



CALLISTO⁺

PROFALARM

ADMINISTRATION MANUAL



Table Of Contents

Administration Manual.....	3
Setup	3
Alarm triggers	4
Receivers	8
Alarm plans	10
Messages.....	14
Reports	16
Phone functions	18
Copyright Information, Disclaimer.....	23

Setup

Installation

ProfAlarm 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 ProfAlarm application. For setting user privileges, see the chapter [User administration](#) of the Callisto platform administration manual.

AlarmTrigger	Provides access to the Alarm Triggers tab.
ReceiverGroup	Provides access to the Receiver Groups tab.
AlarmPlan	Provides access to the Alarm Plans tab.
Messages	Provides access to the Messages tab.
Reports	Provides access to the Reports tab.
TriggerAlarm	Allows the user to use the alarm URLs to trigger, stop and monitor alarms (see chapter Alarm triggers)

Access



Configure icon

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

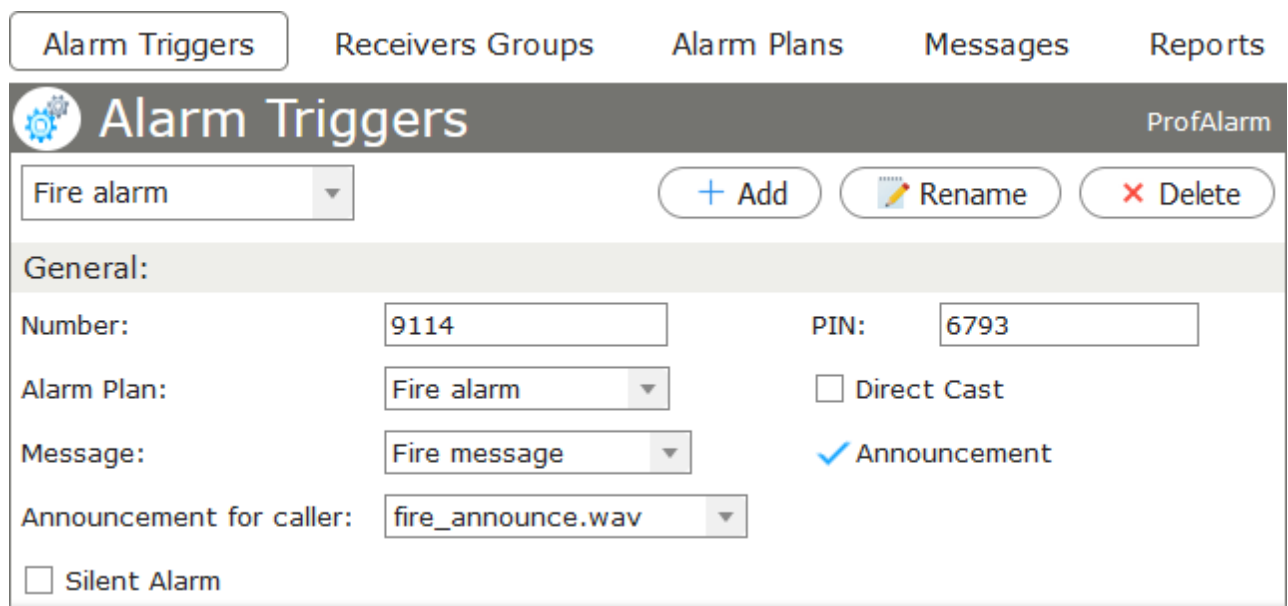
Users who were granted privileges to access the ProfAlarm instance can do so by navigating to Applications in the main menu and clicking on the name of the ProfAlarm instance.

Alarm triggers

In the *Alarm Triggers* tab, parameters for triggering alarms and other general parameters can be set. To create a new alarm trigger, click the Add button in the top right corner and type a name for the new alarm trigger in the field labeled Alarm Trigger name. To edit an existing alarm trigger, choose it from the drop-down list labeled Choose.... The selected alarm trigger can be renamed or deleted by clicking the respective button in the top right corner.

General settings

This section defines the basic properties of the alarm trigger.



The screenshot displays the 'Alarm Triggers' configuration page. At the top, there are navigation tabs: 'Alarm Triggers' (selected), 'Receivers Groups', 'Alarm Plans', 'Messages', and 'Reports'. Below the tabs is a header area with a gear icon, the text 'Alarm Triggers', and 'ProfAlarm' on the right. A dropdown menu shows 'Fire alarm' selected. To the right of the dropdown are three buttons: '+ Add', 'Rename', and 'Delete'. Below this is a 'General:' section with the following fields and options:

- Number:** 9114
- PIN:** 6793
- Alarm Plan:** Fire alarm
- Message:** Fire message
- Announcement for caller:** fire_announce.wav
- Direct Cast
- Announcement
- Silent Alarm

Number

Dialing this number will trigger the alarm. The correspondence with the assigned OIM lines can be checked here.

PIN

If set, this PIN has to be entered after dialing the number before the alarm triggers. Leave this field blank to trigger the alarm immediately when dialing the number.

Alarm Plan

The alarm plan to use when the alarm is triggered. Alarm plans are set in the [corresponding tab](#).

Direct Cast

If checked, the phone that triggered the alarm will be used as multicast transmitter. If unchecked, the Callisto server will conduct the multicast transmission instead.

This function requires a network that allows a transmitted multicast stream to reach multicast receivers.

Beware that any transmitter calls must be ended before the multicast can be transmitted, as Cisco phones cannot transmit through two channels at the

Message	<p>same time.</p> <p>The message to use when the alarm is triggered. Messages are set in the corresponding tab.</p>
Announcement	<p>If checked, the agent who triggered the alarm has the possibility to make live announcements which will be transmitted to all receivers. receiver will hear live announcements. After playing an optional wave file, a beep will indicate that the caller can make an announcement.</p> <p>If this this option is not checked, a voice message as defined in the Messages tab will be played.</p> <p>This option is always active if the option Direct Cast is activated, since the pre-recorded wave files on the Callisto server are not available when using direct cast.</p>
Announcement for caller	<p>Select an audio file which will be played to the user who called the alarm trigger number. The alarm will be triggered after the announcement playback has finished.</p>
Silent Alarm	<p>If checked, no data will be shown on the phone that triggered the alarm.</p>

Volume threshold

If the option Volume threshold is checked, the alarm will be triggered if the caller's microphone exceeds a certain sound level. ProfAlarm keeps the call permanently active and will re-trigger the alarm every time the volume threshold is exceeded. The call is ended manually through the device that dialed the alarming number.

If the volume threshold feature is used in combination with the option Direct Cast, the alarm will only be triggered once because the call that triggered the alarm will be ended in order for the direct cast to be transmitted.

✓ Volume threshold

Threshold volume:
 Values are typically in the range 50-2000 depending on the phone setup.

Measurement interval:
 Measurement interval in milliseconds.
 Values are typically in the range 500-10000.

Initial Alarm delay:
 Minimal time in seconds before the first alarm is generated.

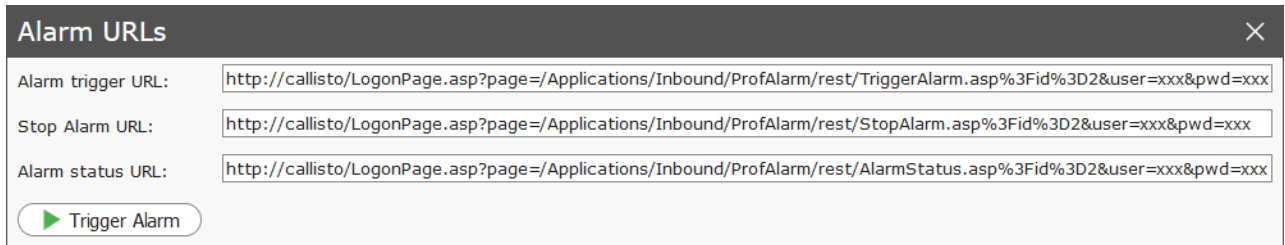
Alarm gap:
 Minimal time in seconds between 2 alarms.

If activated, the volume threshold feature can be configured with the following settings:

Threshold volume	Sets the volume at which the alarm is triggered.
Measurement interval	How the value applies to the device's actual volume threshold may vary depending on the type of telephone used. Refer to the documentation of the devices in use. Set in milliseconds. To trigger the alarm, the average sound volume must exceed the threshold during the set interval.
Initial Alarm delay	Set in seconds. During the set time, the sound volume is ignored in order to avoid false alarms.
Alarm gap	Set in seconds. After the alarm has been triggered, the sound volume is ignored for the set time before sound monitoring is reactivated (and potentially triggering the alarm again).
Standard	Clicking this button restores all volume threshold settings to default.

Alarm URLs

Alarm URLs are used to trigger, stop or monitor an alarm by calling a single URL. This can be used to control an alarm quickly through a variety of devices, e.g. by creating a shortlink on a PC or mobile phone, or by assigning the URLs to a Cisco IP Phone using Cisco services (see [platform administration manual](#)).



Clicking the button labeled Alarm URLs... will display a dialog box containing three URLs:

- The Alarm trigger URL will start the alarm when called.
- The Stop Alarm URL will end the alarm when called.
- The Alarm status URL will return an XML output containing the current status of the alarm.

Each of the three URLs end with the query string &user=xxx&pwd=xxx. To use the URLs, replace the two xxx placeholders with the user name and password of a user who has the privilege to trigger alarms (see chapter [Setup – Privileges](#)). Other ways to authenticate are available as well: see [Integration of Callisto Gadgets](#) in the platform administration manual.



In the same dialog window, the alarm can be triggered manually by clicking the button labeled Trigger Alarm. Manually triggered alarms will ignore the options *Announcement* and *Volume threshold*, i.e. they will behave as if as they are unchecked. After starting the alarm, it can be stopped again by clicking on the button labeled Stop Alarm.

Cisco services

Clicking the button Cisco Services... will provide the URLs needed to create CUCM phone services controlling the alarm. The available services are described in detail in the chapter [Phone functions](#).

Receivers

The tab *Receivers Groups* is used to manage who will receive the alarms when triggered. To create a new receivers group, click the Add button in the top right corner and type a name for the new group in the field labeled Receivers Group name. To edit an existing group, choose it from the drop-down list labeled Choose.... The selected group can be renamed or deleted by clicking the respective button in the top right corner.

Alarm Triggers **Receivers Groups** Alarm Plans Messages Reports

Receivers Groups
ProfAlarm

Manchester office ▼
+ Add
 Rename
 Delete

	Number	Type	Name	
	1011	<input type="checkbox"/> CiscoPhoneVoice <input type="checkbox"/> CiscoPhoneText <input type="checkbox"/> Email	Bloggs, Fred (Management)	Save
	1144	<input type="checkbox"/> CiscoPhoneVoice	Farrow, Tamara (Sales)	Save
	1128	<input type="checkbox"/> CiscoPhoneVoice <input type="checkbox"/> CiscoPhoneText	Cooper, Ashley (HR)	Save
	1012	<input type="checkbox"/> CiscoPhoneVoice <input type="checkbox"/> CiscoPhoneText <input type="checkbox"/> Email	Forbes, Lance (R&D)	Save
	1109	<input type="checkbox"/> CiscoPhoneVoice <input type="checkbox"/> CiscoPhoneText	Brook, Phil (R&D)	Save
	1162	<input type="checkbox"/> CiscoPhoneVoice <input type="checkbox"/> CiscoPhoneText	Cole, Jeff (Design)	Save
	1154	<input type="checkbox"/> CiscoPhoneVoice <input type="checkbox"/> CiscoPhoneText <input type="checkbox"/> Email	Marshall, Scott (R&D)	Save
	+441641XXXXXX	<input type="checkbox"/> Direct call	n.n., ()	Save
	+441677XXXXXX	<input type="checkbox"/> Direct call	n.n., ()	Save

New receiver:

+

Add

All members of the selected receivers group are listed here. Receivers can be added, removed, reordered, and their phone number or type can be changed. Column labeled Number shows the phone number of the device which will receive the multicast or text message. In the column labeled Type, you can configure how the device will inform the receiver of the alarm. The following options are available:

Cisco Phone Voice*

The device will play a voice message through the multicast stream. Depending on the [alarm trigger configuration](#), the receiver will either hear a pre-recorded message or an announcement made from the device that triggered the alarm.

Cisco Phone Text*

This stream is transmitted from the Callisto server, so the network configuration must allow the Callisto server to transmit multicast streams to the phone. The device will show a text message. This message is defined in the [Messages tab](#).

Direct call

Similar to Cisco Phone Voice, but the device will receive a regular phone call instead of a multicast stream. This option is suitable for phones without Cisco IP Phone functionalities.

The options Cisco Phone Voice and Cisco Phone Text become unavailable to phones that are alarmed via direct calls.

Every direct call occupies a voice channel on Callisto. Make sure that enough voice channels are licensed to carry every direct call.

Send an email message to the user's address.

Email

*These alarming types can only be used with Cisco IP Phones.

In the Name column, the name of the receiver is displayed if the phone number is assigned to a Callisto user.



Reorder icon

Delete icon

Receivers can be reordered by dragging and dropping the *reorder* icon. The receivers' order in the list is relevant when used alongside an alarm plan with the Distribution option set to *Top-Down* or *Round-Robin* (see chapter [Alarm plans](#)).

Clicking the *delete* icon will remove the receiver from the group.

Alarm plans

In the *Alarm Plan* tab, the behavior of the alarms can be configured in detail. To create a new alarm plan, click the Add button in the top right corner and type a name for the new alarm plan in the field labeled Alarm Plan name. To edit an existing alarm plan, choose it from the drop-down list labeled Choose.... The selected alarm plan can be renamed or deleted by clicking the respective button in the top right corner.

Clicking the Standard button will reset all settings to default.

General settings

Alarm Triggers Receivers Groups **Alarm Plans** Messages Reports

Alarm Plans ProfAlarm

Fire Alarm + Add Rename Delete

General

Receivers Group: Manchester office

Distribution: Top-Down

Number of repeats: 3

Repetition gap: 2 Seconds

Wait announcement: en_firealarm_wait.wav

Announcement for waiting times.

Send alarm report to e-mail

E-mail: scott.marshall@example.com

Multicast

Receivers Group

The group of agents that will be informed when the alarm triggers. Receivers groups are configured in the [corresponding tab](#).

Distribution

Select in which manner the receivers will be alarmed.

- Parallel: All receivers will be alarmed simultaneously.
- Top-Down: Receivers will be alarmed one after another in the order they appear in the receivers group's list.
- Round-Robin: Same as *Top-Down*, but once the last receiver in the list has been alarmed, the first receiver is alarmed again.

If *Top-Down* or *Round-Robin* is set, an ongoing alarm will be stopped if one of the following cases occur:

- A confirmation is received (see [Confirmation settings](#)).
- The global time limit of 180 seconds is reached.
- The alarm is stopped manually.

Number of repeats

The number of times all receivers will receive the alarm. If the value is set to 0, then the alarm will be repeated indefinitely.

Repetition gap

Set in seconds. The time ProfACD will wait before repeating the alarm.

Wait announcement

The announcement that is played to the caller during waiting times (see Direct calls).

Send alarm report to e?mail

If checked, a report on the alarm will be sent to the address entered in the E?mail field.

Multicast settings

This setting only applies to receivers whose alarming type is set to either Cisco Phone Voice or Cisco Phone Voice+Text.

The option Speaker volume sets the sound volume with which multicast announcements are played on receiving devices. It is set in percent, with 100 being the phone speaker's full volume.

Direct call settings

These settings only apply to receivers whose alarming type is set to Direct call.

Max. ringing time

Set in seconds. Defines how long a receiver's phone will ring before the call is cancelled.

Waiting time for direct calls

Set in seconds. Defines how long ProfAlarm waits for the receiver to accept the call. Once the waiting time

is exceeded, no further direct calls are made and ProfAlarm will continue the alarming procedure for receivers of text message and multicast alarms, releasing the live announcement.

This option is only active if the Distribution option is set to *Parallel* (see [General settings](#)) and the alarm trigger's Announcement option is checked (see [Alarm triggers](#)).

Confirmation settings

Checking the option Confirmation will prompt receivers to confirm that they were informed of the alarm. If the Distribution option is set to *Parallel*, the confirmation can be made by multiple receivers; if set to *Top-Down* or *Round-Robin*, the alarm is terminated as soon as a single alarm message is confirmed.

Depending on the alarm type set for the receiver, the confirmation is made with a soft key on the Cisco phone, or by pressing a key on the telephone.

values are in the range 0-10.

Confirmation

Confirmation

Confirmation waiting time:
Time in seconds to wait for alarm confirmation.

Confirmation announcement:
Confirmation announcement if call is connected.

Confirmation key:
DTMF key for alarm confirmation.

Volume monitoring

Basethrough listen time:

The confirmation feature is not available to receivers whose alarming type is set to *Cisco Phone Voice*.

Confirmation waiting time	Set in seconds. Defines how long Callisto will wait for recipients to confirm an alarm.
Confirmation announcement*	The audio file played to receivers when they're prompted to confirm the alarm.
Confirmation key*	Sets which phone key receivers have to press to confirm the alarm.

*These options only apply to receivers whose alarming type is set to *Direct call*.

Volume monitoring

Volume monitoring

Passthrough listen time:

Listening time in seconds if volume trigger and passthrough are configured.
Values are in the range 0-30.

The option Passthrough listen time is only active if the alarm trigger's Announcement option is activated (see [Alarm triggers](#)). Set in seconds, this option sets the time during which the receivers are to listen to an active alarm's announcement.

Messages

In the *Messages* tab, the messages being sent to the receivers are configured. Saved messages can be selected for use in the *Alarm Triggers* tab by selecting a message from the Messages drop-down list.

Alarm Triggers Receivers Groups Alarm Plans **Messages** Reports

Messages
ProfAlarm

#	Name	Announcement	Ringtone	Message	
1.	<input type="text" value="General alarm"/>	<input type="text" value="red_alarm.wav"/> ▼	<input type="text" value="AreYouThere.raw"/>	ALARM Follow instructions!	<input type="button" value="Save"/>
2.	<input type="text" value="Fire alarm"/>	<input type="text" value="red_alarm.wav"/> ▼	<input type="text" value="AreYouThere.raw"/>	FIRE ALARM Leave the building immediately!	<input type="button" value="Save"/>
3.	<input type="text" value="Flood alarm"/>	<input type="text" value="alarm_alt1.wav"/> ▼	<input type="text" value="AreYouThere.raw"/>	FLOOD ALARM Move to higher ground!	<input type="button" value="Save"/>
4.	<input type="text" value="Active shooter"/>	<input type="text" value="alarm_alt2.wav"/> ▼	<input type="text" value="AreYouThere.raw"/>	ALARM: ACTIVE SHOOTER Lock all doors!	<input type="button" value="Save"/>
5.	<input type="text" value="Test alarm"/>	<input type="text" value="alarm_test.wav"/> ▼	<input type="text" value="Saxophone.raw"/>	EMERGENCY DRILL Follow instructions!	<input type="button" value="Save"/>

New Alarm Message:

+

▼

Each message configuration consists of the following parameters:

- | | |
|--------------|---|
| Name | The name to identify the message in the <i>Alarm Triggers</i> tab. Changing the name will not affect any other configurations or assignments. |
| Announcement | The selected audio file will be played to the receivers. Leave the selection blank to omit the announcement. Audio files can be added by clicking the Upload new audio file button in the bottom left corner. |
| Ringtone | The ringtone used on the phones receiving the alarm. |
| Message | The text message that will be displayed on all Cisco IP Phones that have the Type option set to <i>Cisco Phone Text</i> (see chapter Receivers). |

Depending on the phone model, the length of text messages might be limited. If the set message exceeds the length of the receiving phone's character limit, the message text will be cut short.

Reports

The *Reports* tab shows details on all alarms that have been executed in the past.

Alarm Triggers Receivers Groups Alarm Plans Messages **Reports**

Reports

ProfAlarm

📅 01.01.2024 00:00 - 📅 01.09.2024 00:00 🔍

ID	Trigger	Destination	Source	Confirmed	Start time
✓ 195	Emergency drill	192.168.210.158	admin - 192.168.13.50	✓ 4	06.08.2024 10:25:15
✓ 194	Emergency drill	192.168.210.158	admin - 192.168.13.50	✓ 3	02.07.2024 11:03:27
✓ 193	Flood alarm	192.168.210.158	1012 - Forbes, Lance	✓ 6	28.06.2024 14:02:06
✓ 192	Emergency drill	192.168.210.158	admin - 192.168.13.50	✓ 5	04.06.2024 10:48:17
✓ 191	Emergency drill	192.168.210.158	admin - 192.168.13.50	✗ 0	07.05.2024 09:47:47
✓ 190	Emergency drill	192.168.210.158	admin - 192.168.13.50	✓ 1	02.04.2024 10:46:09
✓ 189	Emergency drill	192.168.210.158	admin - 192.168.13.50	✓ 3	05.03.2024 11:33:42
✓ 188	Emergency drill	192.168.210.158	admin - 192.168.13.50	✓ 6	06.02.2024 10:41:38
✓ 187	Emergency drill	192.168.210.158	admin - 192.168.13.50	✓ 6	02.01.2024 10:40:58

Reports: 9

To show the alarms triggered during a certain time, set the time frame with the two date/time input fields on the top left corner. With the search field, alarms can be filtered by any available metadata:

- Source (phone number or user name)
- Destination number
- Name of alarm trigger, alarm plan, or message
- Numbers of the receivers who confirmed the alarm.

Clicking on an entry opens a detail window. If an error has occurred, detailed information is shown here.

Reports



ID:	193
Trigger:	Flood alarm
Destination:	9115
Source:	1012 - Forbes, Lance
Start time:	28.06.2024 14:02:06
End time:	28.06.2024 14:02:50
Duration:	00:00:44
Alarm Executed (Status Code):	✔ (200)
Alarm Plan:	Flood alarm
Distribution:	Parallel
Direct calls (connected, called):	alarm_alt1.wav (1, 2)
Cisco multicast (Number of receiver):	alarm_alt1.wav (6)
Cisco message (Number of receiver):	Flood alarm (6)
Message text:	FLOOD ALARM Move to higher ground!
Confirmations (Time, number):	28.06.2024 14:02:12 Ashley.Cooper 28.06.2024 14:02:17 Jeff.Cole 28.06.2024 14:02:18 Fred.Bloggs 28.06.2024 14:02:24 Tamara.Farrow 28.06.2024 14:02:36 +441641XXXXXX 28.06.2024 14:02:42 Scott.Marshall

Close

Phone functions

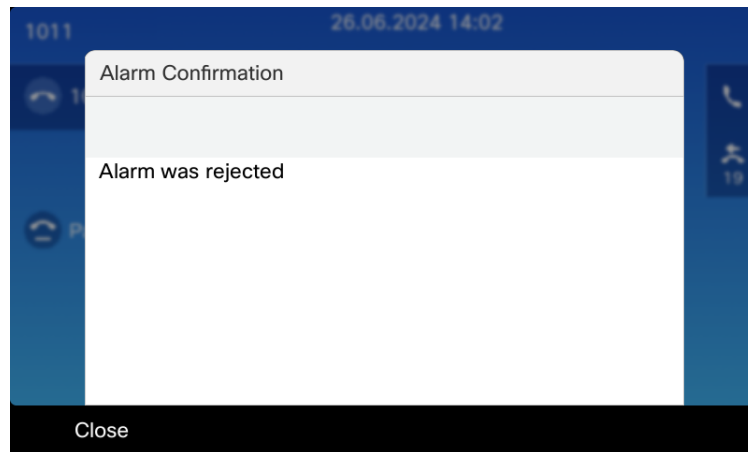
Receiving alarms

If a receiver's phone has the Type option *Cisco Phone Text* enabled (see [Receivers](#)), a text message will be shown on the phone's screen when it receives an alarm.



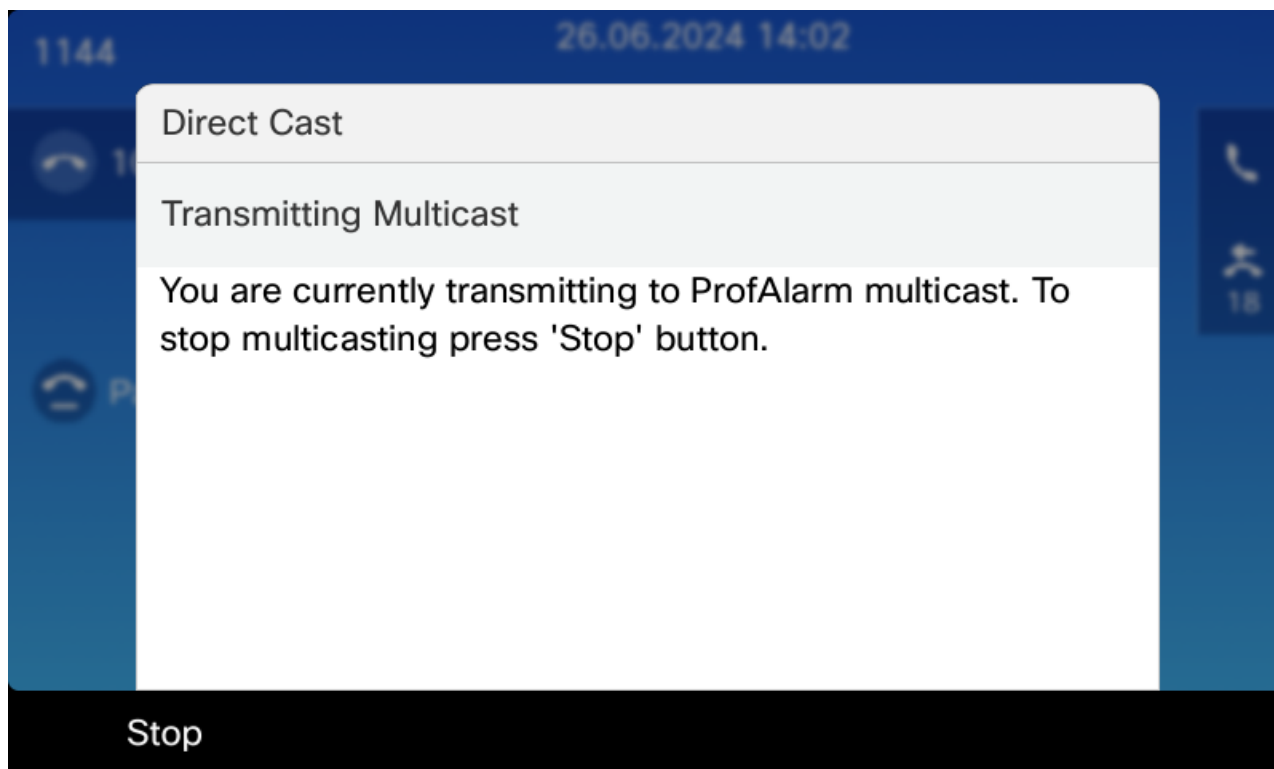
If the option Confirmation is enabled for the alarm plan (see [Confirmation settings](#)), two buttons will be available on the receiver's phone to either Accept or Reject the alarm. A respective message will be shown upon pressing either button.





Transmitting alarms

When using a phone to transmit an alarm through direct cast, a message is displayed on the phone alongside a button to Stop the multicast. This view is only available if the option Silent Alarm is disabled in the [Alarm Trigger tab](#).



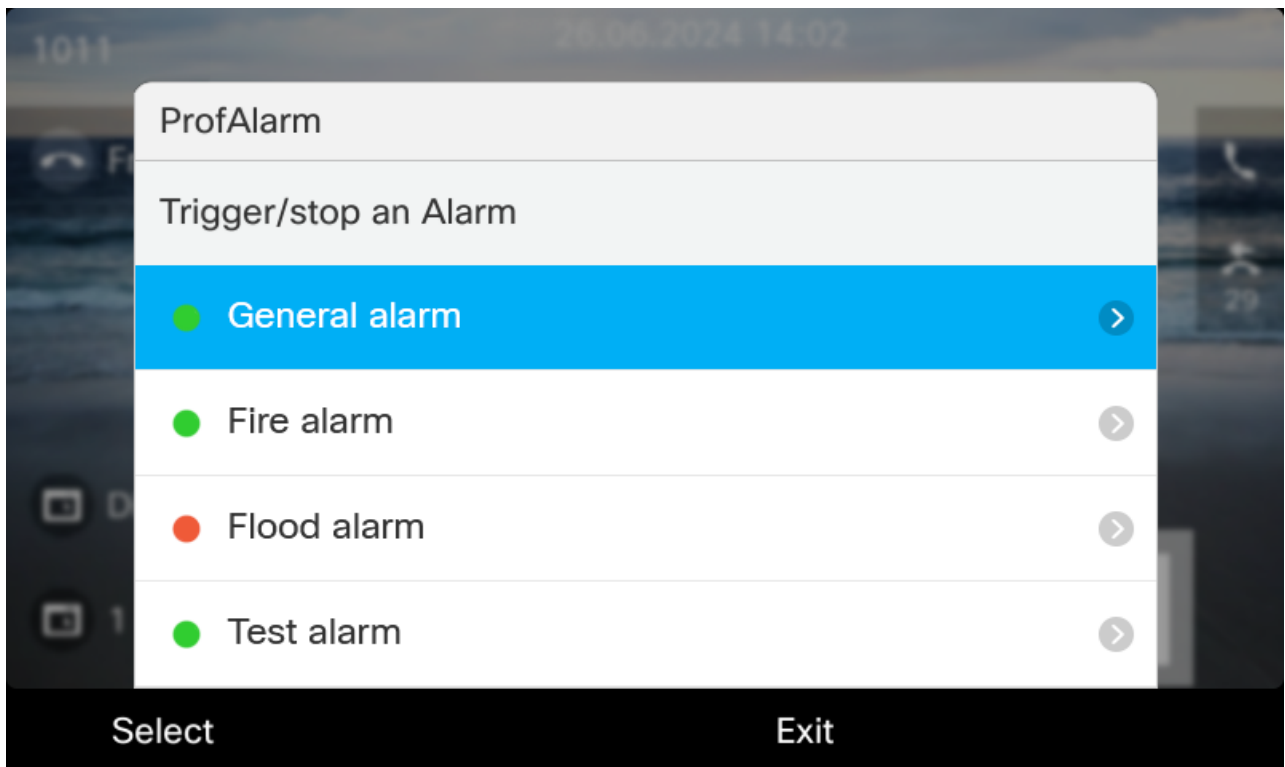
Phone Services

Two dedicated phone services are available to control alarms via Cisco IP Phones. The links can be found by navigating to the [Alarm Triggers tab](#) and clicking on the Cisco Services... button at the bottom.

Cisco Services		✕
Main menu:	<input type="text" value="http://callisto/Applications/Inbound/ProfAlarm/src/PhoneMenu.asp?device=#DEVICENAME#"/>	
Alarm toggle URL:	<input type="text" value="http://callisto/Applications/Inbound/ProfAlarm/src/PhoneMenu.asp?action=toggleAlarm&device=#DEVICENAME#&trigger=XXXXX"/>	
Create the needed services in CUCM with the above URL's. trigger parameter should be URL encoded name of the Alarm Trigger.		

Main menu

The first link is called Main menu. This service will show a list of all alarm triggers and their statuses (*idle* or *active*).



The main menu screen will be refreshed every seven seconds to show the updated state of alarms. If an idle alarm trigger is selected, the alarm will be triggered. Selecting an active alarm trigger will send a request to stop the alarm. On each action, the screen will update and a message will be shown immediately.

Triggering an alarm this way is equivalent to triggering an alarm over the web GUI; unlike making a phone call to trigger the alarm, voice announcements and the volume threshold feature will not be available. To make use of those features, trigger the alarm using a call.

By adding the alarm trigger number to a speed dial button, a call-based alarm can be triggered in the same manner as a service-based trigger.

Alarm toggle URL

The second service link is called Alarm toggle URL. With this service, a specific alarm can be triggered or stopped.

The last part of this URL's query string reads `&trigger=XXXXX`. To configure this URL for a specific alarm, replace the XXXXX placeholder with the percent-encoded name of the alarm trigger.

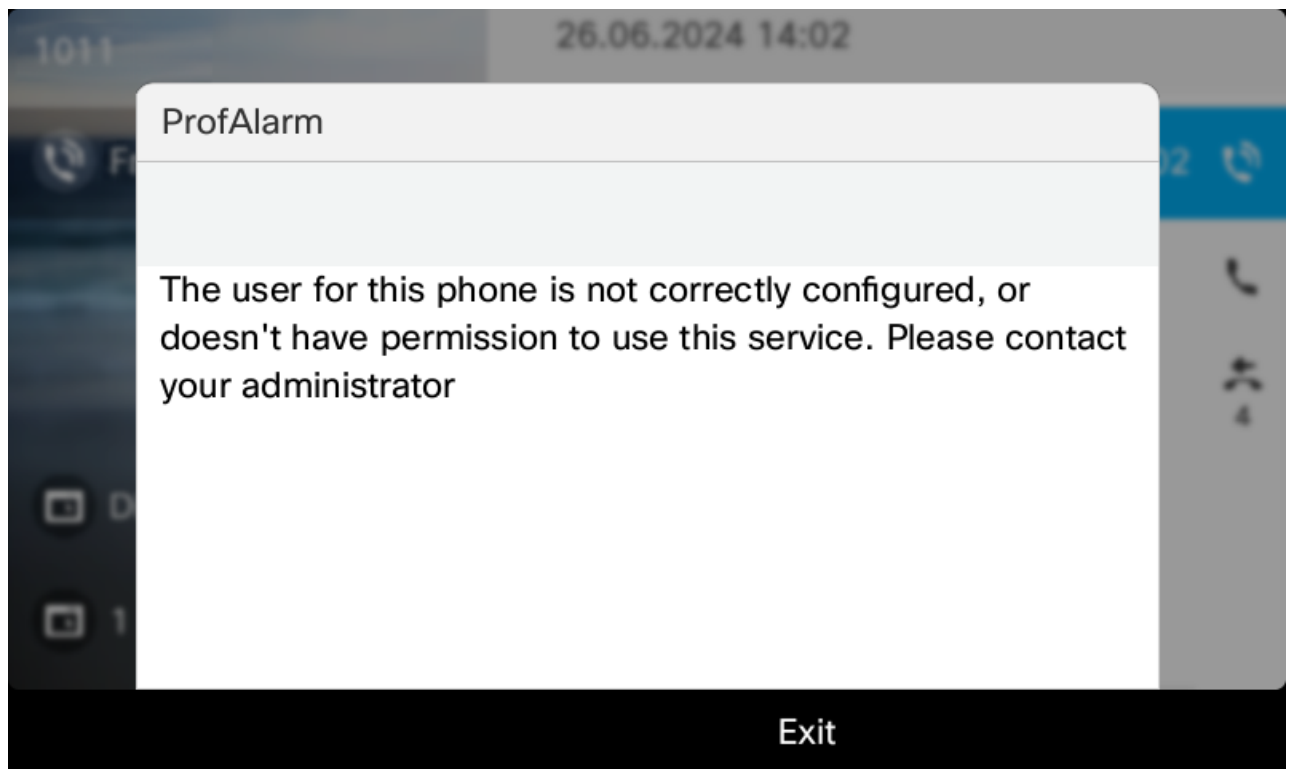
To assign an alarm trigger named Fire alarm to an a Cisco Service, the alarm toggle URL should look like

this:

```
http://<callisto>  
/Applications/Inbound/ProfAlarm/src/PhoneMenu.asp?action=toggleAlarm&device=#DE  
VICENAME#&trigger=Fire%20alarm
```

After triggering or stopping an alarm, a respective message reading either “*Alarm is triggered*” or “*Alarm is stopped*” will be displayed. This message will only be shown if the option Silent Alarm in the [Alarm Triggers tab](#) is unchecked.

Triggering an alarm using Cisco Services is only available to users who have the privilege TriggerAlarm enabled (see [Privileges](#)). If the user lacks this privilege, or the phone isn't assigned to any user at all, the service will return an error message.



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

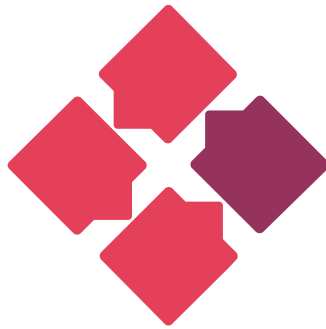
Changes are possible without notice.

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