CALLISTO

PROFACD

ADMINISTRATION MANUAL

Table Of Contents

Administration manual 3
Setup 3
Automatic call distribution 4
Call queues 11
Non-business hours and holidays 17
Reports 20
Copyright Information, Disclaimer 25

Setup

Installation

ProfACD is installed through Callisto's Open Application Manager. The installation and updating process for OAM applications is described in the chapter Options of the Callisto platform administration manual.

Privileges

The following application privileges can be assigned to a user for the ProfACD application. For setting user privileges, see the chapter User administration of the Callisto platform administration manual.

ACD	Provides access to the *ACD* tab.
Queues	Provides access to the *Queues* tab.
NonBusinessHours	Provides access to the *Non-Business Hours* tab.
Holidays	Provides access to the *Holidays* tab.
Reports	Provides access to the *Reports* tab.
Reports4Eyes	Provides access to the *Reports* tab, with the login of a second user required.
RepNumUnveiled	Shows phone numbers of agents and other callers unveiled in reports.

Access

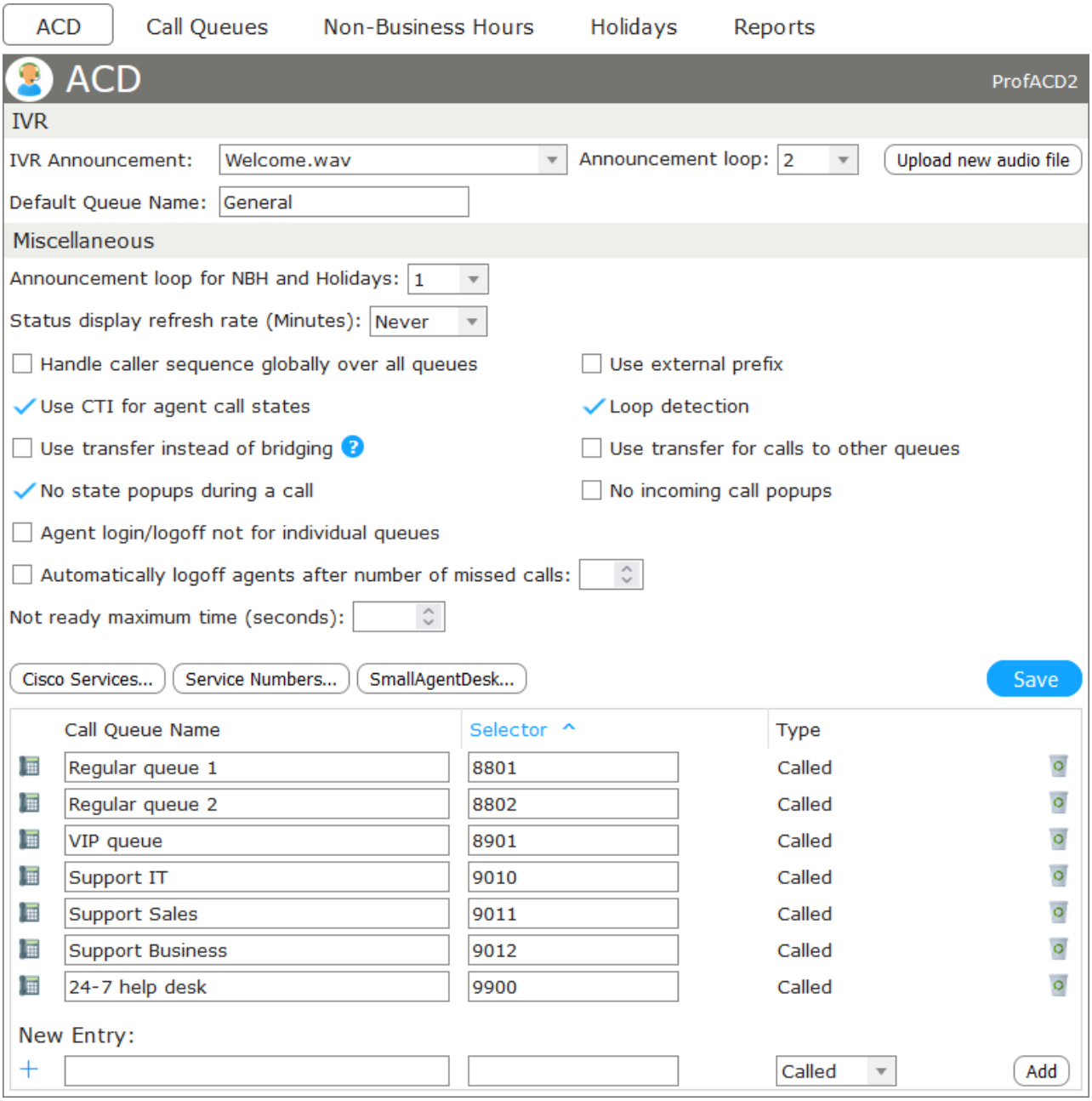
Configure icon

Administrators can access the ProfACD configuration by navigating to System > Open Application Manager in the main menu. In the tab Applications, locate the ProfACD instance and click on the *Configure* icon.

Users who were granted privileges to access the ProfACD instance can do so by navigating to Applications in the main menu and clicking on the name of the ProfACD instance.

Automatic call distribution

In the *ACD* tab, queues can be defined and configured. If no queues are defined, all calls will enter default queue. This tab also allows uploading announcements which can be used across all queues.



Section “IVR”

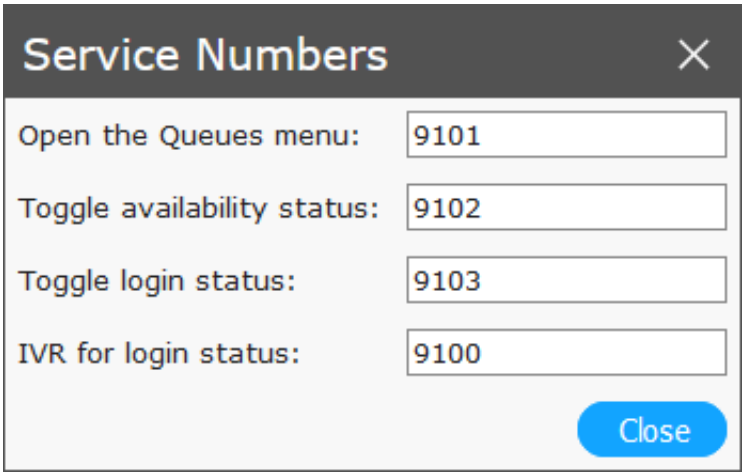
IVR Announcement	The IVR announcement is a wave file that is played when there is no queue defined for the calling number. The announcement should contain directives for the caller as for which button press will lead to which queue.
Announcement Loop	Sets how often the IVR announcment will be repeated. If the caller hasn’t pressed any valid number by the time the announcement was repeated, the call will be forwarded to the default queue.
Default Queue Name	Name of thr default queue. If no call queues are defined, all incoming calls will be redirected to this queue. Setting this queue is required.

Section “Miscellaneous”

Announcements loop for NBH and Holidays	Sets the number times announcements for non-

	business hours and holidays will be repeated. See also chapter Non-business hours and holidays.
Status display refresh rate (Minutes)	An agent's phone may show status information on queues as pop-up messages on the phone display. This configuration sets the interval after which the status display shows up again.
Handle caller sequence globally over all queues	When this option is enabled, all callers are put on hold until the current caller is connected with an agent, regardless of which queue the callers are waiting in.
Use external prefix	Callisto has the option to set external prefixes for outgoing numbers (see chapter System of the Callisto administration manual). Enabling this checkbox allows you to use these prefixes when dialing numbers.
Loop detection	Loop detection may take effect when an agent redirects his phone to a queue where he is a member of.
Use CTI for agent call states	With this option enabled, the call state of an agent is discovered using CTI (option COC Proxy). This avoids calls to an already busy agent.
Use transfer instead of bridging	When the call is connected to ProfACD and then with the agent, the entire call from goes through ProfACD to the agent, where the Callisto ProfACD acts as a middleman. In order to skip unnecessary load to ProfACD, by checking this option, the call is routed directly to an agent by initiating a transfer on CUCM.
Use transfer for calls to other queues	When the call is transferred to another queue, and this option is checked, the call is removed from the queue where it comes from.
No state popups during a call	Prevents showing a phone popup while a call is in progress.
No incoming call popups	Prevent showing an information phone popup about caller on phone display.
Agent login/logoff not for individual queues	Agents can be assigned to one or more queues. If this option is checked, the agent can login/logoff only to all assigned queues in parallel and not to individual queues.
Automatically logoff agents after number of missed calls	ProfACD can automatically log off agents after the defined number of missed calls.
Not ready maximum time (seconds)	Reject call after defined seconds of waiting for an agent.

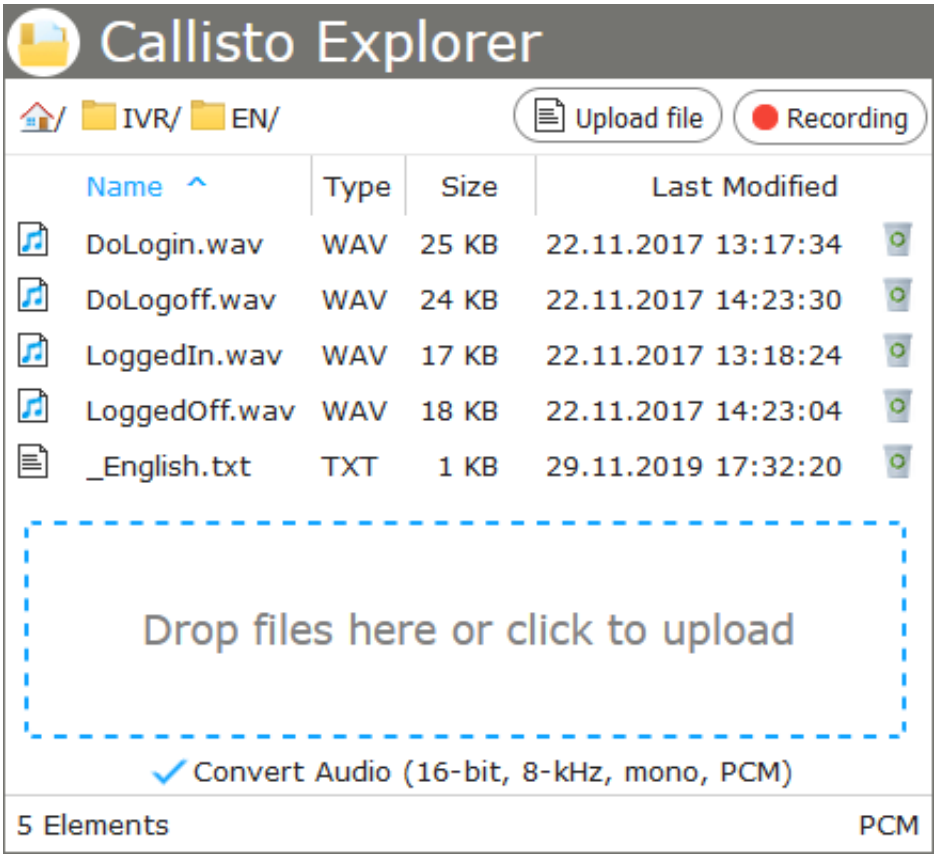
Service numbers



Clicking the button Service Numbers… at the bottom of the *Miscellaneous* section opens the *Service Numbers* menu. An agent can perform various functions with an internal Cisco IP phone by dialing the numbers defined in this menu.

Open the Queues menu	Dial this number to open the Queues menu. Here, you can check and change the phone's status as well as login and logoff from the available queues.
Toggle availability status	Change the agent's availability status for the logged-in queues. Two statuses are available: *ready* and *not ready*.
Toggle login status	Dialing this number toggles the login status (*logged in* or *logged off*). When the agent sets the status to *ready* or logs in again on the device, the status automatically changes to *logged in*.
IVR for login status	Dialing this number allows an agent to change the login status through an IVRinteractive voice response menu.

Modify IVR announcements



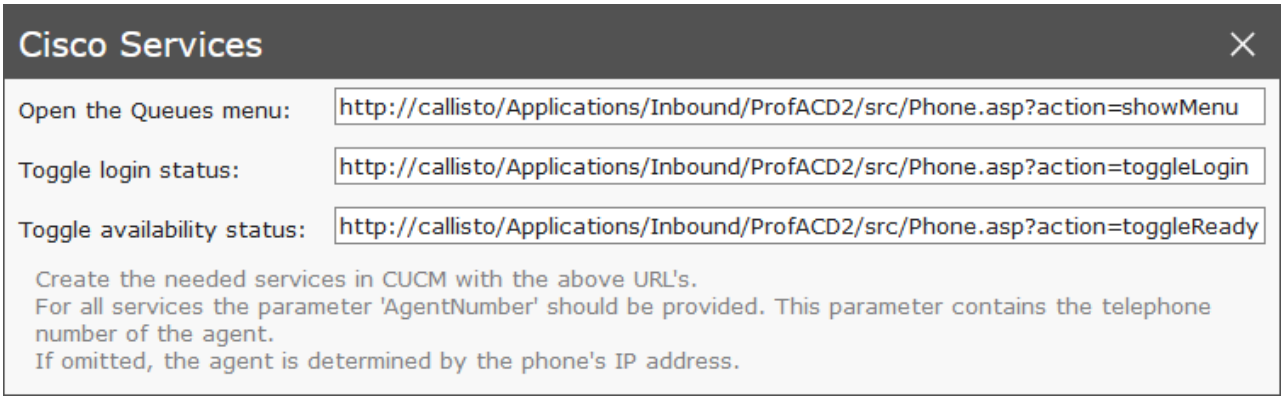
The IVR announcements can be changed by navigating tho the ACD tab and clicking the Upload Wave File button in the *IVR* section. Navigate to the “IVR” folder where the folders for each language are located; per default, announcements for German and English are available. Which announcement will be played depends on the agent’s language configuration. Existing announcements can be replaced and new languages can be created.

The following names can be used for language directories:

- EN (English)
- DE (German)
- FR (French)
- IT (Italian)
- ES (Spanish)

Cisco Services

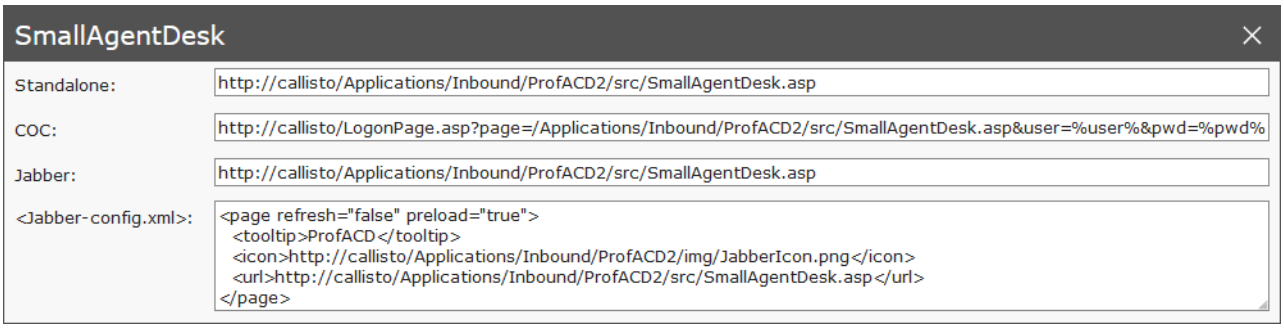
Cisco services are used to toggle availability status, login status or to show status when defined number is called. All these actions are showed on phone display. This is preconfigured when application is installed, but the populated URLs should be added to cisco call manager.



SmallAgentDesk

The *SmallAgentDesk* feature allows agents to track various information about queues and calls. Same as with Cisco services, the URLs are populated automatically when the application is installed.

SmallAgentDesk can take an additional URL parameter, refreshRate, which takes a numeric value; this value sets the the page refresh rate in seconds. The <Jabber-config.xml> field is used for Jabber integration.



For more information and how to set up SmallAgentDesk Standalone with Jabber or COC, refer to the chapter Integration fo Callisto Gadgets in the Callisto administration manual.

SmallAgentDesk view when accessed from a browser

User-defined queues

In the bottom section of the *ACD* tab, user-defined queues are managed. An incoming number can reach a queue in two different ways; either by directly calling the number assigned to the queue, or by pressing the corresponding numbers on the telephone (i.e., using DTMF).

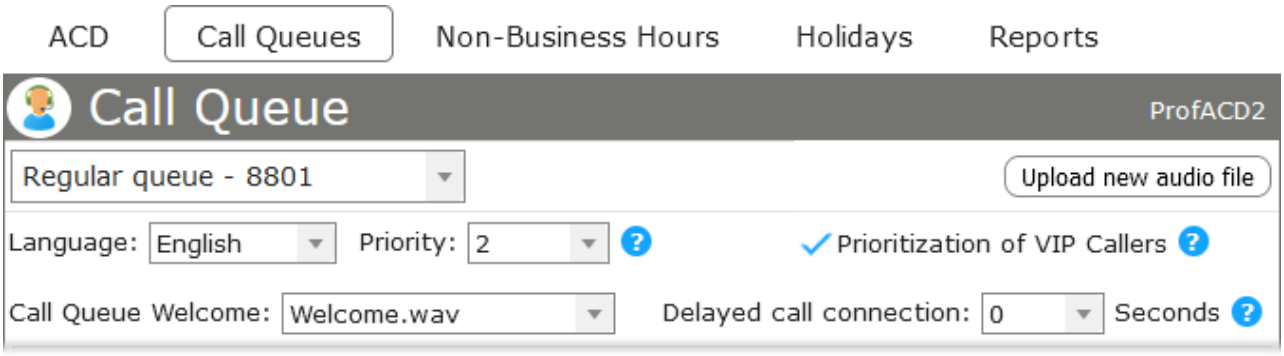
Add a new queue by filling out the fields Call Que Name, Selector, setting the queue's Type and clicking the Add button.

Call Queue Name	Set the name of the queue to use throughout Callisto.
Selector	The selector is a number or character that maps to a certain queue. DTMF-type selectors are usually those found on common telephone keypads, i.e. the digits from 0 to 9, as well as the star sign ? and the number sign #. For queues of the type *Called* type, the selector is a concrete number (e.g., 9231).
Type	The queue type is either *DTMF* or *Called*. *DTMF* is used when the caller chooses the queue by pressing numbers on the telephone. In this case, the caller is usually guided to the correct queue by the announcement. With queues of the type *Called*, the caller can directly join the queue by dialing its predefined number. For example, if a *Called*-type queue has the selector 8901, a caller can join it directly by dialing 8901.

Call queues

In the *Call Queues* tab, user-defined queues can be configured. Every queue has its distinct settings that are applied individually. Select the queue you want to configure from the Choose… drop-down menu. The default call queue (as defined in the ACD tab) is always available. If a number is called which is routed to ProfACD by the OIM lines but is not associated with a specific queue, the call is routed to the default queue.

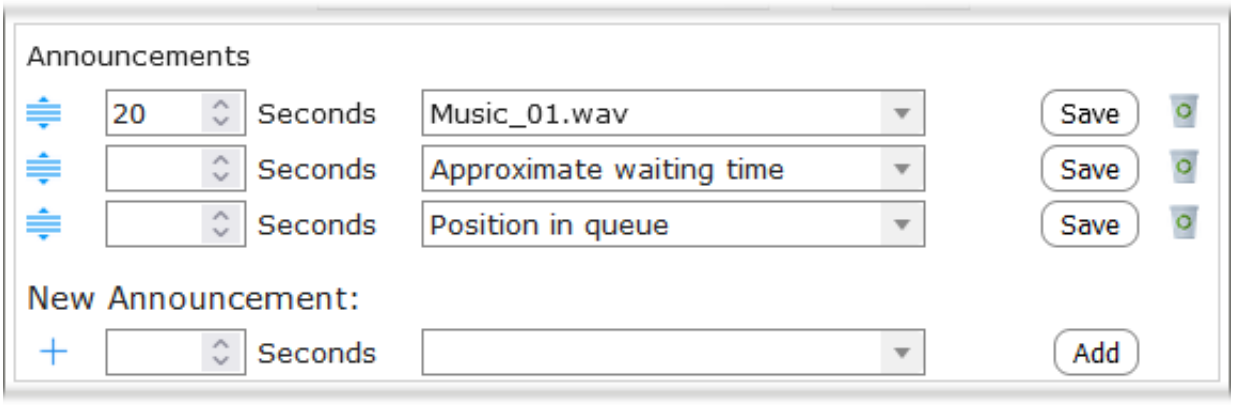
General settings



Language	There are several options for language. Users can choose either English, German, French, Italian or Spanish. Regarding selected language, different options and different announcements will be applied.
Priority	Each queue can have a priority. Queue with priority 1 has the highest priority. Agent can be assigned to multiple queues, in that case the call who is in the queue with bigger priority will be processed first by agent.
Prioritization of VIP Callers	This option allows VIP callers to have privileges over other callers. These callers will be processed first.
Call Queue Welcome	Set the announcement that will be played to the caller when the call enters the queue and before it's routed to the available agent.
Delayed call connection	This option defines how long ringing should take before the call is connected.

Announcements

Each queue can have a custom set of announcements that plays after the *Call Queue Welcome* announcement. The value Seconds sets how long the announcement is played before playing the next announcement. If this value is not set, the complete audio track will be played.



Two dynamic announcements, Position in queue and Approximate waiting time, are also available from the drop-down menu.

Position in queue

This announcement informs callers about their position in the queue. For example, if a caller joins a queue in which five other calls are currently waiting, the caller will be informed that he is sixth in line.

To set these announcements, open the Callisto Explorer by clicking the Upload new audio file button. Navigate to the directory labeled POS, and then to the directory of the language your announcement is in. The names of the announcement's audio files should be of the format <*position in queue*>.wav.

If the number of users exceeds the number of available announcements, the announcement with the highest number is played to those callers. Therfore, the audio file with the highest number should contain a generic announcement.

If a caller is in the first position in the queue, the audio file 1.wav will be played to him, the caller in second position will hear 2.wav, and so on.

The files 1.wav to 10.wav contain announcements refering to the exact queue position, and the highest file, 11.wav, contains the announcement "More than ten callers are waiting in the queue."

Approximate waiting time

This announcement informs the caller on the approximate waiting time until an agent is available.

To set these announcements, open the Callisto Explorer by clicking the Upload new audio file button. Navigate to the directory labeled WAIT, and then to the directory of the language your announcement is in. The names of the announcement's audio files should be of the format <*waiting time in seconds*>.wav. ProfACD will use the file that matches the estimated waiting time most closely. Therefore, the audio file with the highest number should contain a generic announcement, as it will be played to callers with a waiting time exceeding the estimated time value.

The file 30.wav will be played to a caller who is expected to wait another thirty seconds before an agent picks up the call.

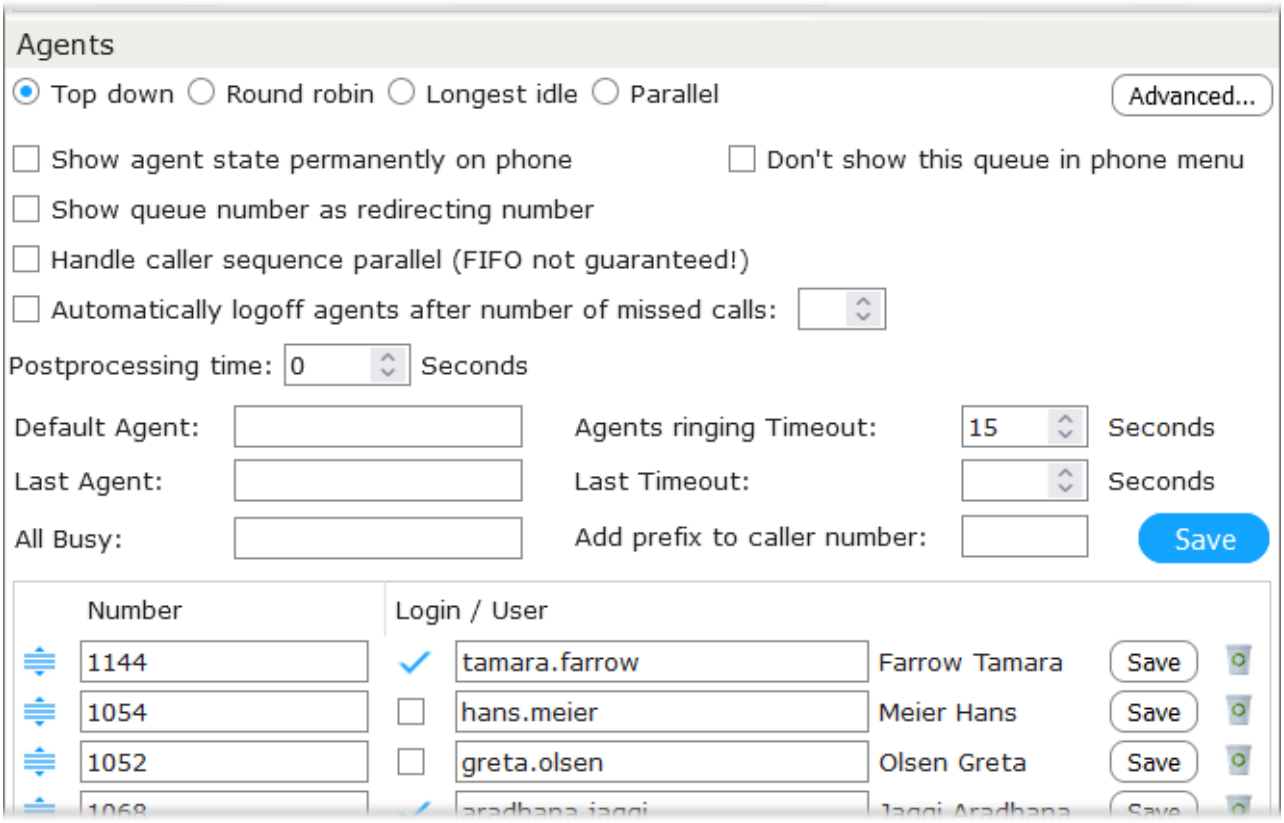
The file with the highest number is 300.wav and contains the announcement "Your expected waiting time is over five minutes."

Uploading and replacing announcements

Click the Upload new audio file button and the Callisto Explorer will appear, showing all uploaded files and available subdirectories. Upload files by using the section labeled Drop files here or click to upload at the

bottom of the window.

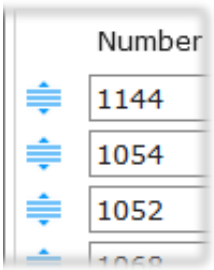
Agents



Agent selection algorithm

There are four different algorithms available to determine which agent a call in the queue will be directed to.

Top-down	The call will be routed to the highest agent in the agent list who is not busy. The agents #1 to #4 are in the list in numeric order. • If agents #1, #2, and #3 are busy, the next call will be routed to agent #4. • If agents #1 and #3 are busy, the next call will be routed to agent #2.
Round Robin	The call distribution uses a circular order. The first call will be routed to the first agent in the agent list, and every call will be routed to the agent listed after the one who picked up the prevous call. Once the last agent in the list has picked up a call, the next call will be routed to the first agent again.
Longest idle	Any call will be routed to the agent who has been idle the longest.
Parallel	The call is routed to all agents simultaneously (i.e., all agents' phones will ring). The call will effectively be connected to the agent who picks up the phone first.



The options Top-down and Round Robin make use of the order in which the agents are listed. You can change the order by dragging the icons to the left of each list entry.

Agent settings

Show agent state permanently on phone	Shows the agent's state on the phone display. See also chapter Automatic call distribution.
Show queue number as redirecting number	Enabling this option will display the number of the queue the incoming call is in as the redirecting number on an agent's phone.
Handle caller sequence parallel (FIFO not guaranteed!)	Any agent's phone will ring immediately once a call is routed to them. If this option is selected, callers might not be connected to agents in their actual queue order.
Automatically logoff agents after number of missed calls	Besides being able to log in and log off manually, agents can also get logged off automatically after the set number of missed calls is reached.
Postprocessing time	Sets a time in which no new calls will be directed to an agent immediately after finishing a call. This gives an agent time to finish up any work after the call has ended before new calls are to be handled again.
Default Agent	The Default Agent is contacted when all other agents are logged off. If no Default Agent is defined, a caller has to wait until an agent logs in or another routing criteria is met.
Agents ringing Timeout	The time how long an agent's phone will ring. If the phone is not picked up within the set time, the call will get rerouted to the next agent (in accordance with the active agent selection algorithm).
Last Agent	If there are no agents available to take a call, it is routed to the Last Agent. If no Last Agent is defined, the call is routed to the next available agent(in accordance with the active agent selection algorithm).
Last Timeout	Timeout for the last agent. After that timeout the call is routet to the defined last agent.
All Busy	If all agents are busy, the call will be routed to the agent specified in this field.
Add prefix to caller number	A custom prefix for incoming calls can be specified in this field. This prefix will be displayed on the agent phone display in front the caller's actual number.

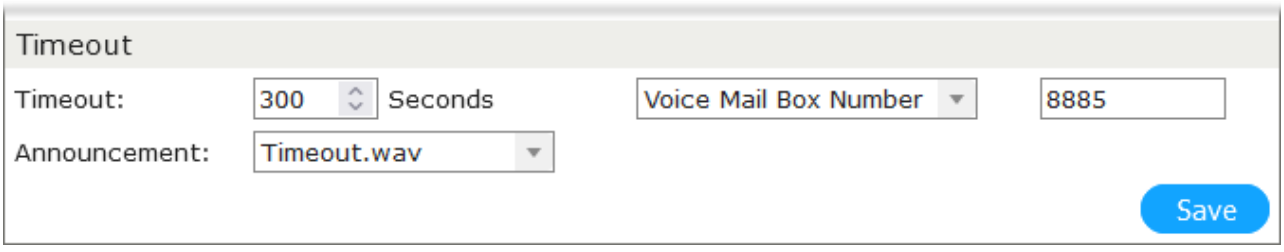
Advanced agent settings

Click the button Advanced… to access the advanced user settings.

Alarming E-mail	If any of the alarms defined in the advanced agent settings is set off, a notification will be sent to this email address.
Last Timeout reached	Send an alarming email when the Last Timeout (set in

	the agent settings) is reached.
Max Callers in Queue	Set the maximum number of callers for the queue. If Alarming E-Mail is checked, an alarming email is sent when the caller limit is reached. If a call the queue while its caller limit is reached, the call can be rerouted to the nummer set in the Divert to Number field.
Max number of Calls during time	If there are more calls active for a longer thime than the limit defined in the Calls and Minutes fields, an alarming mail will be sent if Alarming E-Mail is checked.
Threshold for number of Agents logged in	If fewer agents are logged in than defined in the Agents field, an alarming email will be sent. Additionally, incoming calls can be rerouted to the number set in the Divert to Number field.
Threshold for number of available Agents in	If fewer agents are available than defined in the Agents field, an alarming email will be sent. Additionally, incoming calls can be rerouted to the number set in the Divert to Number field.
Threshold for call duration	If Alarming E-Mail is checked, an alarming email will be sent if a call in this queue exceeds the duration set in the Call Duration (Min) field.
Max number of unsuccessful tries of a Caller during Time	If a caller has unsucessfully tried to reached for as many times and within the time defined in the Calls and Minutes fields, an alarming email will be sent.
ProfACD Viewer Settings	ProfACD Viewer will display *Warning* and *Critical* alerts respectively if the thresholds set here are exceeded. • Answered rate: Alerts will be displayed if fewer calls are answered than the percentages set here. • Ø QueueTime: Alerts will be displayed if the the callers in average need to wait longer than the values set here.

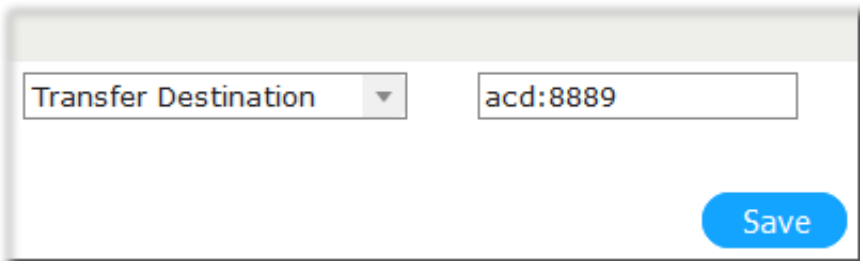
Timeout



A general timeout for the queue can be defined here. In the Announcement drop-down menu, select the announcement that will be played to inform the caller that he reached the waiting timeout. Afterwards, one of two actions can take place:

- Voice Mail Box Number will give the caller the possibility to leave a voice mail to the mail box of the number defined in the field. In the DTMF (yes / no) field, set which numbers the caller may press to accept or deny the recording of the voice mail.
- Transfer Destination will redirect the call to the number set in the field.

Transfer using ACD



For diverting numbers in the advanced agent settings as well as for both timeout options, the prefix acd: can be set in before the number. This will move the caller to the set number without using the transfer functionality of CUCM. The same syntax is also available for the non-business hours and holidays settings.

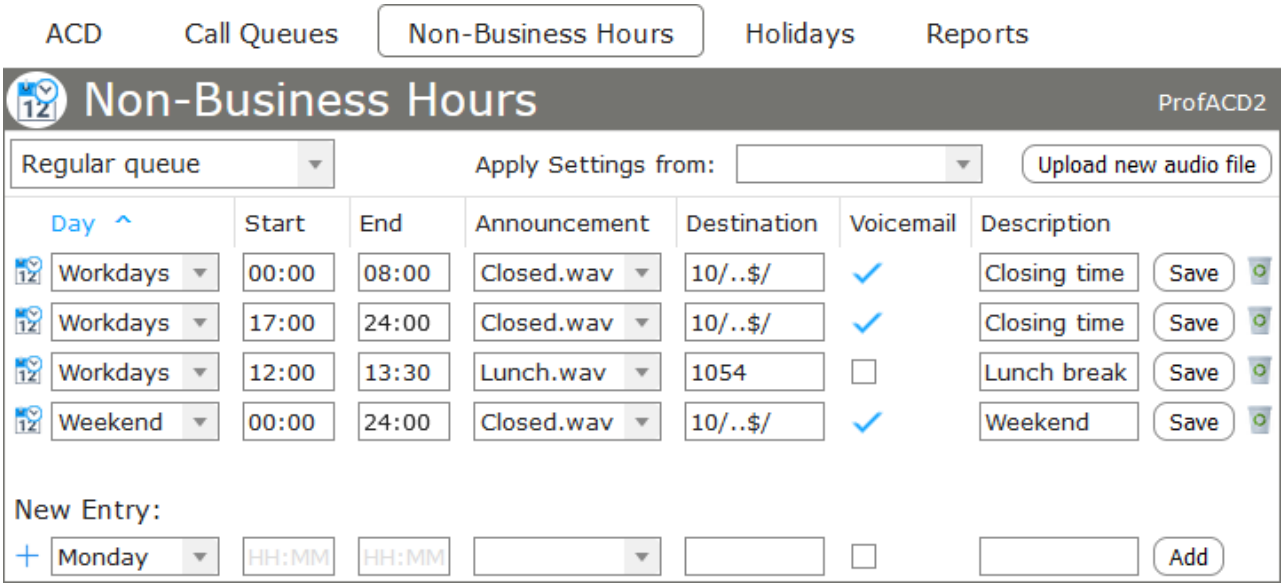
Non-business hours and holidays

The tabs *Non-Business Hours* and *Holidays* contain options for setting the times when the company's staff is not available. During these times, callers will not enter a queue, but instead will hear an announcement. Optionally, callers can be routed to a specific number, or given the possibility to leave a voicemail.

In either tab, choose the queue you want to configure by selecting it from the the drop-down menu labeled Choose…. The option DTMF will configure every DTMF-based queue, i.e. all queues that are reached by pressing the number keys on the telephone. User-defined queues of type *Called* (see chapter Automatic call distribution) can be configured individually from this menu.

An existing configuration can be copied to a new queue by selecting the new queue from the Choose… drop-down menu and then selecting the queue with the existing settings from the Apply Settings from drop-down menu.

Configuring non-business hours



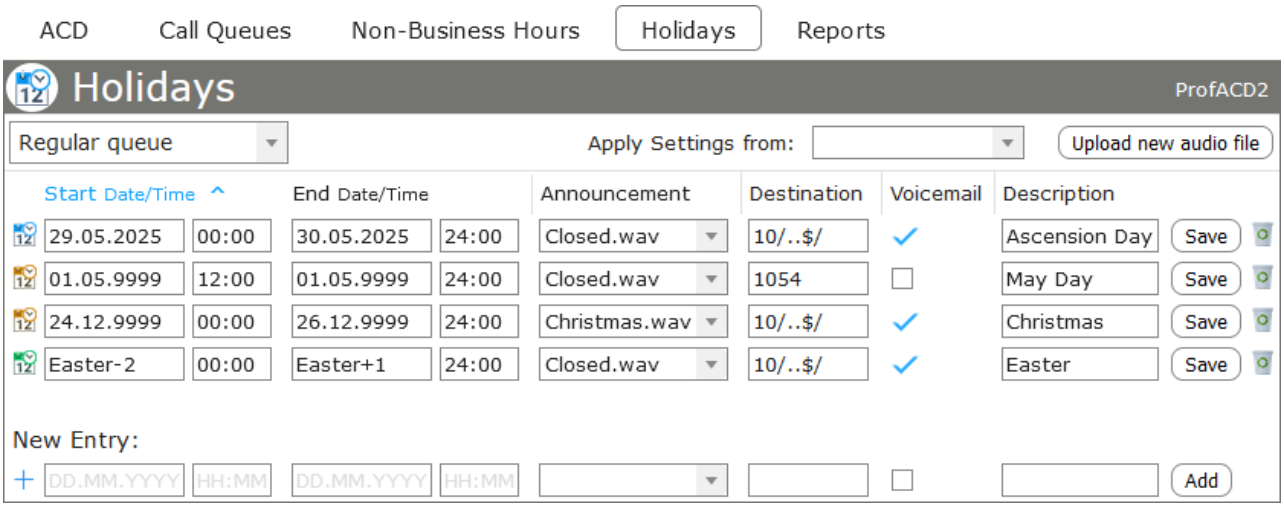
Day	The day of the week when the non-business hours should be active. The option Workdays will apply the settings to every day from Monday to Friday, and the option Weekend will apply to Saturday and Sunday.
Start and End	When the non-business hours should start and end. The time is set in 24-hour format.

One single entry will set a single consecutive time range within one day. If you have multiple non-consecutive non-business hours one day, each time range requires a separate entry. Similarly, if your non-business hours extend from one day to the next (i.e. overnight), two entries must be configured for both days.

If your company stops taking calls on 17:00 and opens again on 8:00 the following day, two entries are needed.

- from 17:00 to 24:00
- from 00:00 to 08:00

Configuring holidays



The Start and End colums consist of a *Date* and *Time* field each. In the *Date* field, setting the year to 9999 will activate the holiday every year at the same date and time. Entering the string Easter will calculate the date of Easter every year. The strings Easter-<*n*> and Easter+<*n*> will set the date to *n* days before and after Easter, respectively.

In 2025, the date of Easter is 20 April 2025. Entering the string Easter-2 into the Date field sets the holiday start to 18 April 2025.

General settings

The following settings are applicable to both non-business hours and holidays configurations.

Announcement	The audio file that will be played during the set non-working hours.
Destination	During non-business hours, calls will be directed to this number after the announcment has been played. It is also possible to set a dynamic number (see Dynamic routing destination).
Voicemail	If this option is checked, a caller will only be able to leave a voicemail to the number entered in the Destination field. If the option is unchecked, the call will be routed to the number.
Description	An optional description for the entry.

Dynamic routing destination

Besides regular numbers, you can also enter a regular expression in the Destination field. A regex pattern must be enclosed by two slashes and will match against the number dialed by the caller. Numbers and regular expressions can be combined by putting absolute numbers before or after the regex pattern. For details on the regex syntax, see the Regular expressions quick reference.

The Destination field contains the following value: 10/..$/

The digits 10 are an unchanging value outside the regex pattern. The pattern itself will take the last two digits of the number dialed by the caller.

- A caller who dialed 8801 will be routed to 1001.
- A caller who dialed 8812 will be routed to 1012.

- A caller who dialed 907712 will be routed to 1012 as well.

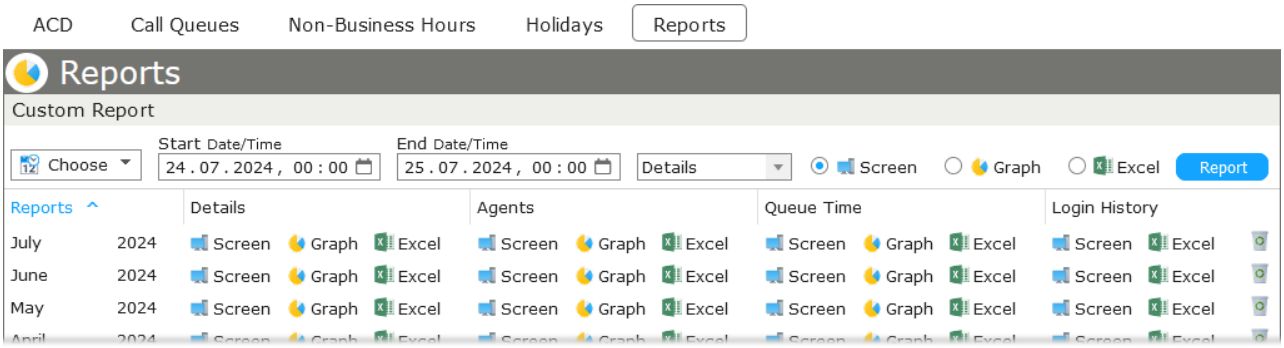
Reports

This section provides various detailed reports and statistics. Reports can be generated per month or for a specific time period.

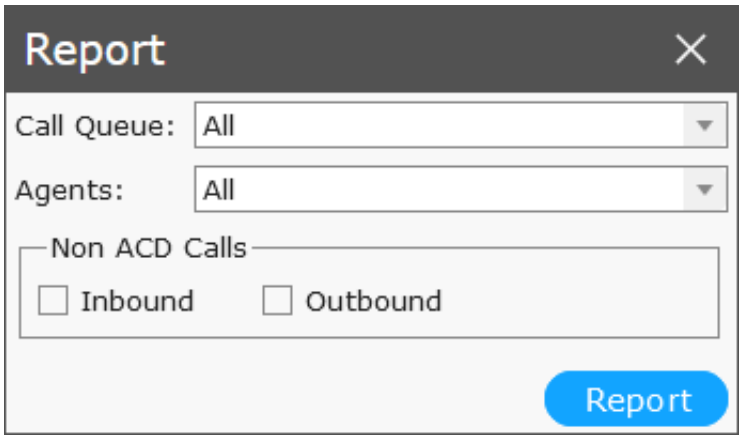
There are four types of reports:

- Details: Detailed reports on calls handled by ProfACD queues.
- Agents: Reports and statistics on agents' activities.
- Queue Time: Reports and statistics on the queues.
- Login History: Reports on login and logoff times of the agents.

Each report can be either displayed in the browser or exported as an Excel file. Additionally, all reports except *Login History* feature a graph view which visualizes the data as a bar chart.



To generate a report, set a time range in the Start and End fields, choose the report type from the drop-down menu and how to output the data with the radio buttons, and chick the Report button. Alternatively, you can select the report for a specific month from the reports list and clicking the corresponding icon in the row.

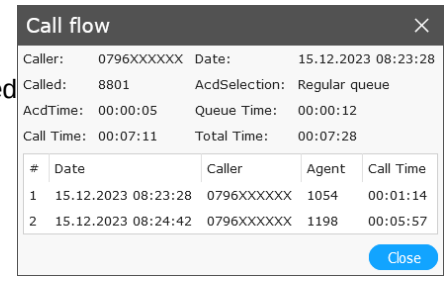


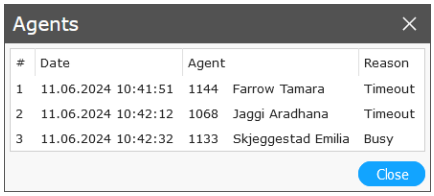
After selecting the time range, report type and output type, a pop-up window will appear where the data can be limited to a single call queue or agent. For detail and agent reports, an option section labeled Non ACD Calls lets you set whether calls not managed by ProfACD (i.e., internal calls) shall be included in the report as well.

Detail reports

These reports provide detailed information about calls which are handled by ProfACD queues. They contain the following information:

Date	The date and time the call was made.
Caller	The caller's number.
Called	The number dialed by the caller.
AcdTime	How long the call was processed byProfACD (i.e. playing announcements or prompting DTMF input).
AcdSelection	Name of the queue which the call entered.
Queue Time	How long the call remained waiting in the queue.
Agent	The internal number of the agent who picked up the call. If the call was not picked up, this column will show the call's termination state (see Termination states).
Call Time	The duration of the active call between the caller and the agent.
Total Time	The total duration of the call (including time spent in menu and waiting in queue).
Call Flow	If the call was transferred among multiple agents, a list will show all the agents the caller was connected to and the duration of each individual call.
Missed	If the call did not connect to any agents, a list will show all the agents whose phone rang and the reason why the call remained unanswered (*Timeout* or *Busy*).





Termination states

If a call remained unanswered, the column *Agent* will contain the state under which the call was terminated. The following termination states exist:

NB hours	The call was handled by the non-business hours scheduler.
Holidays	The call was handled by the holidays scheduler.
Caller abort (0)	The caller hanged up during a DTMF prompt.
Caller abort (1)	The caller hanged up during the welcome announcement.
Caller abort (2)	The caller hanged up while waiting for an agent.
Overflow	The caller was diverted to an overflow number. The exact number is shown in brackets.
Timeout transfer	The caller was diverted to the timeout destination.

Graph reports

By clicking the *graph* icon in the *Detail* column, the data will be visualized as bar charts. Five views are available:

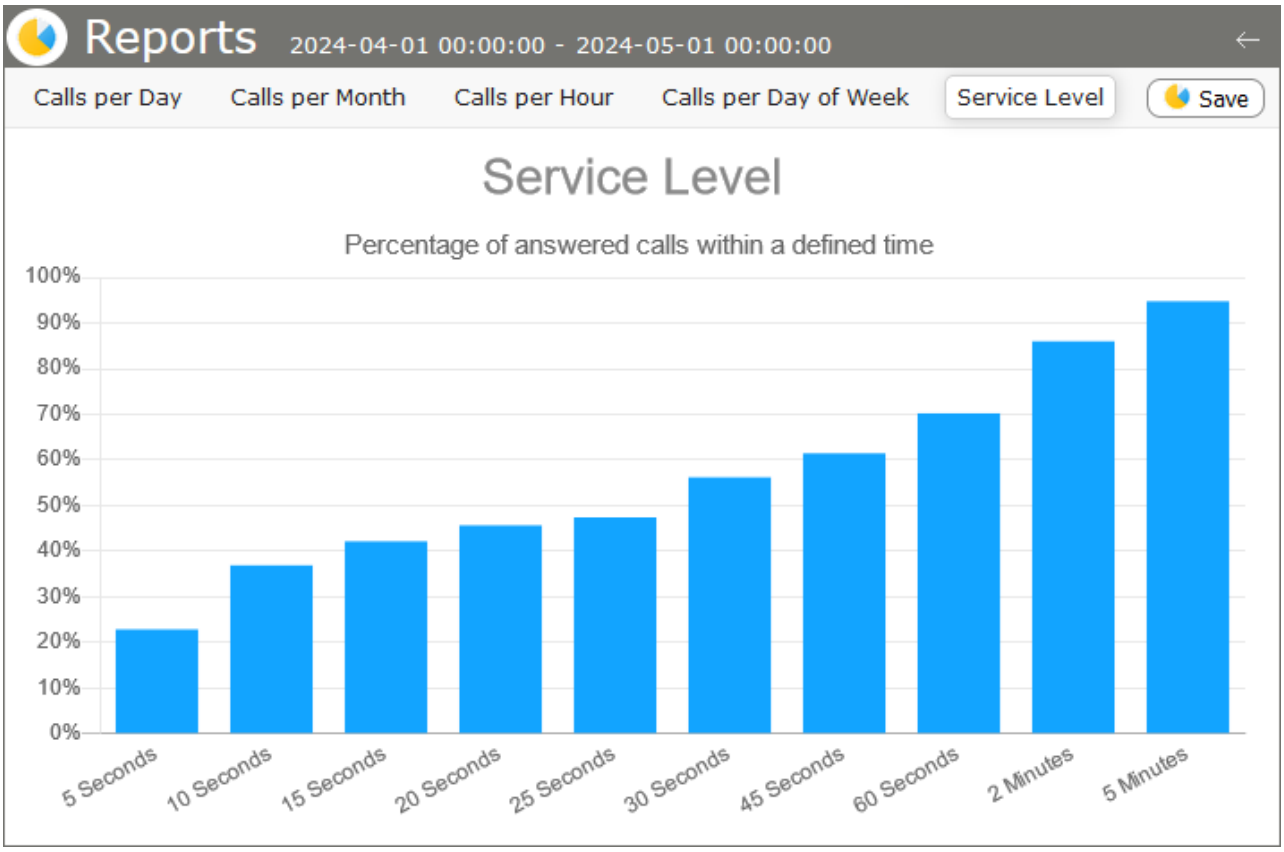
- Calls per Day
- Calls per Month
- Calls per Hour
- Calls per Day of Week

- Service Level

The first four views show how many calls were conducted during the given period, visualizing the amount of call traffic at different times.

The *Service Level* view shows how callers had to wait during a given period by showing the percentage of calls that have been answered within a certain time span.

In the *Service Level* view of the April 2024 details report, the column labeled *30 Seconds* is at 55%. This means that in that month, fifty-five percent of all callers had to wait thirty seconds or less before their call was answered.



Agent reports

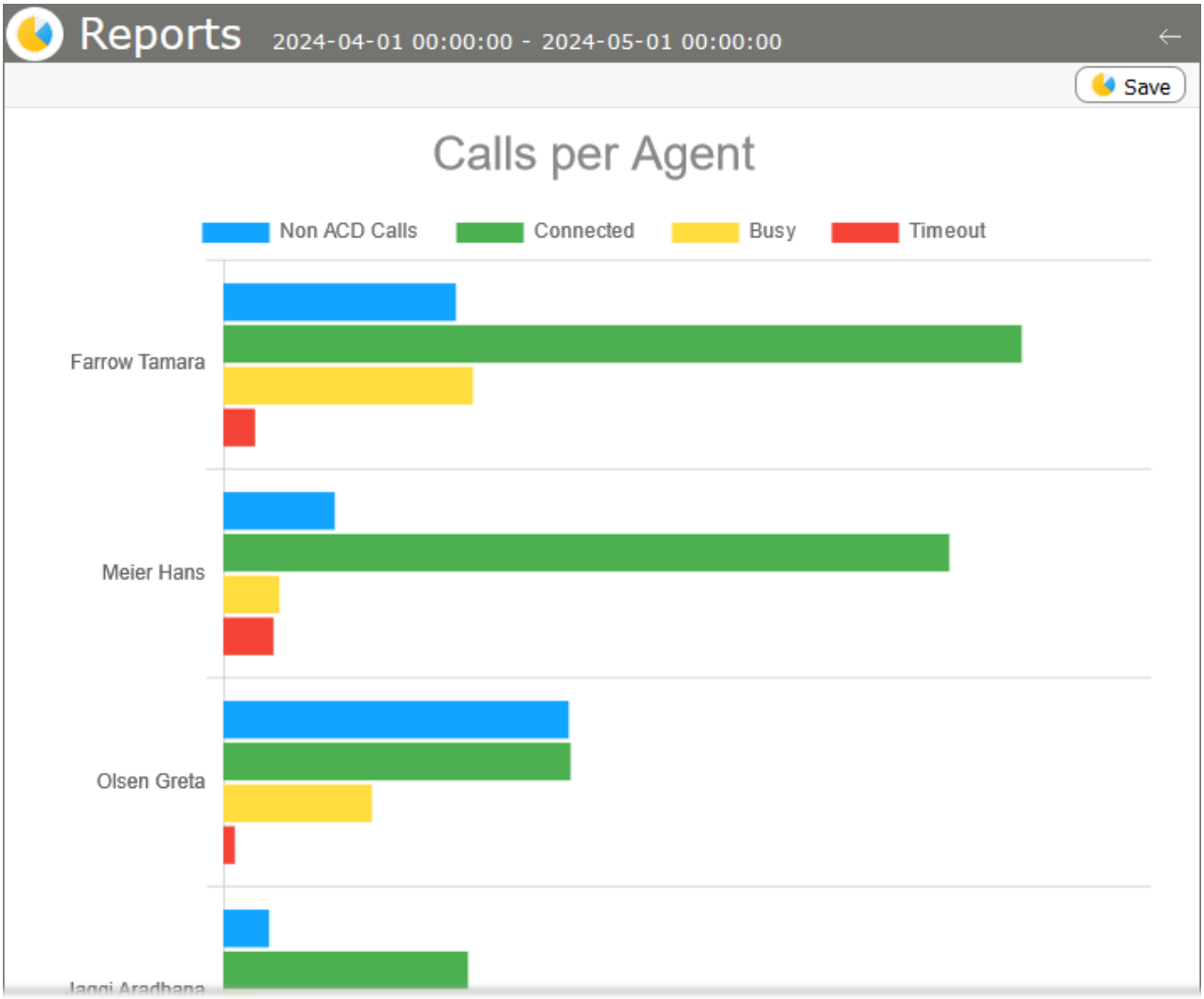
These reports provide statistics on the agents that are assigned to the queues. They contain the following information:

Agent	The number of the agent's phone.
Name	The name of the agent to whom the phone is assigned.
ACD Calls and Call Time	The amount of calls and time spent in calls managed by ACD.
Non ACD Calls and Call Time*	The amount of calls and time spent in calls not managed by ACD.
Total Calls and Total Time*	The amount of calls and time spent in calls in total.
Ø Call Time	Average duration of a single call conducted by the agent
Timeout	How many times a call directed to the agent remainend unanswered due to timeout.
Busy	How many times a call directed to the agent

	remainend unanswered because the agent's state was set to *Busy*.

* This information is only shown if one of the Non ACD Calls checkboxes was selected before generating the report.

The graph view for agent reports shows how many calls were diverted to each agent. If any Non ACD calls were selected, they will be shown as a separate bar.



Queue time reports

These reports show a summary of call statistics per call queue. They contain the following information:

AcdSelection	The name of the call queue.
Calls	How many calls were conducted in the queue during the specified period.
Caller abort	How many calls were hung up by the caller before being connected to an agent.
Ø Queue Time	How long a caller had to wait in queue on average.
Ø Call Time	How long a caller was actively connected to an agent on average.

The graph view shows two bars for each queue: one for connected calls and one for aborted calls.

Login history reports

These reports show when and how long the agents were active in ProfACD. Each row represents a single login session. The reports contain the following information:

Agent	The internal number and name of the agent (if available).
ACD	The queue into which the agent logged in.
Start Date and End Date	The date and time when the agent logged in and off. In addition, this column shows the means how the agent entered and left the session.
	The agent used a PC client to log in/off.
	The agent used an IP phone client to log in/off.
	The agent was logged in/off automatically.
Total Time	The duration how long the agent remained logged in.

Copyright

Copyright © 2026 CTModule AG; All Rights Reserved

This document contains proprietary information of CTModule AG. No part of the work described herein may be reproduced. Reverse engineering of the hardware or software is prohibited and is protected by patent law.

This material or any portion of it may not be copied in any form or by any means, stored in a retrieval system, adopted or transmitted in any form or by any means (electronic, mechanical, photographic, graphic, optic or otherwise), or translated to any language or computer language without the prior written permission of CTModule AG.

The information in this document is subject to change without notice. CTModule AG makes no representation or warranties with respect to the contents herein and shall not be responsible for any loss or damage caused to users either by direct or indirect use of this information. This document may contain information about third party products or processes. This third party information is out of the sphere of influence of CTModule AG. Therefore CTModule AG shall not be responsible for the correctness or legitimacy of this information.

While due care has been taken to deliver accurate documentation, CTModule AG does not warrant that this document is error-free. If you find any errors, inconsistencies, omissions or other problems related to this document, please report this in writing by email to box@ctmodule.com at CTModule AG.

CTMaker, VAS, Callisto, Callisto Express, Callisto ISDN, Callisto One, Callisto UCM, Callisto Cruise, Callisto Hospitality, Callisto X Mobile, COC Express , COC UCM and CTModule AG are trademarks and the CTModule logo is a service mark of CTModule AG.

All other products or company names mentioned herein are used for identification purposes only, and may be trademarks or registered trademarks of their respective owners.

The following description of software, hardware or process of CTModule AG or other third party provider may be included with your product and will be subject to the software, hardware or other license agreement.

Disclaimer

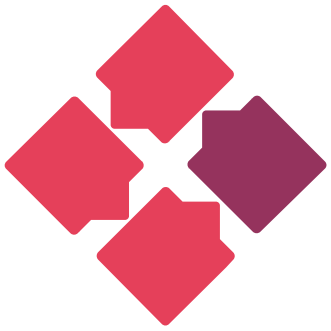
Changes are possible without notice.

The General Terms and Conditions (GTC) of CTModule AG, Switzerland apply.

All rights reserved.

For more information about CTModule AG, visit the CTModule web site at

www.ctmodule.com



CTMODULE

COMMUNICATION TECHNOLOGY MODULES

CTMODULE AG

Lehnweg 1

CH-3123 Belp/Berne

Switzerland

T: +41 (0)31 531 11 11

F: +41 (0)31 531 11 12

sales@ctmodule.com

OFFICE GERMANY

Frankfurter Straße 92

D-65760 Eschborn/Frankfurt

Germany

T: *+49 6196 2049173-0*

F: *+49 6196 2049173-9*

sales-d@ctmodule.com

OFFICE SERBIA

Gospodara Vučića 145

RS-11000 Belgrade

Serbia

T: +381 18 308076

sales@ctmodule.com