CALLISTO

CRUISE ALARMING

ADMINISTRATION MANUAL

Table Of Contents

Setup

Installation

Cruise Alarming 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 Cruise Alarming application. For setting user privileges, see the chapter User administration of the Callisto platform administration manual.

Settings	Provides access to the *Settings* tab.
EspaSources	Provides access to the *Espa Configuration* tab.
ActiveAlarms	Provides access to the *Active Alarms* tab.
ClearedAlarms	Provides access to the *Cleared Alarms* tab.
Alarm Groups	Provides access to the *Alarm Groups* tab.
SMCSIntegration	Provides access to the *SMCS Alarm Integrations* tab.

Access

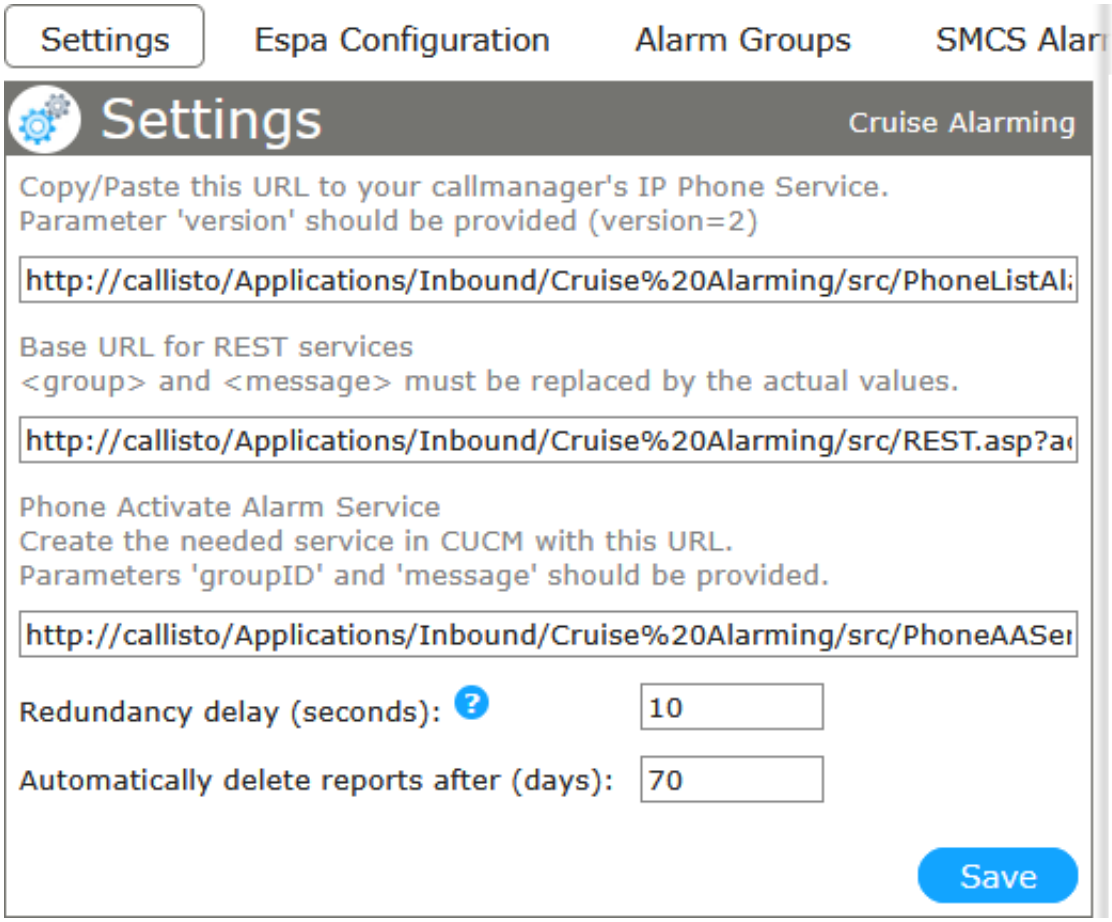
Configure icon

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

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

Settings

The Settings tab contains the general settings of Cruise Alarming.



Service URLs

At the top of this tab are three predefined URLs:

Call manager phone service URL

The first URL is used to set Cruise Alarming as a phone service on the call manager. This service provides the possibility to list the alarm history directly on phones which are subscribed to the service. Paste this URL to the call manager's phone service definition.

REST services

The second URL is the base URL for the REST API provided by Cruise Alarming.

The URL contains two placeholders which must be replaced when calling the REST API:

- <group>: The ID or name of the group to which the alarm message are sent to (see chapter Alarm groups).
- <message>: The content of the alarm message.

“Activate alarm” phone service

The third URL is used on IP phones to set up services which can activate predefined alarms (e.g., engineer call). To use such a this service, two parameters :

- groupID: The ID/group number of an alarm group (see chapter Alarm groups).
- message: The text to display of alarm which will be shown on the alarm group phones when alarm is activated.

Paste this URL to the call manager’s phone service definition.

Additional settings

Redundancy delay	Set in seconds. The interval of how often Callisto checks for duplicate messages. This is helpful if multiple alarming systems send the same messages. If set to 0, no redundancy check will be performed.
Automatically delete reports after	Set in days. The time how long alarm reports will be kept before being deleted automatically.

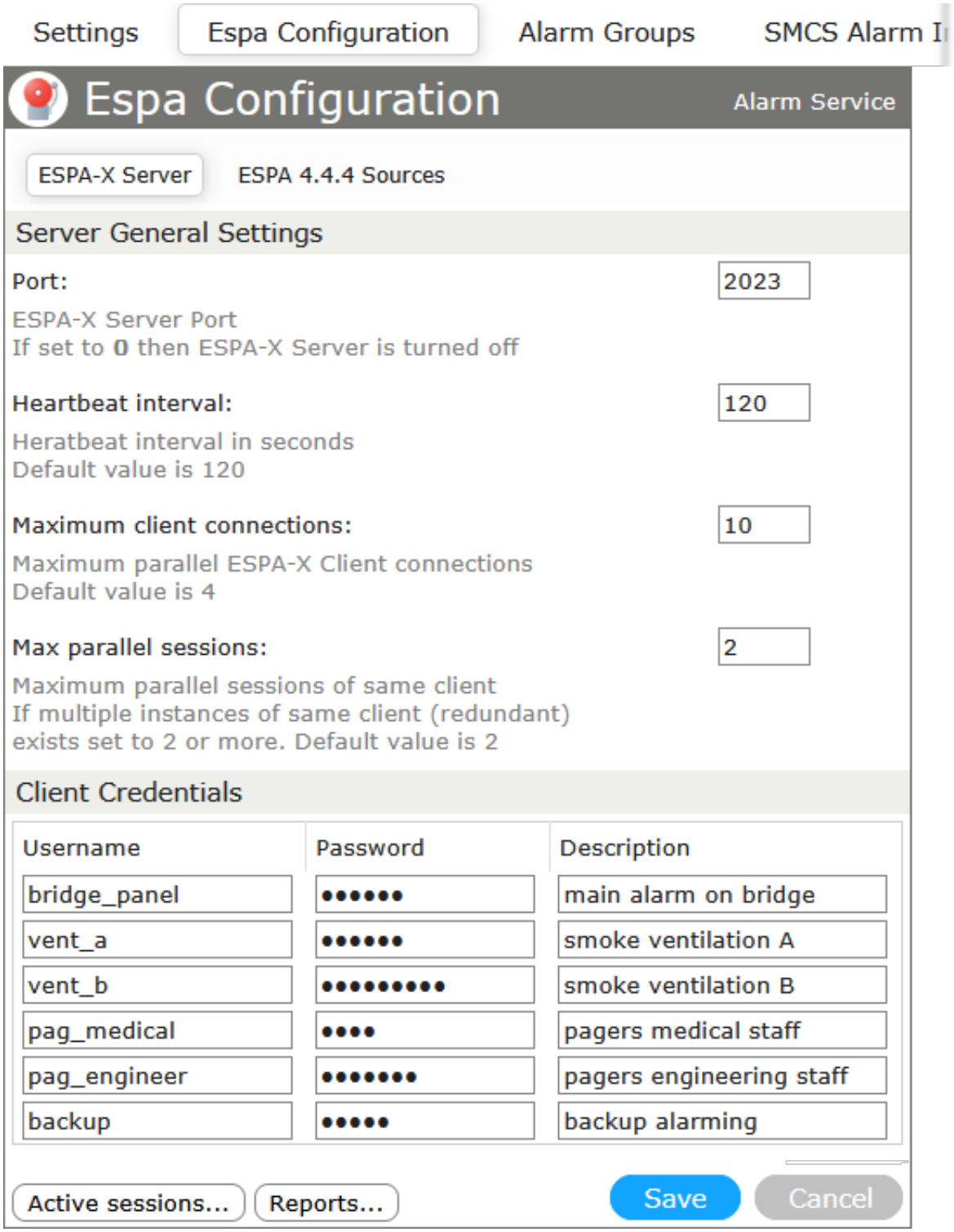
ESPA configuration

Callisto Crusie Alarming supports both ESPA 4.4.4 and ESPA-X interfaces for alarm communication. Choose the interface to use by selecting the Espa Configuration tab and clicking the respective button at the top of the panel.

ESPA-X Server

ESPA-X clients can be integrated with Callisto via an embedded ESPA-X server.

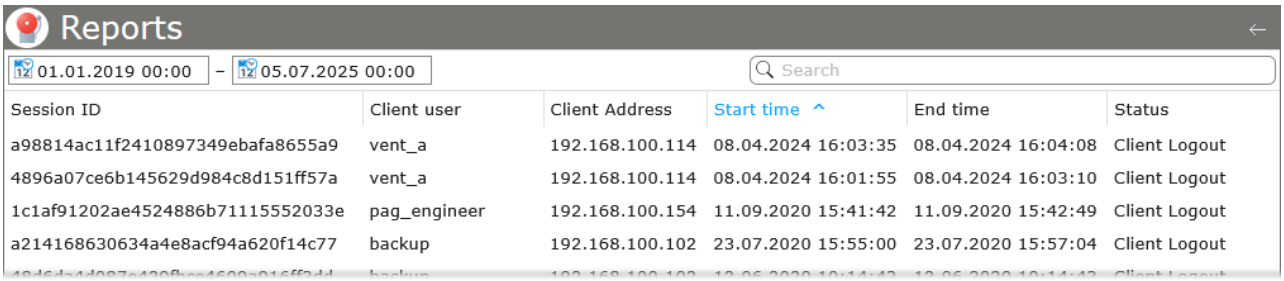
Callisto supports ESPA-X protocol version 1.00 rev 4.



Port	The server port (TCP) on which ESPA-X clients connect to the ESPA-X server. The recommended port is 2023, but can be set to any free port. Setting the port to 0 disables the ESPA-X server.
Heartbeat interval	Set in seconds. If there are no activities from an ESPA-X client during this interval (i.e., no heartbeat ESPA-X messages are received), the respective ESPA-X client session will be terminated. To avoid erroneous termination of a session, the Heartbeat interval set here should be set at least 20% higher than the heartbeat interval configured on the ESPA-X client.

Maximum client connections	The maximum of clients which can be connected to the ESPA-X server simultaneously. The recommend setting is 10.
Max parallel sessions	If multiple instances of the same client exist (e.g., in a redundant system), the maximum of allowed parallel sessions with the same client can be set here.
Client credentials	Enter the username, password and an optional description of all ESPA-X clients that connect to the configured server.

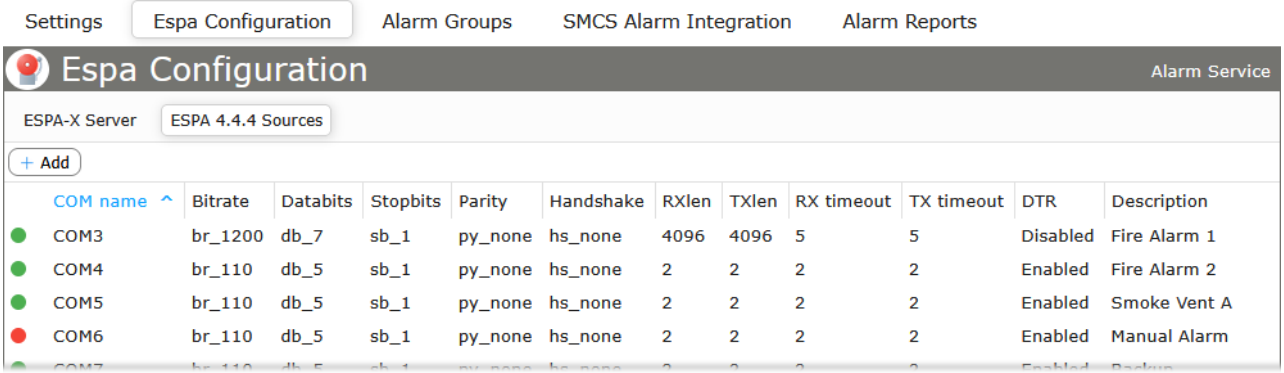
Active ESPA-X sessions can be monitored in real-time by clicking the Active sessions… button. Clicking on the Reports… button will list all past EXPA-X sessions.



More information about ESPA-X can be found in the ESPA-X Server interface manual.

ESPA 4.4.4. Sources

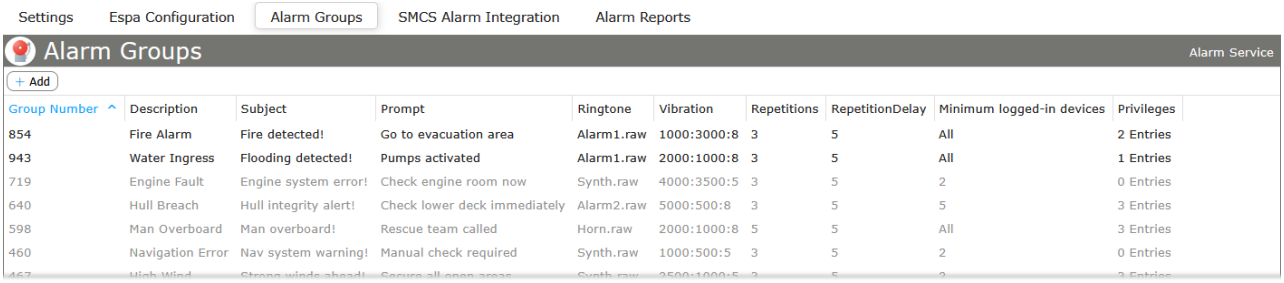
You can configure up to 10 COM ports for ESPA 4.4.4. Sources (Alarm systems on the ship). When an alarm system detects a problem somewhere on board (e.g., a fire sensor detects fire in a cabin), the alarm system immediately informs Callisto Cruise by sending the respective ESPA messages via COM port. Depending on the calling source's address, the received alarm message will be pushed to any related alarm groups (see chapter Alarm Groups).



The dots on the left side of each ESPA source represent the current status of the COM ports. A green dot indicates an open port, a red dot means that the port is either closed or encountering an issue. Hovering over the dot will reveal more information on the current status.

Alarm groups

This tab lists all alarm groups. Each alarm group contains the configuration of a specific alarm's behavior when executed (e.g., prompt to display, ringtone, vibration, repetitions) as well as which target devices the alarm will be distributed to.



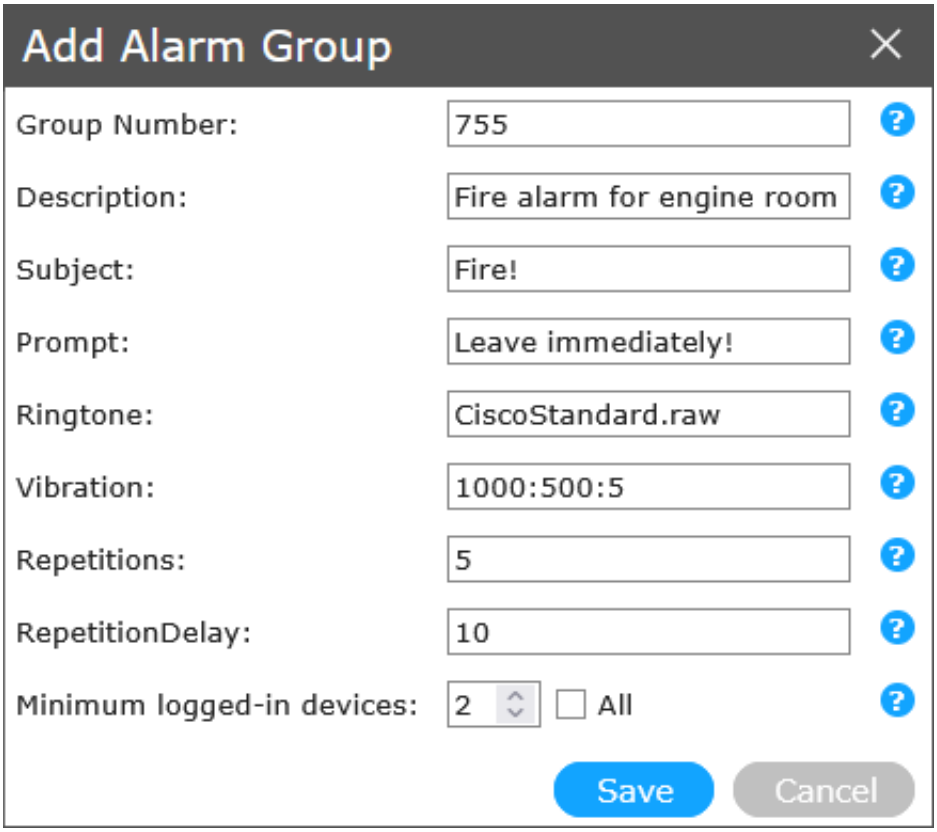
Group Number	Description	Subject	Prompt	Ringtone	Vibration	Repetitions	RepetitionDelay	Minimum logged-in devices	Privileges
854	Fire Alarm	Fire detected!	Go to evacuation area	Alarm1.raw	1000:3000:8	3	5	All	2 Entries
943	Water Ingress	Flooding detected!	Pumps activated	Alarm1.raw	2000:1000:8	3	5	All	1 Entries
719	Engine Fault	Engine system error!	Check engine room now	Synth.raw	4000:3500:5	3	5	2	0 Entries
640	Hull Breach	Hull integrity alert!	Check lower deck immediately	Alarm2.raw	5000:500:8	3	5	5	3 Entries
598	Man Overboard	Man overboard!	Rescue team called	Horn.raw	2000:1000:8	5	5	All	3 Entries
460	Navigation Error	Nav system warning!	Manual check required	Synth.raw	1000:500:5	3	5	2	0 Entries

An alarm group is uniquely identified by the group number.

If an alarm group should be triggered by an ESPA source, the ESPA source's call address must be used as the group number.

Adding an alarm group

To add an alarm group, click on the Add button in the top-left corner and a dialog window will appear to configure the new alarm group.



Group Number — The unique identifier for this group. Needs to be the

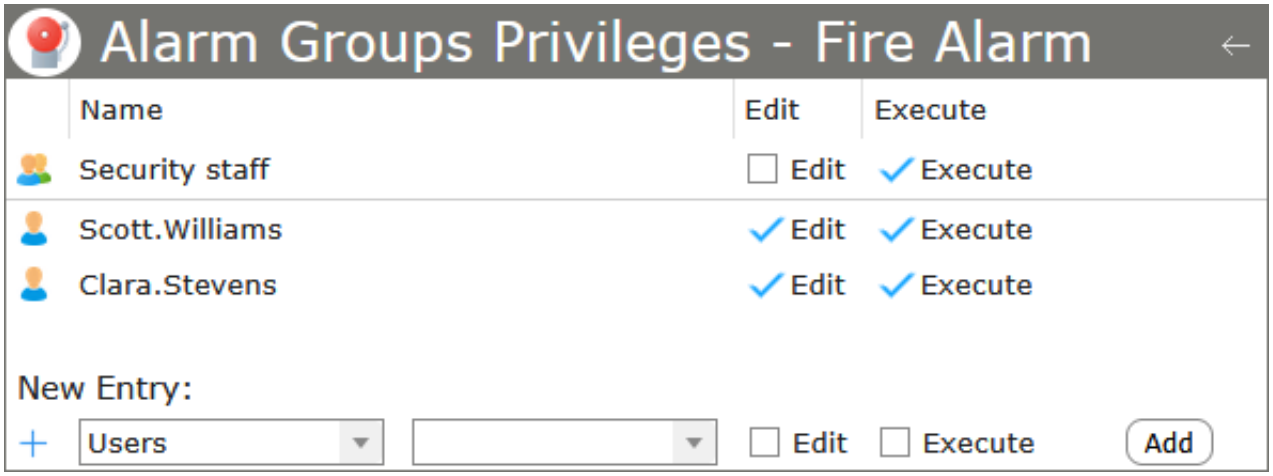
	same as the ESPA call address which should trigger this group alarm.
Description	A short text to describe the alarm group.
Subject	Text to be shown as a push message's title on any phone that receives the alarm (maximum 32 characters).
Prompt	Text to be shown as a push message's text body on any phone that receives the alarm (maximum 32 characters).
Ringtone	The file name of the ringtone that will be used on any device that receives the alarm. Typing any text in this field will reveal a list of all available ringtones that match the entered text.
Vibration	Configure the vibration that will be activated on any device that receives the alarm. A vibration has the format vibrateDuration:silenceDuration:count. vibrateDuration: The duration of the vibration (set in milliseconds; value between 0 and 65536). silenceDuration: The duration of the silence after the vibration (set in milliseconds; value between 0 and 65536). count: The count of how often the vibration is repeated (value between 0 and 100).
Repetitions	How often an alarm is repeated on a device if the alarm isn't answered.
RepetitionDelay	The interval between alarm repetitions (set in seconds; values between 2 and 60).
Minimum logged-in devices	The minimum number of devices that are required to be logged into the alarm group. Checking All will require all devices to be logged in.

Privileges and editing alarm groups

There are two privileges that can be given to users regarding alarm groups:

- Edit: Permission to change the group's attributes (e.g., description, subject, prompt…), add and configure the destinations, or delete a group.
- Execute: Permission to activate the alarm for a group.

Administrators can edit and delete any alarm group as well as execute the respective alarms. Regular users need the appropriate privileges to edit an alarm group and/or execute an alarm. To edit user privileges, click on the Privileges column of any alarm group to access the group's privilege settings. Here, you can set which users and user groups have the privilege to edit/delete the alarm group or execute the group's alarm.



Users can only be selected for alarm group privileges if they meet the following criteria:

- The user has access to the Cruise Alarming instance (see chapter User administration in the Callisto Platform administration manual).
- The user has the privilege to access the *Alarm Groups* tab (see chapter Setup).

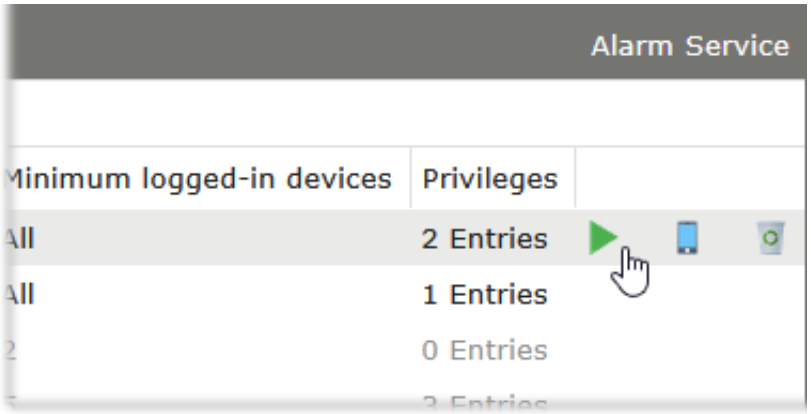
Likewise, when a user group is granted any privileges, only group members that meet those two criteria will effectively gain the selected privileges.

If a regular user creates a new alarming group, he will be automatically given the privilege to edit and execute the alarm group. The user can then remove his own privileges, but won't be able to restore them afterwards. A group without any privilege entries can only be edited by administrator users.

Alarm group destinations

Destinations icon

Alarm group destinations define the devices which receive alarms triggered by an alarm group. To edit the alarm group destinations, hover over an alarm group and click on the *Destinations* icon on the right side.



For each destination, the following parameters can be set:

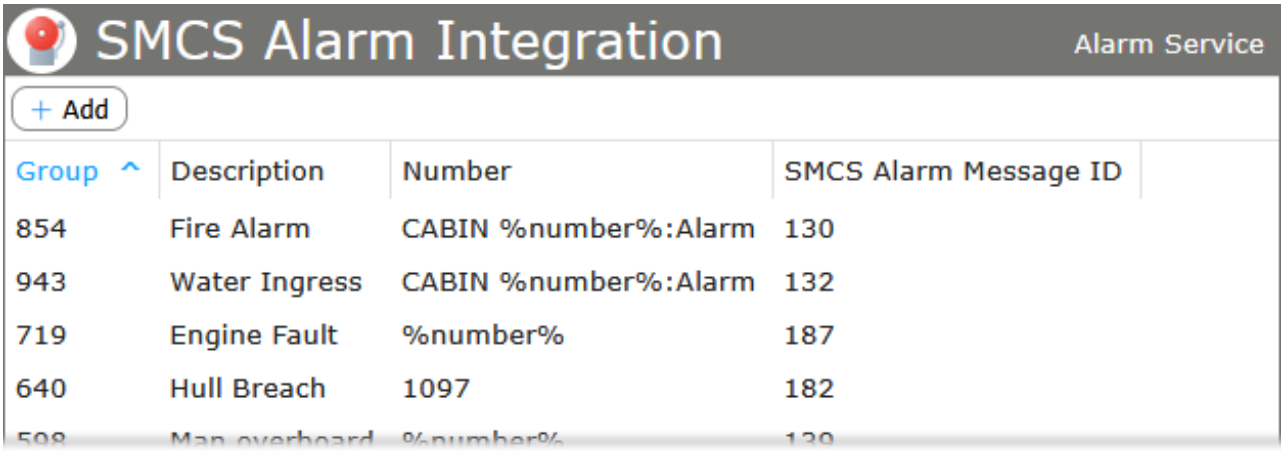
Destination IP	The IP address or DNS entry of the target.
Description	An internal description of the target.
Device Type	Set the device type for Cruise Alarming to use the appropriate protocols and ports for the push notification. The following device types are available: • Cisco Phone • Android • SIP Phone For Cisco Phones and Android devices, a Secure option is also available. With this options, a secure port is used for transmitting the alarm message (443 on Cisco Phones, 8443 on Android devices).
Login State	The device's login state. The state can also be controlled from the GUI. Changing state will be reflected on the device. The following states are available: • Logged out • Logged in • Always logged in: With this option, it is not possible to log the device out from the GUI.

Activate Alarm icon

Users with the Execute privilege can immediately send the alarm to all destination devices by clicking the *Activate Alarm* icon on the right side of the alarm group.

SMCS alarm integration

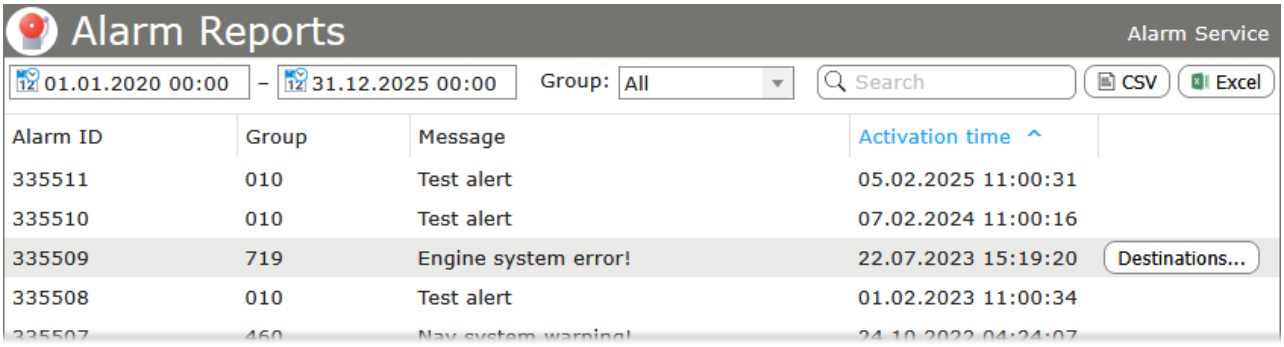
SMCSSafety Monitoring & Control System integration provides integration with the Callisto module *SMCS Alarm*. Integration with SMCS Alarm allows the Cruise Alarming service to play pre-recorded messages to phones when an alarm is triggered.



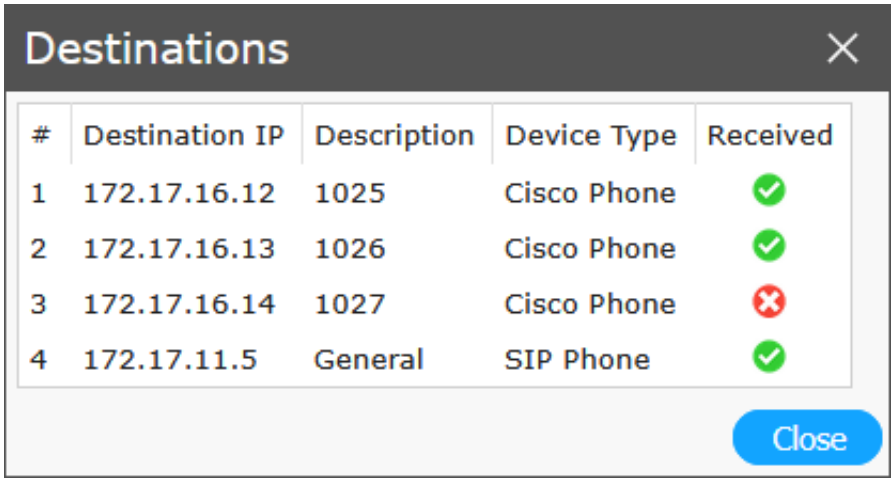
Group	ID/Number of the alarming group (alarm system). When alarm for that group is received call will be placed to the phone which number is defined in 'number' field
Description	A descriptive text about the alarm group/integration
Number	Number to which call will be placed (i.e., play a pre-recorded alarming message). The number can be static be extracted from an alarm message (if possible). The format for extraction must be provided by entering the text and placing the placeholder %number% where the actual number is written in the alarming message. The system receives the following text message: Fire alarm, sensor 8080 CABIN 1020:Alarm To extract the phone number (in this case, 1020), the following expression can be used: CABIN %number%:Alarm
SMCS Message ID	The ID of a pre-recorded message as defined in the *SMCS Alarm* module

Alarm reports

The *Alarm Reports* tab lists every occurrence when an alarm was triggered.



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. Selecting a group from the Group drop-down menu, only alarms of the selected group will be shown. With the search field, alarms can be filtered by any available metadata. Clicking the buttons labeled CSV or Excel will export the current report listing in the respective file format.



Clicking on the button labeled Destinations… will show all the destinations to which the alarm was sent; the symbol in the column Received indicates whether the destination actually received the alarm message.

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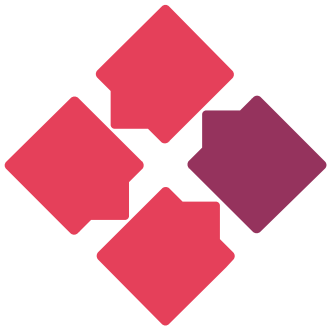

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