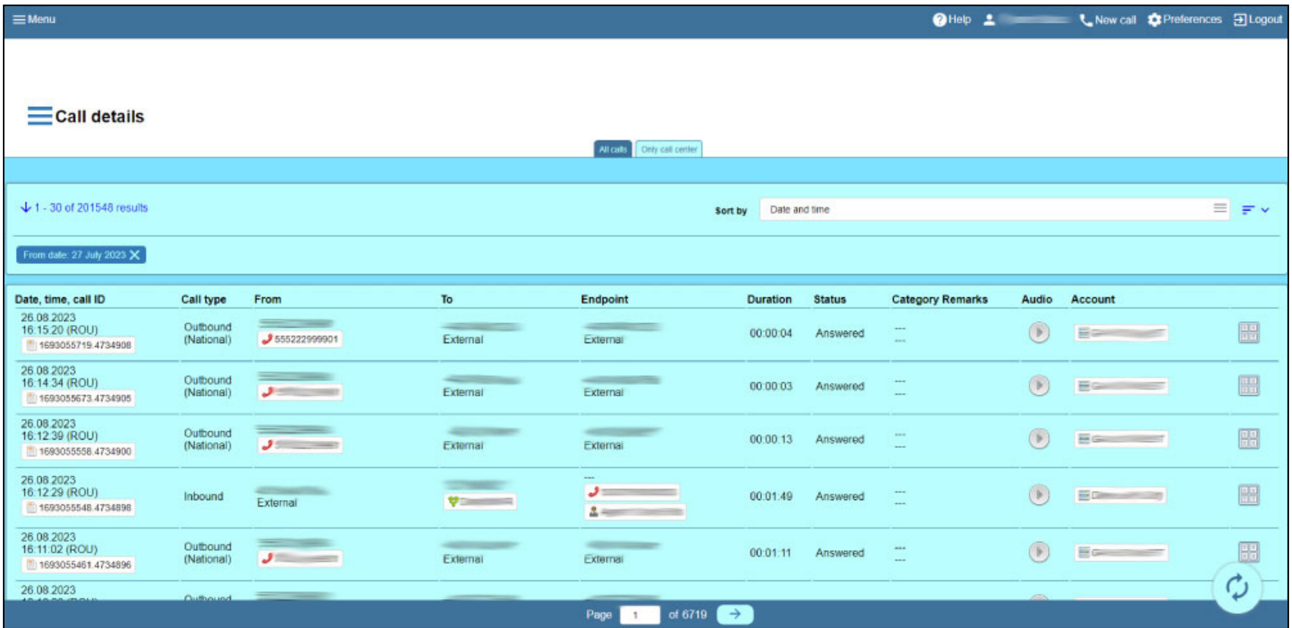
Search results

After a search has been started, Accolades will show the results, as a table. Above the filters section two tabs are available: All calls and Call center .

Using the Download button from the page menu the administrator can save the search results, as a .csv file.

"All callse" tab

The All calls tab will show all processed calls.



Search results â€“ All calls

The results table contains the following columns:

- Date, time, call ID: Date and time of the call, along with the call ID, unique inside the Accolades system.

- Call type: The call type: local (a call inside the account), inbound (a call from an external source towards an account), outbound (a call from an account to an external destination).

- From: Info about the entity that started the call. For outbound calls, the column will display the phone number, the user (device) and the administrator / agent (if available) that started the call. For inbound calls the caller ID is shown, along with the CRM contact (if available).

- To: Info about the initial destination of the call. For inbound calls (started outside the account) the column will display the destination phone number (VoIPIT number), the entity that was called (user, IVR, queue etc.) along with the linked administrator (if available). For outbound calls the destination phone number will be displayed, along with the linked CRM contact for that number (if available).

- Endpoint: The last entity that processed the call. For outbound calls, usually this column is identical to the "to" column. For inbound calls the column has a different value when the call is diverted. For example, a call is first processed by an IVR then redirected to a waiting queue. In this case, "to" column will display the IVR and the endpoint will display the waiting queue.

- Duration: The call duration, formatted as hours:minutes:seconds.

- Status: Final status of the call: answered, no answer, busy, error.

- Category Remarks: Call category (if defined) and remarks about the call. These properties can be defined during the call, by the agent or later, from the call info page.

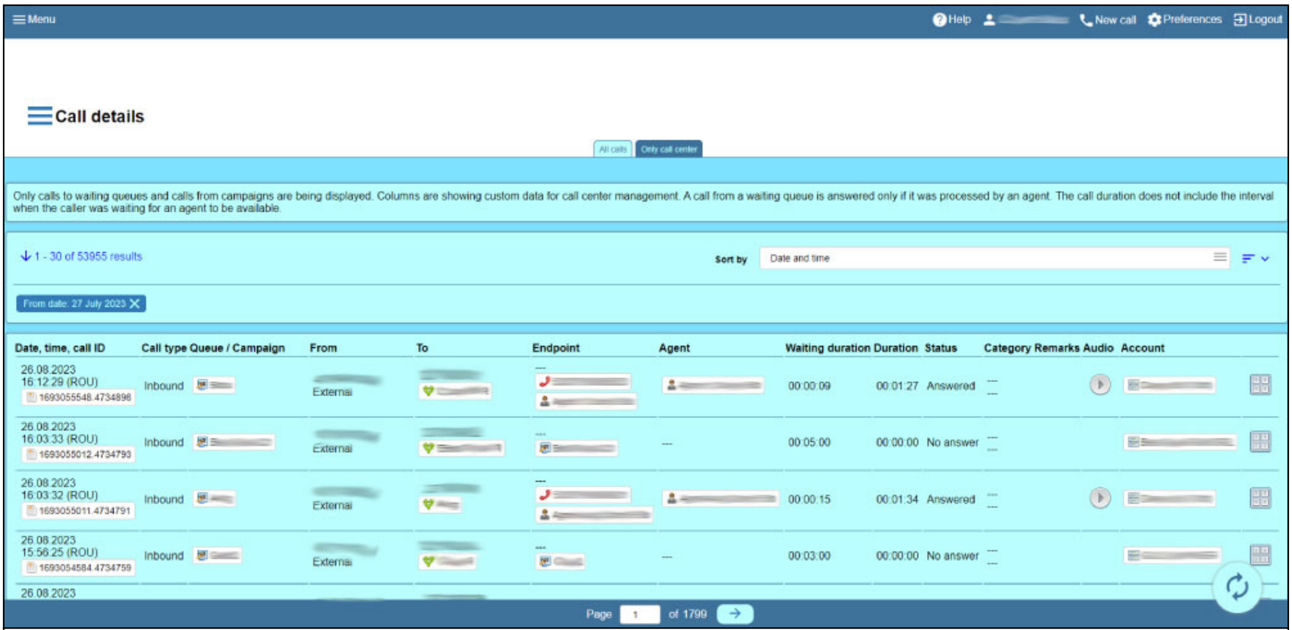
- Audio: If the call has an attached audio file, then, using this option the administrator can listen or download the recording (credential required).

- Account: The account that processed the call.

- Options: A contextual menu with various options for the call.

"Call center" tab

The Call center tab will only display calls from a waiting queue or from a campaign. Any other calls are hidden. Also, a call from a waiting queue is displayed as answered only if an agent answered it (the answer event from the IVR or waiting queue is ignored).



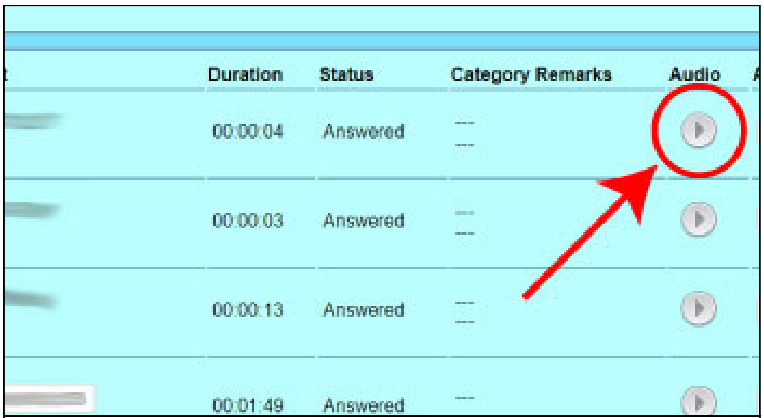
Search results â€“ call center

The results table contains the following columns:

- **Date, time, call ID:** Date and time of the call, along with the call ID, unique inside the Accolades system.
- **Call type:** The call type: local (a call inside the account), inbound (a call from an external source towards an account), outbound (a call from an account to an external destination).
- **Queue / Campaign:** The waiting queue or the campaign of the call.
- **From:** Info about the entity that started the call. For outbound calls, the column will display the phone number, the user (device) and the administrator / agent (if available) that started the call. For inbound calls the caller ID is shown, along with the CRM contact (if available).
- **To:** Info about the initial destination of the call. For inbound calls (started outside the account) the column will display the destination phone number (VoIPIT number), the entity that was called (user, IVR, queue etc.) along with the linked administrator (if available). For outbound calls the destination phone number will be displayed, along with the linked CRM contact for that number (if available).
- **Endpoint:** The last entity that processed the call. For outbound calls, usually this column is identical to the "to" column. For inbound calls the column has a different value when the call is diverted. For example, a call is first processed by an IVR then redirected to a waiting queue. In this case, "to" column will display the IVR and the endpoint will display the waiting queue.
- **Agent:** The Accolades agent that processed the call..
- **Waiting duration:** The time the caller waited for an available agent (only valid for waiting queues).
- **Duration:** The call duration (the time that the caller waited for an available agent is not included).
- **Status:** The final status of the call: answered, not answered, busy. Warning! For waiting queues, a call is answered only if it has reached an agent.
- **Category / Remarks:** Call category (if defined) and remarks about the call. These properties can be defined during the call, by the agent or later, from the call info page.
- **Audio:** If the call has an attached audio file, then, using this option the administrator can listen or download the recording (credential required).
- **Account:** The account that processed the call.
- **Options:** A contextual menu with various options for the call.

Listen to call recordings

Audio files with the call record are available by pressing the button from the "Audio" column.

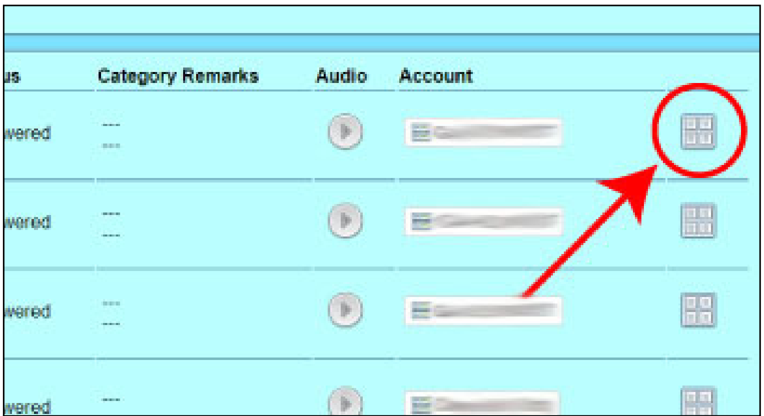


Listen to a call recording

Keep in mind that the call recordings option is only available when enabled by VoIPIT. Also, the storage space is limited, so older recordings will get overwritten when new files are created.

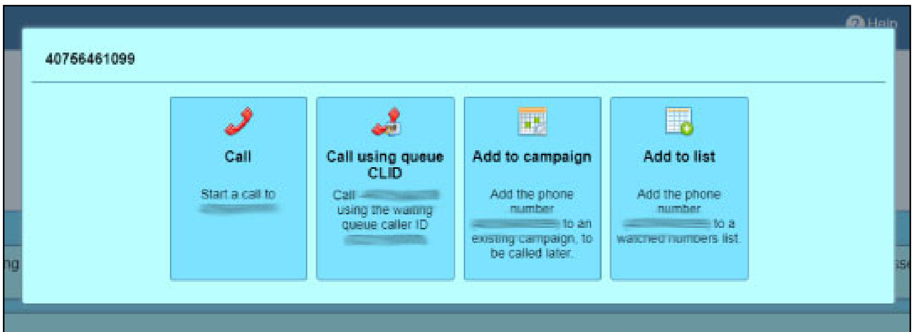
Additional options

The last column of the table contains a menu with some options for the call.



Menu toggle button

After the button has been clicked, Accolades will display the available options for the call.



Contextual menu

The following operations can be shown:

- Call: a new call will start, from the administrator phone to destination number;

- Call using the queue CLID: (only for calls received by a waiting queue) a new call will start, from the administrator phone to destination number, using the waiting queue caller ID;

- Add to campaign: adds the phone number to an existing campaign;

- Reschedule call: (only for calls belonging to a campaign) the call will be rescheduled at a later date, in the same campaign;

- Add to list: the phone number will be added to a number list.

16. Server

16.1 - Server identity

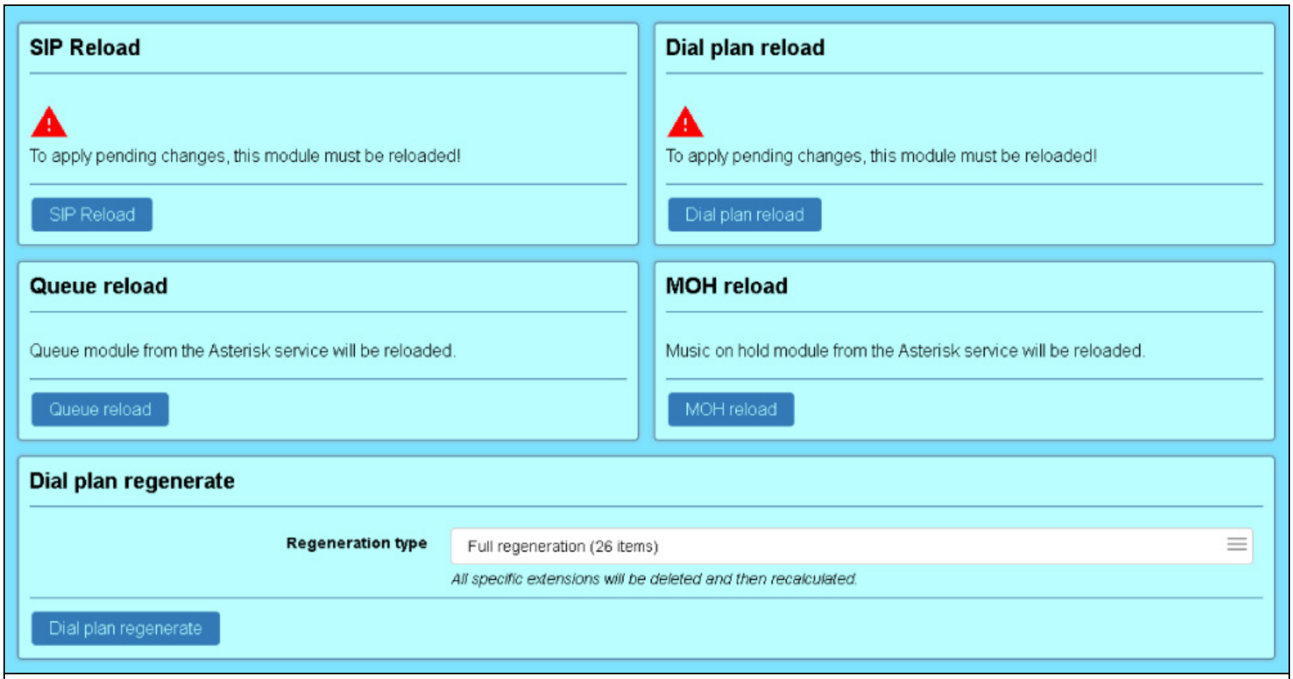
This page displays info about the server identity inside the Accolades system. The page can be accessed from the main menu, by fist selecting the Server menu and then the Identity section.

- **Identity type:** The identity type for the server owner: a person or a company.
- **Name / Family Name, Given Name:** The name of the company or the name of the owner of the server.
- **E-mail:** The email address for the server owner.
- **Server name:** The generic server name, as it is displayed inside the Accolades system.
- **Server address:** The server address, as an IP address or a FQDN (ex: client.voipit.ro).

The data displayed inside this section can not be edited from the browser. The data is stored inside the server configuration file: (`/etc/accolades/configurare.ini`).

16.2 - Asterisk commands

Using this section, an administrator can issue Asterisk commands to the server. The page for these commands can be accessed from the main menu, by selecting the Server section and then the Asterisk commands submenu.



Available commands

The following commands can be issued:

- **SIP reload:** The Asterisk server will reset the SIP module (if an exclamation mark is displayed then the module needs to be restarted, to apply pending changes);
- **Dial plan reload:** The Asterisk server will reload all instructions for the Dial Plan module (if an exclamation mark is displayed then the module needs to be restarted, to apply pending changes);
- **Queue reload:** The Asterisk server will reload all data related to the waiting queues (if an exclamation mark is

displayed then the module needs to be restarted, to apply pending changes);

- MOH reload: The Asterisk server will reload all data related to the "Music on hold" instances (if an exclamation mark is displayed then the module needs to be restarted, to apply pending changes);

- Dial plan reload: the entire dial plan (for the entire server) will be deleted and a new set of instructions will be generated, based on the database settings.

16.3 - Server status

The page contains data about the server status. It can be accessed from the main menu, by selecting the Server section and then the Status submenu.

The following data is displayed:

- Storage space: The section contains data about all the mounted partitions inside the operating system.

- Processor load: Values for the last minute, last 5 minutes and the last 15 minutes are displayed.

- Uptime: The uptime for the server running the Accolades client.

- Memory: Load status for the server RAM..

16.4 - Time conditions (server)

> *A detailed description for the time conditions (regardless of the module that implements it: IVR, waiting queues, regular phones) can be found inside the Time Condition section of this manual.*

Accolades allows the administrator to define some sets of days, for the time conditions, available to all accounts. This page can be accessed from the meniul aplicatiei, by selecting the Server option and then the Time condition submenu.

Add

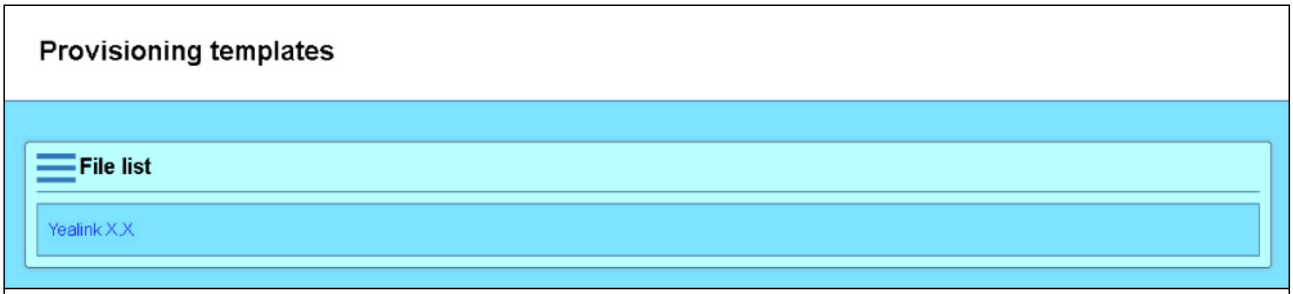
To add a new set of days, at a server level the administrator must press the Add button, available inside the main container menu.

View set info

The info page for a set of days can be viewed by pressing the Info button, available after the user clicks on the name of the set.

16.5 - Provisioning

The module allows the administrator to set up templates for provisioning files, used for devices configuration. It can be accessed from the app menu, by selecting the Server menu and then the Provisioning submenu.

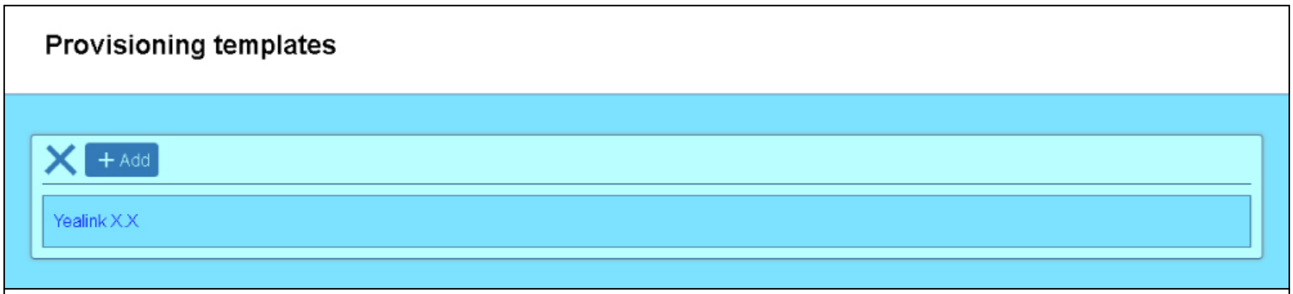


Templates interface

The interface allows for templates editing, templates that will be later used for user provisioning (see the Provisioning tab). The templates can include variables that will be updated by Accolades, with user values, when the template is used.

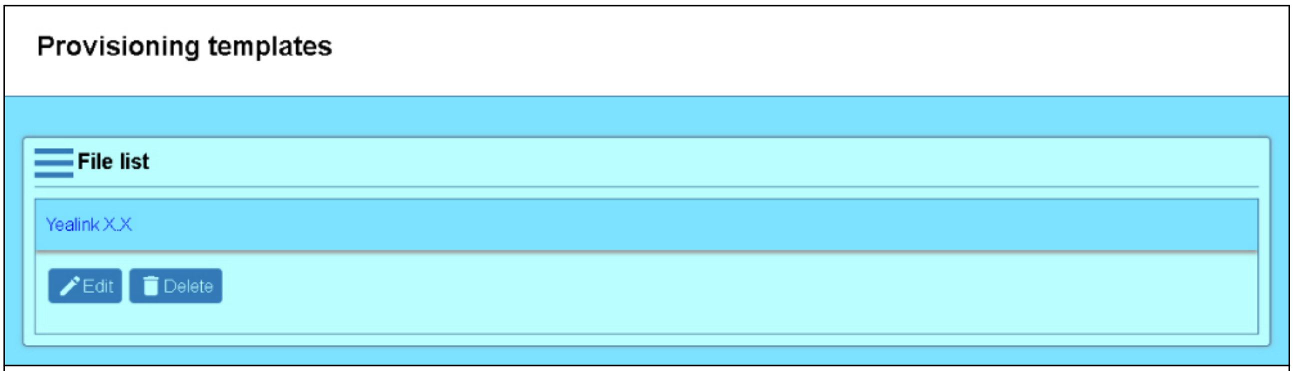
Add / Edit

To add a template, the user must press the Add button, from the file list panel.



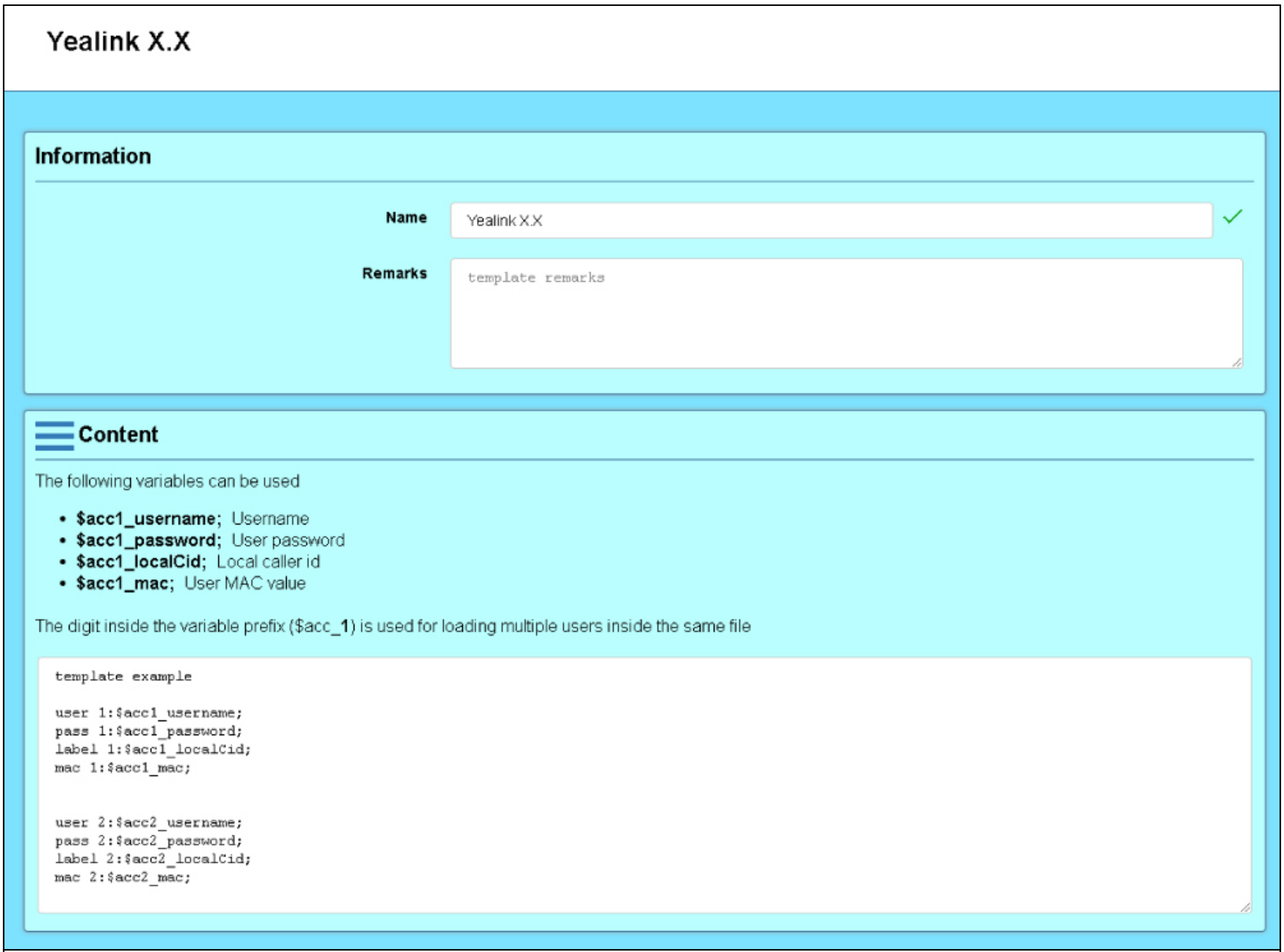
Add button

To edit an existing template, the administrator must press the Edit button, displayed after selecting a template.



Edit button

The interface for template editing is shown below.



Edit interface

The interface is divided into two sections: template info and template content.

The info panel allows the administrator to define a name and a short description for the template.

To load the template from an external file, the Upload button can be used, inside the "Content" panel menu.

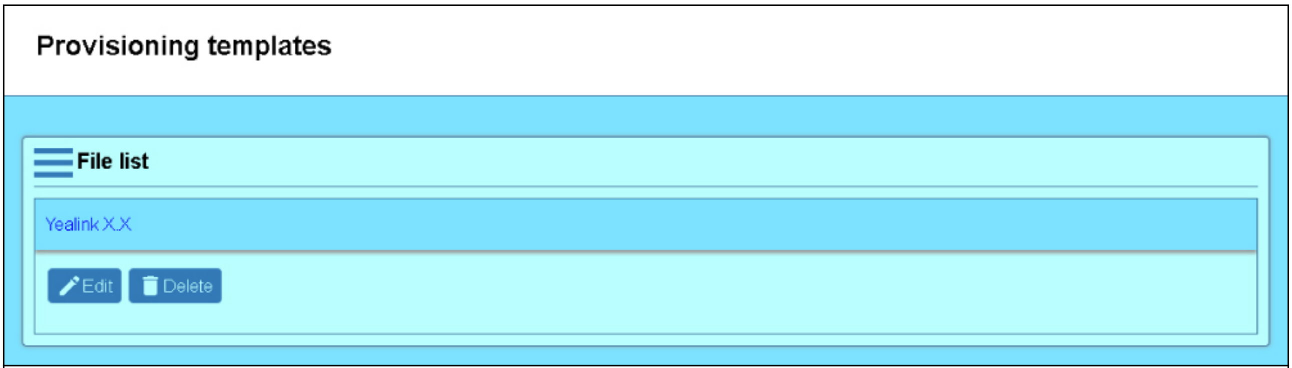
The content from the template can be edited from the dedicated section. The following parameters can be used:

- **$acc1_username;:** The username of the user;
- **$acc1_password;:** The password of the user;
- **$acc1_localCid;:** The local number assigned to the user;
- **$acc1_mac;:** The MAC address of the user.

The digit inside the variable name defines a parameter set. A template can handle multiple parameters sets, for multiple users. For example, if a template for a device with 3 phone lines is created, then the template will contain 3 parameters sets: `$acc1_###`, `$acc2_###`, `$acc3_###`. When a provisioning file is generated, based on this template, the administrator can select the phone line, to be assigned to each user.

Delete

To delete a template, the administrator must push the Delete button, available after a template is selected.



Delete button

16.6 - Monitored IP

Accolades server temporary stores all the authentication requests with invalid credentials and, also the HTTP requests for invalid pages (requests ended with 404 status). Using this module, the server manages a brute force attack protection.

If the number of invalid requests passed a defined threshold, then the server will reject any new request from the monitored IP for a certain amount of time.

The page can be accessed from the main menu, by selecting the Server section and then the Monitored IP submenu.

The monitored IPs are displayed as a list. The administrator can click on an element to display detailed information about the entry. A monitored IP has the following properties:

- **Status:** The entry status: "still active" (the requests from that IP are still allowed) or "blocked" (the server will reject any new connection from that IP).
- **API:** The number of invalid requests left until the IP will be blocked.
- **Frontend:** The number of invalid authentication requests to the Accolades server, left until the IP will be blocked.
- **Backend:** The number of invalid HTTP requests (ended with status 404) until the IP will be blocked.
- **Expires on:** The time limit for the monitoring process (if no invalid requests are made until this threshold then the monitoring process will stop)

If the administrator has the necessary permissions then an entry can be deleted by pressing the Delete button, available after an IP is selected.

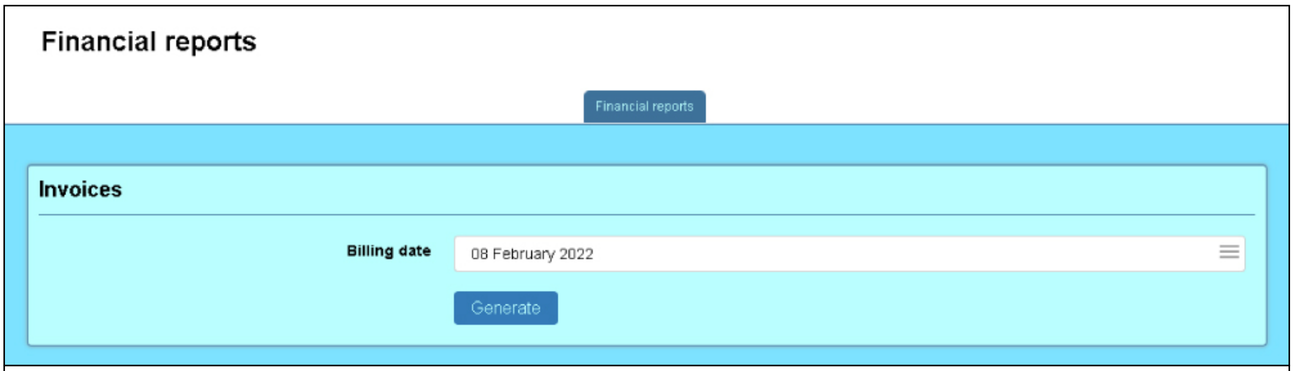
16.7. Reports

16.7.1 - Global reports

This module is used for generating global reports, at a server level. The page can be accessed from the main menu, by fist selecting the Server menu and then the Reports section.

16.7.2 - Financial reports

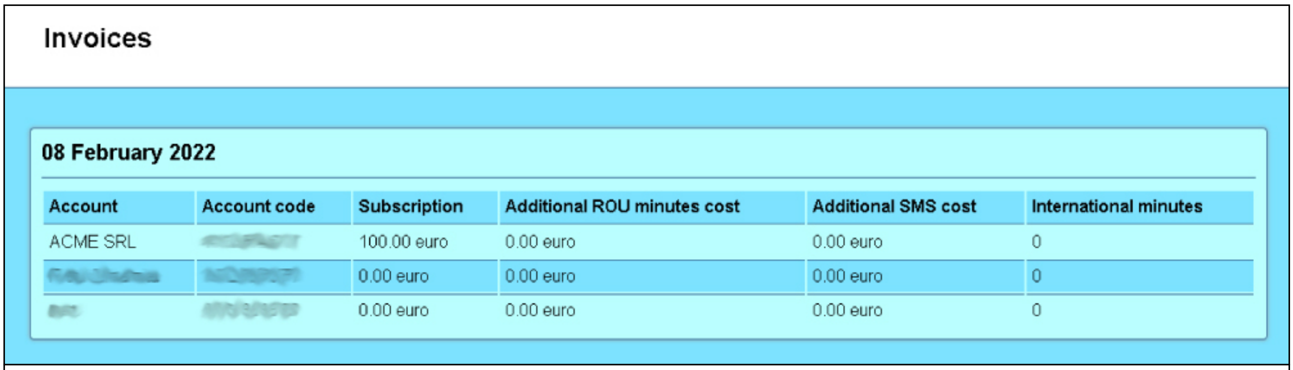
The module can generate reports with the financial status for all accounts defined on the server. It can be accessed from the app menu, by selecting the Server menu and then the Reports submenu. If this page is not already selected, then the administrator must click on the Financial Reports tab.



Financial reports interface

Invoices

The report generates a list with every account having a specified billing day, defined inside the account interface. To generate the report, the admin must first select the billing date. Only the days available for billing, defined at a server level, are available to be selected. For example, if February 8, 2022, is selected then the report will contain a list with all accounts having the billing date set to 8. For each account the invoice will be computed, for the interval between January 8, 2022, and February 7, 2022.
After the Generate button is pressed, Accolades will generate the report and will display the results, just like the in image below.



Invoices report

17. API

17.1 - API overview

Accolades provides several APIs allowing the phone service to be integrated with external applications.

Call notifications (to the final user computer, to identify the caller inside an external CRM application)

The API uses a web-socket opened by the final user computer (a call center agent). When the agent is about to enter a call, the API will notify the listener, using the web socket, with the phone number of the caller.

User experience

When the phone rings, the external CRM application, installed on the agent computer will open the contact info page.

Backend

The external CRM application will listen (directly or using a connector script that can be hosted by Accolades) on a specific port (using the WSS protocol). When a call is about to be sent to the agent, Accolades will send a message, using the existing connection, to the agent computer with several info about the call, including the phone number. The CRM application receives the package and needs to process it (probably the app will search the database for the contact corresponding to the phone number and then open the contact info page).
If the CRM is web-based, then the web-socket management and message management part of the code is already written inside this documentation.

External server requests from the IVR interface

The IVR (Interactive Voice Response) represents the system used by a caller to interact with an automated phone system: "Pentru limba romana apasati tasta 1, for English press 2".
Using HTTP(S) requests, Accolades can query an external server where it can send parameters and receive instructions.
For example:

- The caller, after starting the call will have the following message played: "To check the status of your order, please input the order number and then press the pound key."
- The caller inputs, using the phone keypad: 12345#
- The Accolades server starts a HTTP(S) request to an external server, where it will send the value provided by the caller
- The remote server will answer the request with a status value like "toTheCourier"
- Based on the value received, Accolades will play to the caller a recorded message, like "Your order has been picked up by the courier. "

Call notifications (to an external server, for call history and current call management)

Using HTTP(S) requests, Accolades will send data about an ongoing call to an external server. Notifications for call answer, call hang up and notifications during the call (to implement a pre-pay system, for example) can be sent.

REST API for commands originated from external applications

The following instructions can be received:

- Start a call directly from external applications (click2call features)
- Send SMS from external applications

User experience (click2call)

The process to start a call runs as follows:

- The user pressed the Call button, inside an external application;
- The external application starts a HTTPS request to the Accolades server, where the destination phone number is included, as a parameter;
- The phone on the user desk will start ringing;
- After the user picks up the phone, the destination number will be dialed automatically.

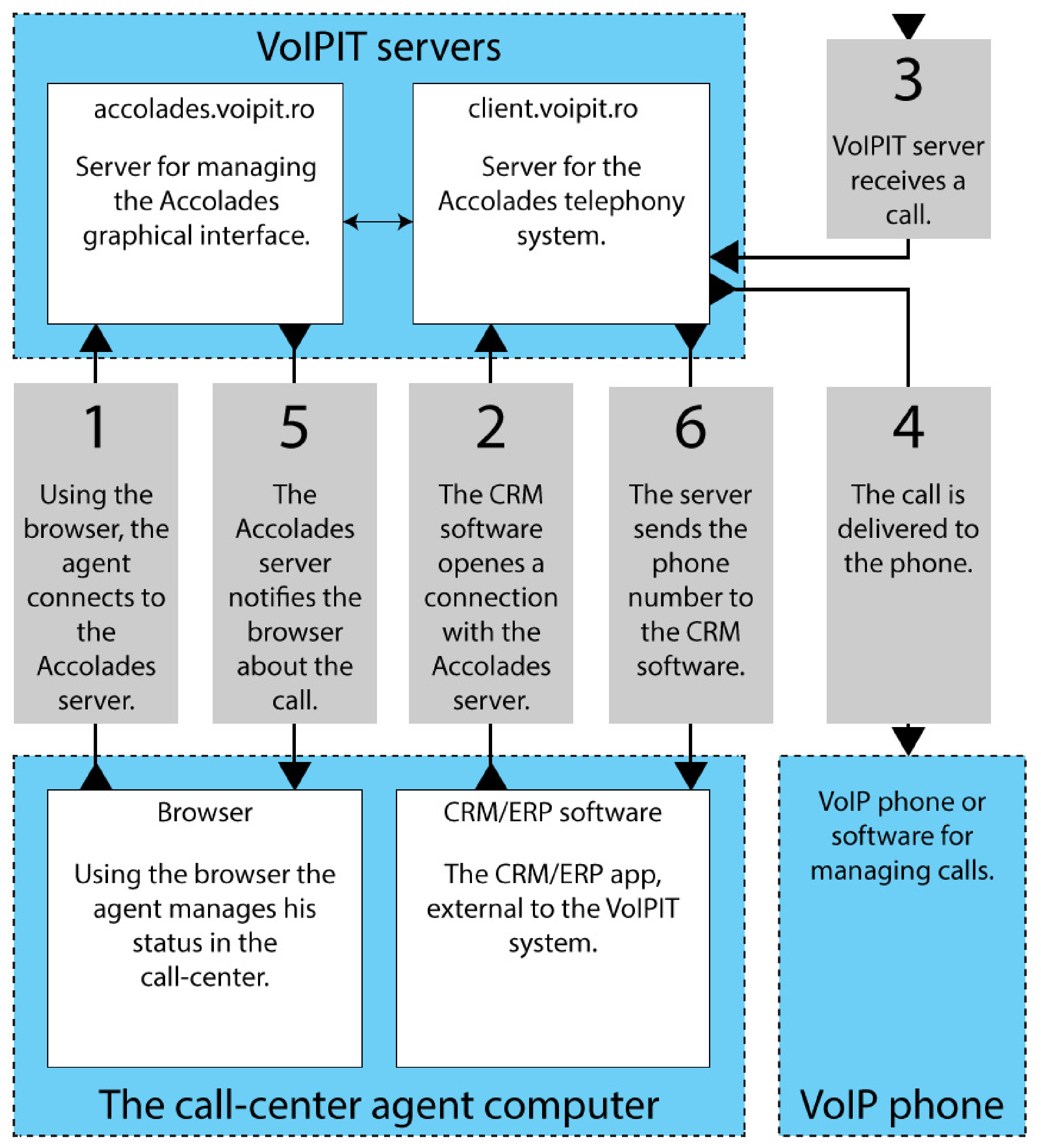
17.2. External CRM

17.2.1 - External CRM API overview

For a better integration with your systems Accolades provides a module (API CRM) for notifying a local application (running on the agent's computer) about an inbound or outbound call.
Using this API, the local CRM application can display automatically the additional info (probably from a local database) about the caller.

Workflow

The notification procedure is illustrated below.



External CRM API workflow

- Using the browser, the agent logs in to the Accolades server.
- The CRM software will start, from the same computer, a connection with the VoIPIT server and will listen for events.
- The VoIPIT server receives a call.
- The call is sent to the VoIP device used by the agent.
- The VoIPIT server notifies the browser about the call.
- The VoIPIT server notifies the CRM software about the call, sending the caller phone number also.

To integrate a CRM app, your software must manage steps 2 and 6.

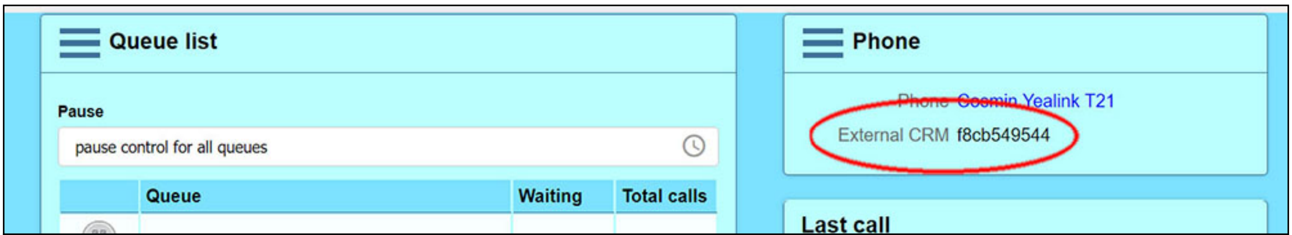
Limits

Because these services are provided from the cloud, API CRM module has several security restrictions implemented, to deliver a secure service.

- the server will provide notifications as long as the agent has the Accolades web interface opened (Menu / Call center / Agent). If the agent closes the web interface, then the API CRM connection will be closed by the server;
- API CRM connections can only be initiated from the same IP address as the one that the agent uses. If a connection is initiated from a different IP then an IP_MISSMATCH error will be triggered;
- only one API CRM connection per agent is possible. If a second connection is initiated, then an CONNECTION_EXISTS error will be triggered.

17.2.2 - Workflow description for external CRM API

API CRM delivers only the notification event for an incoming call or when the phone is used to start an outbound call. The management for this event and the integration with your CRM application must be done by you. If you wish, we can provide service for implementing this feature on your CRM applications.
For creating a connection, you will need the unique id of the connected agent. This ID is displayed in the External CRM field, placed inside the PHONE container.



External CRM field

An API CRM session will follow the next steps:

- Establish the connection;
- Authentication;
- Authentication answer;
- Additional data download (optional);
- Call events sent by server;
- Closing the connection.

Establish the connection

The connection with the server runs using web-sockets protocol. The messages are formatted using the JSON standard. The requests will be send to our url: wss://client.voipit.ro:14327.

Authentication

After the connection has been established, the CRM application must send an authentication message to the Accolades server.

```
{"type":"authRequest", "idCrm":"f8cb549544"}
```

The message has two parameters:

- **"type":"authRequest":** defines the type of package: authRequest (authentication requests);

- "idCrm":"f8cb549544": defines the ID of the agent that will be notified.

Authentication answer

Following the authentication request, the server will send an answer with the connection status.

```
{"type":"authSucces", "version":"X.X.X"}
{"type":"authFailed", "reason":"REASON"}
```

"authSucces" message is send when the connection has been accepted by the server. The package also contains the current version of the API - "version"

"authFailed" message is send when the server denies the authentication request, also providing a reason:

- ID_NOT_FOUND: the ID was not found on any connected agent;

- IP_MISSMATCH: the agent IP is different from the IP that requested the API;

- CONNECTION_EXISTS: the agent already has an API connection running.

Additional configuration data

While the call center is running Accolades uses 3 types of entities:

- the phone: either a physical device or a software application;

- the account: the group that contains all the phone inside the call center (and probably inside the company that owns the call center);

- the agent: the person that uses the phone.

Using the Accolades interface, each of these entities can have a text, up to 2000 characters in length, that can be used for storing configuration settings (please check the API tab from the info page for each of this type on entities). You can use any type of format for storing data: JSON, XML, CSV or any other structure.

To get the additional data for each entity, the CRM application has to send to the Accolades server the following package:

```
{"type":"configuration"}
```

The Accolades server will respond with data about the account, phone and agent, with a package structured as it follows:

```
{
 "type": "configuration",
 "account": {
 "id": "15",
 "data": "INFO_ACCOUNT"
 },
 "phone": {
 "id": "27",
 "data": "INFO_PHONE"
 },
 "agent": {
 "id": "321",
 "data": "INFO_AGENT"
 },
}
```

The package contains the following properties:

- **type:** the type of this package: configuration;
- **account, phone, agent:** a set of properties for each of the 3 entities described above: account, phone and call center agent;
- **id:** the unique numerical ID for the described entity;
- **data:** the data (text) stored by Accolades for that entity.

The id for the entities is unique at an entity level. That means that it is impossible to have 2 different agents, both with the id 15, but it is possible to have an agent with the id 15 and an account with the id 15.

Call events sent by server

If the connection has been authenticated, the server will send a message to your CRM application when a call is sent to the agent. The message has the following structure:

```
{
 "type": "incomingCall",
 "phoneNumber":"0211234567",
 "uniqueId":"1608743891.1344"
 "callCenter":"yes"
}
```

The message has three parameters:

- **type:** defines the message type: `incomingCall` or `outgoingCall`;
- **phoneNumber:** the phone number for the call;
- **uniqueId:** the unique ID of the call, as a number.number value;
- **callCenter:** (`yes` or `no`) if the parameter is set to "yes" then the call was processed using the call-center module (an inbound call from a waiting queue or an outbound call from an outgoing campaign), if the parameter is set to "no" the a direct call is being processed (the device has been directly called or someone has dialled a number using the device).

Version check

The current API is at version 1.1.0. The versioning system uses the Sequence-based identifiers (major.minor.patch), including the compatibility between versions standard.

To check the version running on the server, the client has to send a request package like this:

```
{"type":"version"}
```

Based on that request, a package will be received from the server:

```
{"type":"version", "value":"1.1.0"}
```

Closing the connection

If the Accolade server decides to terminate the connection, for any reason (for example, if the agent has closed the web-interface) then the server will send a message that notifies the closure, just before the connection is terminated:

```
{"type":"connectionClosed"}
```

17.2.3 - Integrating a connector into the Accolades interface

To integrate Accolades and an external CRM application, usually, you have to create a small software, called a "connector".
The connector has to receive data from the Accolades server (using the External CRM API), then process the data, send and receive data from the external CRM etc.
If the connector uses web technologies (JavaScript) to run, Accolades can integrate the connector straight into the agent interface, inside an iframe.

Creating the connector

The connector can be created using one or more files. The following extensions can be used: htm, html, js, css. The css extension is allowed, but it is useless for the moment, as the iframe is not displayed (but this option will be implemented in the future).
It is not allowed to have folders inside the connector structure. All the files will be stored into a single root folder.
The connector MUST have a file called index.html. This file will be loaded inside the agent interface. Any other file can be accessed from within the index.html file.

Loading and enabling the connector

To be available for use, the connector has to be sent to the Accolades server, so it can be later served to the agents.
The loading process is performed within the account info page, using the API tab (access the editing interface from the page menu). When a connector is uploaded to the server, the previous files are deleted. The server does not keep backups.
If the connector has only one file, the administrator can upload it as it is. If a connector with multiple files is used, then those files have to be archived (using the zip format) prior to upload. Although the zip format allows for folders to be used, Accolades will ignore those folders and extract all the content into the root folder.
Warning! During the extraction process, Accolades will only process the files having the extensions: htm, html, js, css. Any other extension will be ignored (you can not use php files, for example).
Also, from the API tab, the administrator has to configure the account to use the uploaded connector, by setting up the "External CRM API Connector" option with the "Custom connector" value.

Running the connector

If an account has a custom external connector enabled, then the process for loading up the call center agent interface will follow the next steps:

- the agent selects from the page menu the Agent option;
- the page with the agent interface starts to load;
- after the loading is completed, the page will initiate a live connection with the Accolades server, to run specific Accolades features;
- after the connection has been initiated successfully, the iframe will load the index.html file from the connector.

When loaded, the index.html script will receive some parameters, using the GET method. This parameters can be processed, using javascript, to extract the required data. The following parameters are available:

- **serverFqdn:** the FQDN (name) of the server providing the API (ex: client.voipit.ro);
- **serverPort:** the port used for the connection (ex: 14327);
- **agentId:** the id (External CRM) of the agent.

17.2.4 - Javascript client for integration with API

A client for API CRM written with JavaScript and HTML is shown below.

The client is written so it can be integrated inside the call center agent interface. The script will read from the GET request, the parameters required for the API connection to be initiated. The script will output all the messages received from the server to the browser console.

The sourcecode listed below can also be checked on GitHub.

```
External CRM API
```

17.3. IVR integration

17.3.1 - API for IVR integration

An IVR is a system that allows the caller to interact with the telephony server, using the phone numeric keys. Probably you already know mesages like: "Please input the account number followed by the hashtag key." or "You have to pay 123 euro".
The IVR system can interract with an external server, using HTTP(S) requests. Using this API, Accolades can send and receive data, data that can be later used inside the system.

Example

- The IVR starts a playback with the message: "Please input the order number, followed by the hashtag key";
- The caller will press 12345#;
- Accolades will make a HTTPS request to an external server, sending by POST the value 12345;
- The external server will respond back to the Accolades server with the value "inTransit";
- The IVR will playback to the caller: "Your order has been sent to the pickup location.

Step technical dataa

More info (including configuration) can be found on the page IVR/Structure management/Step types/HTTP request.

17.4. Call notification

17.4.1 - Call notification API

This API allows an external system to be notified about the current calls. The notifications are made of HTTP or HTTPS requests that Accolades will initiate to a web server, triggered by one of the following events:

- a call has been answered (for a call that has this API enabled);
- the server wants to hangup a call and asks for a confirmation or a new duration limit (for a call that has this API enabled);
- a call has been hung up (for a call that has this API enabled).

Enable and configure

This API can be enabled at a user (phone) level, for each user. If you are using the "cloud" service, then you probably do not have access to the configuration interface. In this case you can contact the provider, to enable the API.
The interface for the API management is available in the user info page on the API tab.
For the API to run, the following information must be provided:

- the protocol used for the requests (http or https, probably https);
- the web server where Accolades will send the notifications, as a FQDN (ex: notifications.server.ro) or as an IP;
- the port used for the request (probably 80 for http and 443 for https);
- the path to the file that will process the request (ex: /callNotifications/answer.php).

An incorrect configuration will hang up the call when it is processed by Accolades (for example, if the file that processes the request does not exists).

Notification structure

A notification is sent as a HTTP or HTTP request, to the server stated in the configuration tab.
The data about the call are sent as POST values:

- apiName: ("callNotification") The name of this API (the parameter can be used to distinguish between the various API systems of the Accolades platform, when the destination server uses the same script to process multiple APIs).
- event: ("answer", "confirmHangup" or "hangup") The type of event that triggered the notification. Can be "answer" if a call has been answered or "confirmHangup" if the maximum duration for the call has been reached and the server needs to know if the duration is extendes or the call is dropped or "hangup" if a call has been hanged up.
- callId: (text like numerical.numerical) The unique identifier for the call inside the Accolades system. The value can be used to match different notifications for the same call (the "answer" event and the "hangup" event).
- userId: (numerical) The unique id of the entity (phone) that triggered the event.
- userType: ("user") The type of entity that trigger the event (currently this property only has the "user" value - the event was triggered by a phone).
- callDirection: ("outbound" or "inbound") The call direction relative to the entity that triggered the notification. Can be "inbound" (an incoming call to an Accolades user) or "outbound" (a outgoing call started by an Accolades user).
- callerId: (text) The phone number of the caller. For calls without a specified caller ID "Anonymus" value will be

returned.

- **partnerNumber:** (text) The phone number that the Accolades user is connected to (for the outgoing calls, the dialed number and for the incoming call the caller ID of the caller).
- **answered:** ("yes" or "no") The call status when the notification was sent. The "yes" value defines a call that was answered, the "no" value is for a call that was not answered. The events of type "answer" will always have this property with the "yes" value because the event is triggered after a call has been answered. The "hangup" type of events can have this property either "yes" (a call that was answered has been hung up) or "no" (a call that was still ringing has been hung up).
- **startTime:** (Unix Time) The time that the call has been initiated (for the outgoing calls - the time that the Accolades system started to dial the number, for the incoming calls - the time that the Accolades system sends the call to the Accolades user). This parameter always has a value (it cannot be 0)
- **answerTime:** (Unix Time or 0) The time that the call has been answered. If the notification is for a call that has not been answered, then this parameter is set to 0
- **hangupTime:** (Unix Time or 0) The time that the call has been terminated. If the notification is for an ongoing call, then this parameter is set to 0.
- **hangupCode:** (numeric) Call hangup cause, as a numerical code. A list with the available codes can be found inside the Asterisk manual. For example, code 16 states a normal hangup.
- **hangupDescription:** (text) A text description for the hangup cause. A list with the available codes can be found inside the Asterisk manual.
- **error:** (text) The parameter is an empty text if no errors were triggered. If an error exists, then this parameter contains the error description.
- **errorCode:** (400, 500 or empty text) The error code for the triggered error. If no errors were triggered, then this parameter is empty. Otherwise the 500 value indicates an error inside the Accolades system, 400 indicates an error in the response received by Accolades from the external server.

The values startTime, answerTime and hangupTime are provided using the Unix Time format (the number of second since January 1st, 1970, 00:00:00.

Server response to the request

When an "answer" or "confirmHangup" type notification is sent Accolades will parse the server response. Based on this statement, 3 cases can occur:

- the response has no content (an empty text), so the call will just move forward;
- the response can be parsed as a JSON object, so Accolades will trigger different actions, based on the content of the object;
- Any other case will trigger an error so Accolades will hang up the call and will send an "hangup" event with the error.

Responding to an "answer" event

The JSON answer can have the following parameters:

- **confirmHangup:** If the parameter has the "yes" value then Accolades will emit a "confirmHangup" event, after the maximum duration defined below. For any other value, the call will be dropped after the interval has passed;
- **callMaxDuration:** The maximum duration for the call (in seconds). After this interval, the call will automatically be terminated. If the parameter is missing, it is 0 or it has a non-numerical value then the call **will not be**

automatically terminated. The maximum allowed value for this parameter is 7200 (2 hours). If a higher value is provided then it will be overwritten with 7200. The minimum allowed value is 30 seconds (if it is not 0). The values between 1 and 30 will be automatically overwritten to 30.

Responding to an "confirmHangup" event

The JSON answer can have the following parameters:

- confirmHangup: If the parameter has the "yes" value then Accolades will emit a "confirmHangup" event, after the maximum duration defined below. For any other value, the call will be dropped after the interval has passed;

- callMaxDuration: The maximum duration for the call (in seconds). After this interval, the call will automatically be terminated. If the parameter is missing, it is 0 or it has a non-numerical value then the call **will be terminated**. The maximum allowed value for this parameter is 7200 (2 hours). If a higher value is provided then it will be overwritten with 7200. The minimum allowed value is 30 seconds (if it is not 0). The values between 1 and 30 will be automatically overwritten to 30.

JSON formatting

Warning! The JSON object must be formatted according to the standard. The keys must be encapsulated in quotes.

Correct format: {"callMaxDuration":"120","confirmHangup":"yes"}.

Incorrect format: .

17.5. REST

17.5.1 - REST API overview

The Accolades platform allows external applications to send commands to the server using HTTP requests. This API uses the REST architecture, with some small exceptions due to the nature of the platform.

Issuing a request

An API command starts with an HTTPS request to the Accolades server, using the standard HTTPS port: 443.
The entire URL for the request looks like:

```
https://client.voipit.ro/
/
/
```

where:

- **accountNumber:** the account number of the account targeted by the request (see the Identity tab of the account info page).
- **requestPath:** The path for the request, as it is defined in this document.

Parameters

All the parameters for a request are send using the POST method. Any value send using the GET method will be ignored. The values will be encoded using the URL encoding standard (percent-encoding).
All requests will contain the account API password, using a post parameter named **password**. The password is defined inside the account info page, using the API tab.

Server response

When the server response is received, you must first check the http status for the response. Based on the processing result, the Accolades server will send a 200 OK status for valid requests of another value if an error has occurred. A list with the error codes is available inside the "Error codes" section.
If the request was successful, then Accolades will always send back a response formatted as a JSON object. A JSON content type header is also send: "content-type: application/json".

Error log

When an error occurs in processing a request, Accolades will append an error description to the account log, available in the Log tab, inside the account info page.

Testing

Before any real request is send, you can send test requests, using PING packages (check this type of request in this document).

IP blocking

Accolades server allows a single IP to send a limited number of invalid requests (failed authentications or invalid paths). If your IP sends more requests, then the allowed threshold then Accolades will reject, for a limited amount of time any new requests with a 403 - Forbidden status.

The IP can be deleted from the temporary blacklist from the main menu, using the Server module, the Monitored IP section. Because Accolades is a cloud-based service, if you need to unlock your IP, before the ban expires automatically then you need to contact VoIPIT.

17.5.2 - REST API error codes

The status of the processing result for the request is send to the client as the http response status, using the standard codes defined in the http protocol. A valid request will return the 200 (OK) status. An invalid request will return one of the codes listed below.

When an error occurs, Accolades will append a description of the error to the account log, available inside the account info page, the Log tab.

Status: 400 (Bad request)

The parameters send with the request are not valid, for the request type. The error is recorded to the account log page.

The response is sent as a JSON object with the following content:

```
{
 "type" : "Error",
 "message" : "Bad request",
 "code" : "400"
}
```

Status: 401 (Unauthorized)

The credentials provided for authentication are invalid. There are 3 cases when this error occurs:

- The account number provided in the URL is invalid. The error is not logged because there is no account to log to.
- The account is valid, but the API module is not active. The error is not logged, as the API is not enabled.
- The account is valid, the API module is active but the provided password in invalid. The error is logged to the account.

The response is sent as a JSON object with the following content:

```
{
 "type" : "Error",
 "message" : "Unauthorized",
 "code" : "401"
}
```

Status: 403 (Forbidden)

The server is not processing requests from the source IP, as too many invalid requests have been made, in a defined interval. The IP is temporary blacklisted. The error is not logged to the account (as the server just checks the IP and drops the request, with no further actions).

The response is sent as a JSON object with the following content:

```
{
 "type" : "Error",
 "message" : "IP address rejected",
 "code" : "403.6"
}
```

Status: 404 (Not found)

The request is made for a resource that does not exists. The error is not logged to the account, as the server does not process invalid resources.
The response is sent as a JSON object with the following content:

```
{
 "type" : "Error",
 "message" : "Not found",
 "code" : "404"
}
```

Status: 413 (Payload Too Large)

The request size is larger than the maximum allowed size.
The response is sent as a JSON object with the following content:

```
{
 "type" : "Error",
 "message" : "Payload Too Large",
 "code" : "413"
}
```

Status: 500 (Internal server error)

The server tried to process a request but failed for an unknown reason. You should contact VoIPIT, for a detailed error check. The error will PROBABLY be added to the account log.
If an answer is sent back as a JSON object, then it will have the following content:

```
{
 "type" : "Error",
 "message" : "Internal server error",
 "code" : "500"
}
```

17.5.3 - PING command

The "ping" command can be used for testing purposes, for checking that an external app can issue valid commands and process responses. This way some tests can be performed before issuing more complex requests.
When the command is processed correctly, a new entry will be appended to the account log (this way the Accolades server confirms that the requests was processed ok).

Command structure

To start the request, a http request must be sent to the url:

https://client.voipit.ro/
/ping/

The following parameters will be sent, using the POST method:

- password: the API password for this account.

Server response

> *Always check the http response status (should be 200 - OK) before processing the response. Otherwise check your request for invalid parameters.*

If the request was processed successfully then the server will append a new entry to the account log and a JSON package will be sent back:

```
{ "type" : "pong" }
```

17.5.4 - DIAL command

The "dial" command is used to start a call from a phone (physical device of softphone) connected to the Accolades server. It can be used for implementing click2call features for applications not related with the Accolades platform (for example, CRM type software).

If a valid request is received by the Accolades server:

- the target phone (inside the Accolades server) will start ringing;
- someone will pick up the call;
- after the call is answered on the targeted phone, Accolades will automatically dial the destination number.

Command structure

To start the request, a http request must be sent to the url:

https://client.voipit.ro/
/dial/

The following parameters will be sent, using the POST method:

- password: the API password for this account;

- deviceId: the id of the device that will start the call (check the API tab from the user info page);

- phoneNumber: the phone number that will be dialed (destination number).

Server response

> *Always check the http response status (should be 200 - OK) before processing the response. Otherwise check your request for invalid parameters.*

If the request was processed successfully then a JSON package will be sent back:

```
{ "type" : "ok" }
```

17.5.5 - SMS/SEND command

The "sms/send" command is used to send a SMS message to a destination. It can be used for implementing click2sms type features inside any external application (for example, an CRM).
After the sending process has been finished Accolades can notify an external server, using a http(s) request, with the transmission status (message sent or an error has occurred).

Command structure

To start the request, a http request must be sent to the url:

`https://client.voipit.ro/`
`/sms/send`

The following parameters will be sent, using the POST method:

- **password:** The API password for this account.
- **phoneNumber:** The phone number where the SMS will be sent (destination number).
- **message:** The SMS message that will be send to the destination.
- **sendResultTo:** (optional) A URL where Accolades will send a status notification with the SMS result (sent or error), after the sending process has been finished.
- **messageId:** (optional) An id (as a text) that will be included in the notification described above.

Server response

> *Always check the http response status (should be 200 - OK) before processing the response. Otherwise check your request for invalid parameters.*

If the request was processed successfully then a JSON package will be sent back:

```
{ "type" : "ok" }
```

Status notification

If the parameter "sendResultTo" is defined and has a value then, after the sending process has been finished, Accolades will start a http(s) request to the URL defined in the sendResultTo parameter. The following parameters will be send:

- **apiName:** ("sms") The name of this API (the parameter can be used to distinguish between the various API systems of the Accolades platform when the destination server uses the same script to process multiple APIs).
- **type:** ("deliveryReport") The type of this package, relative to this API
- **status:** ("sent" or "error") the result of the transmission process: sent (the message was delivered to the carrier) or error (a transmission error has occurred)
- **id:** (text) The id of the SMS message, as it was defined in the original request
- **errorMessage:** (text) (available only if the status parameter is error) The description of the error thrown by the sending process.