INTRODUCTION

The new Poltys **CCAccounting Pro** is the perfect solution that allows you to track the Panasonic telephony system usage, helping you to make correct business decisions.

Providing web user interface, no application needs to be installed on the user's PC.

Call Logging provides all the data regarding inbound and outbound calls with advanced searching and filtering capabilities.

Call Reporting provides call historical data organized to get the best overall view over the call statistics.

Call Recording add-on to Call Accounting, that taps the call conversations that take place on different trunks either Analog, E1/T1 ISDN, or SIP, brings more peace of mind and increased productivity to your organization.

Key Features

- **Cloud-hosted** or **on-premises** solution
- Compatible with Panasonic **KX-NSX/ NS/ TDE/ NCP/ TDA** PBX series
- Connect to and monitor **multiple Panasonic IP-PBXs** simultaneously
- **Web-based** user interface
- Full PBX **call logging**, pinpointing all devices a call went thru until it left the PBX
- Multiple predefined **Excel report templates** with graphic summaries and in-depth details
- Increased functionality by **Trunk Call Recording add-on**
- Play the **call conversation of each call segment** by time offsets

Enhanced Call Logging

The new solution provides all the data regarding inbound and outbound calls with advanced searching and filtering capabilities.

The new solution presents all referred devices during the call with their associated call segments with complete statistics. The quick search by strings feature with instant results accelerates retrieving information and business decisions making processes within your organization.

Powerful Call Reporting

The powerful set of 25 Microsoft Excel templates with graphic summaries and details plus ability to design new custom reports help you to always get the exact data you need, when you need it.

Template Name	Category	Can be customized
Billing by Agent	Call Log	Yes
Basic Call Log General	Call Log	
Call Log General	Call Log	
Un-returned Lost Calls	Call Log	
Calls by Talking Time	Call Summary	Yes
Calls by Talking Time by Day	Call Summary	Yes
Calls by Talking Time by Hour	Call Summary	Yes
Calls by Waiting Time	Call Summary	Yes
Calls by Waiting Time by Day	Call Summary	Yes
Calls by Waiting Time by Hour	Call Summary	Yes
Calls by Agent	Call Summary	
Calls by Days	Call Summary	
Calls by DID	Call Summary	
Calls by Extension	Call Summary	
Calls by Group	Call Summary	
Calls by Hour	Call Summary	
Calls by Phone Number	Customers	
Top Received Customers	Customers	
Top Received Numbers	Customers	
Transferred Calls by Agent	Customers	
Top Dialed Numbers	Customers	
Global Service Level	Service Level	Yes
Global Service Level by Day	Service Level	Yes
Global Service Level by Hour	Service Level	Yes
Trunk Activity	Trunk Activity	

Call Recording Add-on

Trunk Call Recording add-on taps call conversations that take place on different trunks either Analog, E1/T1 ISDN, or SIP.

Call Recording represents an essential component for every company that does care about staff training, reducing conflicts and avoiding potential liabilities.

You can easily search for a specific call recording by quick strings, extension, date and time, line number, caller ID information, calling name, and more.

Embedded audio player can reproduce the voice conversation of each call segment by its associated time offset.

Call Segmentation and Licensed Extensions Approach

PBX Monitoring

Call Accounting monitors all incoming and outgoing PBX calls, not intercom calls.

The monitored incoming and outgoing calls are restricted by the number of the extensions permitted by purchased license, as explained in the section Licensed Extensions below.

Call Accounting presents all the PBX devices the call gets through along with their associated call segments.

The following types of PBX devices are monitored:

- PBX **Extensions**
- ACD **Groups**
- PBX **Trunks**
- **Other** devices, such as VM Groups and VM Ports

A PBX device is presented in logs along with its following attributes:

- **Device Number**, such as 601, 123, or 18642779219
- **Device Name**, such as John, CA Mobile, Jane, DID US, or John's Mobile
- **Device Group**, such as Support, Sales, or Marketing
- **Device Type**, such as Extension, Group, Trunk, or Other

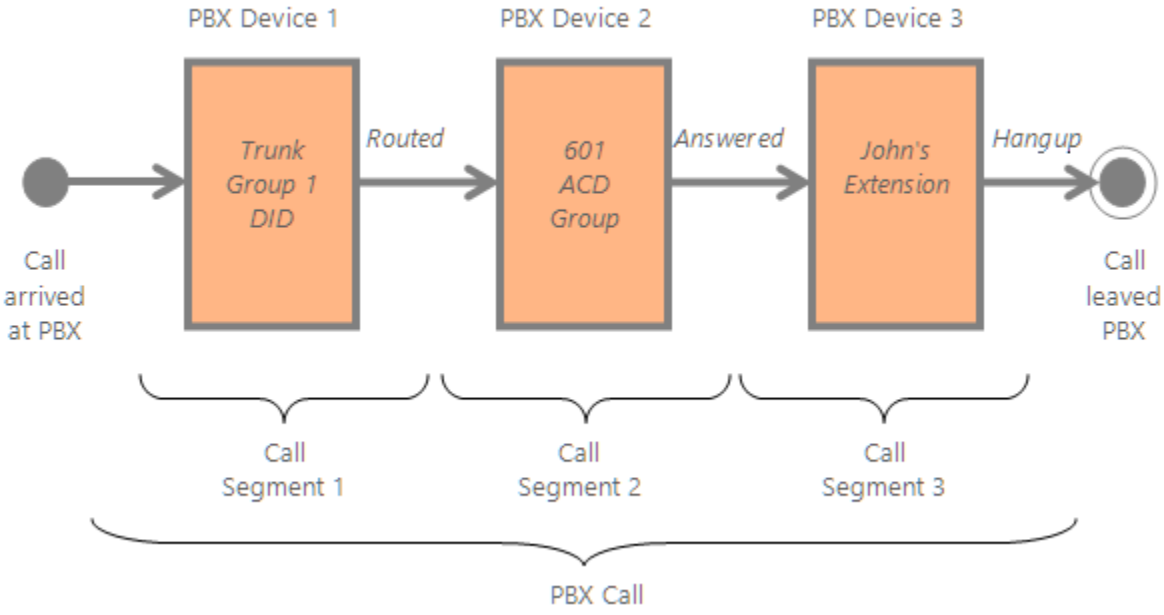
Call Segmentation

A PBX call is presented in logs along with its following attributes:

- Call **ID**
- Call **Time** and **Date**
- **Phone** as Dialed number or Caller ID, depending on the call direction
- **Duration** of the entire PBX call
- The time the call was **Answered after**
- **Talk Time** of the PBX call

A PBX call can include one or more call segments, depending on the number of the PBX devices the call got through.

For example, an incoming call arrived at PBX from the telephony service provider at *Trunk Group 1 DID* device, it is routed to *601 ACD Group* device, and finally the call is answered by *John's Extension* device, which hang-ups after 22 minutes of conversation, for example:



A call segment is presented in logs along with its following attributes:

- The **Time Offset** of the call segment relative to the beginning of the call
- The associated **Device** with its attributes
- **Duration** of the current call segment
- **Talk Time** of the current call segment
- **Status** of the call segment after leaved the PBX device

Licensed Extensions

Call Accounting allows you to configure which PBX extensions are licensed, up to the limit associated to the product edition you have purchased.

RULE:

If a call segment gets through one licensed extension at least for a specific PBX call, the PBX call is stored and presented by Call Accounting in the call logs and call reports.

Otherwise, the PBX call is discarded.

ACTIVATING PRODUCT

You must activate Call Accounting product using the product Activation Code provided by Poltys according to the purchased license before logging in.

Prerequisites

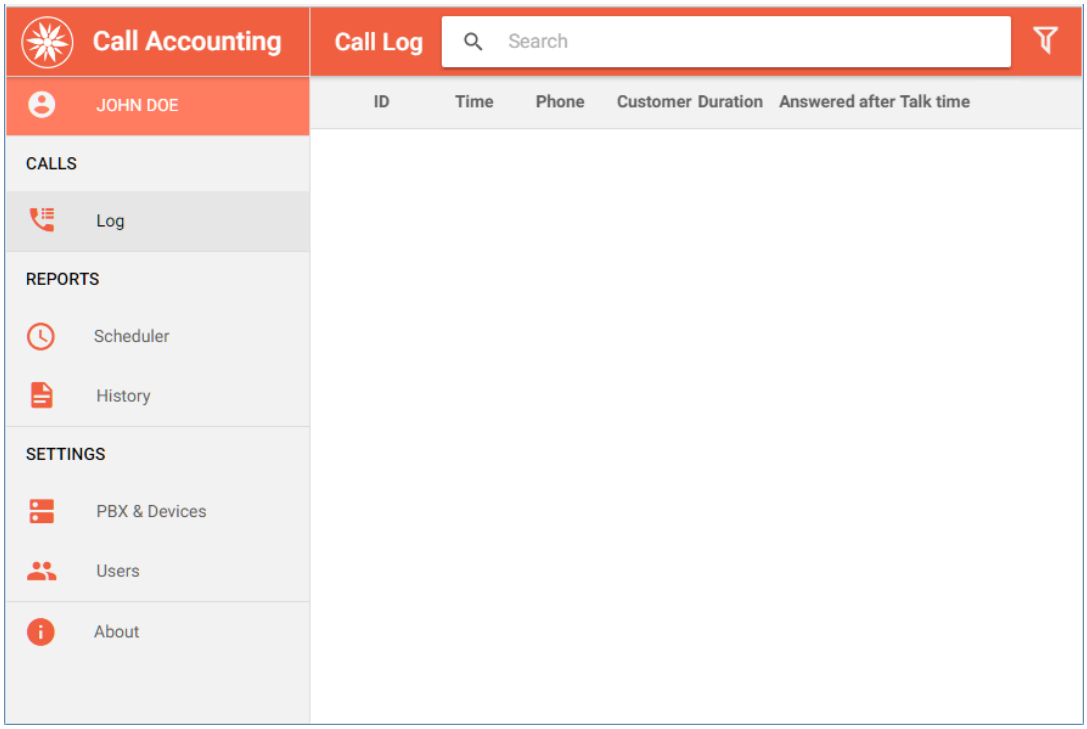
Before activating Call Accounting, please make sure that:

- All designated users must have **active internet connection** in order to use Call Accounting
- You and all designated users must use the latest version of **Google Chrome** browser
- **All installation steps and suggestions** presented in the Call Accounting Installation Manual **have been properly accomplished**
- You have been provided with the **product Activation Key** (AK) by Poltys according to the purchased license

Log In

To login to Call Accounting

1. Enter the URL http://hosting.poltys.com/ccs in the address bar of Chrome browser.
2. The Call Accounting landing page displays. If you have already registered with us, just sign in.
3. The main screen of the Call Accounting product displays.

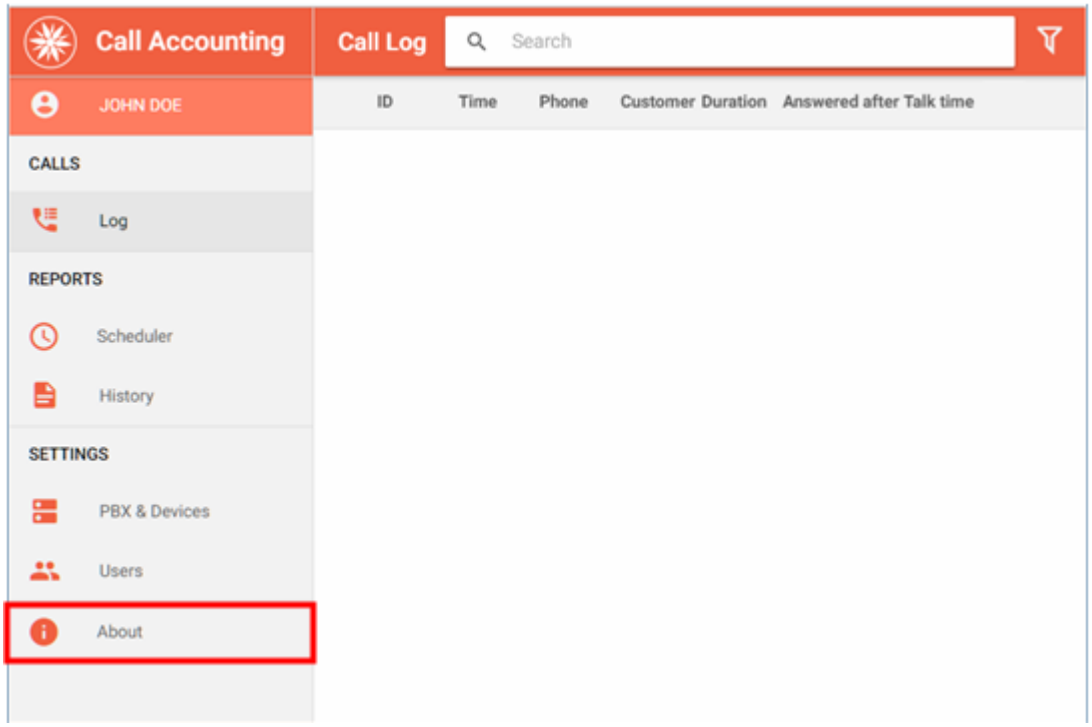


NOTE: You can log in at any time to Call Accounting product using the Customer account credentials: Email and Password.

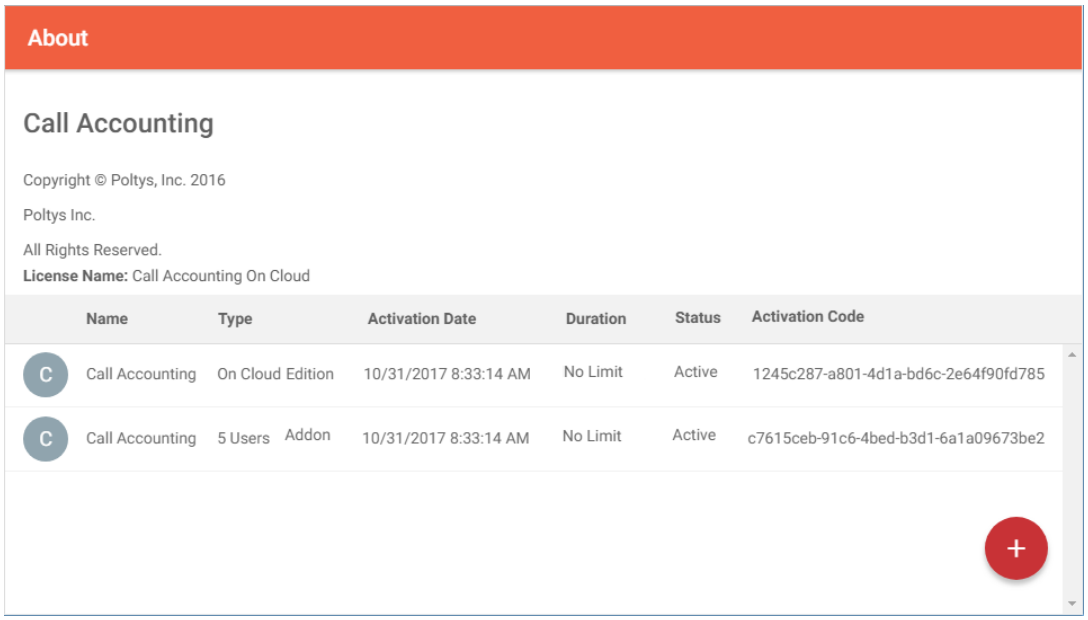
About

To find out information about Call Accounting

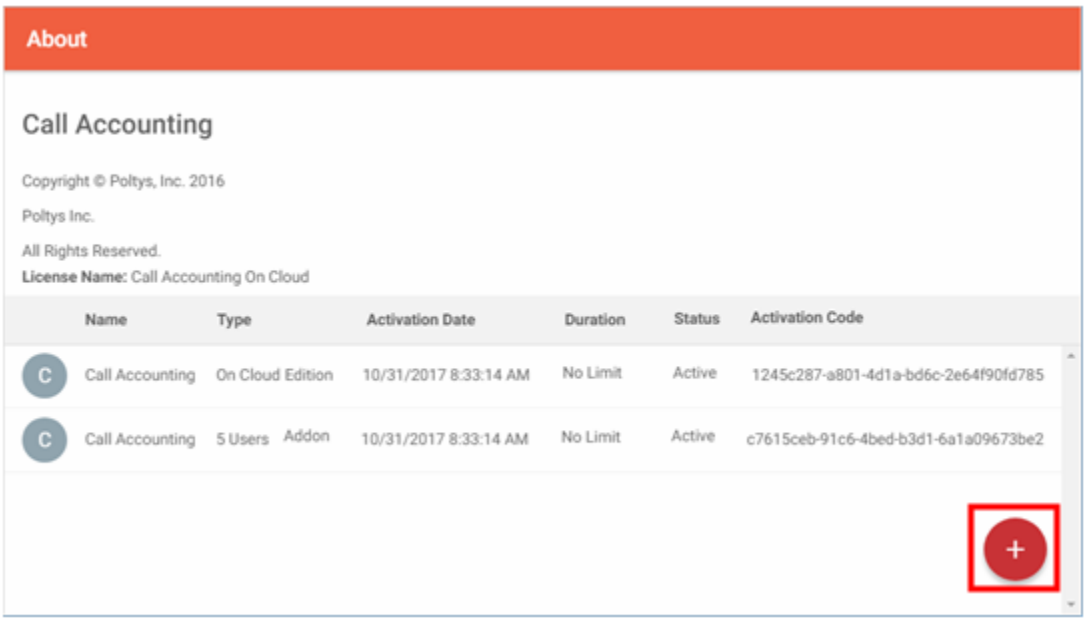
1. Click on the **About** button located in the left control panel.



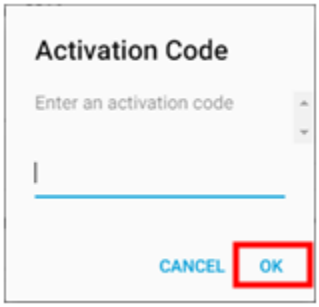
2. The *About* screen displays, presenting all activated licenses for the current product edition.



3. You can add new licenses for the current product by clicking on the **Add new activation code** button.



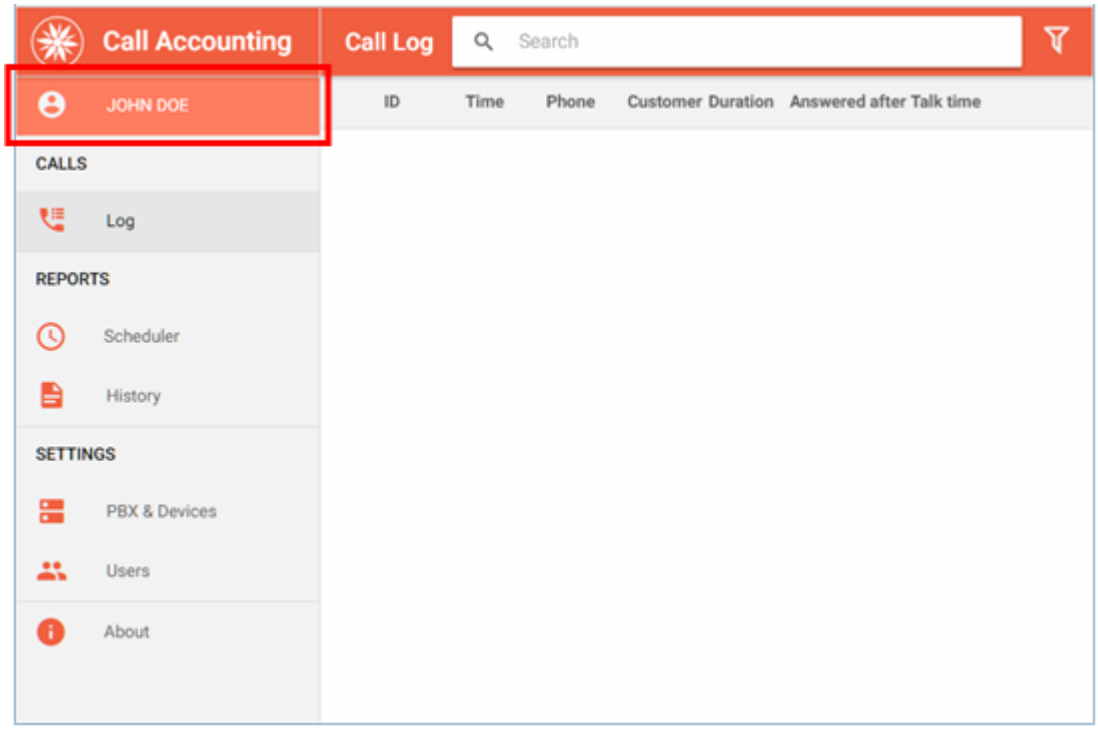
4. The *Activation Code* screen displays. Enter the new license key and click on **OK** button.



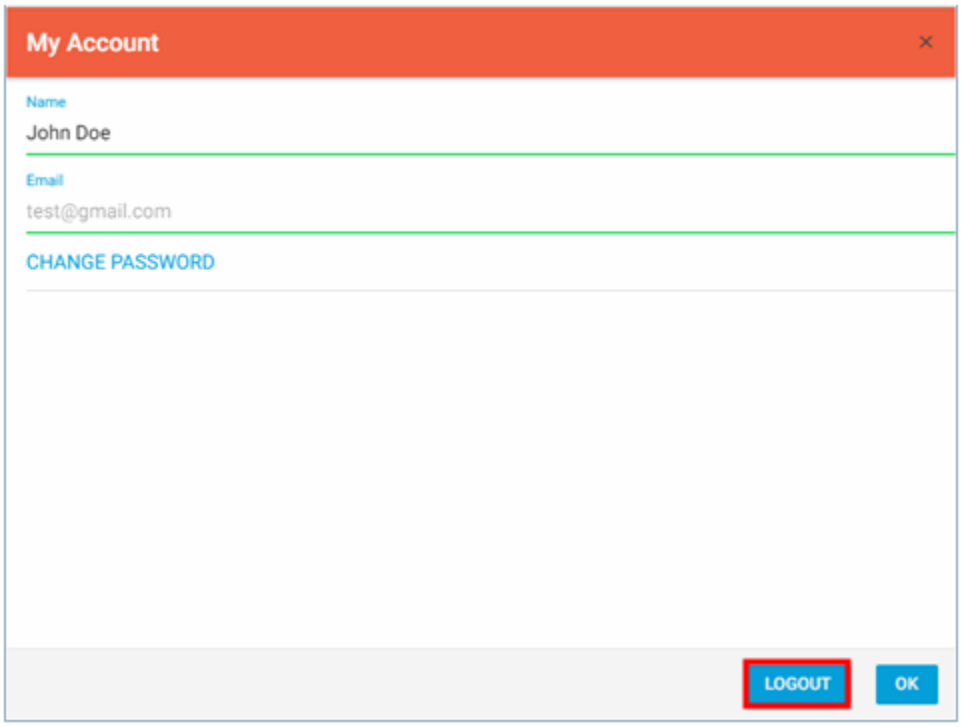
Log Out

To logout from Call Accounting

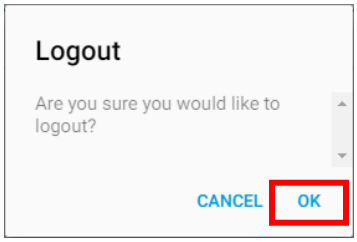
1. Click on the **My Account** button located in the left upper corner.



2. The *My Account* screen displays. Click on the **Logout** button.



3. You are asked to confirm the operation. Click on **OK** button.



4. You are logged out from Call Accounting product.

CONFIGURING USERS

You can create as many users of Call Accounting product as they are required.

Create New Users

The *Super User* of Call Accounting product is the user that activated the system.

The *Super User* have full access rights in the system. Refer to Users and Access Rights to Resources section for more information.

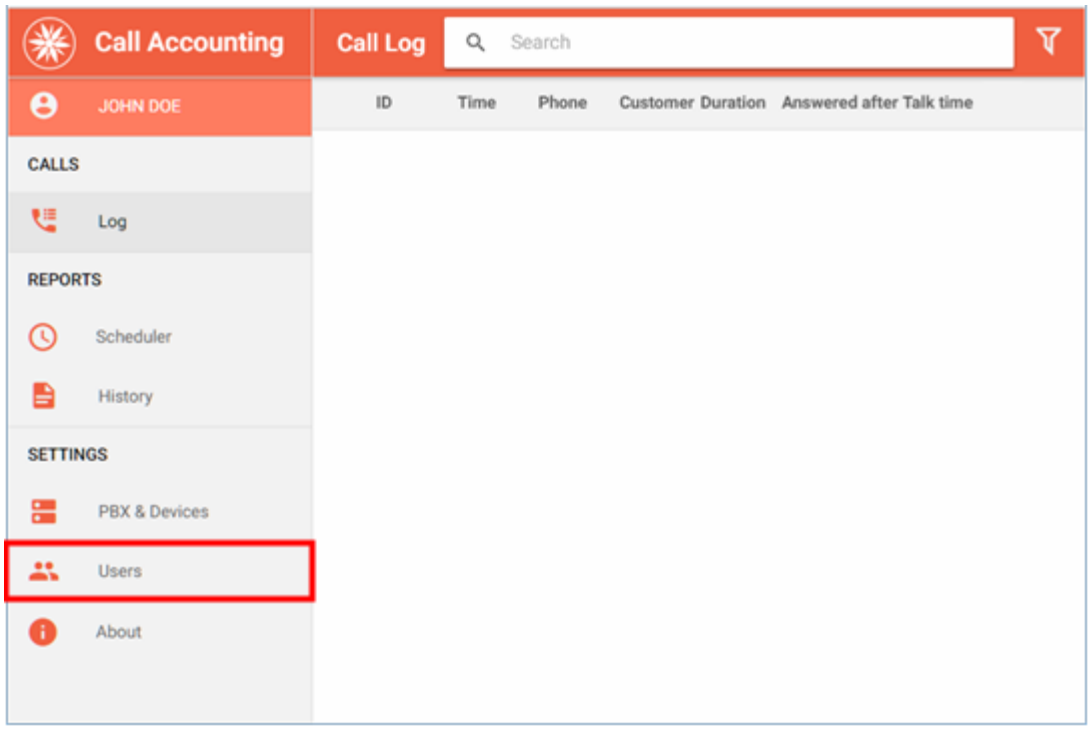
The *Super User* can create other Call Accounting users if required, with the following roles:

- **Admin** - full access to product features
- **Supervisor** - full access to product features, except for *Settings* and *About* sections

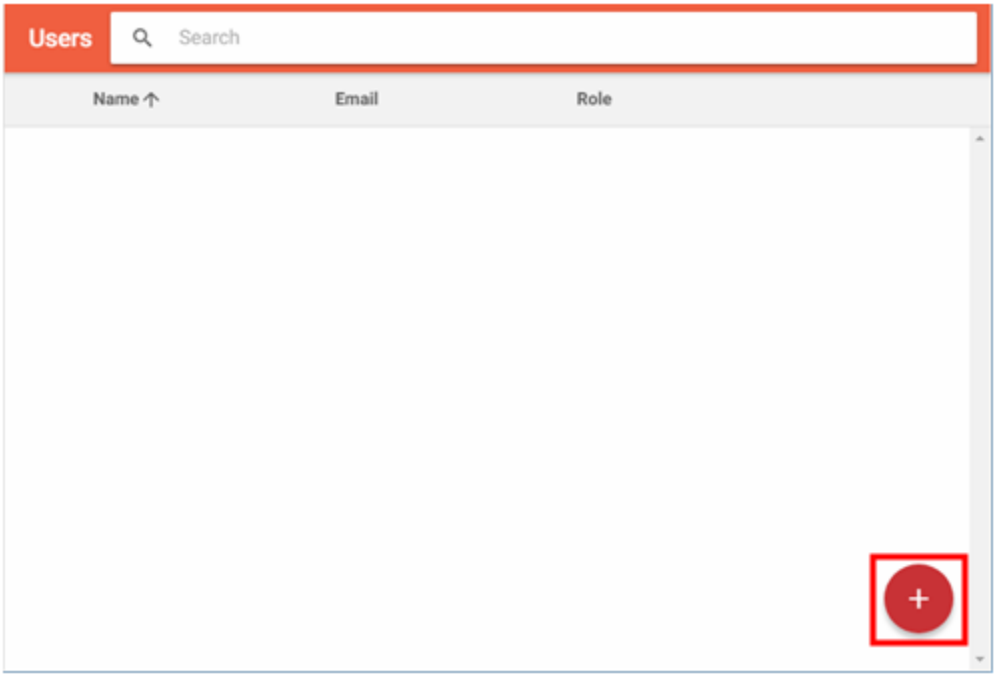
Product Feature	Admin Role	Supervisor Role
Calls | Log	Yes	Yes
Reports | Scheduler	Yes	Yes
Reports | History	Yes	Yes
Reports | Templates	Yes	Yes
Settings | PBX & Devices	Yes	
Settings | Users	Yes	
About	Yes	
Help	Yes	Yes

To create new user

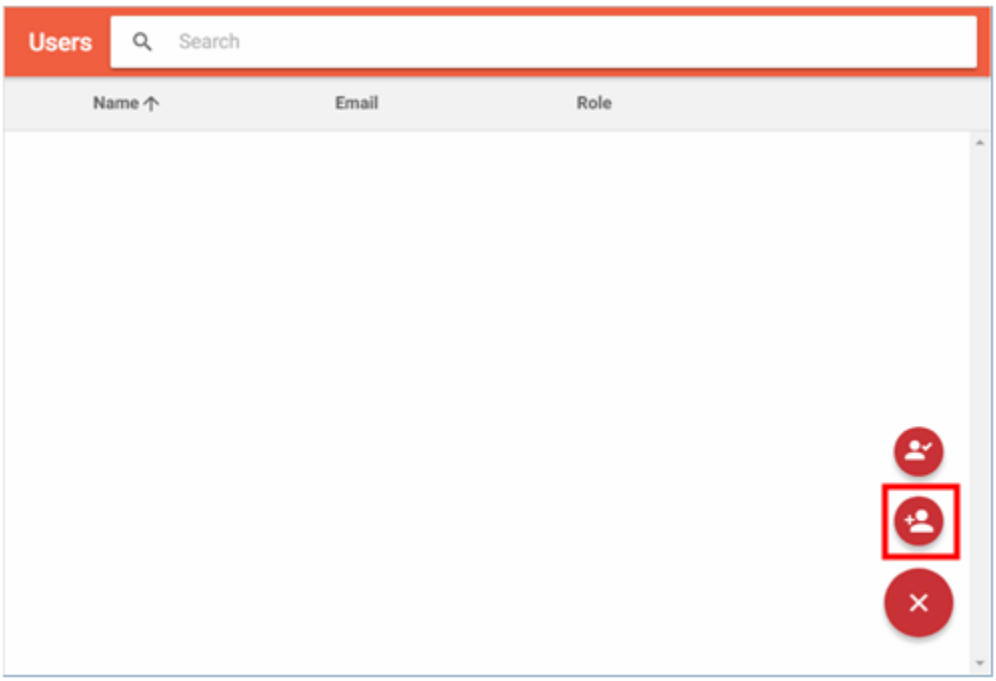
1. Click on **Users** button on the left control panel.



2. The *Users* screen displays. Click on **Add** button.

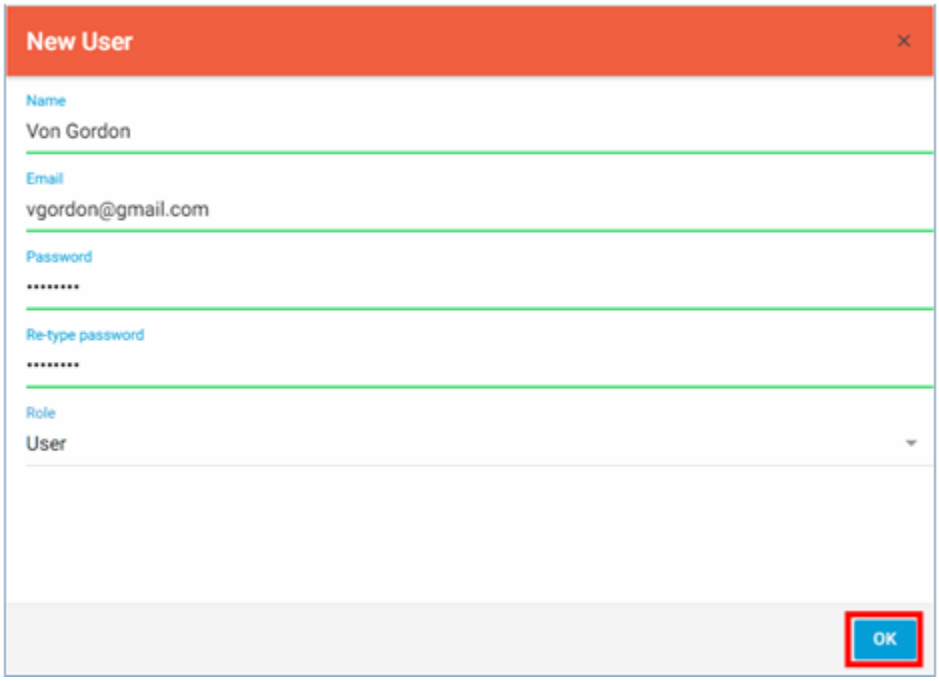


3. Click on **New User** button.

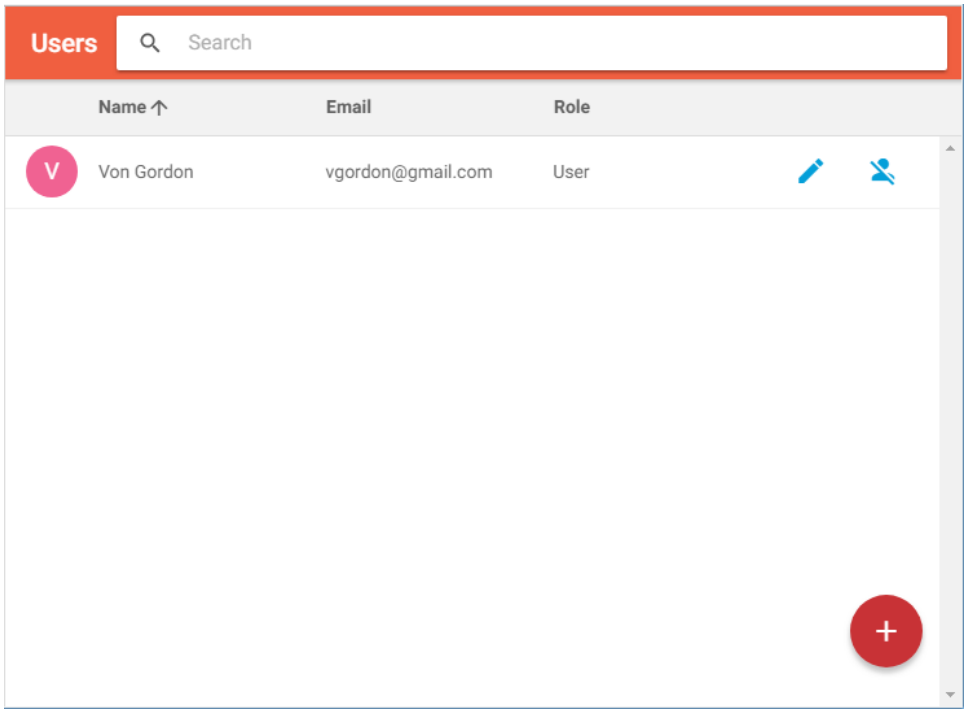


NOTE: If the user you want to add already has an account with Poltys, you must add him/ her to Call Accounting product by clicking on Add User button.

4. The *New User* screen displays. Enter *Name*, *Email*, *Password*, and *Role* for the new user. Click on **OK** button.



5. The new user is created and added to the list.



NOTES:

You may edit or delete any user in the list using the related buttons.

By default, a new user comes with Can Change Access rights.

Users and Access Rights

Different users of the system may have different access rights to Call Accounting resources.

Call Accounting resources are PBX devices and historical reports. The access rights are defined per resource.

The following user access rights are defined in Call Accounting:

User Access Right	Description
Is Owner	• Can delete resource • Can change ownership of resource • Can change access rights to resource • Can access (view) resource
Can Change Access	• Can change access rights to resource • Can access (view) resource
Can Access	• Can access (view) resource
No Access	• No access to resource

NOTE: Only one user in the system have Owner access rights. By default, the Super User of system is Owner of the system resources.

The user access rights work like additional filter criteria in call log and reports.

RULES:

- **In call logs, if a call segment gets thru one device at least the user has access to for a specific PBX call, the entire call is presented to that user.**
- **In call logs, if all call segments enter devices the user has no access to for a specific PBX call, the call is NOT presented to that user.**
- **In historical reports that are based on templates organized by PBX devices (e.g. Calls by DID, Calls by Extension, Calls by Group, etc.), the PBX devices with no access rights are NOT presented to that user.**

Refer to To change user access rights for PBX devices section for more details.

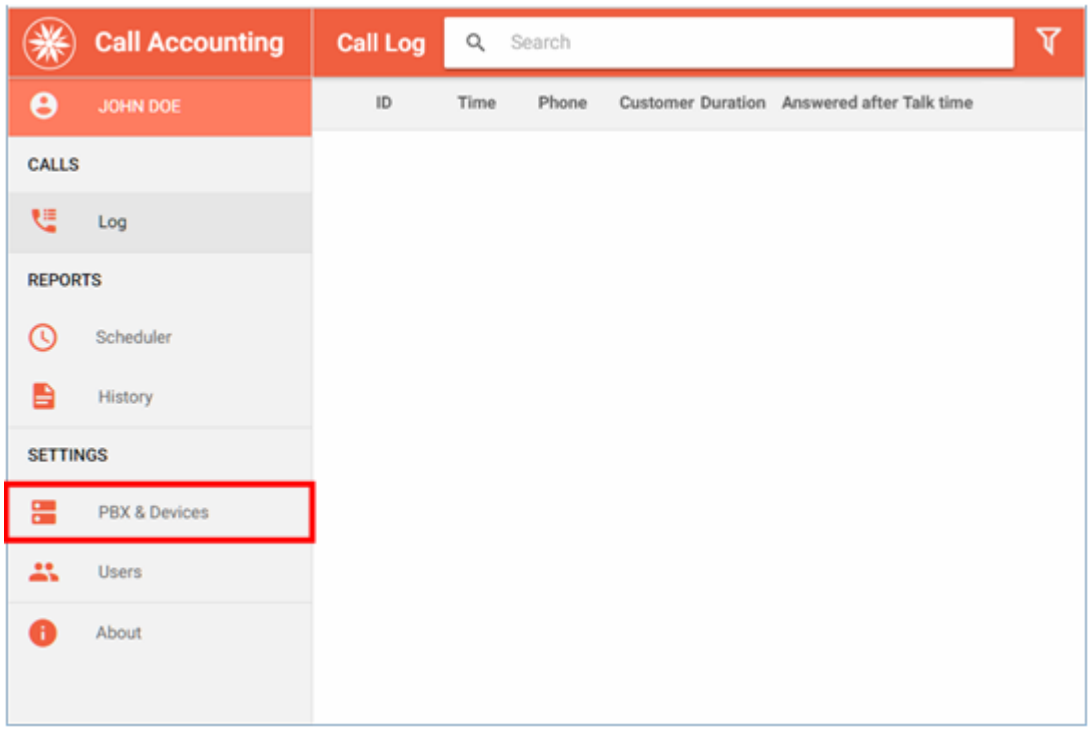
CONFIGURING PBX AND DEVICES

You can connect Call Accounting to one or more PBXs, according to the purchased license.

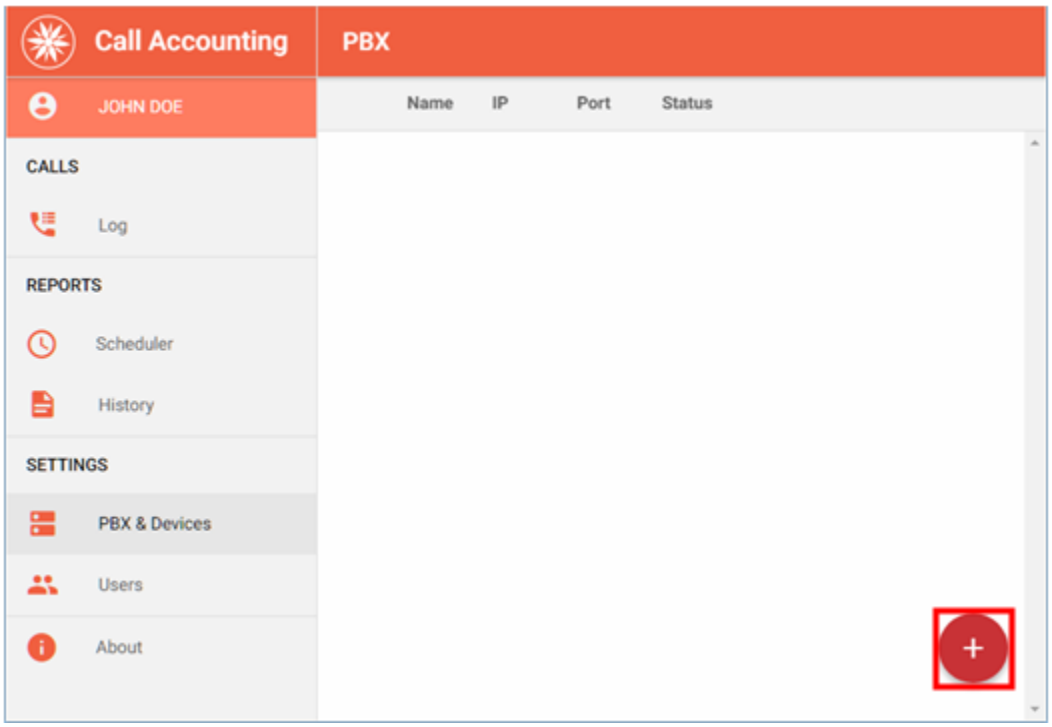
Connect to PBX

To connect Call Accounting to PBX

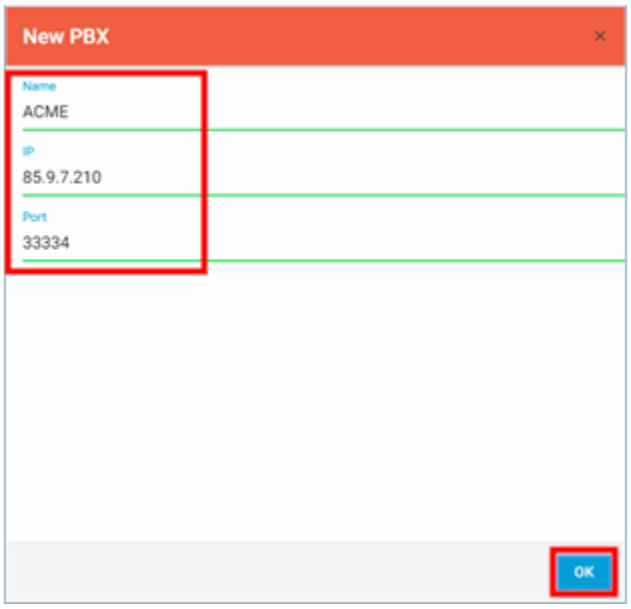
1. Click on the **PBX & Devices** button in the left panel.



2. **PBX** screen displays. Click on **Add PBX** button located on the right bottom corner.

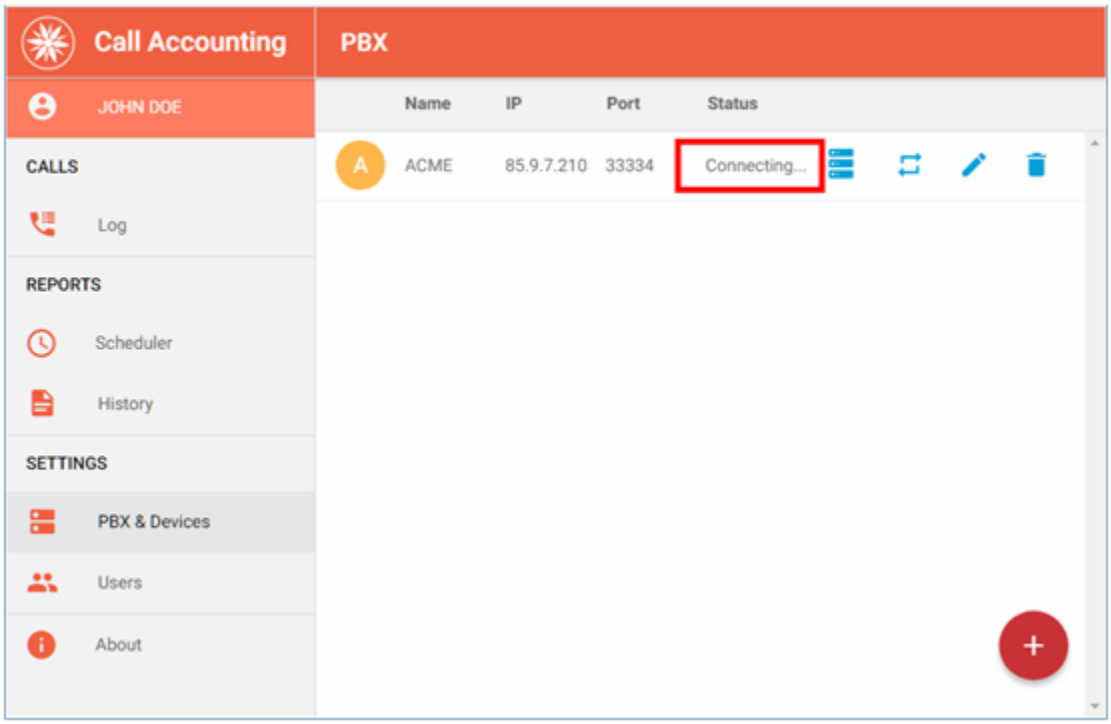


3. The *New PBX* screen displays. Enter the *Name* of the PBX of your choice, the public *IP Address* and the *PBX CTI Port* number. Click on **OK** button.

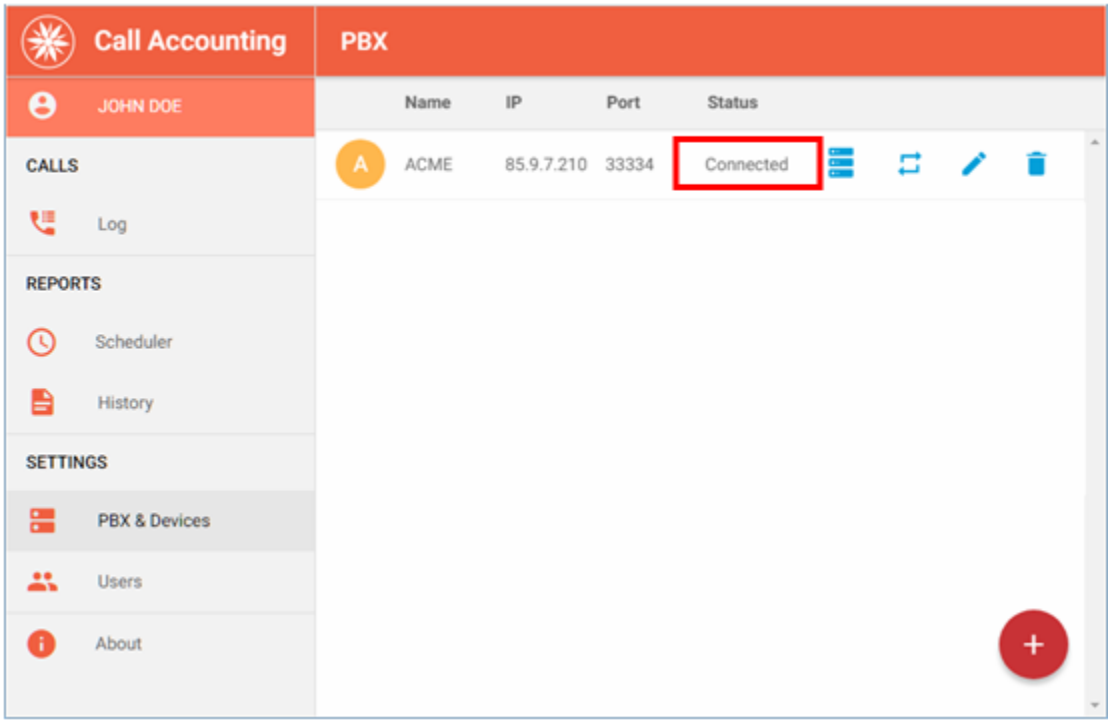


NOTE: IP Address is the fixed public address for granting Call Accounting access to PBX and the PBX CTI Port shall be forwarded in the company router, as described in the *Call Accounting Installation Manual*.

4. The new PBX is added to the list and Call Accounting tries to establish connection with it, displaying the progress status accordingly.



5. Wait for few moments and check the progress status in the list.
6. If everything went OK, Call Accounting successfully connected to PBX.



NOTE: If no connection is established, please check IP Address and PBX CTI Port.

NOTE: You can connect Call Accounting to multiple PBXs, using the same procedure above.

Configure PBX Devices

Call Accounting provides *automatic detection of all PBX devices.* This feature saves substantial amount of time before going up and running with Call Accounting.

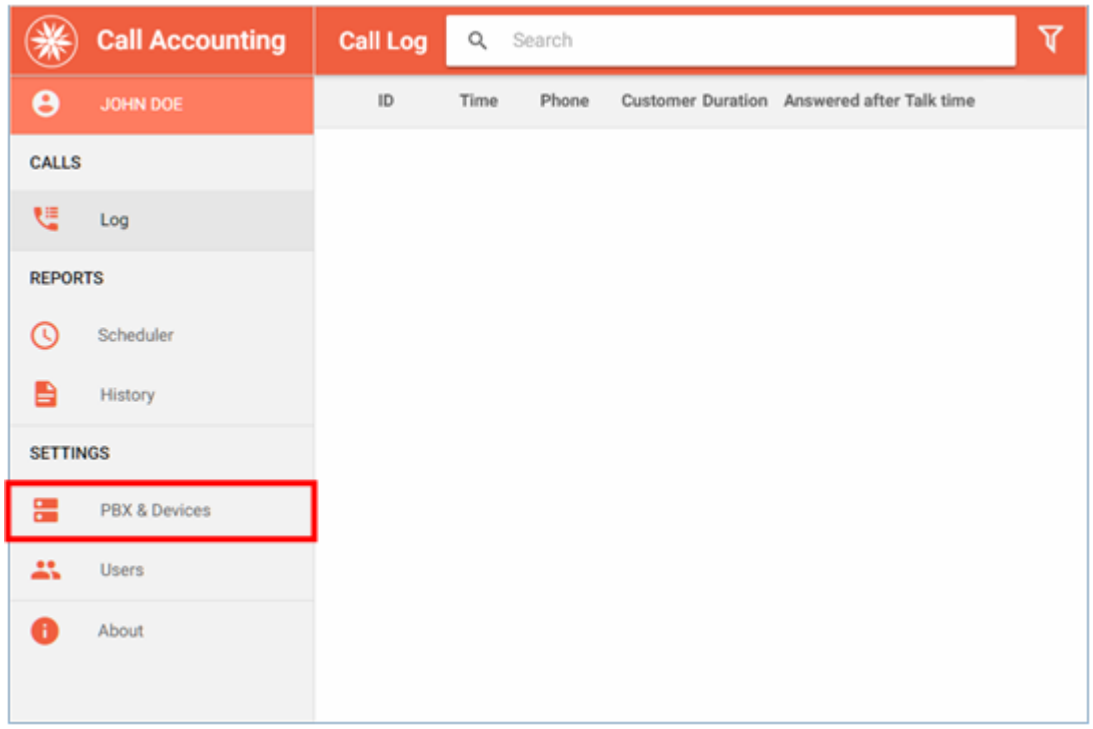
The devices are detected during the calls are carried out by PBX and they automatically added and stored to the PBX devices list as they are configured internally in each PBX.

Call Accounting starts PBX devices monitoring as they are detected and added to the PBX devices list.

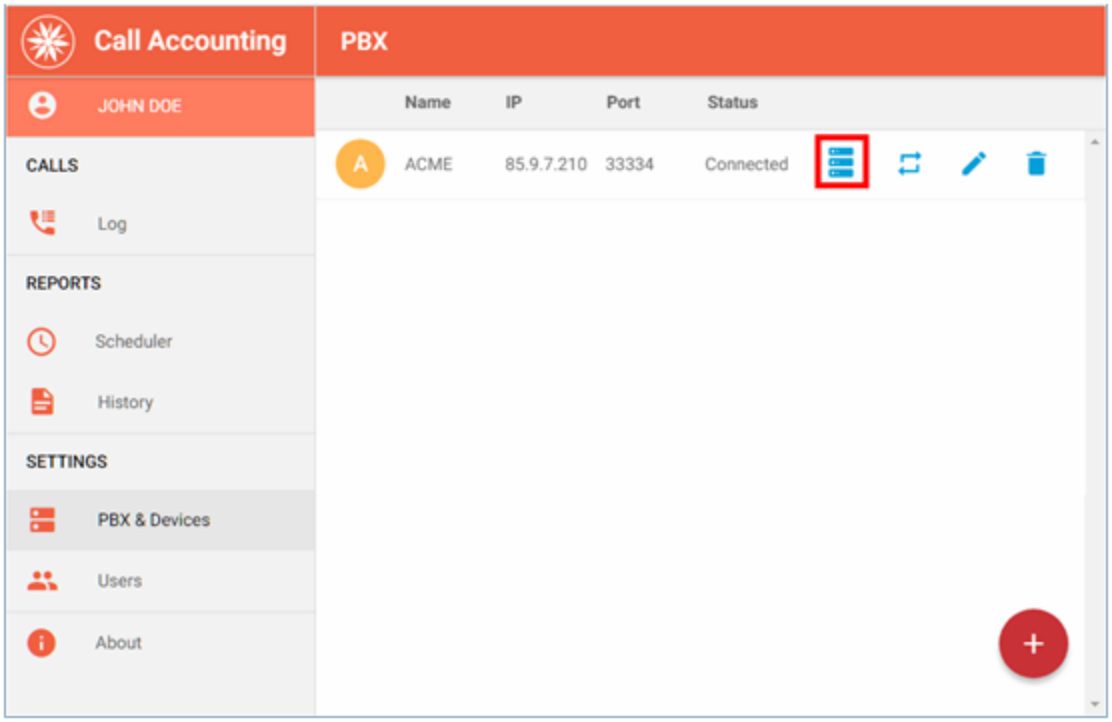
To change PBX device attributes

You can manually change some attributes of PBX devices in the list, if required, depending on the device type. This feature is mostly useful when you changed some attributes in the PBX for a device already detected by Call Accounting. You must maintain synchronization between attributes of the devices in the PBX and Call Accounting.

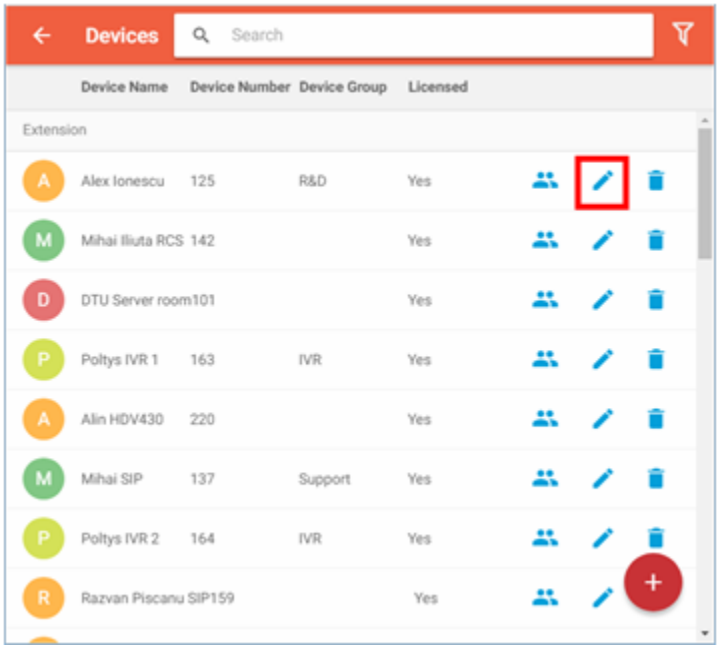
1. Click on the **PBX & Devices** button in the left control panel.



2. Click on the **Edit Devices** button for the PBX you want to configure.

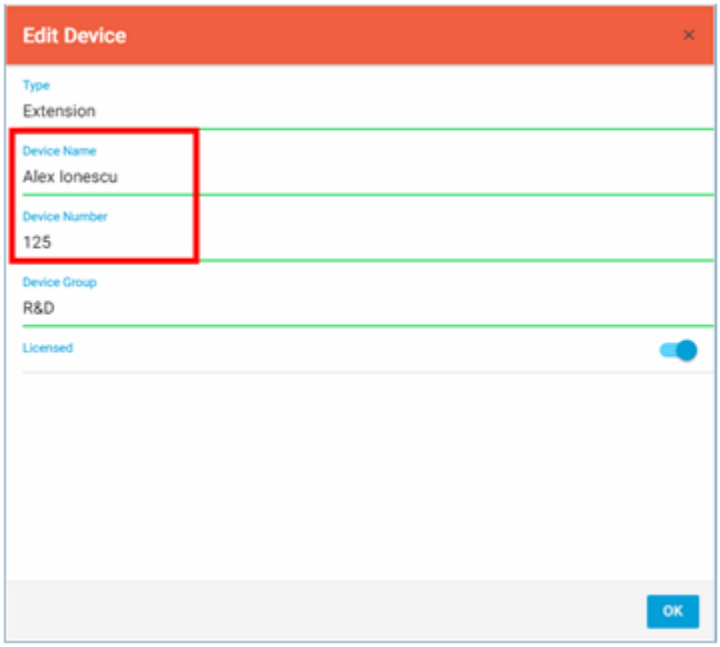


3. The list of PBX devices detected so far displays. Click on **Edit Device** button of the PBX device you want to change.

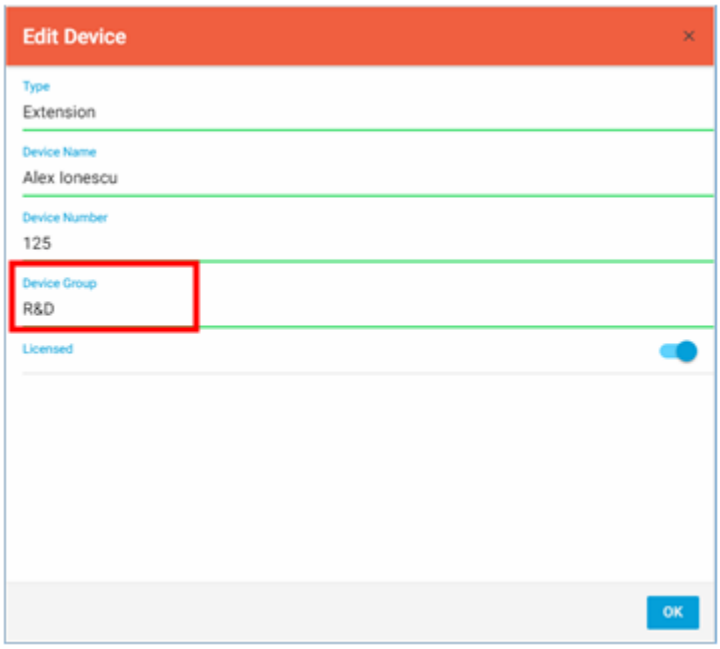


4. The *Edit Device* screen displays.

   You can change *Device Name* and *Device Number* to match the new settings you might carried out in the PBX.



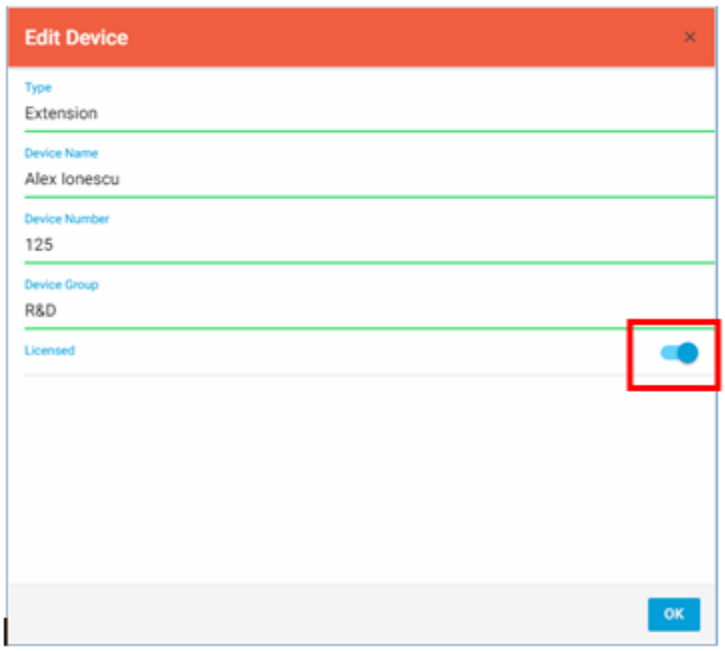
5. The *Device Group* field comes empty by default after the detection of PBX device, but can be very useful to define it for reporting purposes. Therefore, you can define skill groups in your company and measure their activity and performances separately, e.g. Support, Sales, etc.



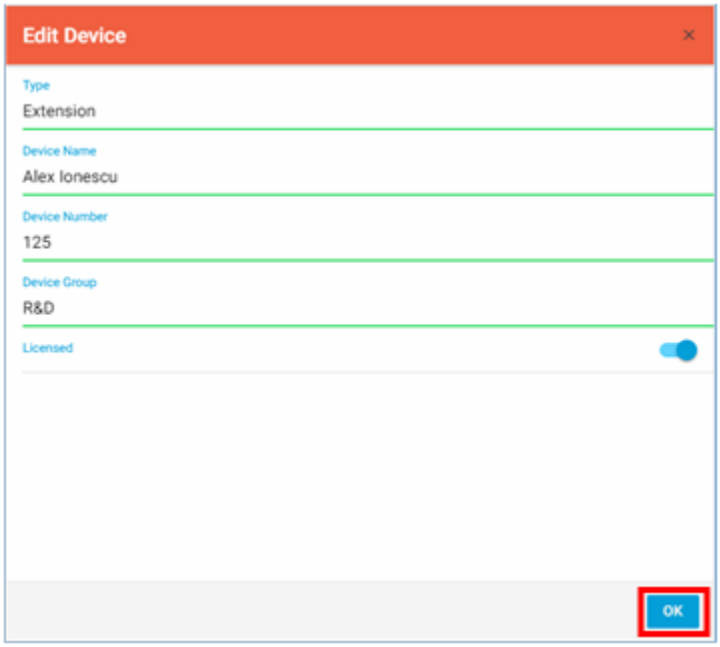
6. The PBX extensions come with additional *Licensed* attribute.

   If a call segment gets through one *Licensed* extension at least for a specific PBX call, the PBX call is stored and presented by Call Accounting in the call logs and call reports. Otherwise, the PBX call is discarded.

   You can manually configure which extensions shall be monitored up to the limit dictated by the license purchased.



7. Click on **OK** button for changes to take effect.

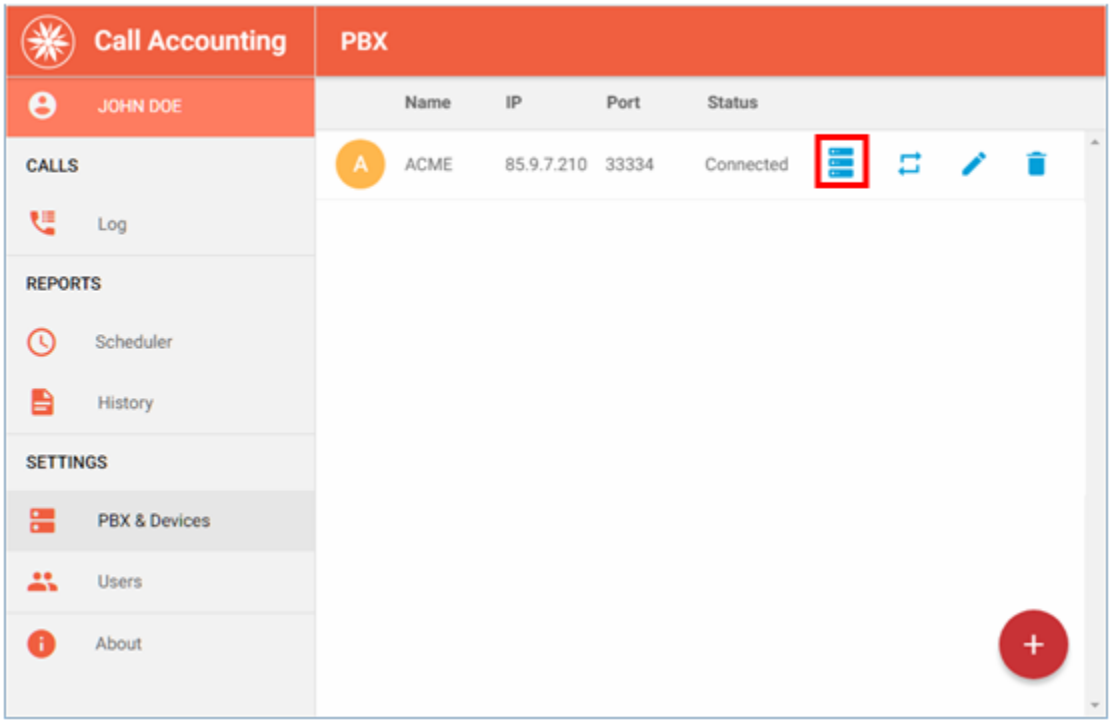


To manually add PBX extension

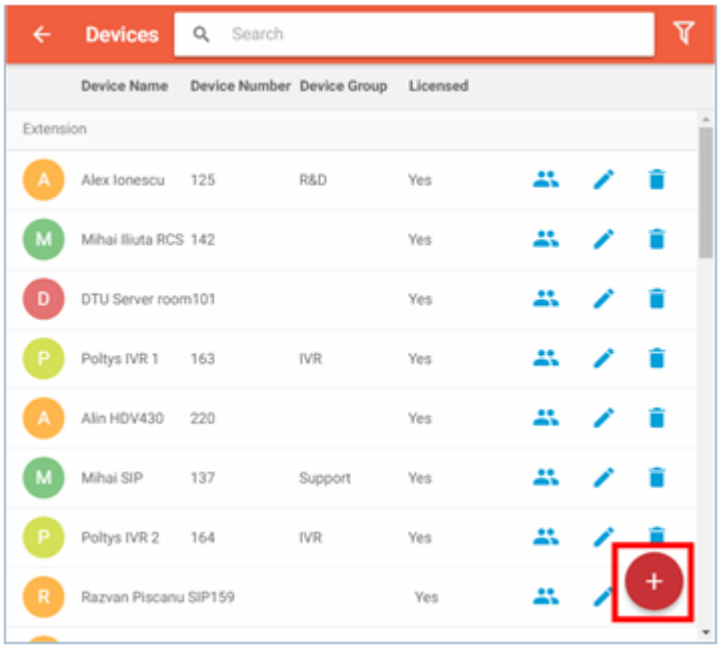
You can manually add PBX extensions, if required.

This feature is useful when you want to monitor only certain extensions in the PBX and you have purchased a Call Accounting license with limited number of extensions to be monitored.

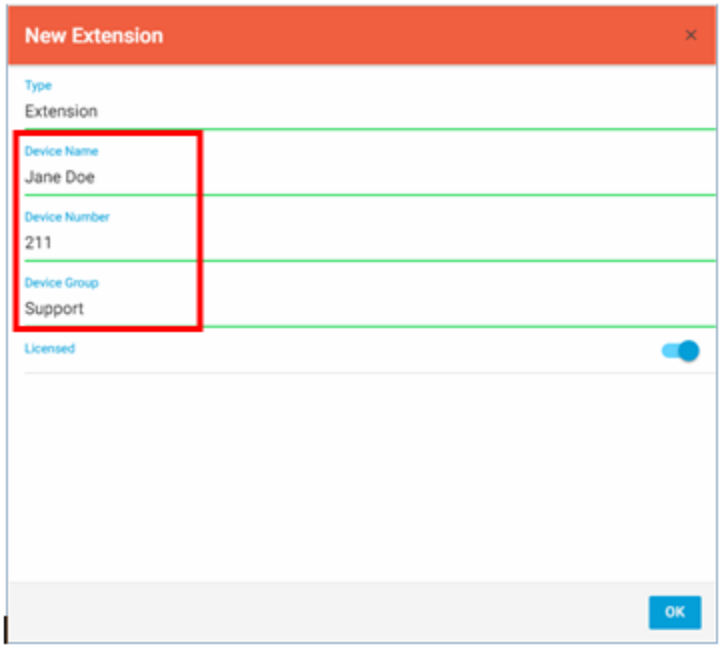
1. Click on the **Edit Devices** button for the PBX you want to configure.



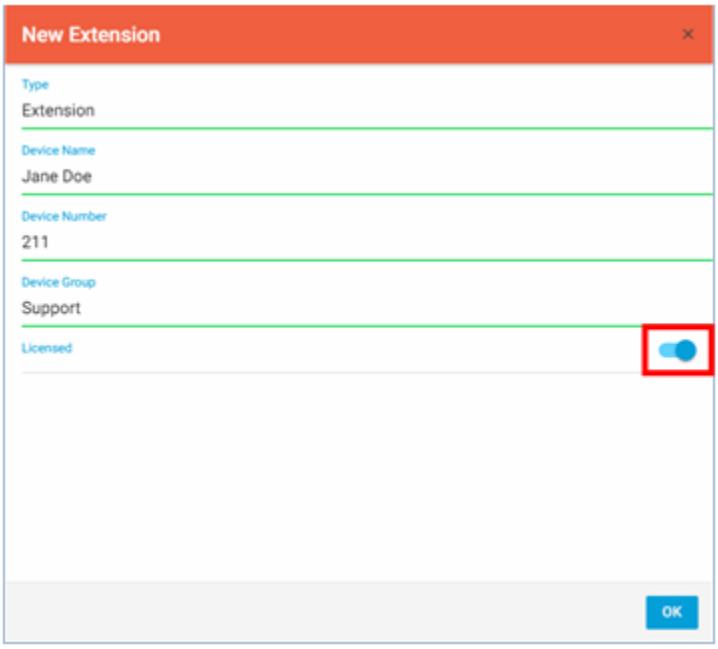
2. The list of PBX devices detected so far displays. Click on **New Extension** button.



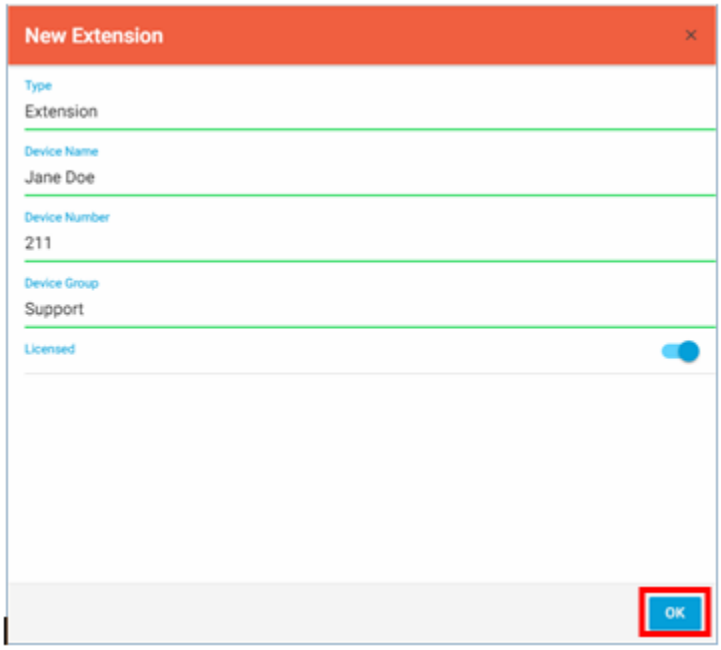
3. The *Edit Device* screen displays. Enter *Device Name*, *Device Number*, and *Device Group* of the new extension.



4. Enable *Licensed* option.



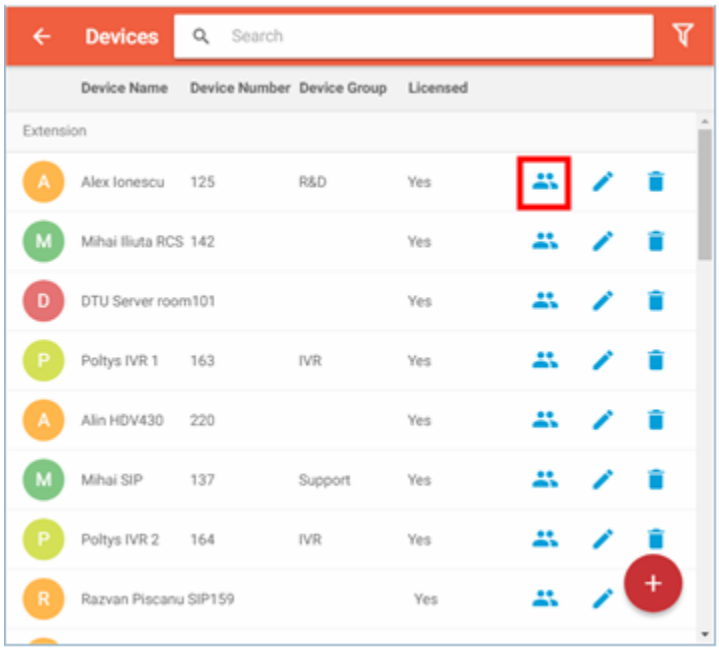
5. Click on **OK** button for changes to take effect.



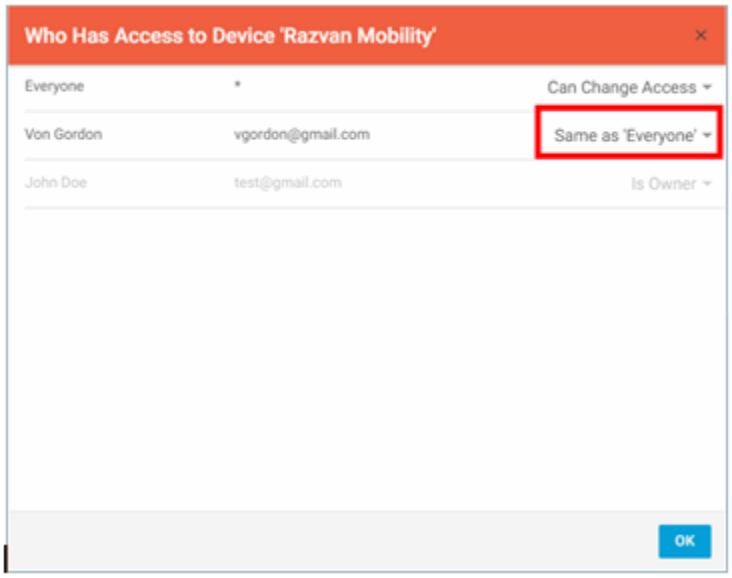
To change user access rights for PBX devices

By default, all users defined in the system have *Can Change Access* rights on all PBX devices. For more information refer to Users and Access Rights section.

1. Click on **Device Access** button of the PBX device you want to change.

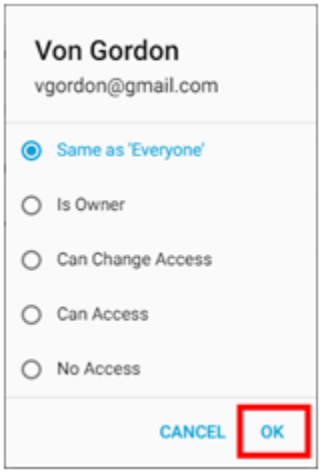


2. *Who Has Access to Device* screen displays. The list presents all users defined in the system. By default, a new user comes with *Same as Everyone* access rights to the current device. If you want the change the access rights of a certain user for the current PBX device, click on **Same as 'Everyone'** button of the PBX device you want to change.

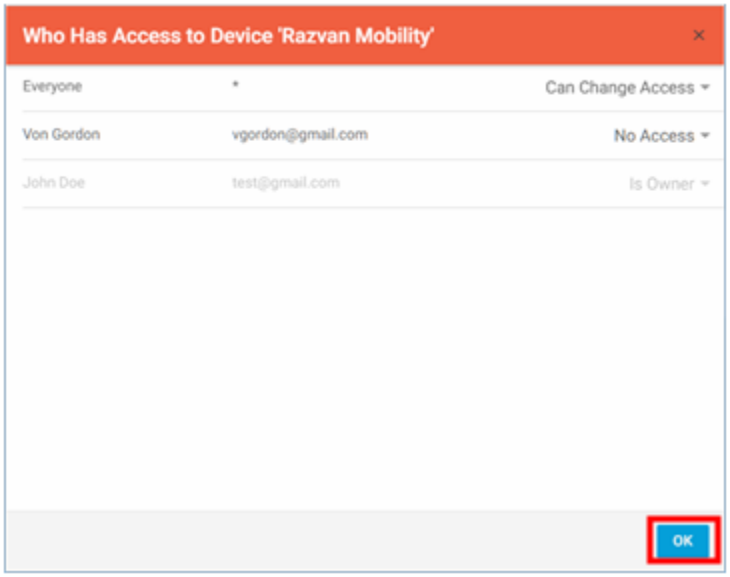


NOTE: *Everyone* is a general modifier of access rights of multiple users in the system which are set to *Same as 'Everyone'*.

3. The *Access Rights* screen display for the selected user. Select the new access rights from the list, for example *No Access*, and then click on **OK** button:



4. The new access rights are saved in the database and updated in the list. Click on **OK** button for changes to take effect.



Repeat steps 1 to 4 for each PBX device you want to change.

CALL LOGGING

You can inspect the entire PBX activity by Call Log.

Browse Call Log

Call Accounting monitors the PBX activity and stores the call information into internal database.

You can access the call history at anytime using *Call Log*.

The *Direction* and *Status* of calls are presented as follows:

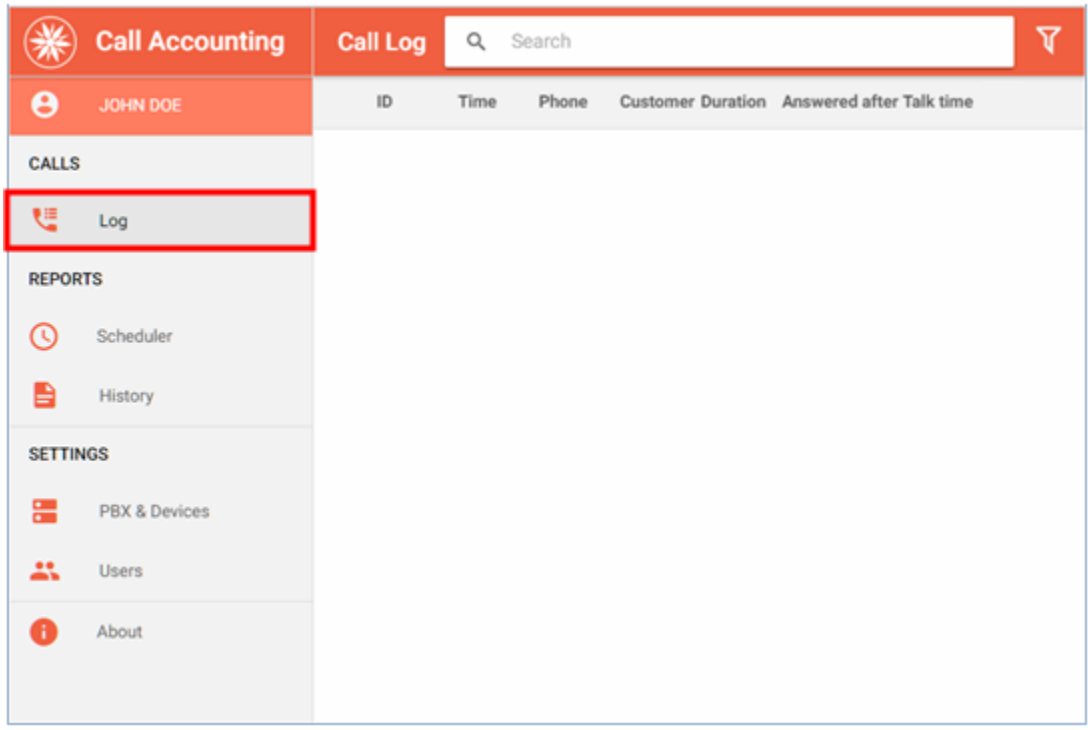
- ↙ **Incoming call**, hung up after call connected
- ↙ **Incoming call**, hung up before call connected
- ↗ **Outgoing call**, hung up after call connected
- ↗ **Outgoing call**, hung up before call connected

The following general call attributes are presented in the list: *ID*, *Date* and *Time*, *Phone* dialed or *Caller ID*, *Customer* name, *Duration*, *Answered after* time, and *Talk time*.

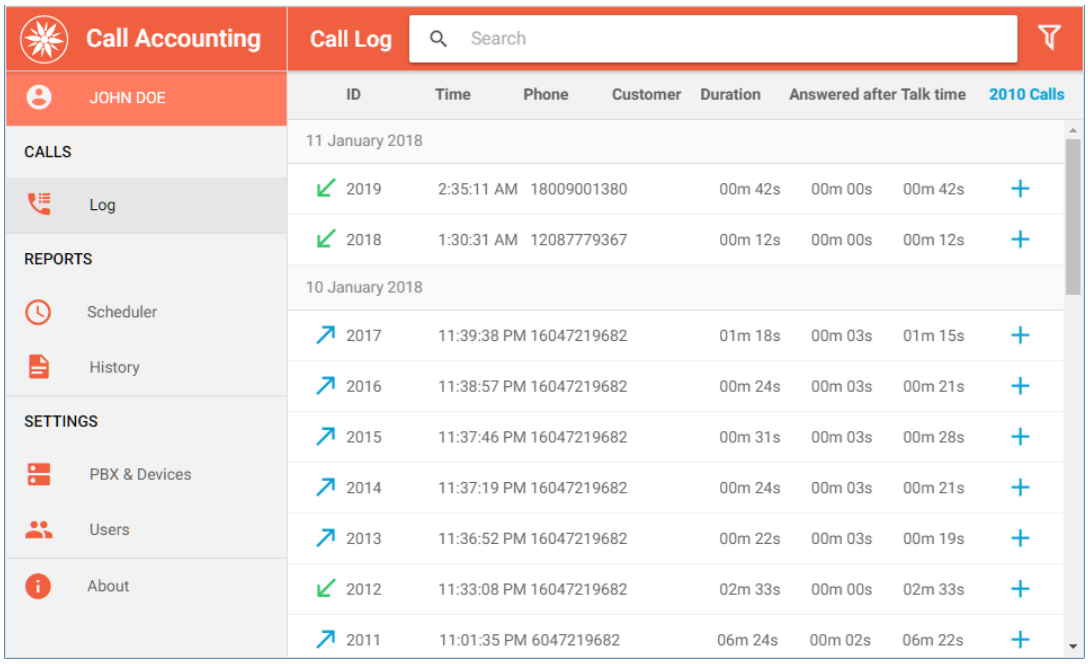
The total number of the calls in the Call Log list displays as well in the Call Log.

To Browse Call Log

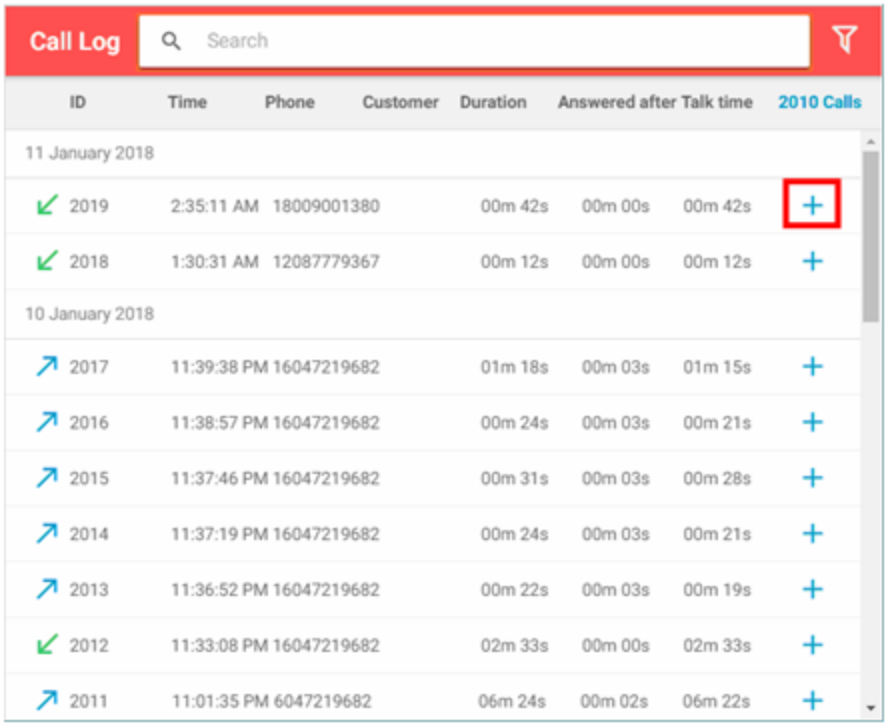
1. Click on the **Log** button in the left panel.



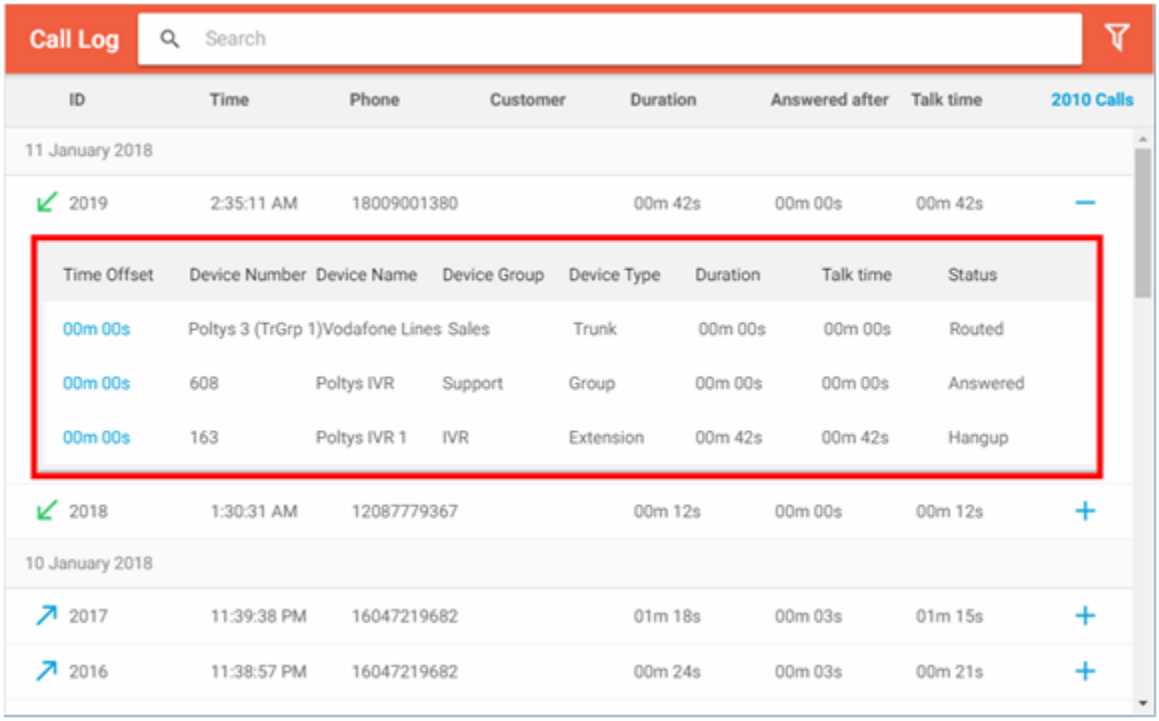
2. The calls are presented chronologically in the list, latest first; the total number of the calls displays as well in the upper-right corner of the list.



3. To get details about the call of interest, click on the call item in the list or on the associated **Call Details** button.



4. The call item expands and all associated call segments display with details.



5. The following call segment attributes display: *Time Offset*, *Device Number*, *Device Name*, *Device Group*, *Duration*, *Talk time*, and *Status*.

Quick Search

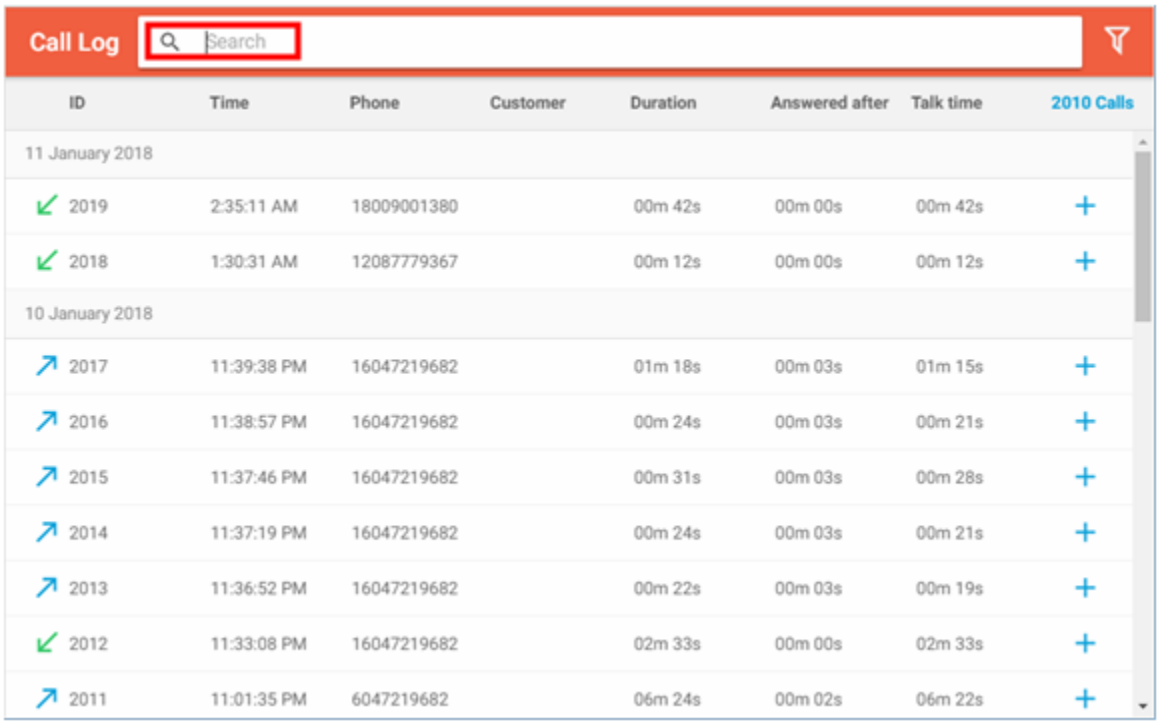
Call Accounting lets you search at a snap for an alphanumeric text in string attributes of a call and subsequent call segments.

The following call string attributes are considered at quick search operation:

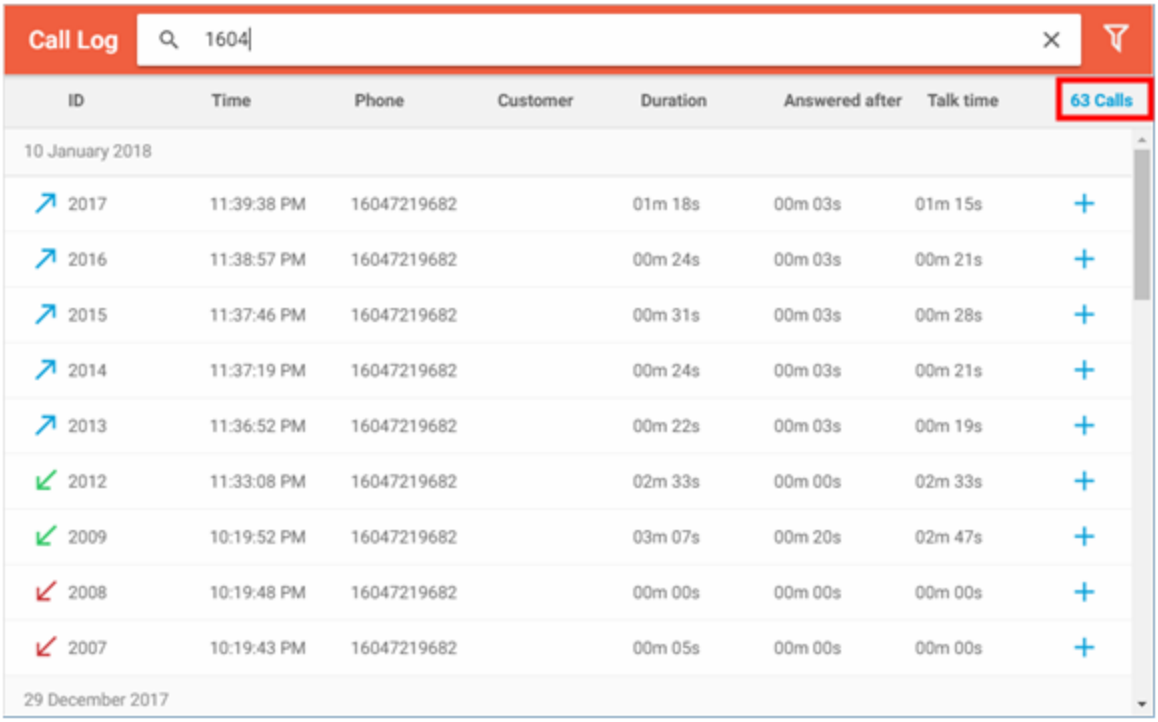
- Call level: *Phone*, *Customer*
- Call segment level: *Device Number*, *Device Name*, *Device Group*

To quick search for calls

1. Click on the *Search* field. Enter the text you are looking for.



2. All Calls that have the specified text in their string attributes display. Also, the number of calls returned in the list is presented in the upper-right corner.



Filter Call Log

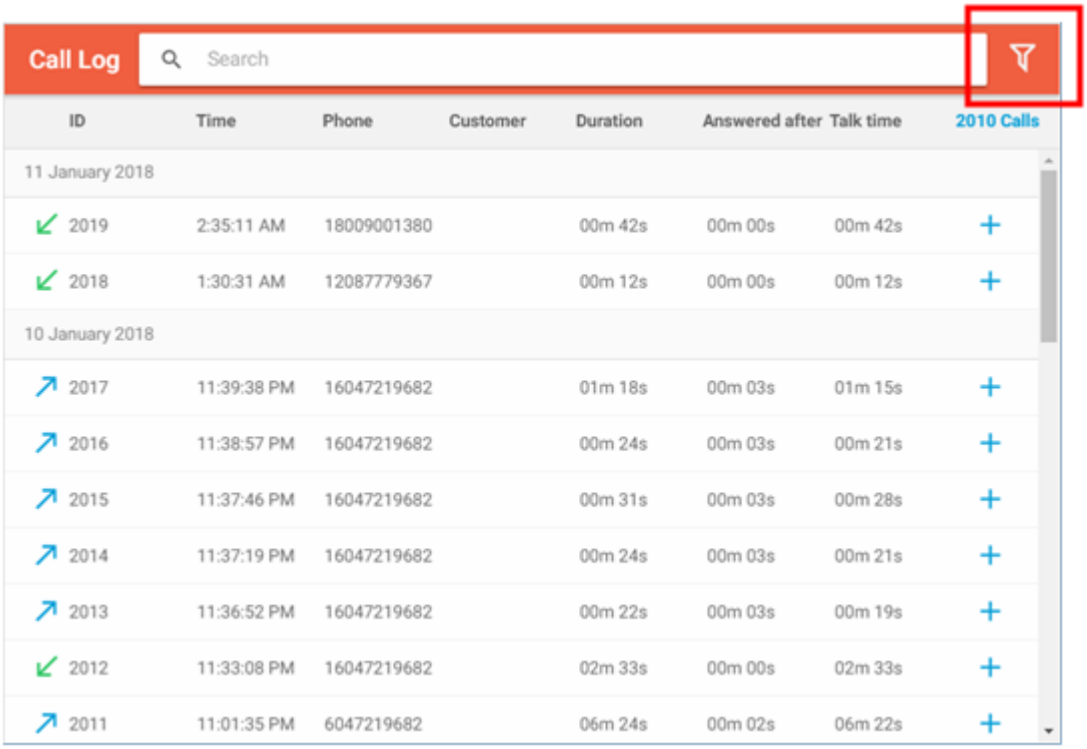
Call Accounting lets you apply multiple data filters in order to locate the call information of interest from the internal database.

One or more filters can be applied on the call log information, as follows:

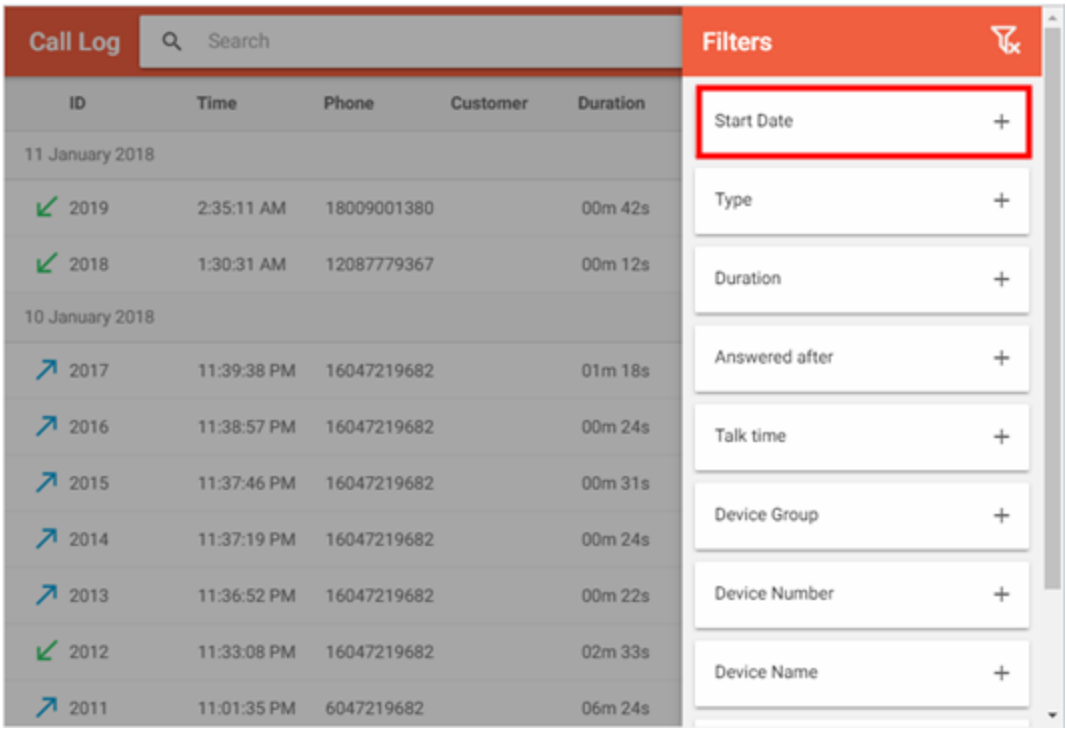
- **Start Date**
- Call **Type**
- **Duration**
- **Answered after**
- **Talk time**
- **Device Group**
- **Device Number**
- **Device Name**
- Call **Status**
- **PBX** Name

To apply a filter to Call Log

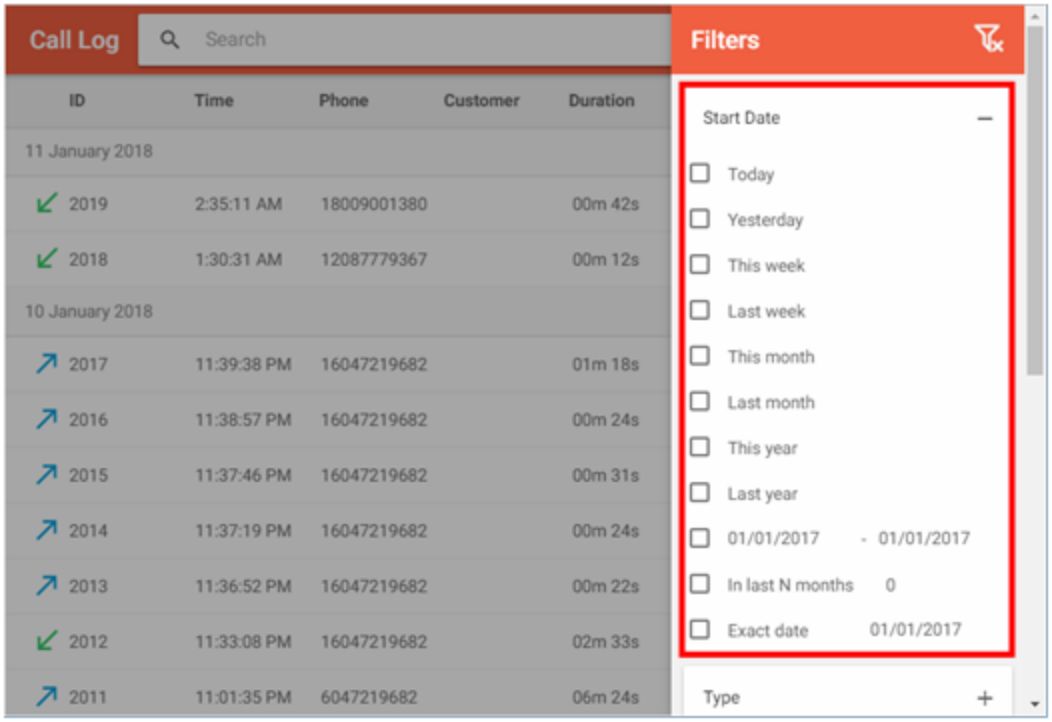
1. Click on **Display Filter** button.



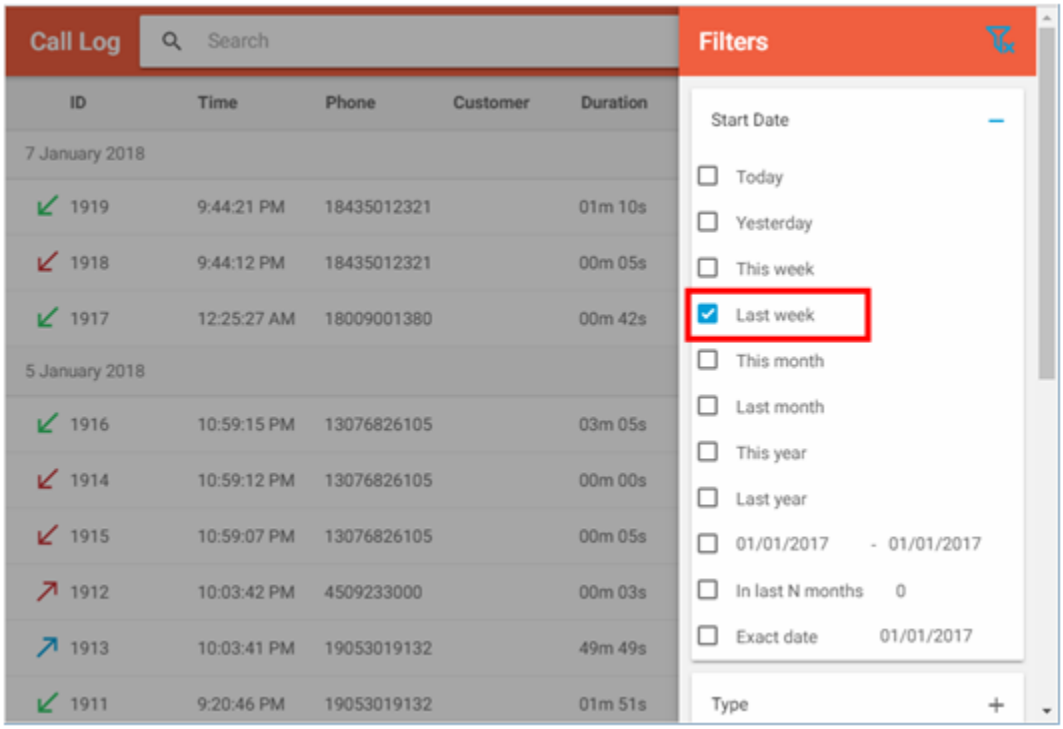
2. The *Filters* panel displays. Select the filter of your choice, *Start Date* for example.



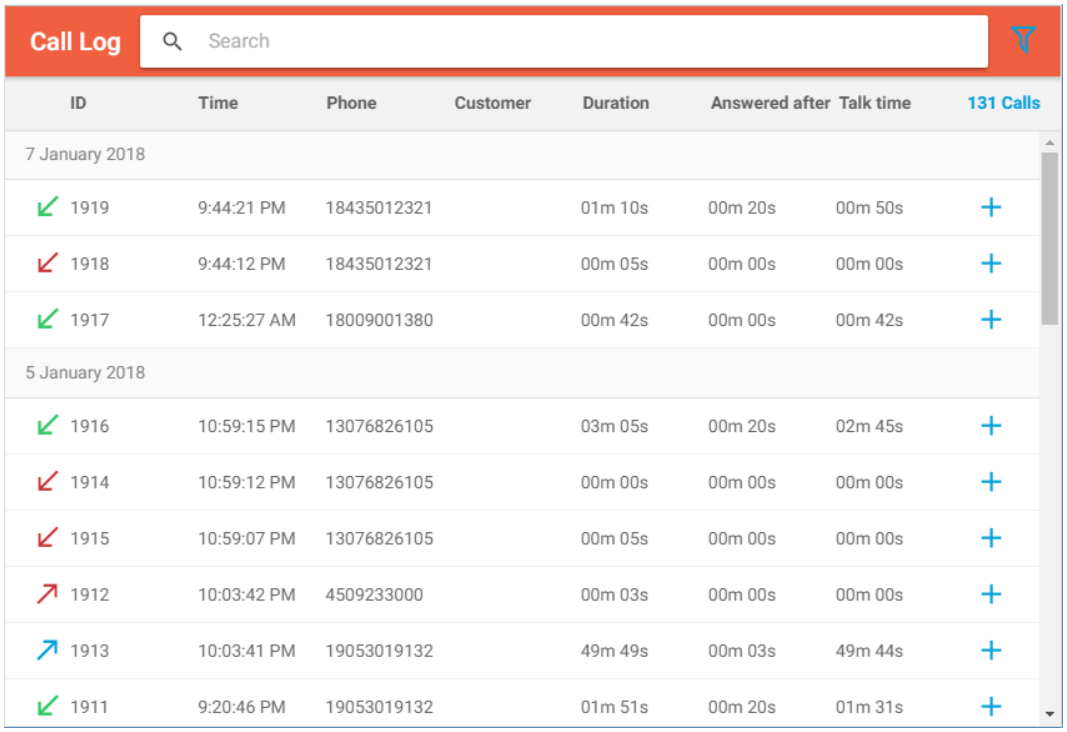
3. The filter *Start Date* expands.



4. Select the date option of your choice, *Last Week* for example.



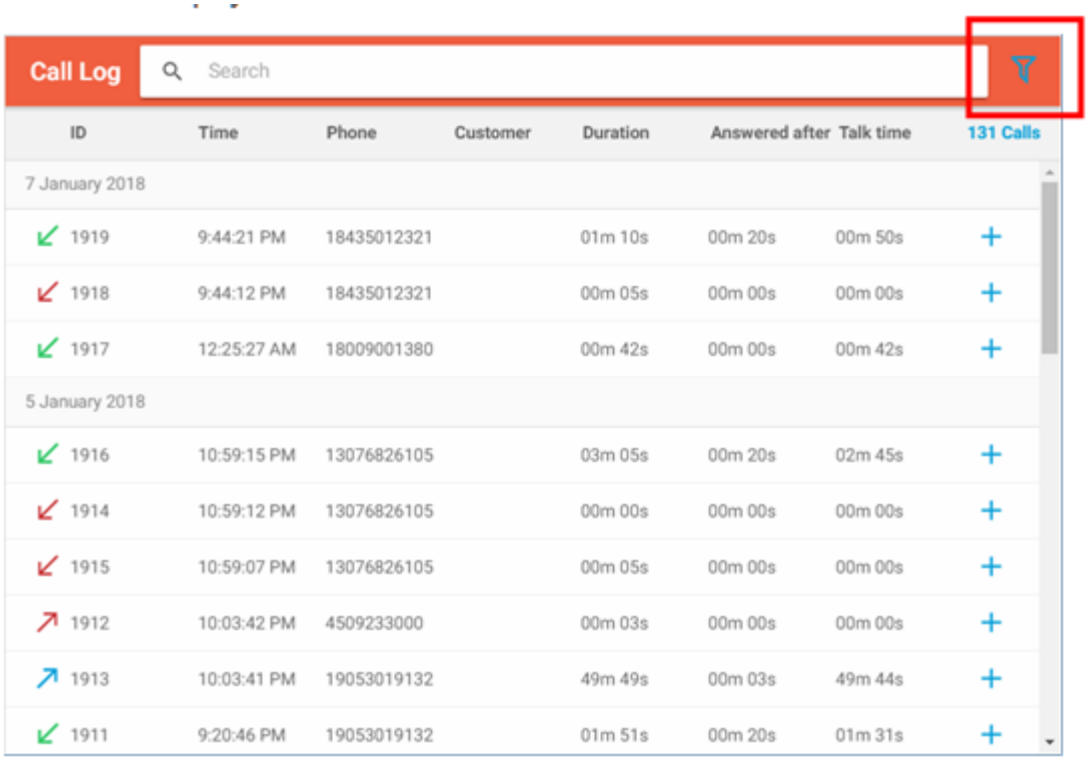
5. Call Log is filtered out instantly. Click somewhere on the area outside the filter panel to view the entire Call Log.



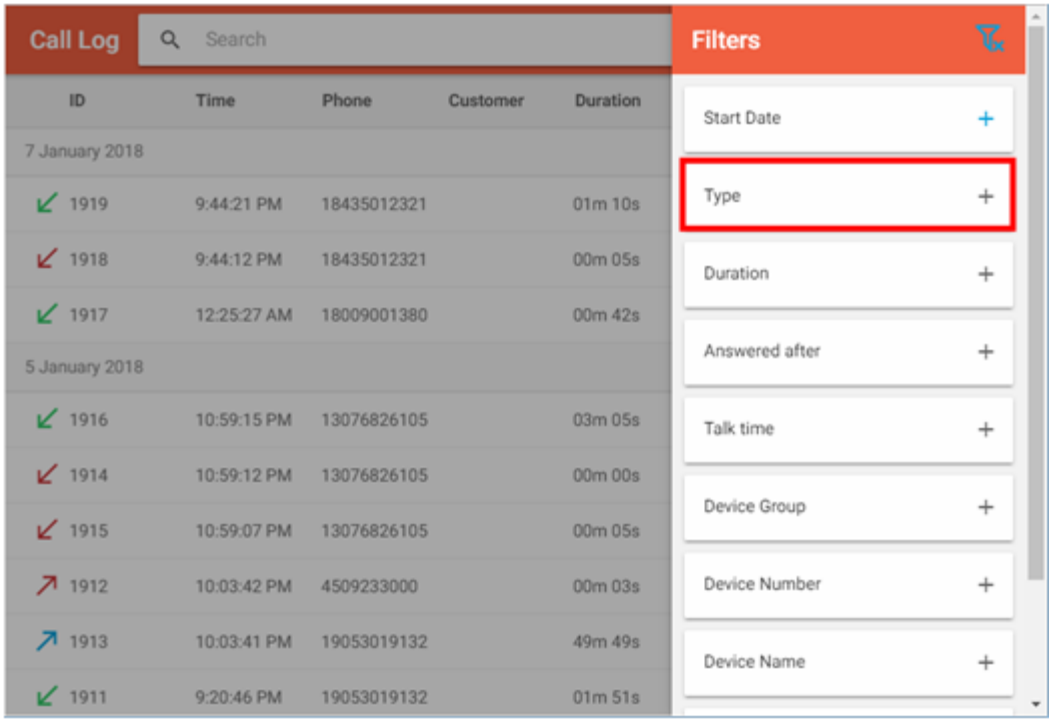
NOTE: When you have at least one filter applied to the Call Log, the Display Filter button displays in blue color.

To apply more filters to Call Log

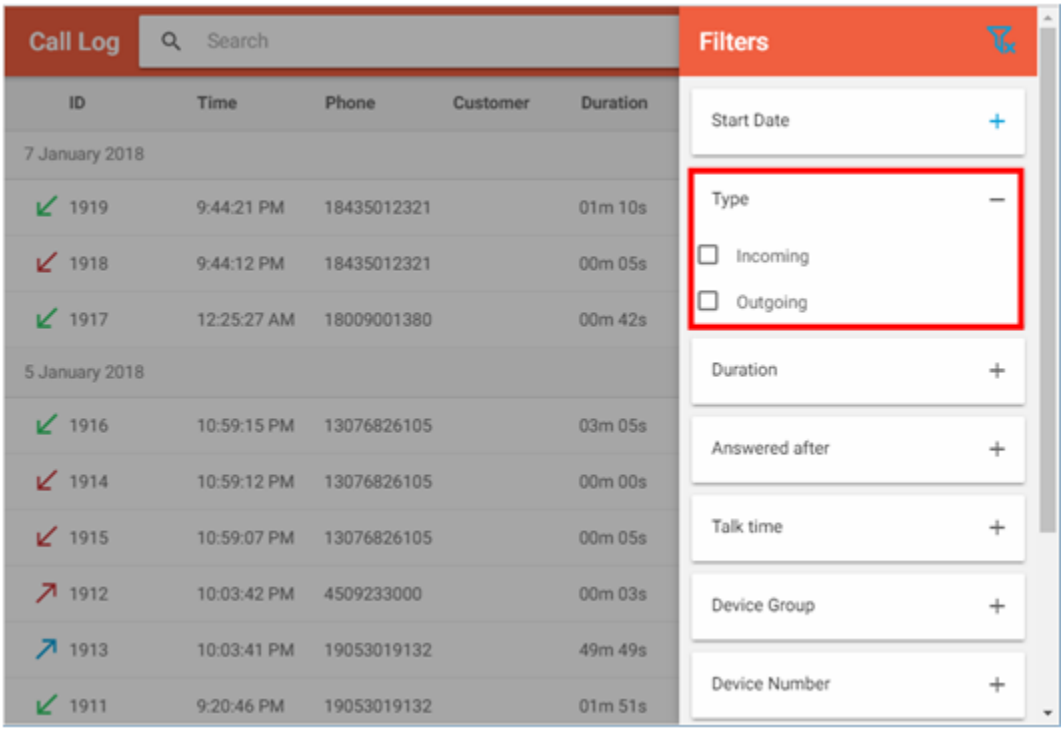
1. Click on **Display Filter** button.



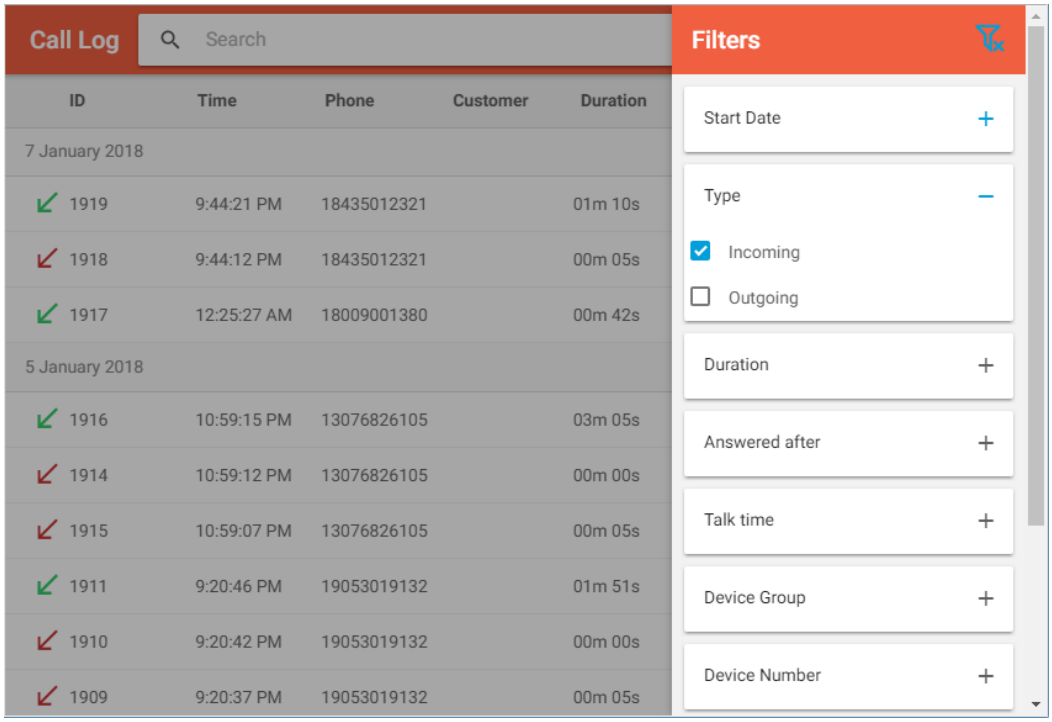
2. The *Filters* panel displays. Select the filter of your choice, *Type* for example.



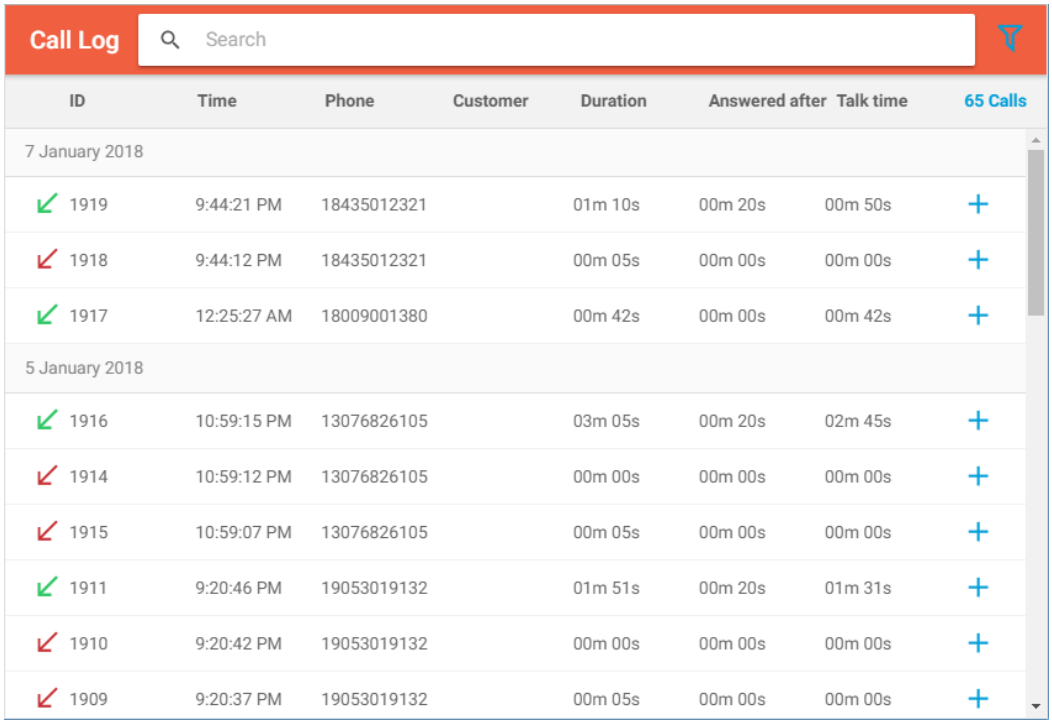
3. The filter *Type* expands.



4. Select the date option of your choice, *Incoming* for example.

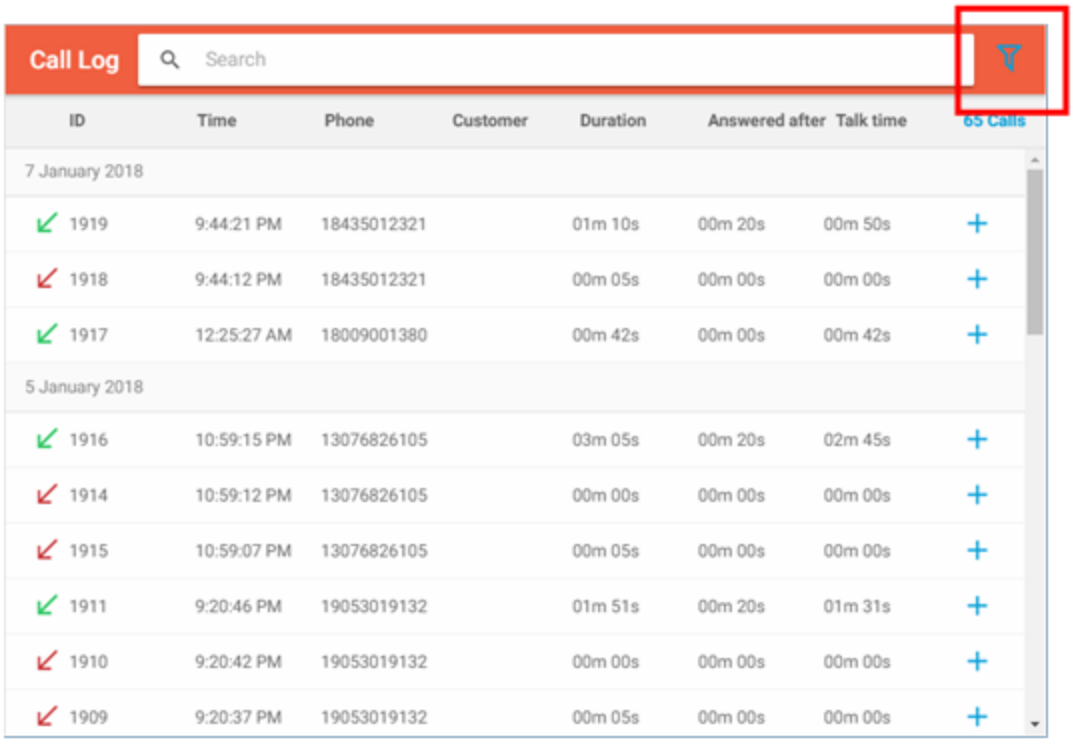


5. Call Log is filtered out instantly. You have now two filters applied: *Start Date* and *Type*. Click somewhere on the area outside the filter panel to view the entire Call Log.

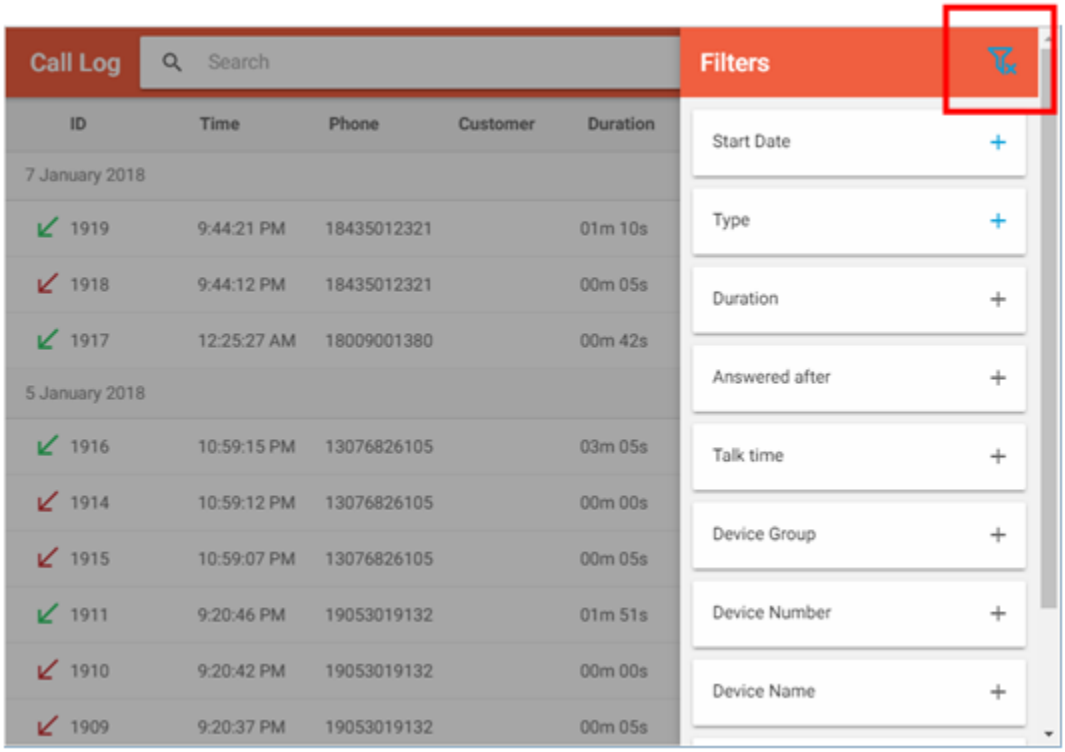


To clear all filters applied to Call Log

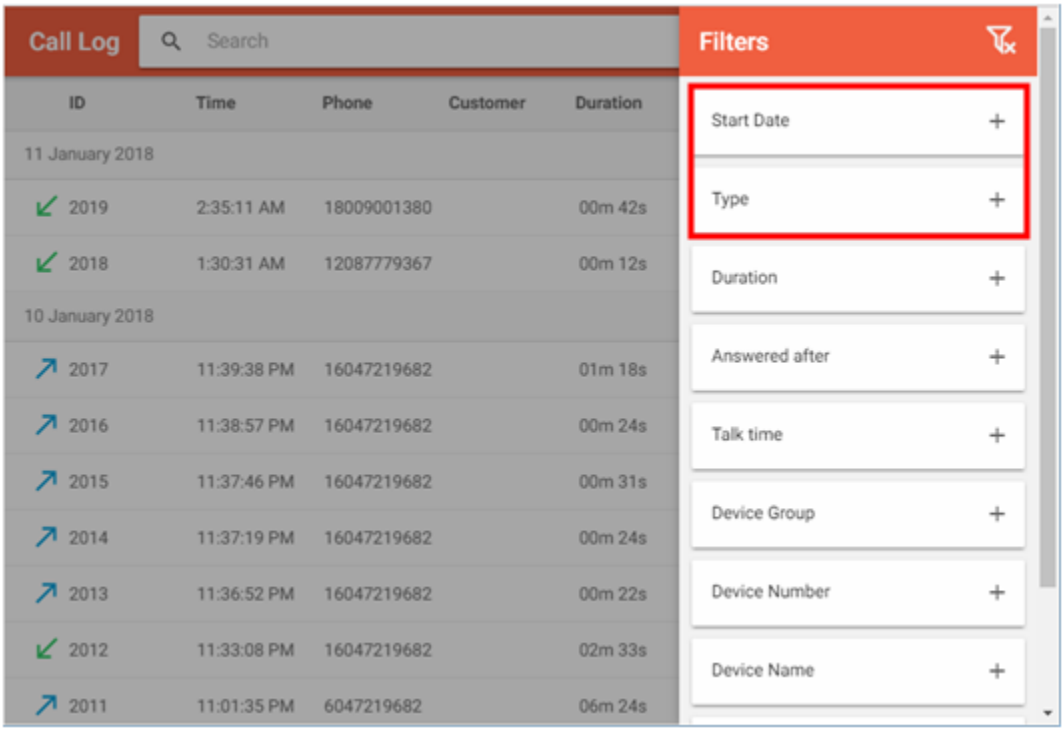
1. Click on **Display Filter** button.



2. The *Filters* panel displays. Click on **Clear Filter** button.



3. All filters are cleared.


Call Log
Search
Filters
ID
Time
Phone
Customer
Duration
11 January 2018
2019
2:35:11 AM
18009001380
00m 42s
2018
1:30:31 AM
12087779367
00m 12s
10 January 2018
2017
11:39:38 PM
16047219682
01m 18s
2016
11:38:57 PM
16047219682
00m 24s
2015
11:37:46 PM
16047219682
00m 31s
2014
11:37:19 PM
16047219682
00m 24s
2013
11:36:52 PM
16047219682
00m 22s
2012
11:33:08 PM
16047219682
02m 33s
2011
11:01:35 PM
6047219682
06m 24s
Start Date
Type
Duration
Answered after
Talk time
Device Group
Device Number
Device Name

CALL REPORTING

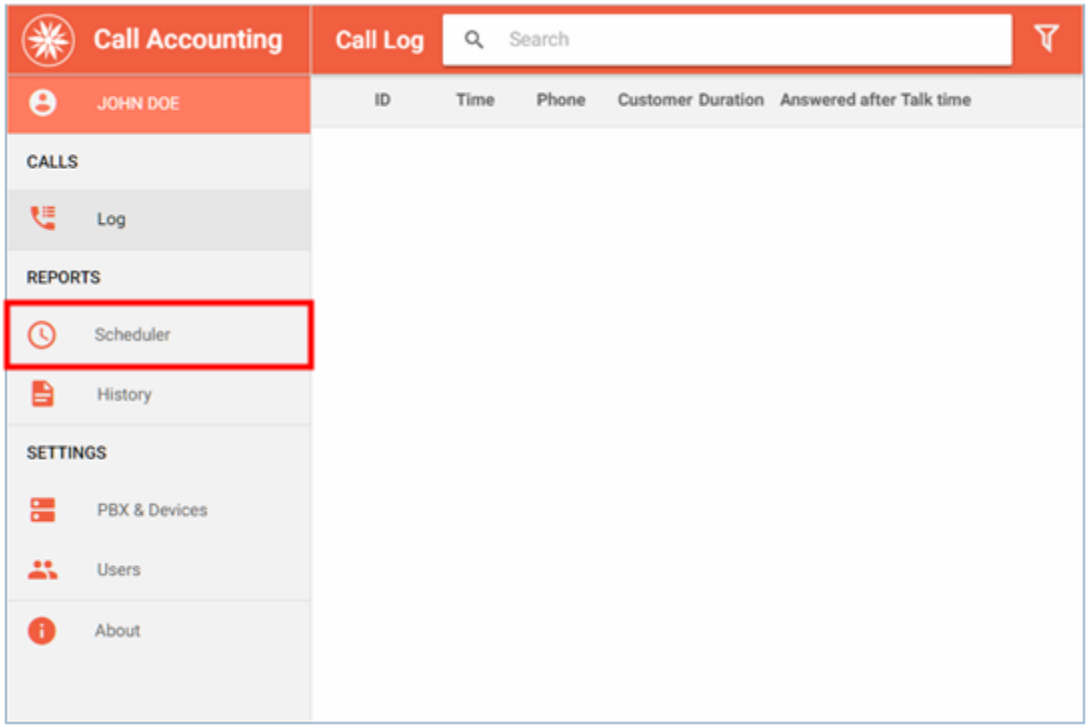
Call Accounting monitors the PBX activity and stores the call information into internal database.

You can create history reports based on predefined Excel templates. You can also create schedules to send the generated reports to Email recipients.

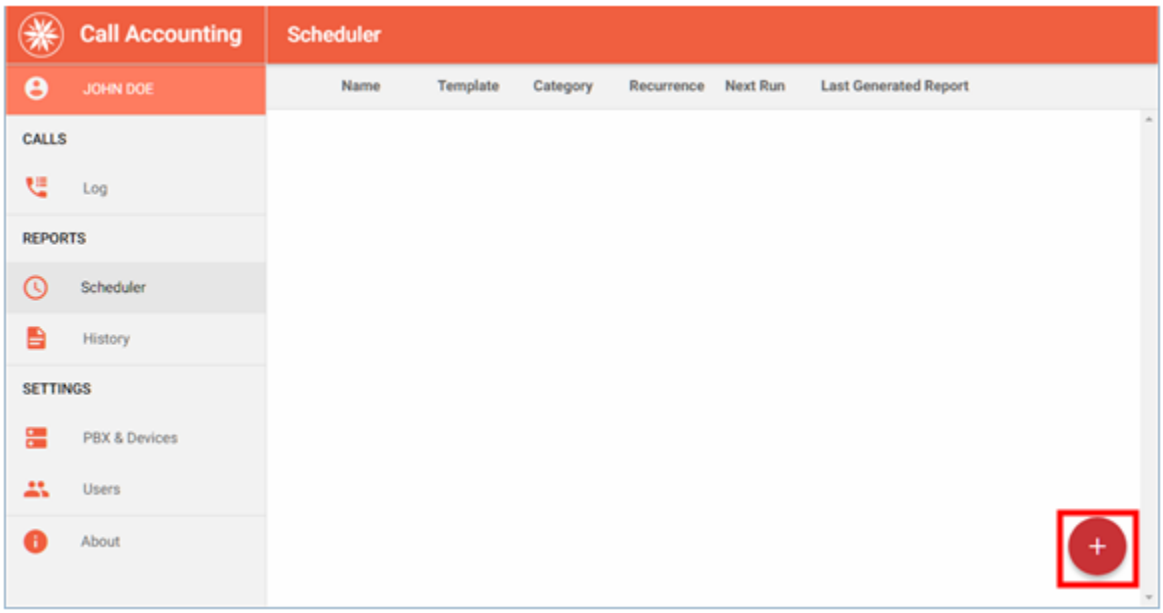
Create Report Schedule

To create report schedule

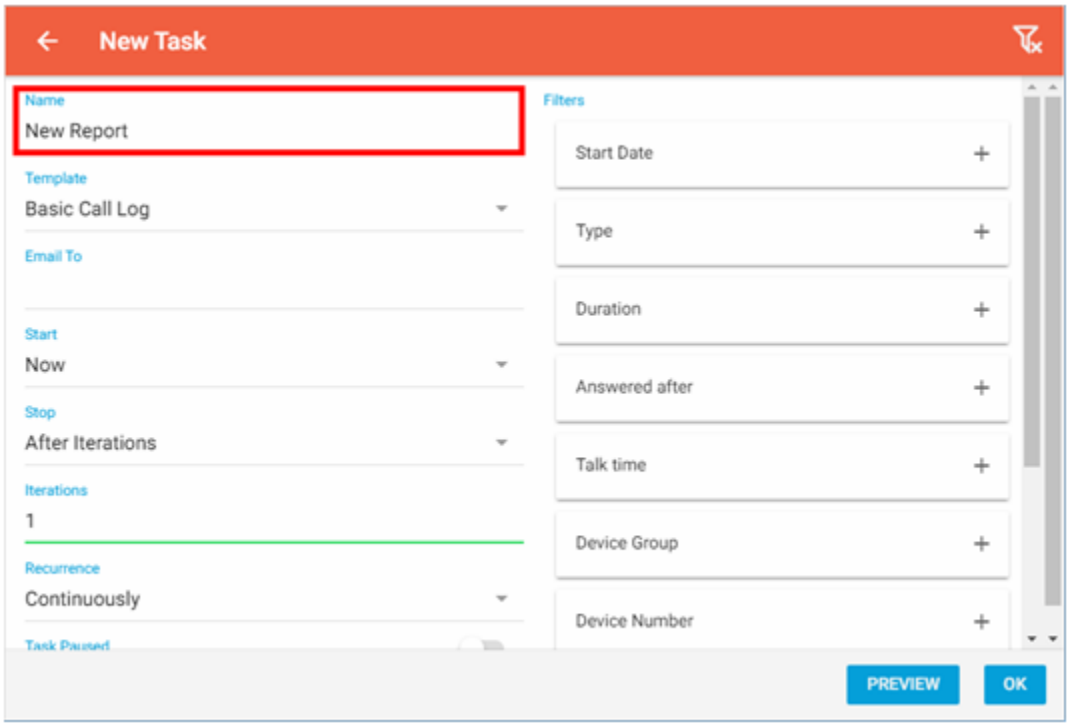
1. Click on the **Scheduler** button in the left panel.



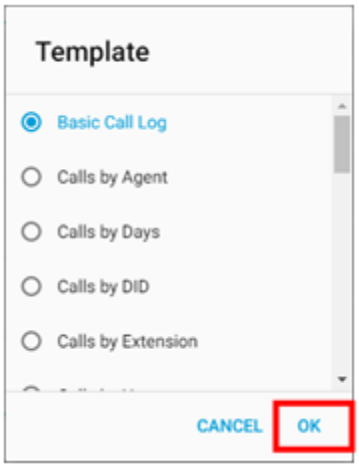
2. The list of currently defined report schedules displays. Click on **New Task** button.



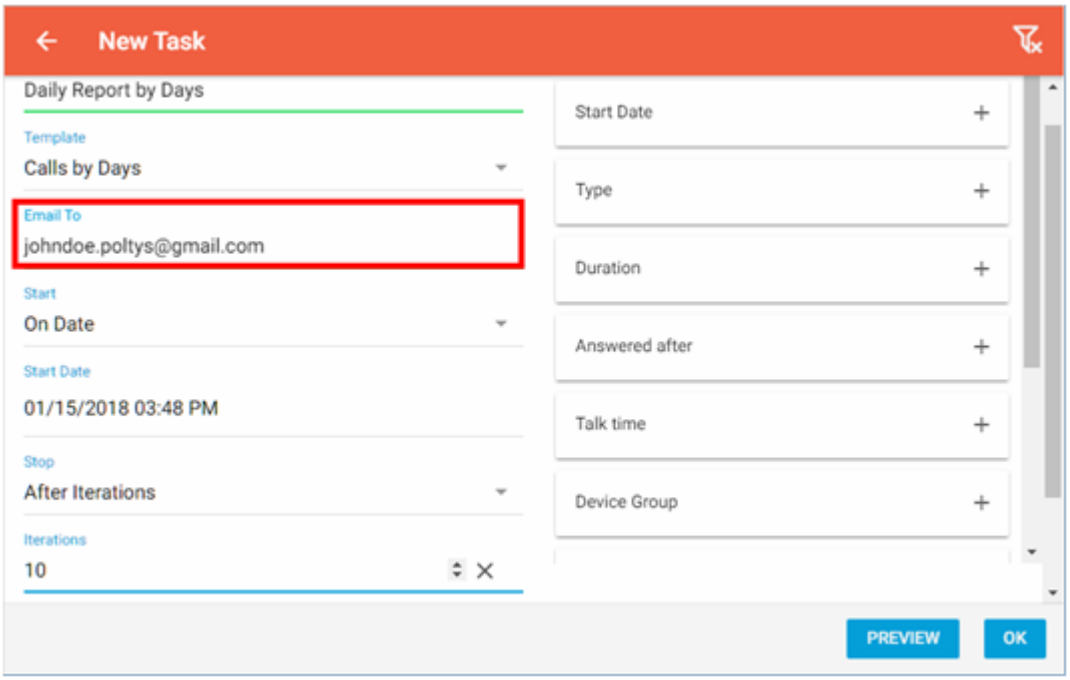
3. The **New Task** screen displays. Enter the report *Name*.



4. Select the report *Template* of your choice and click on **OK** button. The full list of templates are present in the Predefined Excel Report Templates section.

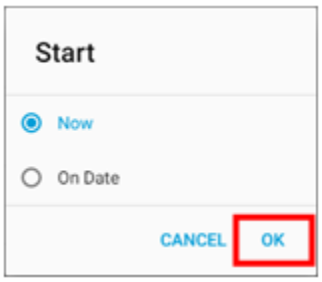


5. If you want to send the report to Email recipients, enter the Email address of the destination in related field.



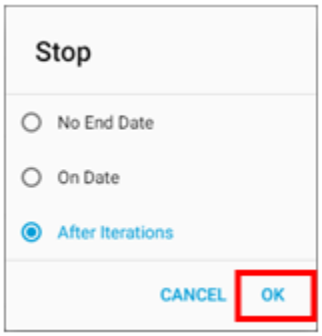
NOTE: You can add multiple Email recipients to a schedule, separated by ";".

6. Select the *Start* option of your choice and click on **OK** button.



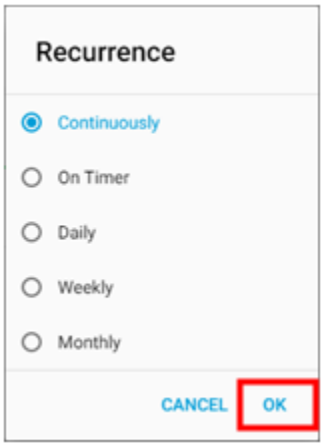
7. Select the effective *Start Date*, if you opted out for it. Click on **Done** button afterwards.

8. Select the *Stop* option of your choice and click on **OK** button.

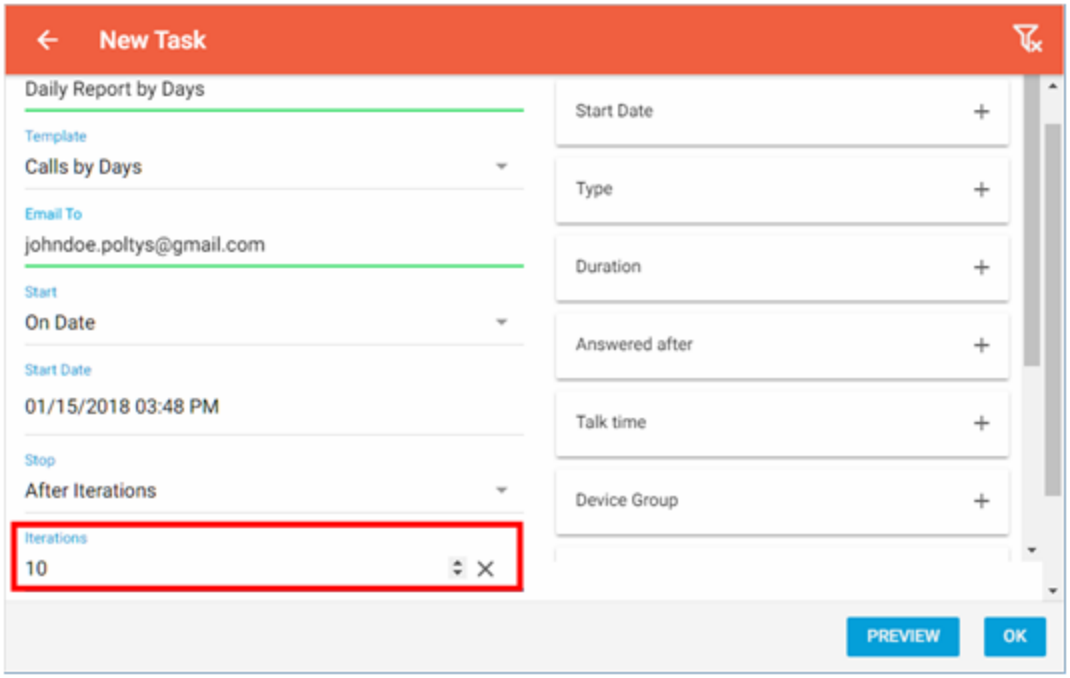


9. Select the effective *Stop Date*, if you opted out for it. Click on **Done** button afterwards.

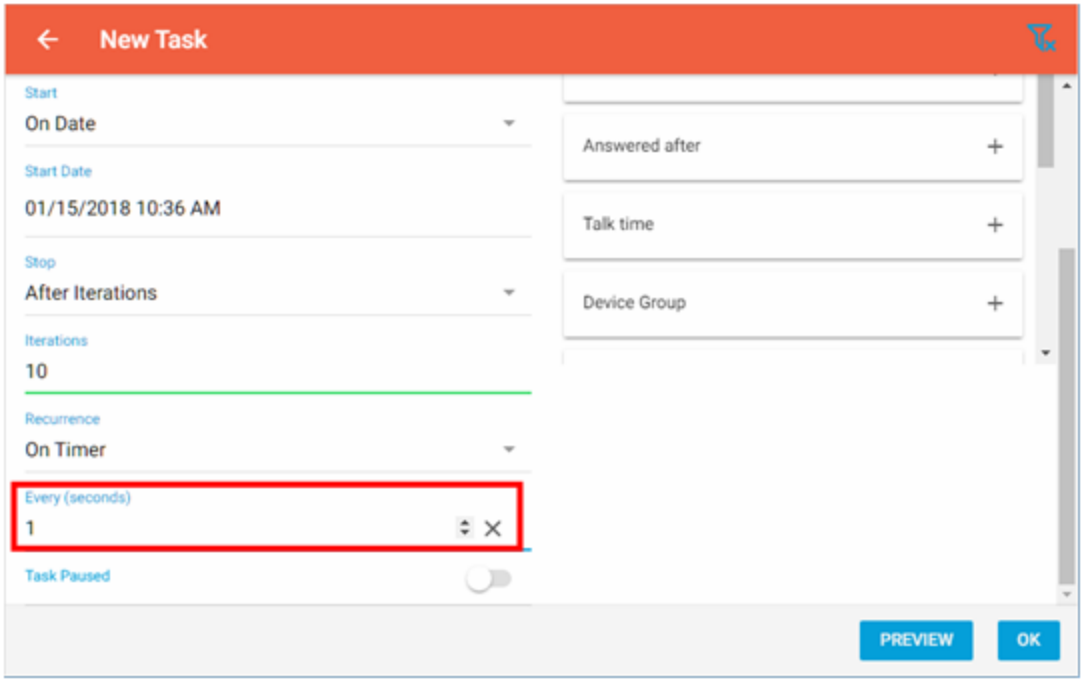
10. Select the *Recurrence*, if you opted out for *Start Now*. Click on **OK** button afterwards.



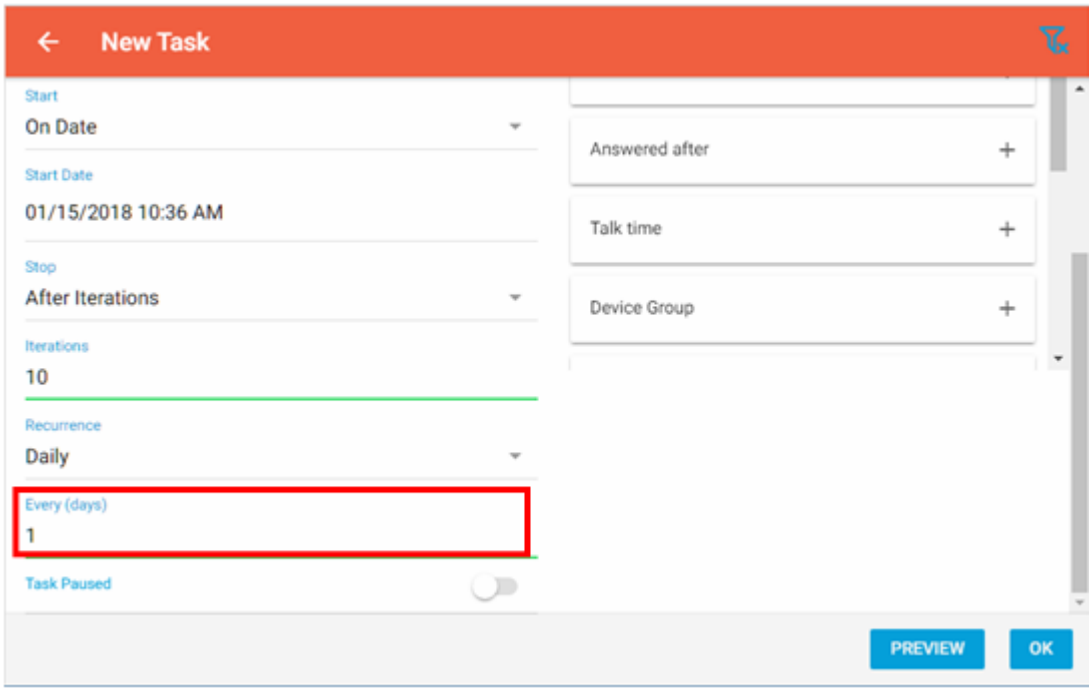
11. Enter the number of *Iterations*, if you opted out for it.



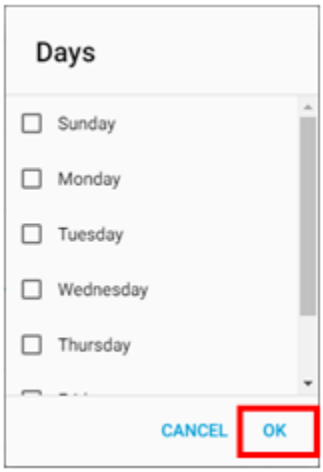
12. Enter the number of seconds after which the report is generated, if you opted out for *Recurrence On Timer*.



13. Enter the number of days after which the report is generated, if you opted out for *Recurrence Daily*.

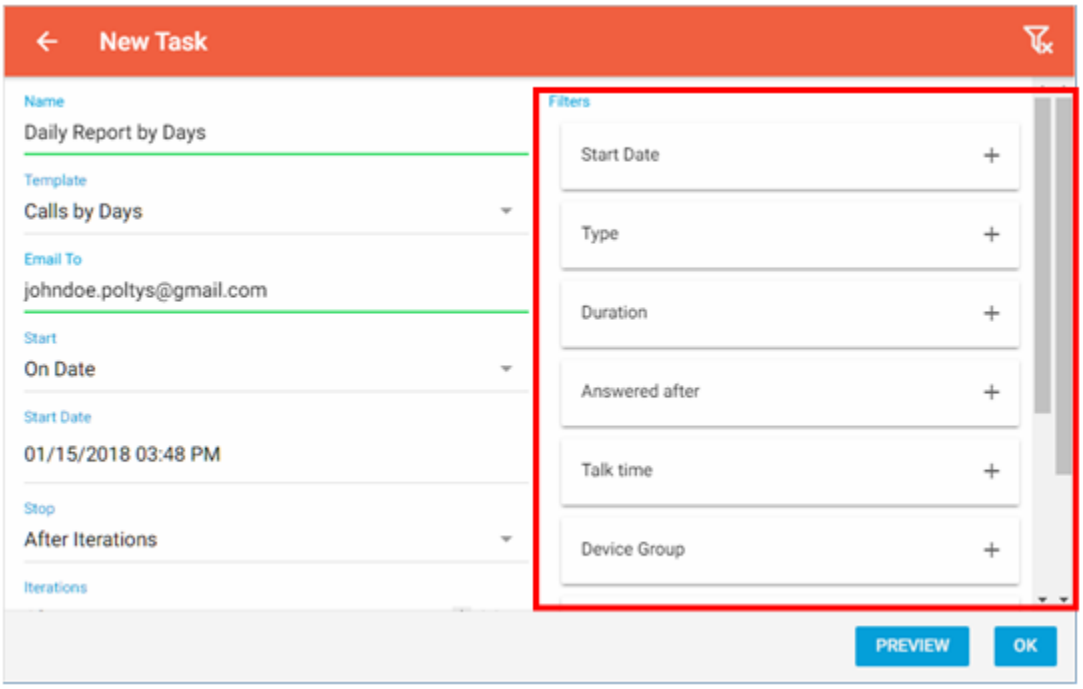


14. Enter on which days of week you want the report to be generated, if you opted out for *Recurrence Weekly*. Click on **OK** button afterwards.

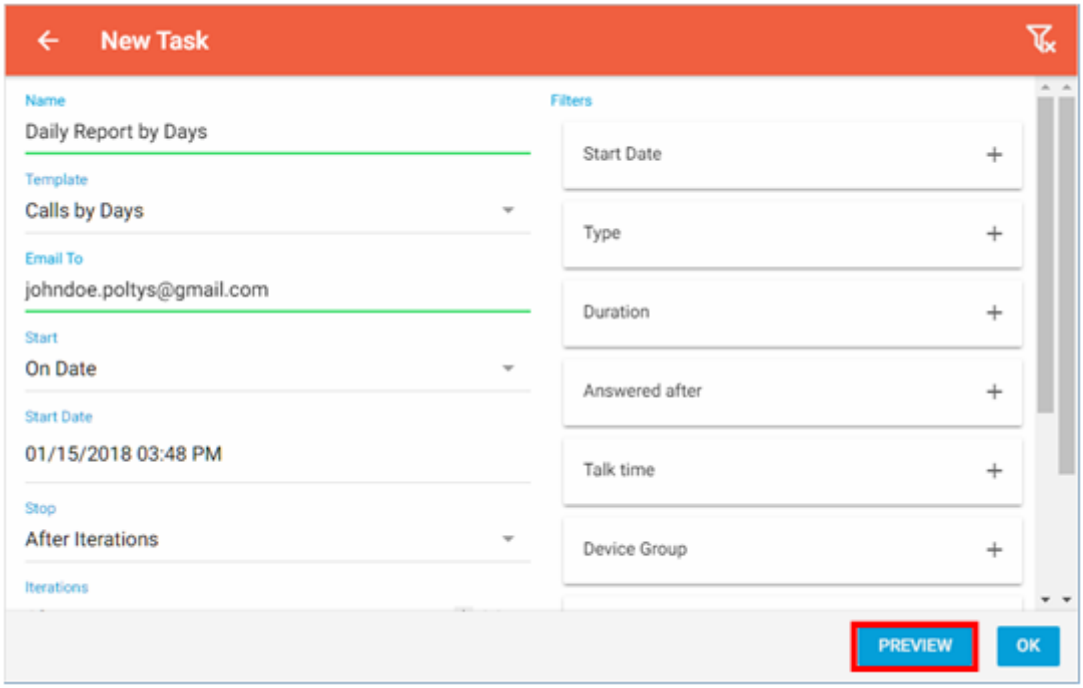


15. Enter on which days of month you want the report to be generated, if you opted out for *Recurrence Monthly*. Click on **OK** button afterwards.

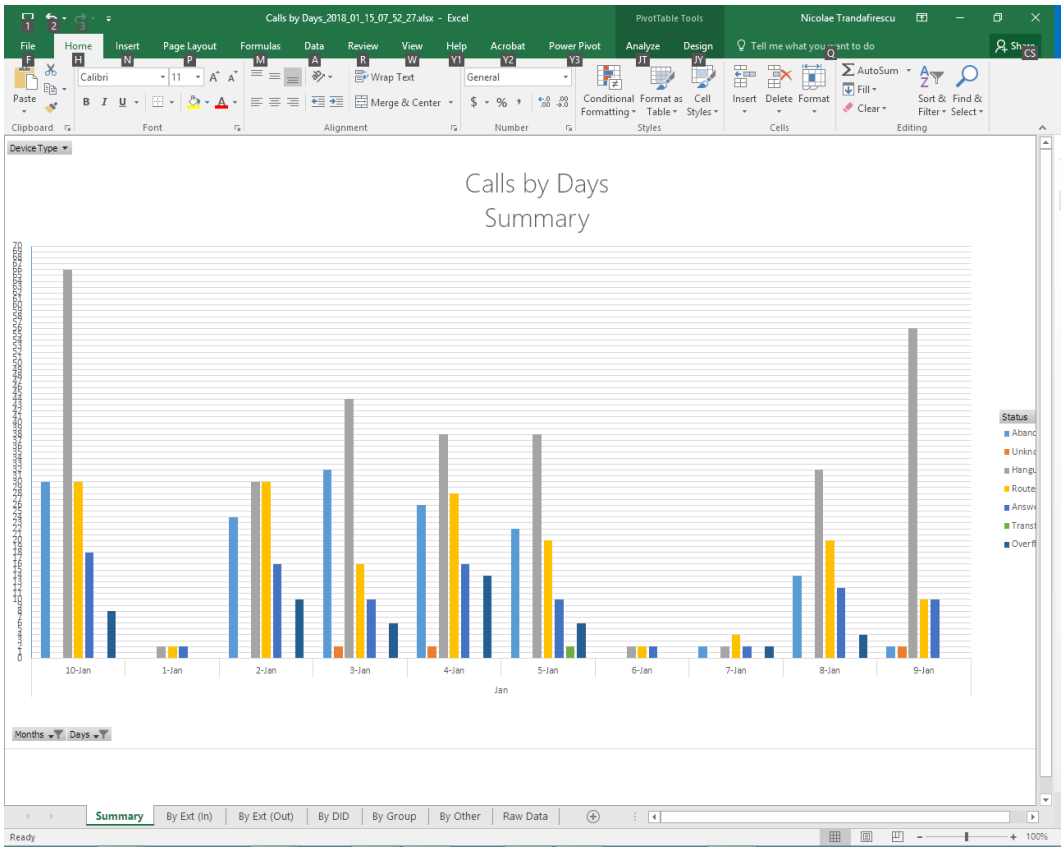
16. You can filter the database information to be presented in the report using the right side of the screen. The available filters and operation are the same as for Call Log. Refer to Filter Call Log section for more information.



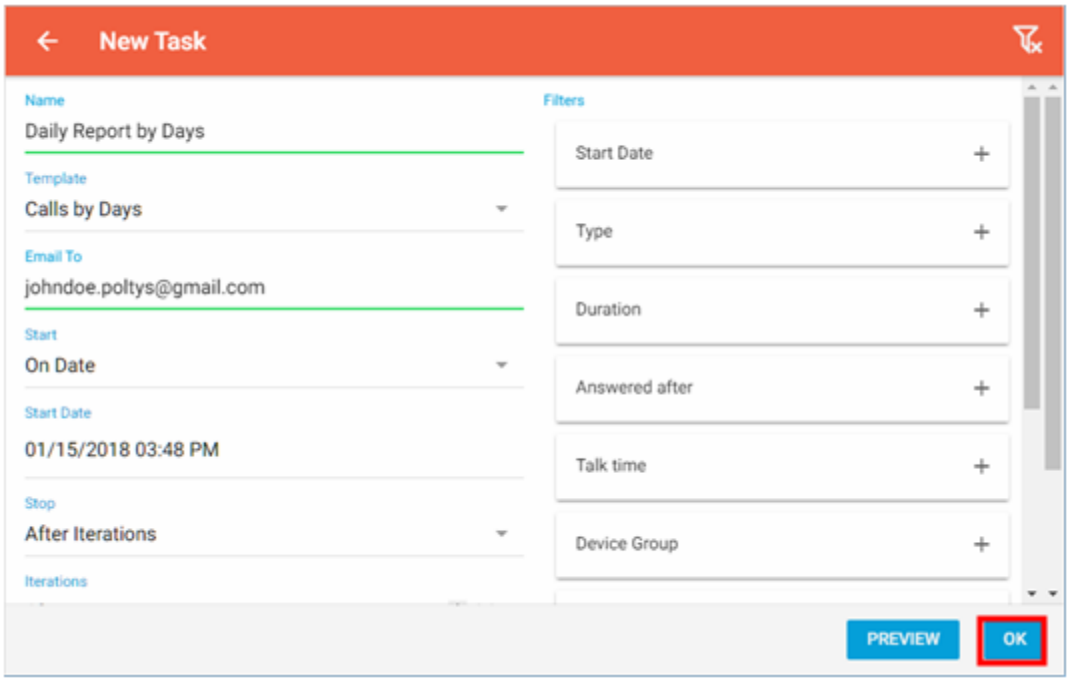
17. You can use **Preview** button for fine tuning of the filters.



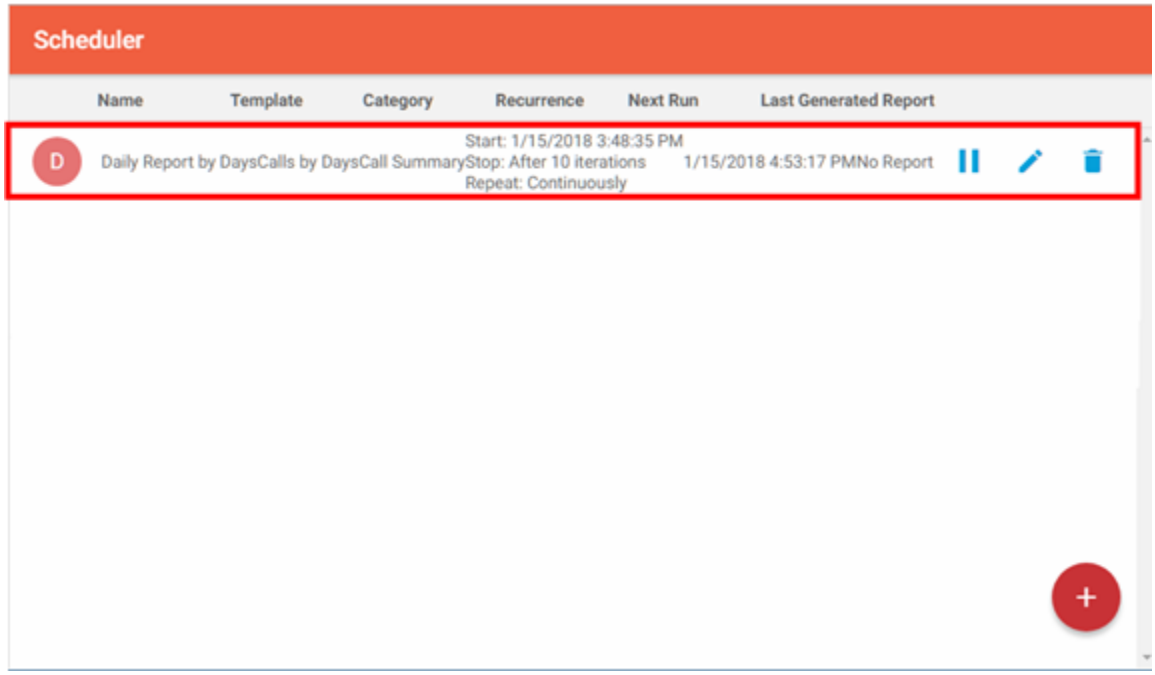
18. Clicking on the **Preview** button initiates report generation. Then you the Excel report is downloaded. Click on the report to open it in Excel. Click on **Enable Editing** button in Excel. The worksheets refresh and present the *Summary* and *Details* information of the report.



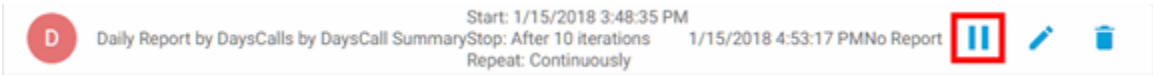
19. Once the report schedule is properly configured, just click on **OK** button.



20. A new schedule is added to the list.



21. The new schedule starts running by default. You can pause it by clicking on related button at any time.



Predefined Excel Report Templates

The following 25 Excel report templates are available in the Call Accounting product:

Template Name	Category	Can be customized
Billing by Agent	Call Log	Yes
Basic Call Log General	Call Log	
Call Log General	Call Log	
Un-returned Lost Calls	Call Log	
Calls by Talking Time	Call Summary	Yes
Calls by Talking Time by Day	Call Summary	Yes
Calls by Talking Time by Hour	Call Summary	Yes
Calls by Waiting Time	Call Summary	Yes
Calls by Waiting Time by Day	Call Summary	Yes
Calls by Waiting Time by Hour	Call Summary	Yes
Calls by Agent	Call Summary	
Calls by Days	Call Summary	
Calls by DID	Call Summary	
Calls by Extension	Call Summary	
Calls by Group	Call Summary	
Calls by Hour	Call Summary	
Calls by Phone Number	Customers	
Top Received Customers	Customers	
Top Received Numbers	Customers	
Transferred Calls by Agent	Customers	
Top Dialed Numbers	Customers	
Global Service Level	Service Level	Yes
Global Service Level by Day	Service Level	Yes
Global Service Level by Hour	Service Level	Yes
Trunk Activity	Trunk Activity	

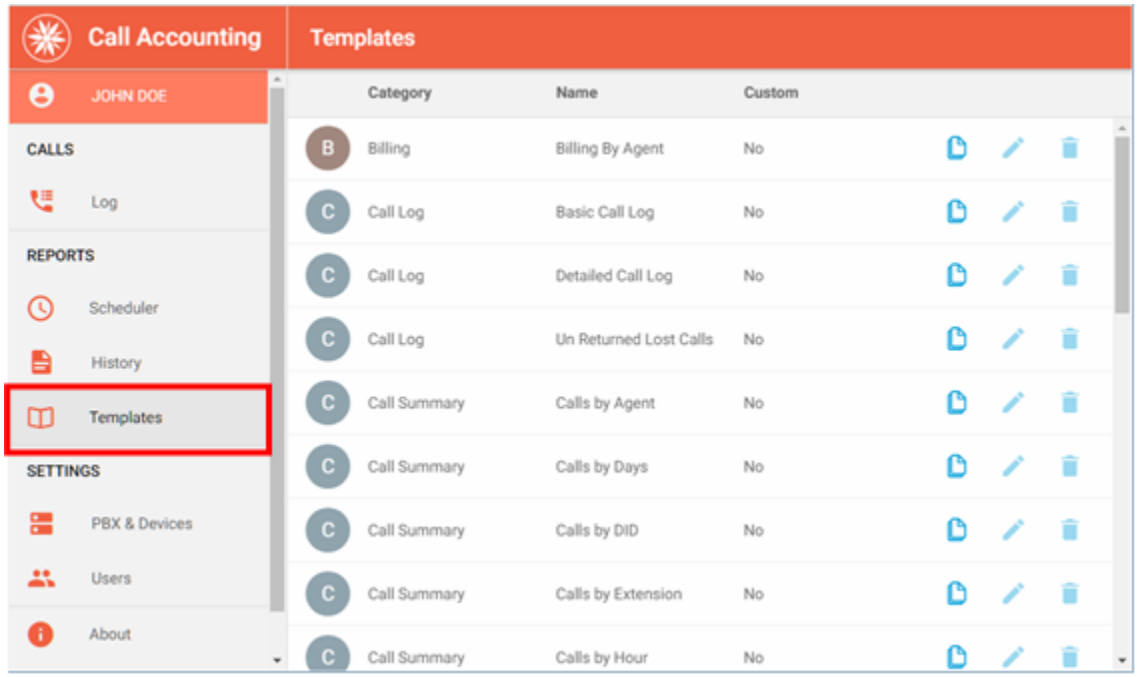
Create Custom Excel Report Templates

Call Accounting allows you to customize Excel Report Templates for more flexibility.

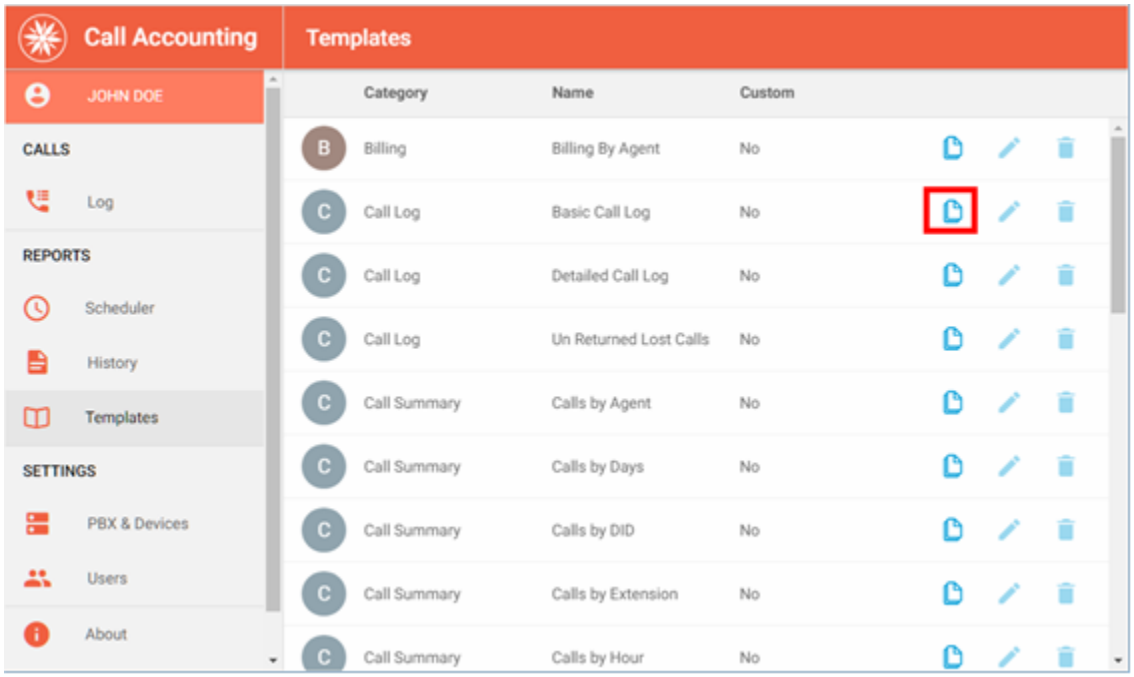
The custom templates are appended to the predefined set. Once defined, the custom Excel Report Templates can be configured and operate like the predefined ones.

To create a custom Excel Report Template

1. Click on the **Templates** button on the left panel. The *Templates* list displays, including the predefined templates.

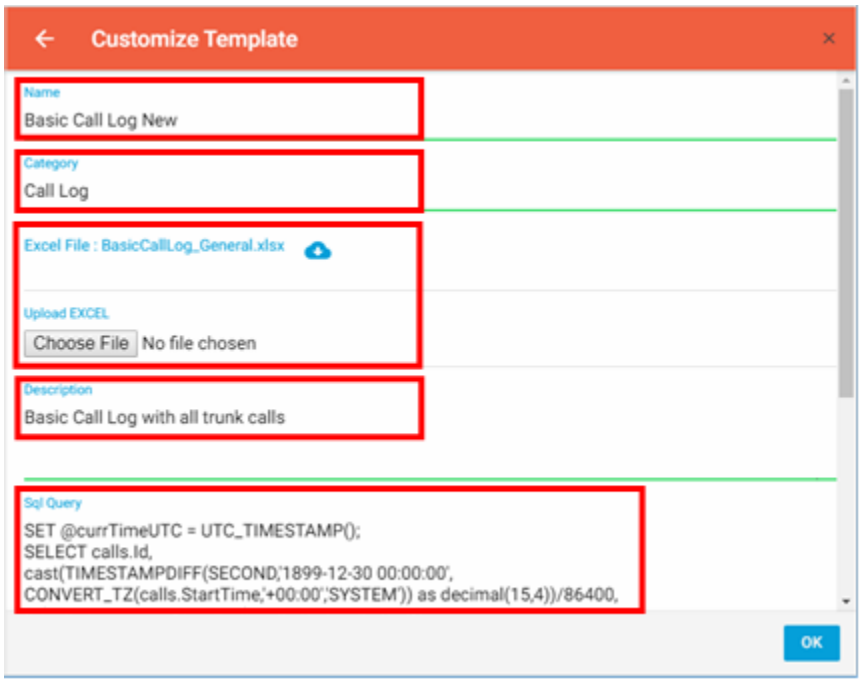


2. Click on **Customize Template** button that corresponds to the report template that you want to copy the information from. The *Customize Template* screen displays.

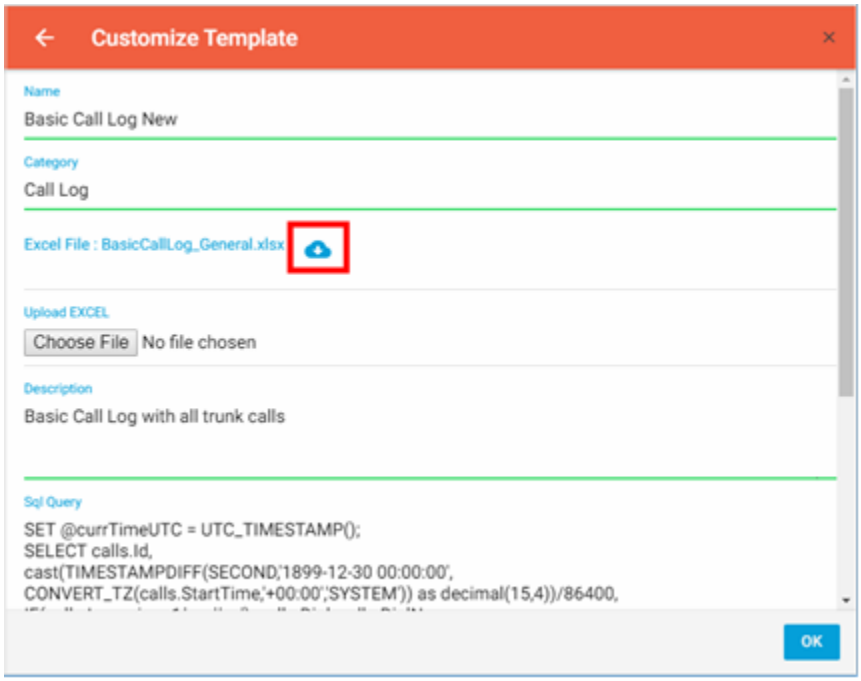


3. The *Customize Template* screen displays. You can customize the following template information:
   - Name

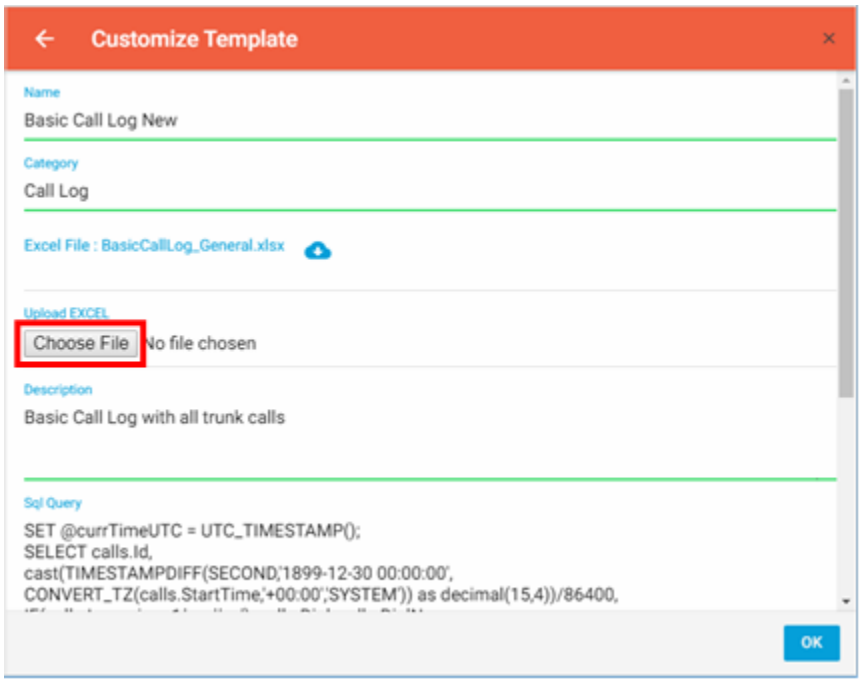
- Category
- Excel Report file
- Description
- SQL Query, internally used for the template at report generation



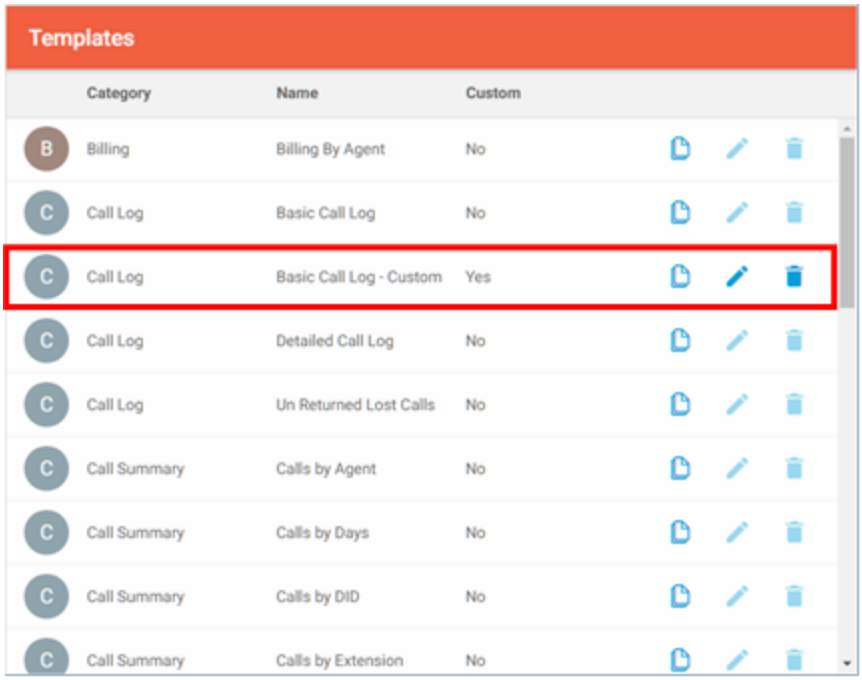
4. If you want to customize the Excel file, you have to download it firstly by clicking on the **Download** button.



5. After you have changed the Excel file locally, you have to upload it to Call Accounting server by clicking on the **Choose File** button.



6. After you have customized the information as necessary, click on **OK** button for the new custom template to be created and added to the general templates pool.

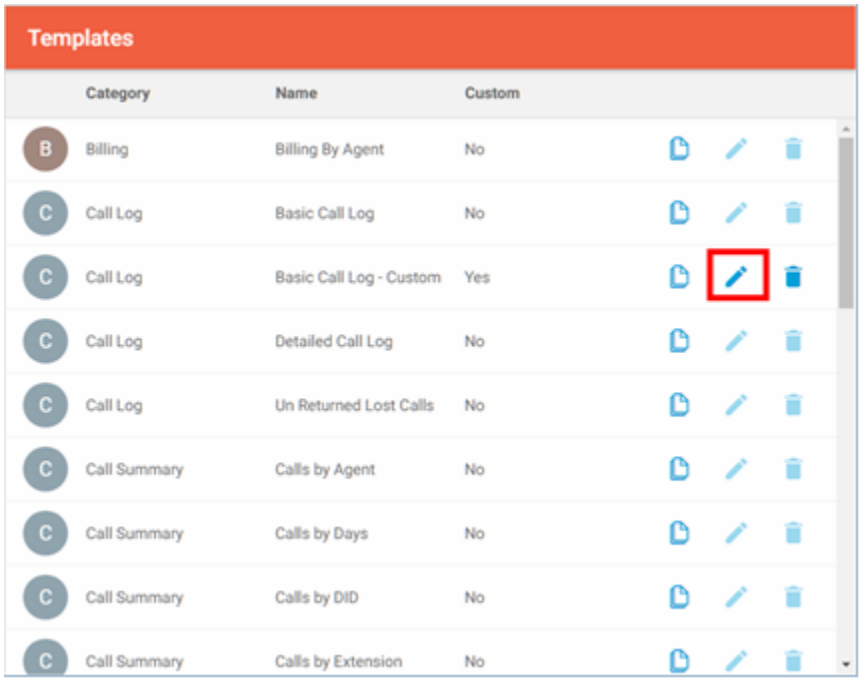


To edit a new Excel Report Template

NOTE: You can edit the custom templates created by you (i.e. by your user account) only.

7. Click on the **Templates** button on the left panel. The *Templates* list displays.

   Click on the **Edit** button of the selected custom template.



8. The *Edit Template* screen displays.

   You can edit the following template information:

   - Category
   - Excel Report file
   - Description
   - SQL Query, internally used for the template at report generation

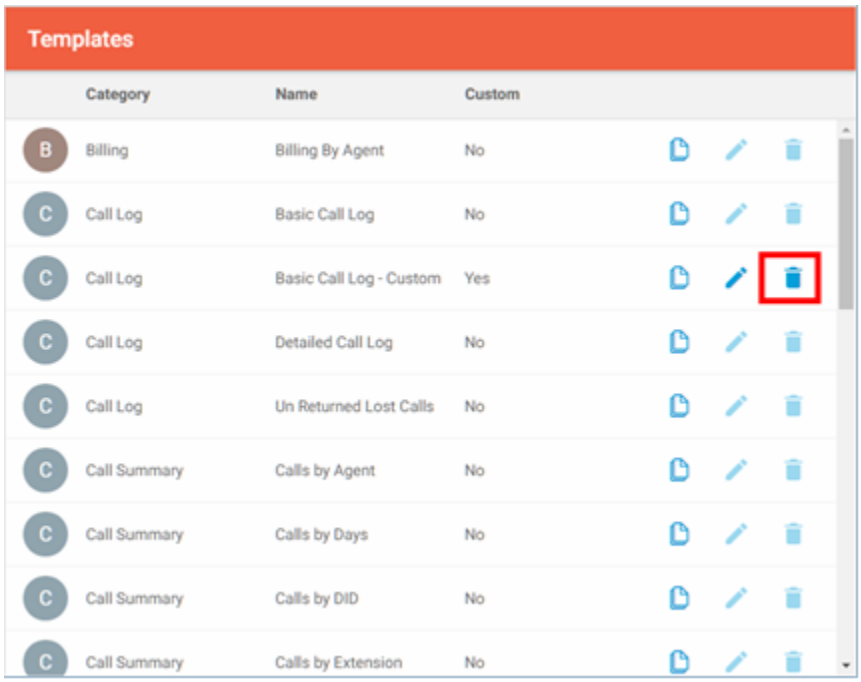
9. Click on **OK** button for changes to take effect.

To delete a custom Report Template

NOTE: You can delete the custom templates created by you (i.e. by your user account) only.

10. Click on the **Templates** button on the left panel. The *Templates* list displays.

    Click on the **Delete** button of the selected custom template.



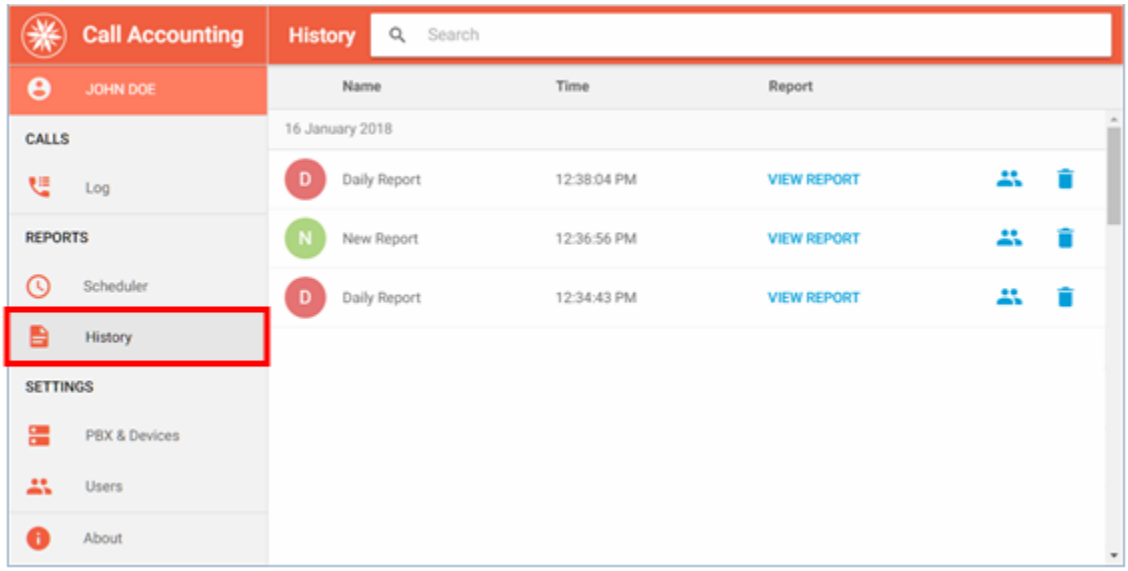
11. The confirmation screen displays. Click on **OK** button.

Browse Reports History

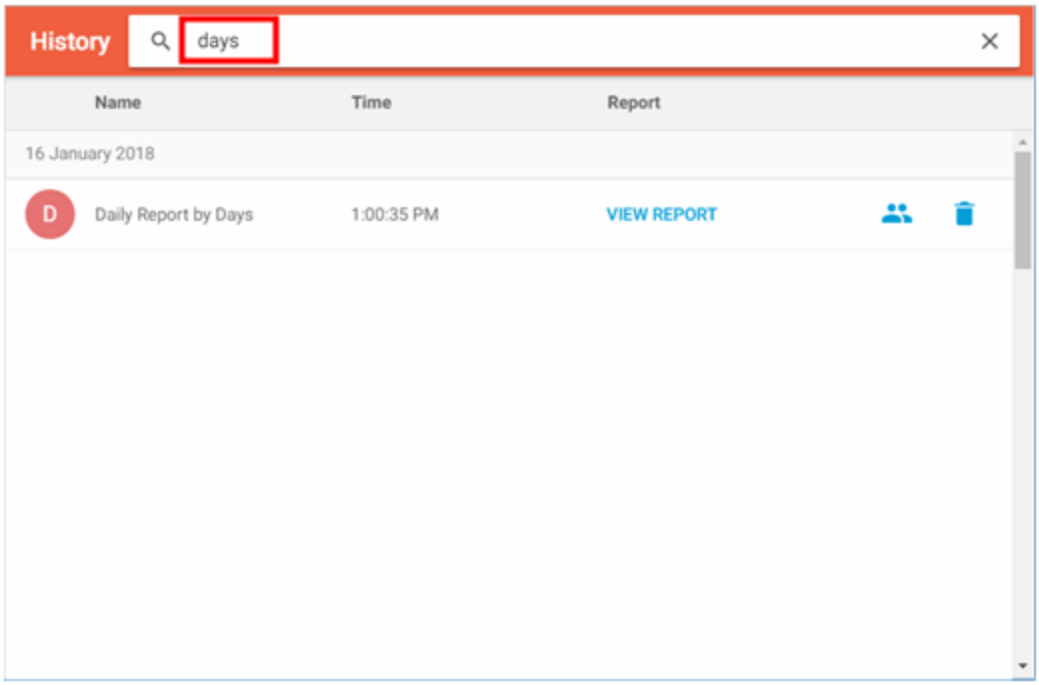
All generated reports display in the History list. You can browse the list, display and purge reports.

To browse the History List

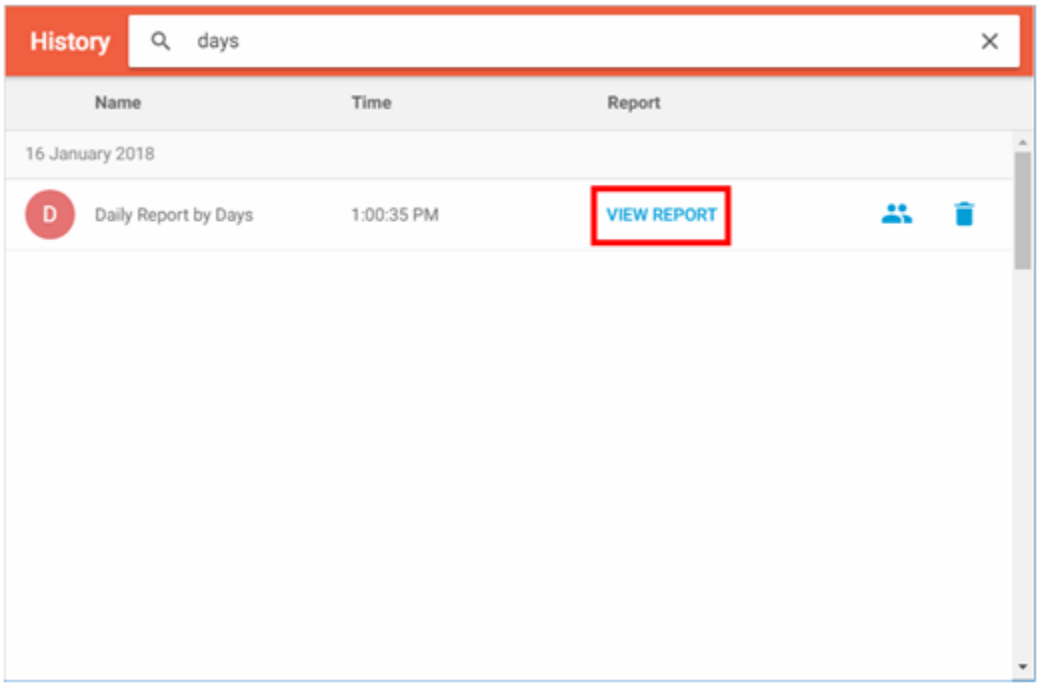
1. Click on the **History** button on the left panel. The *History* list display.



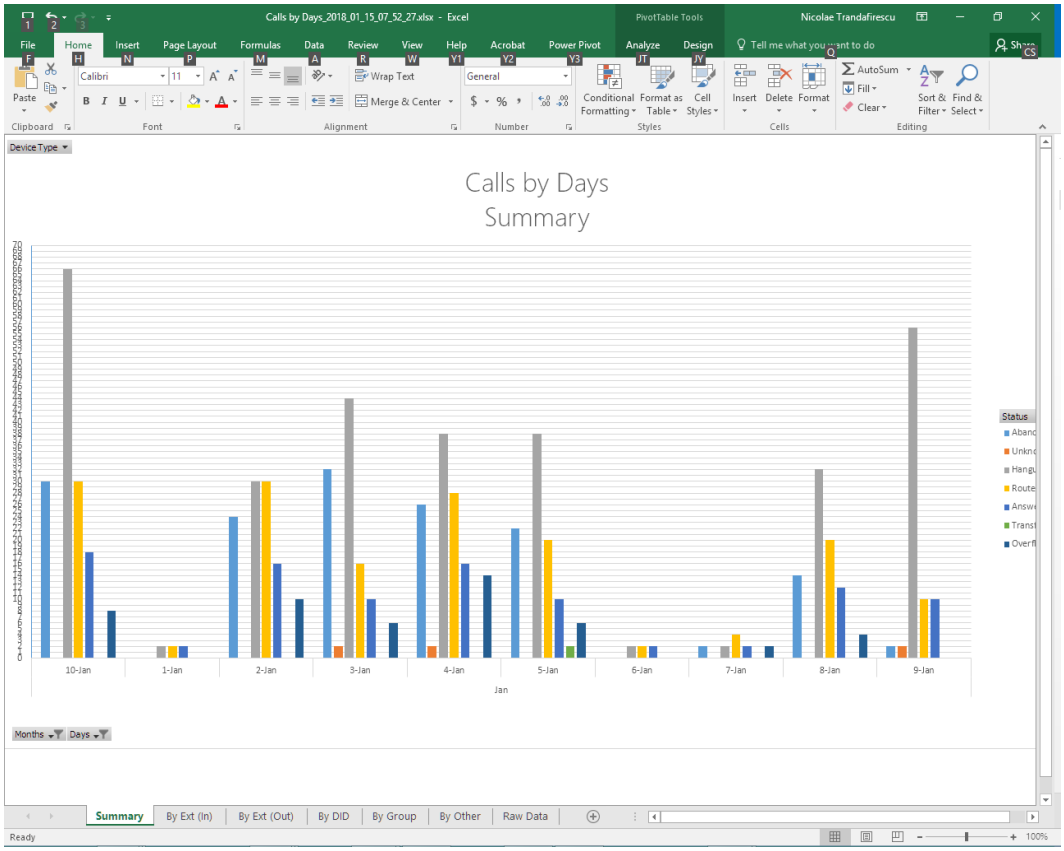
2. You can quick search the *History* list by alphanumeric strings. Enter the report name text you are looking for, for example *days*. The History report items that matched the text display in the list.



3. Click on the **View Report** button of your choice to view the report.



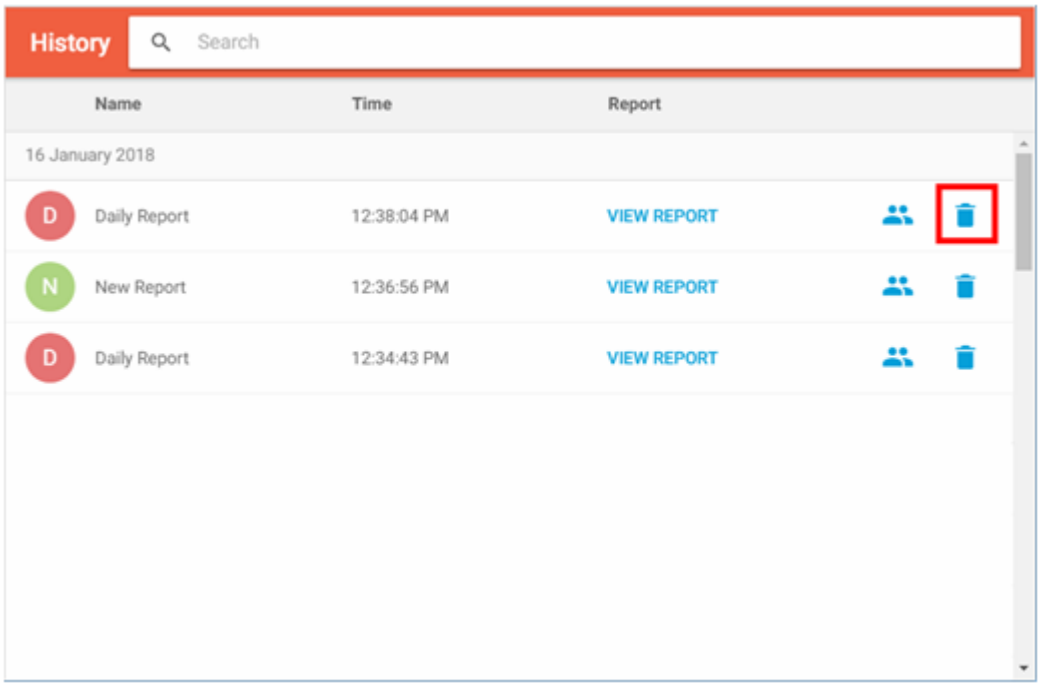
4. The Excel report is downloaded. Click on the report to open it in Excel.
5. Click on **Enable Editing** button in Excel. The Excel worksheets refresh and present the *Summary* and *Details* information of the report.



6. You can print the report using Excel.

To purge the History List

1. Click on the **History** button on the left panel. The *History* list display.
2. Select the report you want to remove and click on related **Delete Report** button.



3. A conformation message display. Click on **OK** button to confirm deletion.
4. Repeat step#2 and 3 above for every report you want to remove.

CALL RECORDING

Call Accounting works with *Trunk Call Recording* add-on.

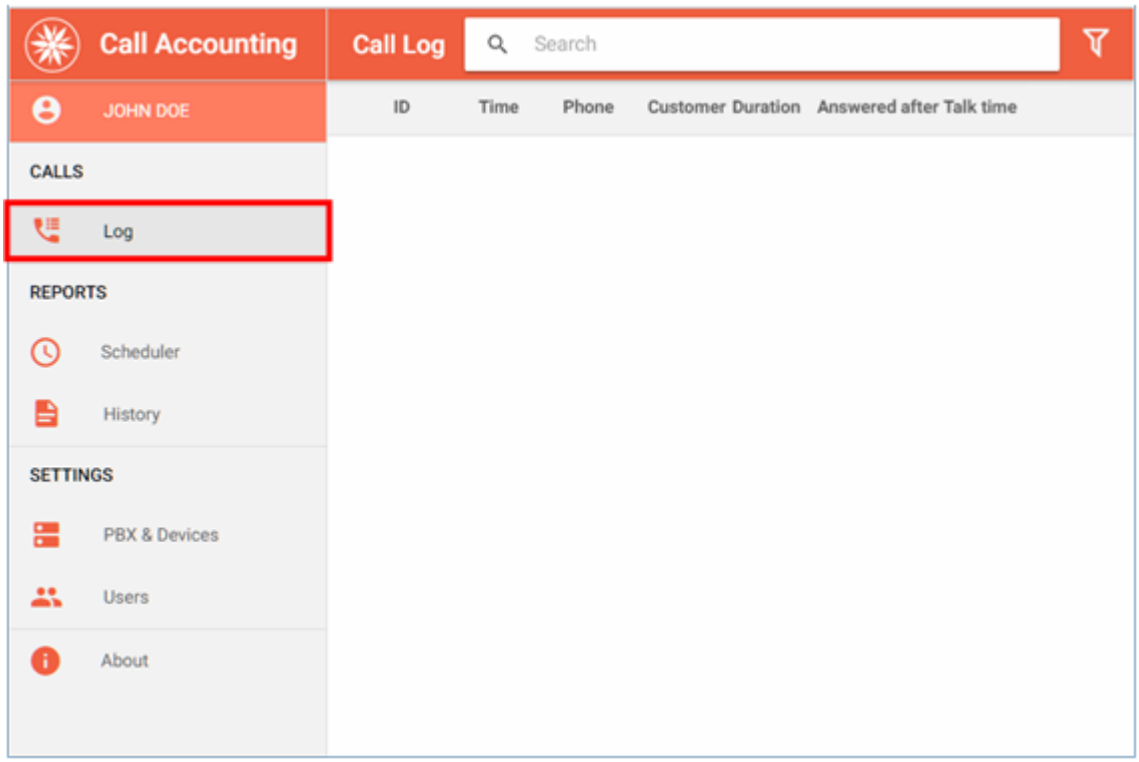
Incoming and outgoing calls are recorded according to *Trunk Call Recording* restrictions, if any. Intercom calls are not recorded.

Please refer to *Installing and configuring the system for the first-time* section in the *Trunk Call Recording User's Guide* for installation and configuration instructions or contact support@poltys.com.

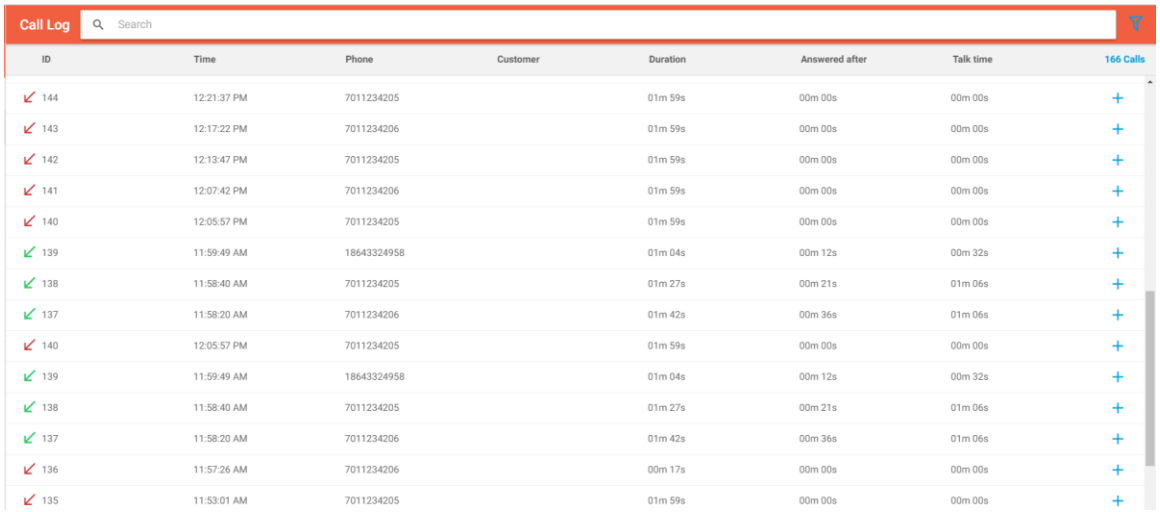
The call recordings are accessible via Call Log. They are presented and can be accessed by users by call segments.

To access a call recording

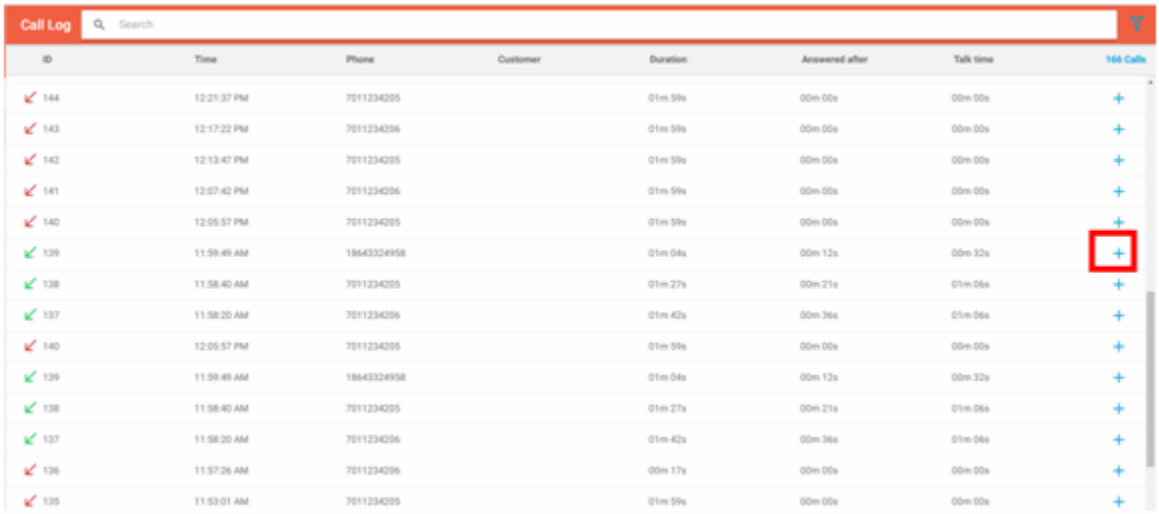
1. Click on the **Log** button in the left panel.



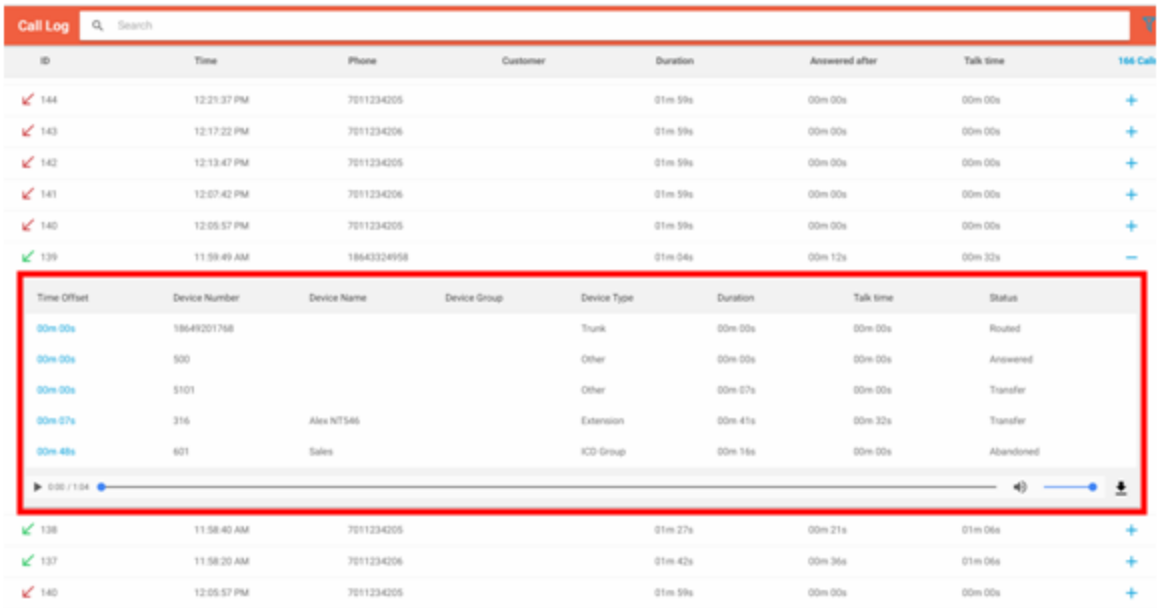
2. The calls are presented chronologically in the list, latest first; the total number of the calls displays as well in the upper-right corner of the list.



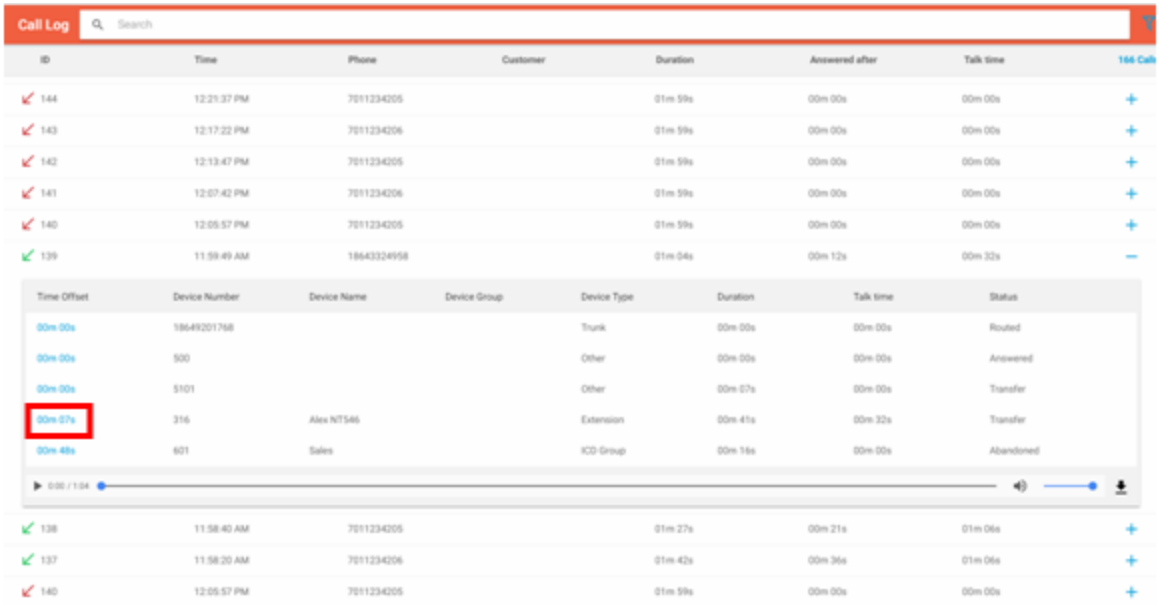
3. To get details about the call of interest, click on the call item in the list or on the associated **Call Details** button.



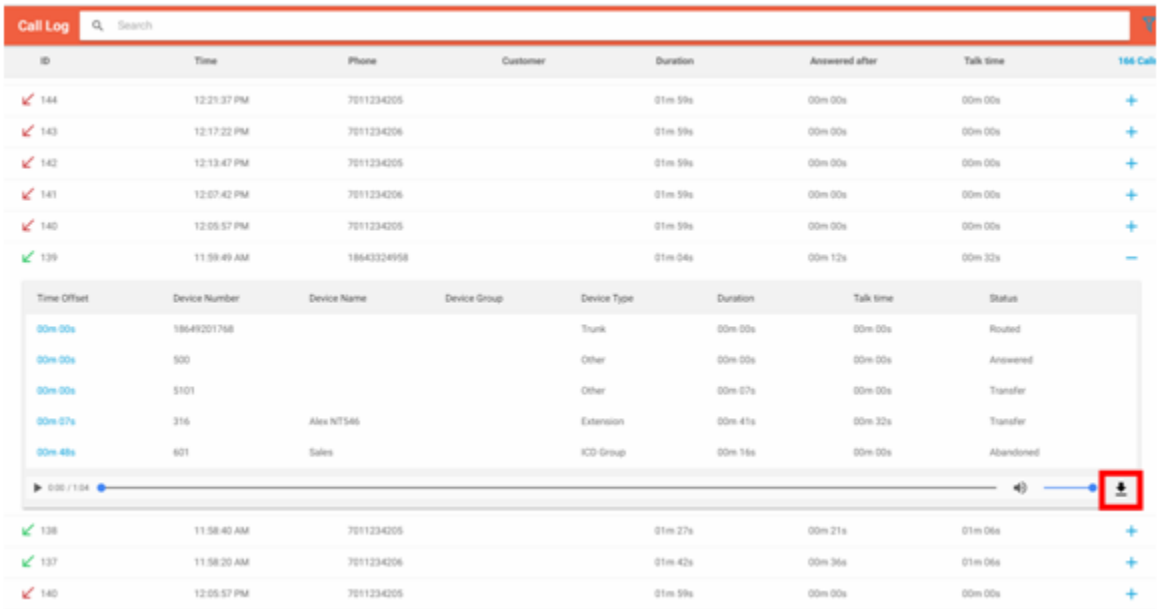
4. The call item with ID *139,* for example, expands and all associated call segments display with details. Also, the audio player shows at the bottom of call segments.



5. You can play the corresponding call segment records by clicking on the related time offsets in the Call Log.



6. Also, you can download the entire call record by clicking on the related button of the audio player.


Call Log
Search
ID
Time
Phone
Customer
Duration
Answered after
Talk time
144 12:21:37 PM 7011234205 01m 59s 00m 00s 00m 00s
143 12:17:22 PM 7011234206 01m 59s 00m 00s 00m 00s
142 12:13:47 PM 7011234205 01m 59s 00m 00s 00m 00s
141 12:07:42 PM 7011234206 01m 59s 00m 00s 00m 00s
140 12:05:57 PM 7011234205 01m 59s 00m 00s 00m 00s
139 11:59:49 AM 18643324958 01m 04s 00m 12s 00m 32s
Time Offset
Device Number
Device Name
Device Group
Device Type
Duration
Talk time
Status
00m 00s 18649201768 Trunk 00m 00s 00m 00s Routed
00m 00s 500 Other 00m 00s 00m 00s Answered
00m 00s 5101 Other 00m 07s 00m 00s Transfer
00m 07s 316 Alex NIT546 Extension 00m 41s 00m 32s Transfer
00m 48s 601 Sales ICD Group 00m 16s 00m 00s Abandoned
138 11:58:40 AM 7011234205 01m 27s 00m 21s 01m 06s
137 11:58:20 AM 7011234206 01m 42s 00m 36s 01m 06s
140 12:05:57 PM 7011234205 01m 59s 00m 00s 00m 00s