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SmartPTT Dispatcher Guide

Revision History

Revision	Description	Date
1.1	Second release of the document. The document is compliant with SmartPTT PLUS 9.7.2. • Multiple enhancements • Modified: • Telephone Interconnect Settings • Operators • Radio Location Properties • Setting Up Radio Location Update Settings • Radio Check	July 2020
1.0	Initial release of the document. The document is compliant with SmartPTT PLUS 9.7.1. The document substitutes *SmartPTT PLUS Dispatcher User Guide* that must be considered outdated.	May 2020

Contents

About This Document

This document provides information on the dispatch console configuration and dispatch functions. It is intended for dispatch console administrators who configure SmartPTT Dispatcher and operators who will use it.

Additional Information

The document assumes that radioserver is properly configured and started. All the required configuration is presented in *SmartPTT Installation and Configuration Guide*.

The document does **not** provide information on dispatch console computer configuration and its operating system administration. All the necessary information can be obtained from the Microsoft Docs website, a Microsoft documentation storage for end users, developers, and IP professionals.

1 SmartPTT Dispatcher Interface

SmartPTT Dispatcher interface includes various elements, indications, and controls that provide you with the necessary information and functionality.

> **NOTE**
>
> Some SmartPTT Dispatcher elements are unavailable if the operator does not have corresponding rights.

SmartPTT Dispatcher interface is divided into the following sections:

- Title bar

- Menu bar with Quick launch buttons

- Main area

- Information bar
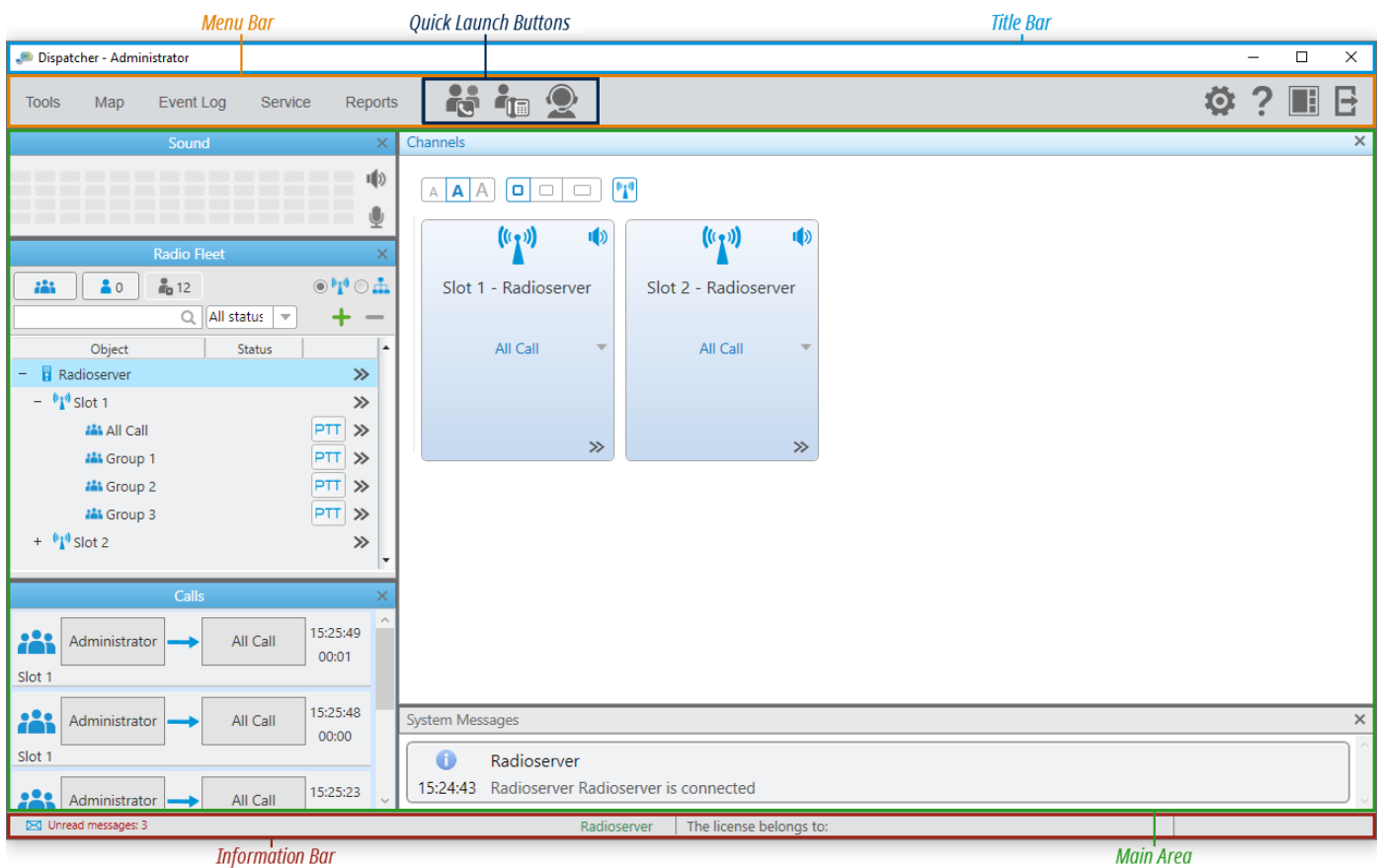
Title Bar

The title bar is located at the top of SmartPTT Dispatcher. It shows the application icon ( ), application name with the current operator name in the **Dispatcher - <name>** format, and standard Windows Minimize ( ), Maximize ( ), and Close ( ) buttons.

Menu Bar

The menu bar is located under the title bar and provides menus and quick access buttons to open panels and windows, and perform various operations in the system. The menu bar provides the following elements:

Tools

Contains all the panels used in SmartPTT Dispatcher. When a panel is open, in the **Tools** menu, a check mark icon appears next to the panel name. For details, see Tools.

Map

Provides the ability to open and configure a range of maps, and to manage displaying of radios and other objects on maps. For details, see Maps.

Event Log

Provides the ability to view information on all events registered in the SmartPTT Dispatcher database, and configure Event Log settings. For details, see Event Log.

Service

Contains a range of secondary functions, including radio check, saving and restoring dispatcher settings, configuring voice notifications, and so on. For details, see Service Menu.

Reports

Provides the ability to build reports on the basis of system events. For details, see Reports.

Quick Launch Buttons

Provide a quick access to some application functionality:

- The **Conference Call (👥)** button opens the **Conference Call** window for initiating conference calls. For details, see Conference Calls.

- The **Telephone Subscribers (📞)** button opens the **Telephone Subscribers** window for initiating calls to telephone subscribers from SmartPTT Dispatcher. For details, see Telephone Interconnect.

- The **Dispatchers (👤)** button opens the **Dispatchers** window for initiating calls to external dispatchers from SmartPTT Dispatcher. For details, see Dispatchers.

Settings (⚙)

Provides the ability to configure system settings such as general settings, sound and control devices settings, and so on. For details, see Settings.

Help (?)

Provides the ability to read the application help file, learn about the application, and check for updates. For details, see Help.

UI Layout Settings (▥)

Provides the ability to save, lock, or apply the saved console layout. For details, see Layout Management.

Change Operator (▯)

Restarts SmartPTT Dispatcher to select another operator.

Main Area

The main area of SmartPTT Dispatcher is a main working area in which all open panels and windows appear.

Information Bar

The information bar is located at the bottom of SmartPTT Dispatcher and provides the following elements:

- The **Unread messages** button with the number of unread messages (if you have them) in the left corner.

- Name of the currently selected/unselected object in green.

- Name of a license customer, and the license expiration date next to the caption **The license belongs to**.

- The application version in the right corner.

For information on layout customization, see the sections below.

1.1 Layout Customization

SmartPTT dispatch console provides the ability to customize its layout in the following ways:

- Move panels

- Tab panels

- Undock panels

- Resize panels

For information on layout customization, see the sections below.

1.1.1 Moving Panels

Follow the procedure to move a panel inside the main area.

Prerequisites:

Ensure the current layout is unlocked.

Procedure:

1. Press and hold the title bar of the desired separate or tabbed panel, and then drag it.
   In the main area, the positioning controls appear.

2. Move the panel to the desired position:

To move the panel and attach it to one of the main area sides,	drop it to the corresponding positioning control of the main area.
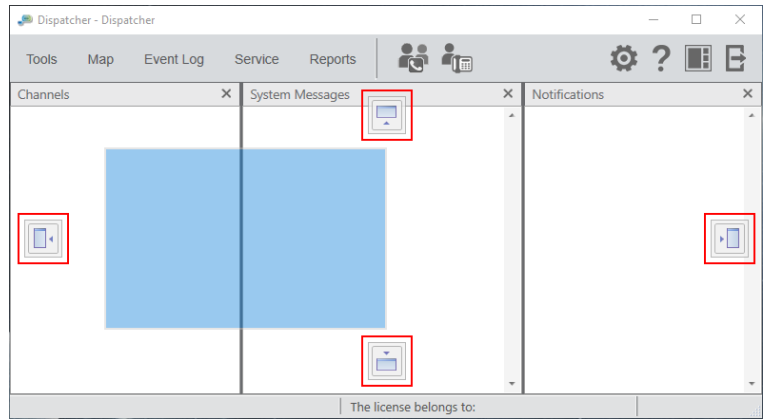
The panel is moved and attached to the selected main area side. Other opened panels move to the opposite direction.

To move the panel to the side of another panel,

drop it on the corresponding positioning control inside the another panel.
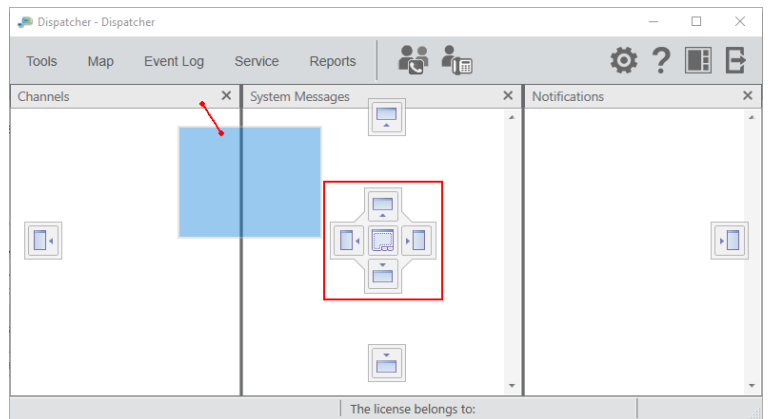
The first panel is moved and attached to the selected side of the second panel. The second panel moves to the opposite direction.

> **NOTE**
> Do not drop the panel on the Tabbing ( ) control unless you want to tab panels.
> For information on tabbing panels, see Tabbing Panels.

1.1.2 Tabbing Panels

Follow the procedure to tab panels into a tab panel.

> **NOTE**
> The **Calls**, **Sound**, **Cross Patches**, and **Radio Fleet** panels cannot be tabbed.

Prerequisites:

- Ensure the current layout is unlocked.

- Ensure in the main area open at least two panels that can be tabbed.

Procedure:

1. Press and hold the panel title bar, and then drag it over the second panel.
   On the second panel, the positioning controls appear.

2. Drop the panel on the Tabbing ( ) control.
   The panels become tabbed.
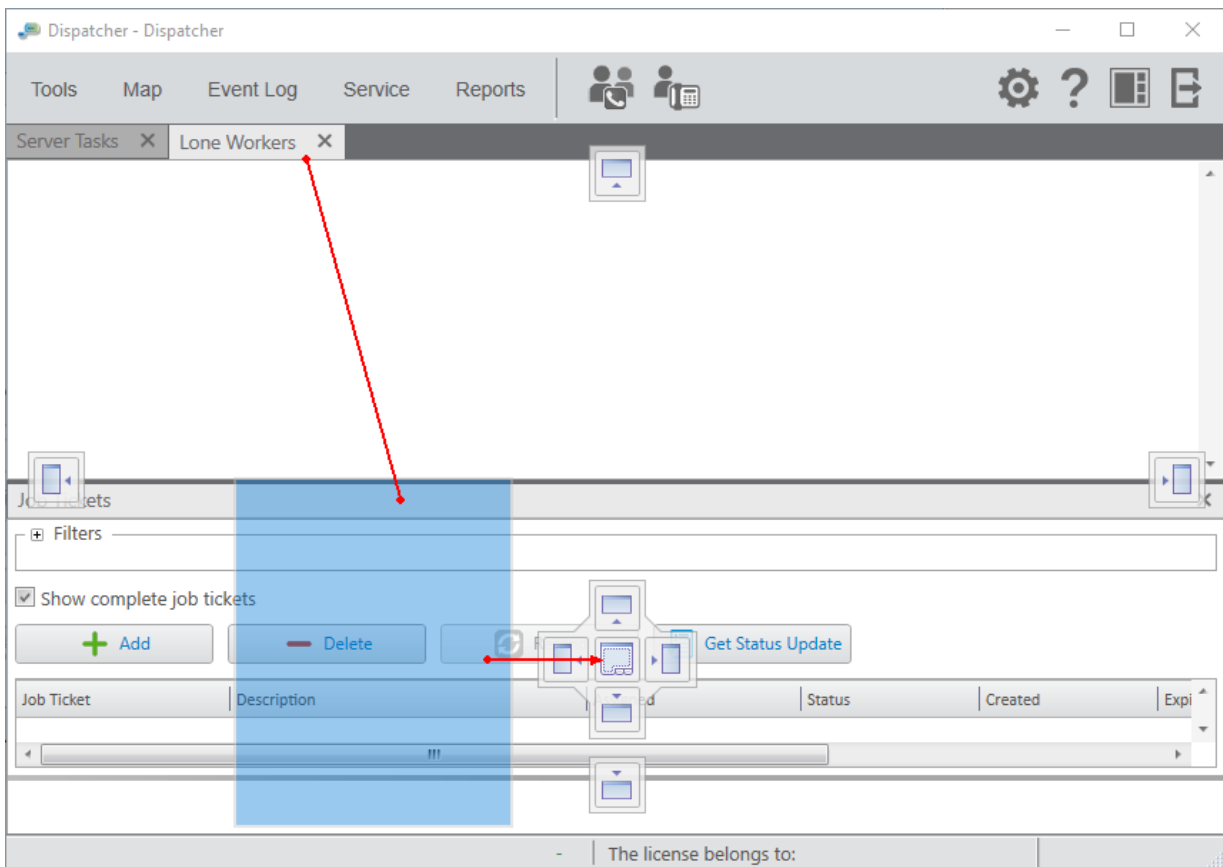
1.1.3 Undocking Panels

Follow the procedure to undock a panel into a separate window.

Prerequisites:

Ensure the current layout is unlocked.

Procedure:

In the main area, press and hold the title bar of the panel, and then drag it to any place of the screen except the positioning controls.
The panel appears as a separate window.

1.2 Layout Management

The **UI Layout Settings (** ▤ **)** menu provides the following elements:

Lock UI Layout

Provides the ability to lock the current layout. For details, see Locking Layout.
When the layout is locked, the dispatcher cannot perform the following actions:

- Open and close panels

- Move and tab panels

- Switch between user interface layouts

- Resize open panels

> **NOTE**
> The **Lock UI Layout** option is available only to the Administrator.

Set UI Layout

Provides the ability to manage the layout in the following ways:

- Save the current layout. For details, see Saving Layout.

- Apply the existing layout. For details, see Applying Layout.

> **NOTE**
> The **Set UI Layout** is unavailable if the layout is locked.

1.2.1 Saving Layout

Follow the procedure to save the current layout.

Procedure:

1. On the menu bar, click **UI Layout Settings ( )** → **Set UI Layout**.
    The **Set UI Layout** window appears.
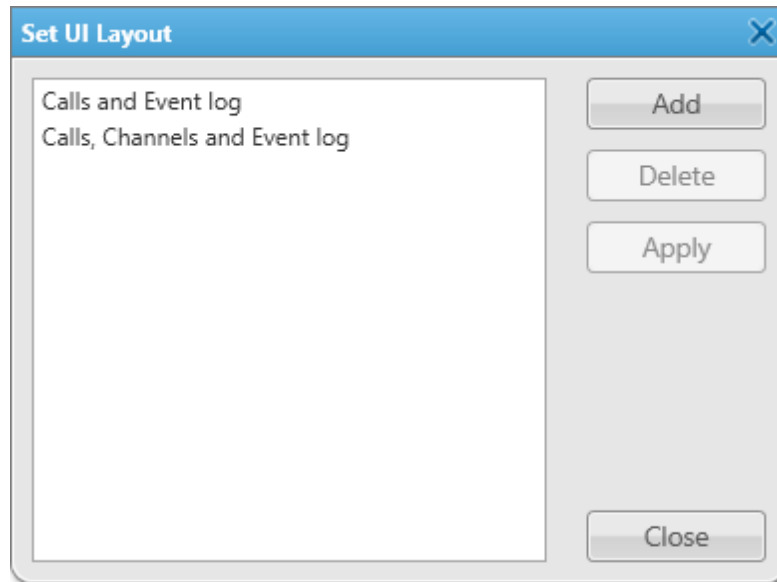
> **NOTE**
> In the list of layouts, *Calls and Event log* and *Calls, Channels and Event log* are default window configurations that cannot be deleted.

2. In the open **Set UI Layout** window, click **Add**.
    The **New UI Layout** window appears.
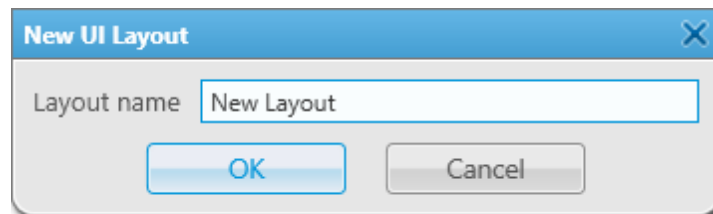
3. In the **New UI Layout** window, in the **Layout name** box, type the layout name.

4. Click **OK** to apply changes and close the window.

5. In the **Set UI Layout** window, click **Close** to close the window.

Postrequisites:

To remove the layout, in the **Set UI Layout** window, select the layout from the list, and then click **Delete**.

1.2.2 Applying Layout

Follow the procedure to apply the saved layout.

Procedure:

1.   On the menu bar, click **UI Layout Settings (**▦**) → Set UI Layout**.

2.   In the open **Set UI Layout** window, select the desired layout name, and then click **Apply**.

3.   In the **Set UI Layout** window, click **Close** to close the window.

1.2.3 Locking Layout

Follow the procedure to lock the current layout.

> **Important**
> Only Administrator can lock the layout.

Procedure:

On the menu bar, click **UI Layout Settings (**▦**) → Lock UI Layout**.
The check mark icon appears next to the **Lock UI Layout** menu. The layout is locked.

> **NOTE**
> If the Event Log is open when the layout is locked, all features for the Event Log management are available to the dispatcher. If closed, the Event Log becomes unavailable.

Postrequisites:

To unlock the layout, select **Lock UI Layout** again.
The check mark icon disappears.

2 Settings

The **Settings (⚙)** menu provides the ability to configure general SmartPTT Dispatcher parameters, parameters of available functionality, and activate and configure parameters of additional functionality.

Most of the **Settings** menu options are available only to the Administrator..
For information on the operator rights, see Operators.

The menu provides the following configuration options:

- Configuring SmartPTT Dispatcher interface settings, such as general interface settings, call windows, custom consoles, notification panels, web pages, and the SCADA module.
  For details, see Interface.

- Configuring the control device and sound settings.
  For details, see Equipment.

- Configuring connection to telephone subscribers.
  For details, see Telephone Interconnect.

- Configuring operator permissions.
  For details, see Operators.

- Configuring the call recording feature and the database backup settings.
  For details, see Information Storage.

- Configuring the list of radios, their categories, statuses and other related settings.
  For details, see Radios.

> **NOTE**
> The **Radios** options are unavailable in the **Settings** menu if the operator does not have the corresponding rights.
> For information on the operator rights, see Operators.

- Configuring GPS and Indoor Tracking settings.
  For details, see Positioning Systems.

- Configuring the list of other dispatchers and connection parameters of the current SmartPTT Dispatcher.
  For details, see Dispatchers.

- Configuring event-based rules defining the SmartPTT Dispatcher behavior.
  For details, see Rules.

> **NOTE**
> The **Rules** options are unavailable in the **Settings** menu if the operator does not have the corresponding rights.

- Installing licenses required for access to additional SmartPTT Dispatcher functionality.
  For details, see Licenses.

- Configuring SmartPTT Dispatcher databases.
  For details, see Database.

- Configuring radioserver parameters.
  For details, see Radioservers.

2.1 Interface

The **Interface** submenu is available from the **Settings (⚙)** menu on the SmartPTT Dispatcher menu bar. It provides the following configuration options:

- Configuring general SmartPTT Dispatcher settings, such as the interface language, authentication, updates, and others.

  For details, see General Settings.

- Creating and configuring custom consoles.

  For details, see Custom Consoles.

- Configuring parameters of call windows.

  For details, see Call Window Settings.

- Configuring parameters of emergencies, system messages, and incoming calls.

  For details, see Notification Panels.

- Configuring access to web pages through SmartPTT Dispatcher panels.

  For details, see Web Pages.

- Activating and configuring the SCADA module.

  For details, see SCADA.

2.1.1 General Settings

The **General Settings** window provides controls for configuring basic SmartPTT Dispatcher parameters, such as the interface language, authentication, updates, and others.

You can open the **General Settings** window by clicking **Settings (⚙) → Interface → General Settings** on the menu bar.
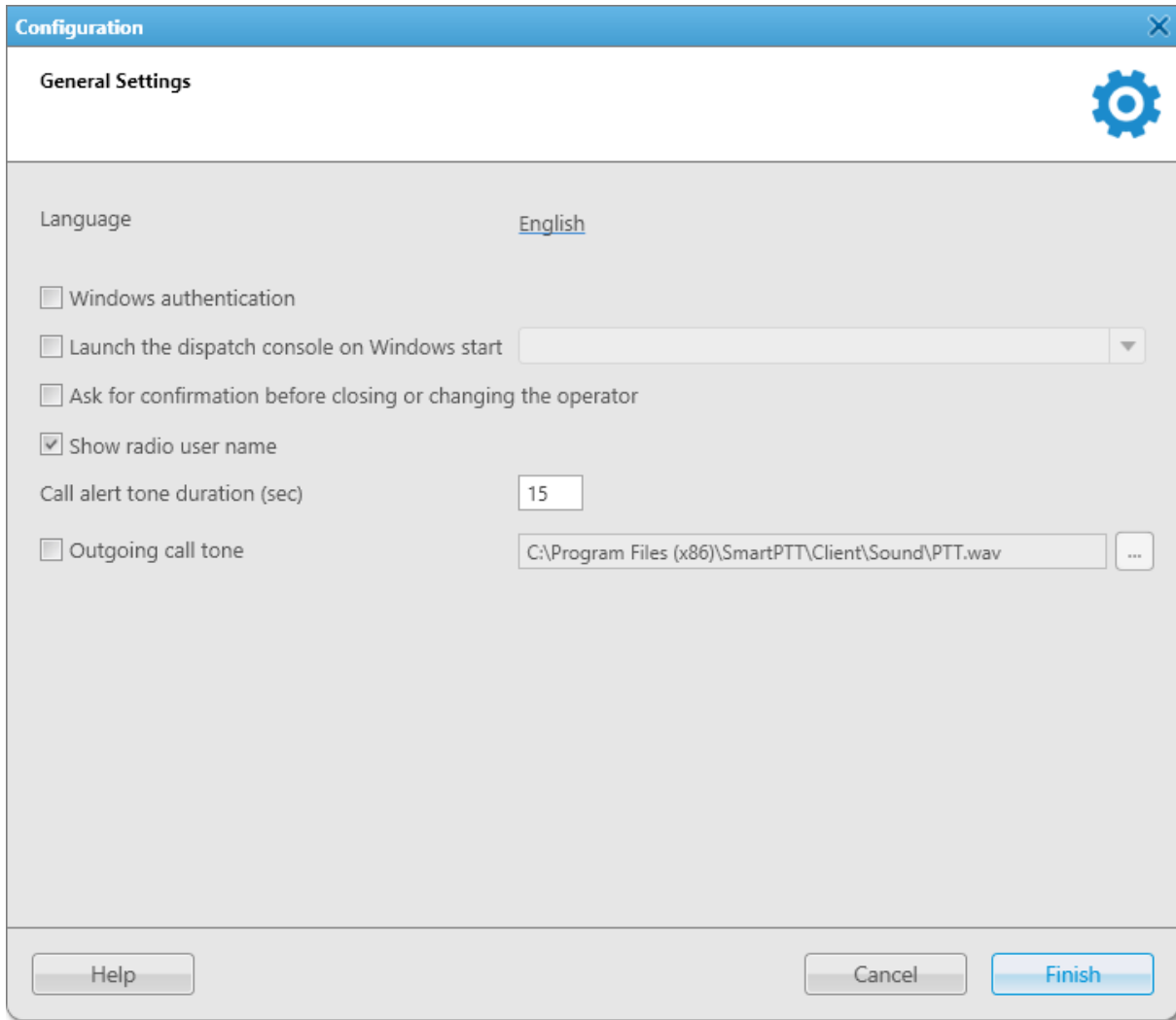
The **General Settings** window provides the following elements:

Language

    The language of the SmartPTT Dispatcher interface.

    You can select the desired language from the list by clicking the current language parameter.

    To apply a new language, you need to restart SmartPTT Dispatcher.

Windows authentication

Activates Windows authentication for authorization in SmartPTT Dispatcher.

To use Windows authentication, you need to create a SmartPTT Dispatcher operator profile with the same name as a Windows user or the group to which the user belongs. For details, see Operators.

If selected, at startup, SmartPTT Dispatcher does not request entering the operator's credentials. It uses credentials of the current authorized Windows user instead. In this case, the **Change Operator ( )** button becomes inactive.

If **Windows authentication** is not selected or the operator's name does not match that of the Windows user or user group, the **Authorization** window prompting for the operator's credentials appears at launch of SmartPTT Dispatcher.

NOTE

Starting from Windows 8, users can be authorized if they are members of either domain or local user groups.

Launch the dispatch console on Windows start

If selected, SmartPTT Dispatcher launches automatically at Windows startup, using a specific operator's profile. You can select the desired operator from the list to the right.

NOTE

The option is not available if the **Windows authentication** check box is selected.

Ask for confirmation before closing or changing the operator

If selected, SmartPTT Dispatcher will prompt you for confirmation every time you close the program or change the operator.

Show radio user name

If selected, the name of the radio user is displayed next to the radio name in SmartPTT Dispatcher.

NOTE

The name of the radio user is displayed only if the user authorization service is activated and users are added in the SmartPTT Radioserver settings. For details, see "Radio Users" in *SmartPTT Installation and Configuration Guide*.

Call alert tone duration (sec)

The duration of the call alert tone played in SmartPTT Dispatcher. You can set the desired duration in the box to the right.

The default value is *15* seconds.

Outgoing call tone

Activates playback of a special tone after activating the PTT button in SmartPTT Dispatcher. The tone indicates that the channel is free and the dispatcher can start speaking.

You can select the desired audio file in the **Sound File Selection** window by clicking the Browse ( ) button.

2.1.2 Custom Consoles

Custom consoles are fully customizable SmartPTT Dispatcher panels that provide access to the radio objects and functionality available in the dispatched radio system.

Custom consoles provide the ability to create SmartPTT Dispatcher panels that are best suited for a specific radio system and/or dispatcher. You can configure the panel layout, add and customize the elements corresponding to the required radio system objects and functionality to facilitate access to them.
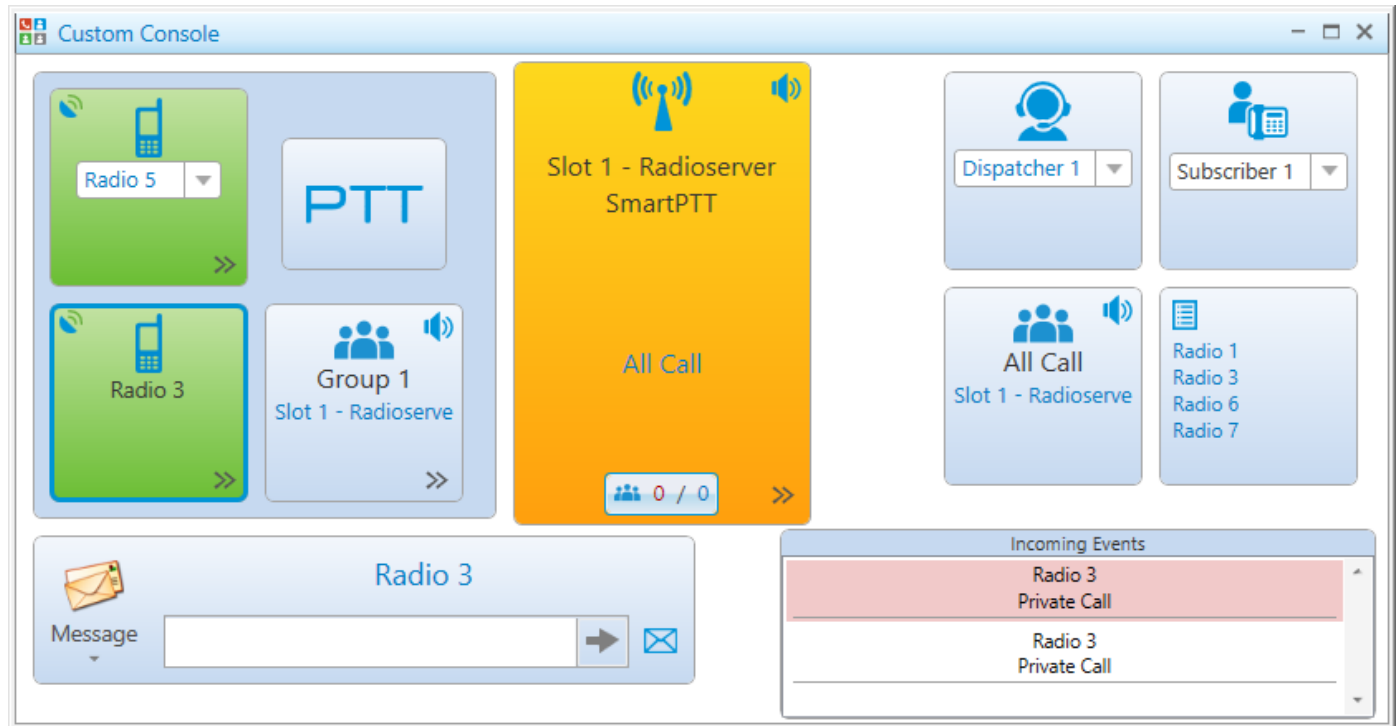
You can open the **Custom Consoles** window for creating and configuring the desired custom panels by clicking **Settings (⚙) → Interface → Custom Consoles** on the menu bar.

SmartPTT Dispatcher provides the ability to work with more than one custom console at the same time. The configured custom consoles are available from the **Tools** menu. For details, see Custom Consoles.

For information on the functionality provided by custom consoles and their configuration, see the corresponding sections below.

2.1.2.1 Custom Consoles Window

The **Custom Consoles** window provides the ability to manage custom consoles.

You can open the **Custom Consoles** window by clicking **Settings (⚙) → Interface → Custom Consoles** on the menu bar.
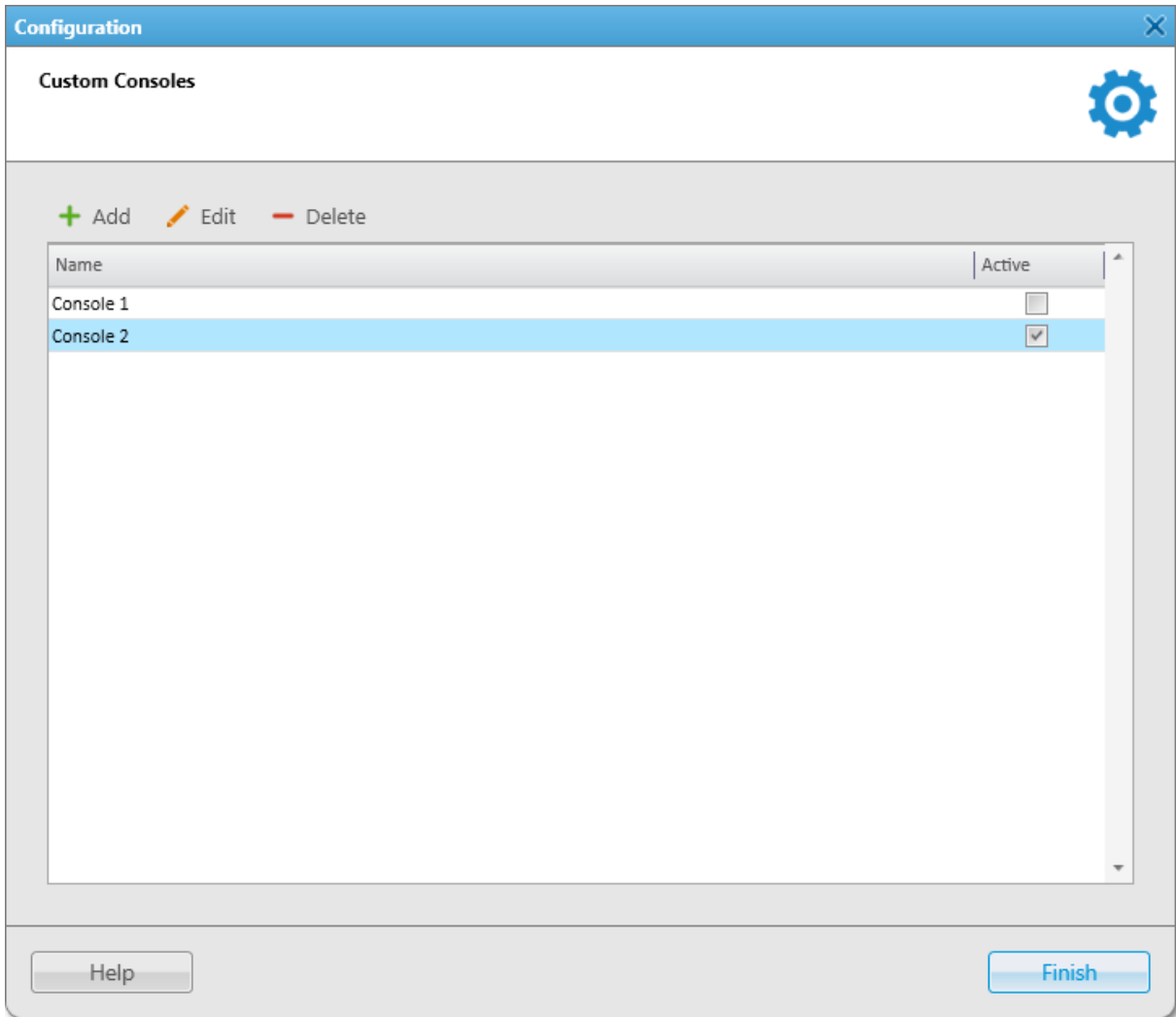
The **Custom Consoles** window provides the following elements:

Add

Opens the Console Configuration window where you can configure a new custom console. For details, see Console Configuration Window.

Edit

Opens the Console Configuration window where you edit the selected custom console. For details, see Console Configuration Window.

Delete

Deletes the selected custom console.

Custom Consoles Table

Contains the custom consoles created in SmartPTT Dispatcher. The table consists of the following columns:

- The **Name** column contains the custom console name.

- The **Active** column contains the check box for activating or deactivating the selected console. If the check box is selected, the console becomes available in the **Tools** menu. For details, see [Custom Consoles](#).

You can sort the column content by clicking the desired column header.

2.1.2.2 Console Configuration Window

Custom consoles provide a wide range of customization options for adjusting the panel to the needs of a specific radio system and/or dispatcher.

You can configure a new custom console or change the settings of an existing console in the Console Configuration window that is called according to the name of the console **Console "<name of the console>"**.

In the Console Configuration window, you can perform the following actions to customize the panel layout:

- Add and configure elements representing radio objects.

- Add and configure elements providing access to SmartPTT Dispatcher functionality.

- Configure the panel layout by setting a wallpaper, moving and resizing the elements located in it.

You can open the Console Configuration window from the **Custom Consoles** window in one of the following ways:

- By clicking **Add (+)** in the top part of the window.

- By clicking the desired console in the Custom Consoles table, and then clicking **Edit (✏)** in the top part of the window.

- By double-clicking the name of the desired console in the Custom Consoles table.
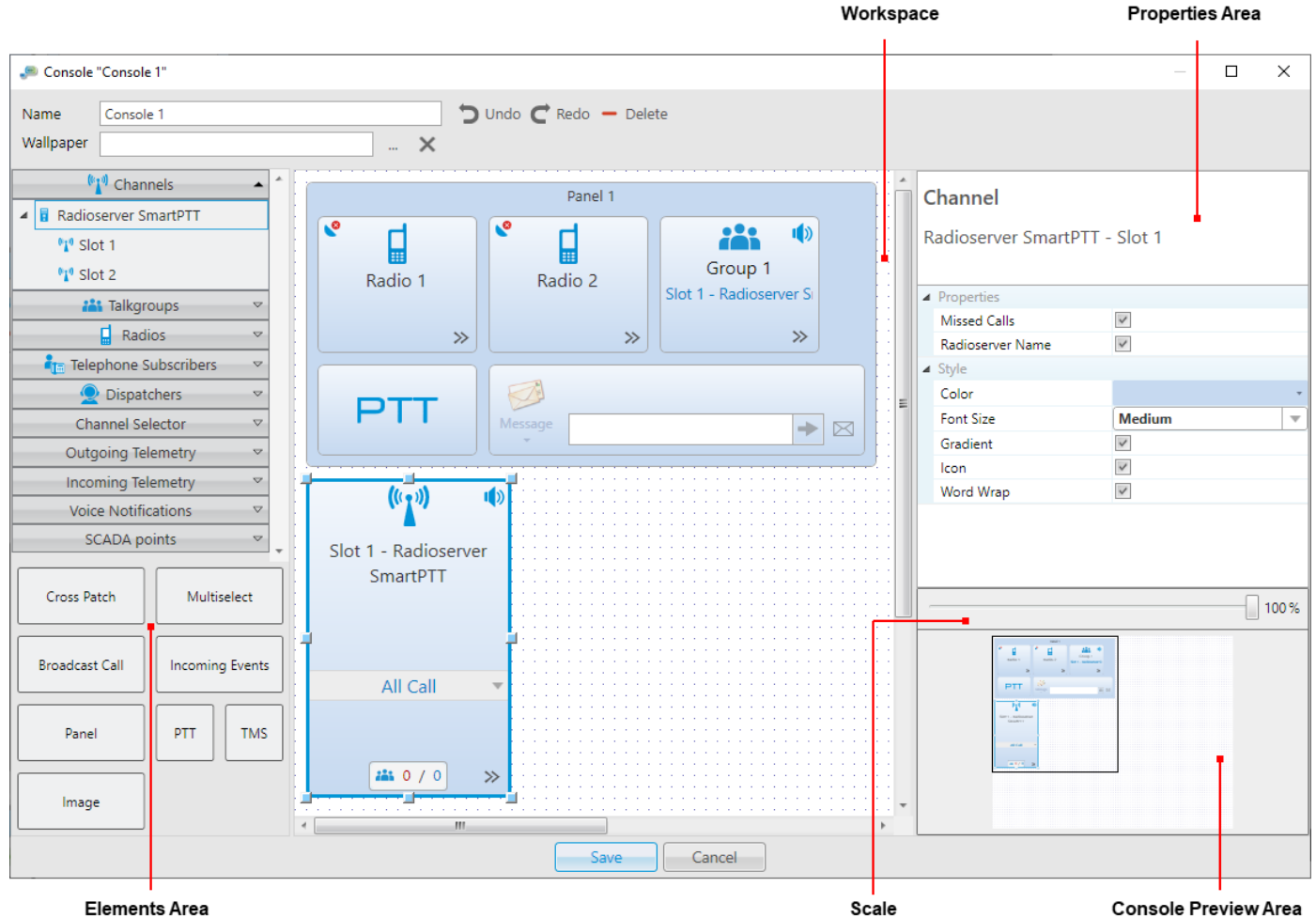
The Console Configuration window provides the following elements:

Name

Name of the custom console. By default, new consoles are called *Console <consecutive number>*. The console name is displayed in the **Tools** menu and as part of the Console Configuration window name.

Wallpaper

Path to the image that is used as the custom console background image. You can select the desired image in the BMP, JPG, or PNG format by clicking the Browse (…) button. To remove the selected wallpaper, click the Delete (✖) button.

Undo (↺)

Cancels the last action applied to the custom console element. The button becomes available only after at least one action was applied to the elements in the console workspace.

Redo (↻)

Cancels the last Undo command. The button becomes available only after cancellation of at least one action using the **Undo (↺)** button.

> **NOTE**
> The **Undo (↰)** and **Redo (↱)** buttons affect the actions applied to the console elements in the workspace only, such as adding, deleting, moving, and resizing. The changes applied in the Properties area cannot be canceled using these buttons and must be edited manually.

Delete (▬)

Removes the selected element from the console workspace.

Elements Area

Contains the elements representing available radio objects and SmartPTT Dispatcher functionality that can be added to the console workspace.

The elements in the upper part of the Elements area are located inside expandable lists with one or more levels.

For some of the element types, such as Radios, Talkgroups, and Voice Notifications, the search box is available.

Workspace

Provides the ability to configure the custom console layout that will be available to the operator after the panel configuration is complete.

Properties Area

Provides the ability to configure properties of the selected element. Depending on the element, different properties may be available.

The properties under the **Properties** heading are element-specific. For information on the properties that are available for each element, see description of the desired element in [Custom Console Elements](#).

The properties under the **Style** heading affect the element appearance in the console workspace. The following customization options may be available:

- **Color** provides the ability to set the color of the element. The default color is light blue. You can select the desired color from the expandable palette by clicking the box displaying the current color on the right. When making a voice call, the color of the radio object element is changed depending on its status. For information on voice call indication, see [Color Indication of Voice Calls](#).
  Some elements may change their color depending on their state. For information on available indication options, see description of the desired element in [Custom Console Elements](#).

- **Font Size** provides the ability to set the font size for the text on an element. You can select *Small*, *Medium*, or *Large*. The default font size is *Small*.

- **Gradient** provides the ability to apply or remove the gradient effect to the element. By default, it is applied to all new elements added to the workspace. You can apply/remove the gradient by selecting/clearing the **Gradient** check box.

- **Icon** provides the ability to show or hide the element icon.

- **Word Wrap** provides the ability to wrap long element names.

Scale

Provides the ability to expand the custom console workspace by decreasing the size of all the elements located in it. You can change the scale by dragging the slider to the left or to the right to decrease or increase the workspace respectively.

Console Preview

Miniature view of the custom console. If some part of the workspace does not fit the window size, a rectangle framing the currently displayed area of the workspace appears. You can change the displayed part of the workspace area by dragging the rectangle to the desired part using the four-point arrow that appears when you point to the console preview.

For information on available custom console elements and their configuration, see the corresponding sections below.

2.1.2.3 Custom Console Elements

Custom consoles provide a range of elements representing the radio objects and functionality available in SmartPTT Dispatcher. You can add them to the custom console, customize their appearance, and set their properties in the Console Configuration window.

> **NOTE**
> Access to some of the elements may require the corresponding operator permission and/or license. For details, see description of the desired element below.

SmartPTT Dispatcher provides the following custom console elements (listed in alphabetical order):

- Broadcast Call

- Channel Selector

- Channels

- Cross Patches

- Dispatchers

- Image

- Incoming Events

- Incoming Telemetry

- Multiselect

- Outgoing Telemetry

- Panel

- PTT

- Radios

- SCADA Points

- Talkgroups

- Telephone Subscribers

- TMS

- Voice Notifications

2.1.2.3.1 Broadcast Call

The Broadcast Call element provides the ability to initiate a group call or an All Call on all available channels of the dispatched radio system at the same time. The element is unavailable in the analog radio systems.

> **NOTE**
> To make broadcast calls, talkgroups must be configured in the radio system settings in SmartPTT Radioserver Configurator. For details, see "Adding and Editing Talkgroups" in the corresponding network settings description in *SmartPTT Installation and Configuration Guide*.

The Broadcast Call element provides the following information and controls:

Broadcast Call Icon
Default icon indicating the element type.

Broadcast Call Name
Name of the Broadcast Call element (if it is set in the element settings in the Properties area).

Active Channels
Counter that provides information on how many channels SmartPTT Dispatcher is currently broadcasting and how many channels are available in total. For example, *2 out of 3* means that SmartPTT Dispatcher is currently broadcasting on two out of three available channels. Detailed information on the initiated calls is available in SmartPTT Dispatcher Event Log. For details, see SmartPTT Dispatcher Event Log.

In the Properties area, you can customize the element in the following ways:

- Set the name displayed at the top of the element by specifying it in the **Element Name** box.

- Set the talkgroups to which the call will be initiated by specifying their ID in the **Talkgroup ID** box.
  The default value is *0* which corresponds to the All Call on all available channels. If you specify another value, the call will be initiated to all available talkgroups with the specified ID.

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Show or hide the element icon by selecting or clearing the **Icon** check box.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

Information on which talkgroups are configured for the element is unavailable to operators from the custom console. For this reason, it is recommended that you set an informative name for each Broadcast Call element.

2.1.2.3.2 Channel Selector

The Channel Selector element provides the ability to switch to the control station channel represented by the element. Each element corresponds to one control station channel.

If no control station is connected or active in the radio system, the element is unavailable. For correct functioning of the Channel Selector element, the control station channels must be configured in SmartPTT Radioserver Configurator.
For information on MOTOTRBO control stations see the "MOTOTRBO Control Stations" section in *SmartPTT Installation and Configuration Guide*.
For information on P25 radio systems control stations see the "P25 Radio Systems" section in *SmartPTT Installation and Configuration Guide*.
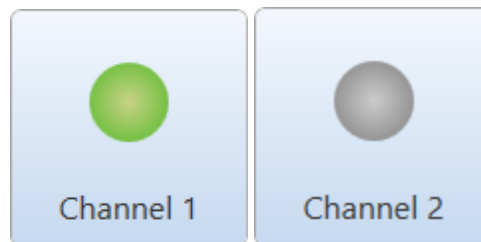
The Channel Selector element contains the round indicator of the control station channel status and the channel name that is set in SmartPTT Radioserver Configurator.

To provide the operator with the ability to switch between channels, you need to add the elements corresponding to each of the desired channels to the custom console workspace.

Depending on the color of the indicator, the Channel Selector element may exist in two states:

- Gray color indicates inactive channels.

- Green color indicates active channels.

In the Properties area, you can customize the element in the following ways:

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.3.3 Channels

The Channel element provides the ability to work with the control stations and IP Site Connect available in the radio system.
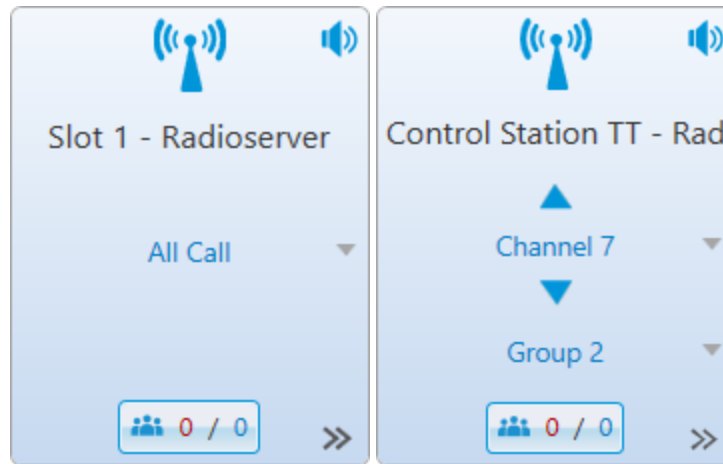
The Channel element provides the following information and controls:

Channel Icon

Default channel icon indicating the element type.

Channel Name

Name that is set in SmartPTT Radioserver Configurator and, if configured, the name of the radioserver.

Mute ( ) / Unmute ( )

Button that provides the ability to mute/unmute the channel sound.

> **NOTE**
> Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.

Channel Selector (/)

Available for control stations only. Provides the ability to switch the control station channels.

Call Target

Talkgroup or All Call that is currently selected on the channel. Operators can select the desired call target on the configured custom console. In the Console Configuration window, the control is unavailable.

Missed Calls (0 / 2)

Counter that provides information on the missed calls on the channel. The counter appears only if the **Missed Calls** check box is selected in the Properties area.

Actions (≫)

The channel Actions menu button.

For information on actions, see Channel Actions Menu.

In the Properties area, you can customize the element in the following ways:

- Show or hide the number of missed calls on the channel by selecting or clearing the **Missed Calls** check box.

- Show or hide the radioserver name next to the name of the channel by selecting or clearing the **Radioserver Name** check box.

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Show or hide the element icon by selecting or clearing the **Icon** check box.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.3.4 Cross Patches

The Cross Patch element provides the ability to interact with cross patches. For details, see Cross Patches in the "Tools" section.
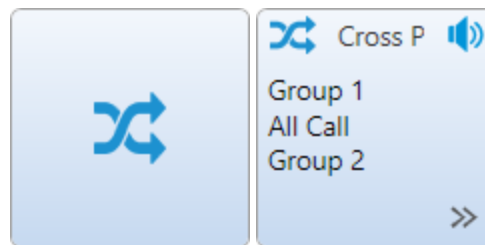
New elements contain only the default Cross Patch icon indicating the element type. You can assign the desired cross patch to the element only from the configured custom console.

If a cross patch is assigned to the element, the following information and controls appear on the Multiselect element:

Cross Patch Icon
    The default cross patch icon in the upper-left corner of the element. The default icon cannot be changed.

Cross Patch Name
    Name of the cross patch which is set in the **Cross Patch** window. For details, see Cross Patch Window.

Mute ( ) / Unmute ( )
    Button that provides the ability to mute/unmute the cross patch sound.

> **NOTE**
> Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.

Cross Patch Members
    Names of the cross patch members.

Actions ( )
    The cross patch Actions menu button.
    For information on actions, see Cross Patch Actions Menu.

In the Properties area, you can set the element color and gradient applied to it by specifying the corresponding parameters.

2.1.2.3.5 Dispatchers

The Dispatcher element provides the ability to interact with other SmartPTT dispatchers.

The Dispatcher element provides the following information and controls:

- Avatar that is set in the dispatcher's settings. If no custom avatar is set, the default icon is used. For details, see Dispatcher Window.

- Name of the dispatcher. Depending on the settings, it may be the name of a fixed dispatcher or the dispatcher selected by the operator from the expandable list on the element.
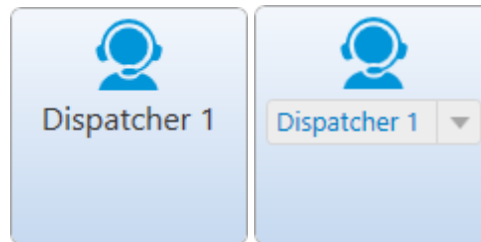
> **Important**
> To interact with other dispatchers, the operator's profile must be assigned the **Connect with external dispatchers** permission. For details, see Operators.

In the Properties area, you can customize the element in the following ways:

- Set the operator's ability to reassign the element to another dispatcher be selecting or clearing the **Allow Changes** check box. If the check box is cleared, the element will be associated with the dispatcher you assign in the Console Configuration window. If the check box is selected, the operator will be able to select the desired dispatcher from the expandable list on the element.

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Show or hide the element icon by selecting or clearing the **Icon** check box.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.3.6 Image

The Image element provides the ability to add an image in the BMP, JPG, or PNG format to the custom console.

You can set the desired image by specifying the path to it in the **Path** box in the Properties area.

If no image is assigned to the element, it is displayed as a blank area of the default color.

2.1.2.3.7 Incoming Events

The Incoming Events element provides information on incoming events in SmartPTT Dispatcher, such as missed private calls, messages, and call alert commands received during the current operation session.
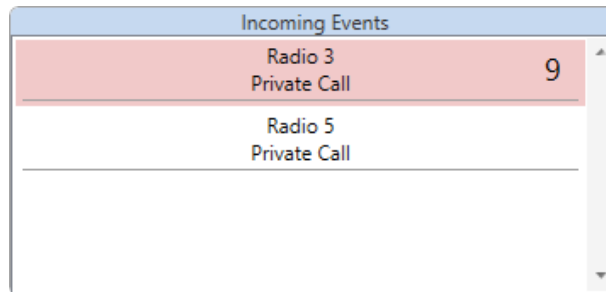
In the Properties area, you can customize the element by setting the color of the element header in the corresponding expandable palette. The default color of the element background cannot be changed.

2.1.2.3.8 Incoming Telemetry

The Incoming Telemetry element provides the ability to monitor the current status of GPIO pins on the radios in the dispatched radio system. For information on the telemetry settings configuration, see Telemetry.

The Incoming Telemetry element provides the following information and controls:

Name

Name or ID of the radio on which the pin is installed.

Update Status ( )

Button that sends a request for the radio pin status update.

> **NOTE**
> On clicking the **Update status ( )** button on the element, the status will be automatically updated for all the pins installed on this radio.

Last Update Time

Time of the last pin status update. The status can be updated manually using the **Update Status ( )** button or automatically with the interval that is set in the radio settings. The last update time appears on the element after the first update received from the radio by SmartPTT Dispatcher. For details, see Telemetry.

Status Indicator

Square indicator filled with the color assigned to the current pin status in the element settings. For the pins that are assigned two telemetry actions of the High Level and Low Level types, next to the square indicator, the text description of the current pin status is displayed.

In the Properties area, you can customize the element in the following ways:

- Set the colors indicating the High Level and Low Level pin statuses by selecting the desired colors from the corresponding expandable palettes. This color is displayed in the square status indicator on the element when the radio pin reports the corresponding state.
  By default, the green color corresponds to the High Level status of the pin, dark gray - to the Low Level status.

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.3.9 Multiselect

The Multiselect element provides the ability to create multiselect groups consisting of radios, WAVE users, and/or talkgroups.

Multiselect groups can be used for the following purposes:

- Making calls to multiple radio objects at the same time (multiselect calls). All participants of a multiselect call can hear the operator and cannot hear other members of their multiselect group.

- Sending messages to multiple radio objects at the same time using the TMS element. For details, see TMS.

- Performing other actions available for multiple radio objects using the hot keys assigned in SmartPTT Dispatcher settings. For details, see Keys.

New elements contain only the default Multiselect icon indicating the element type. Members of the Multiselect group can be added only from the configured custom console.

If the Multiselect group is assigned at least one member, the default icon disappears and the following information and controls appear on the Multiselect element:

- Name of the multiselect group (if specified).

- Names of the multiselect group members.

- The multiselect group Actions (») menu button. For information on the menu, see Multiselect Group Actions Menu.

In the Properties area, you can set the element color and gradient applied to it by specifying the corresponding parameters.

2.1.2.3.10 Outgoing Telemetry

The Outgoing Telemetry element provides the ability to send preconfigured telemetry commands and monitor the current status of GPIO pins on the radios in the dispatched radio system. For information on the telemetry settings configuration, see Telemetry.

The Outgoing Telemetry element provides the following information and controls:

Name

Name or ID of the radio on which the pin is installed.

Update Status ( )

Button that sends a request for the radio pin status update.

> **NOTE**
> On clicking the **Update status ( )** button on the element, the status will be automatically updated for all the pins installed on this radio.

Last Update Time

Time of the last pin status update. The status can be updated manually using the **Update status ( )** button or automatically with the interval that is set in the radio properties. The last update time appears on the element after the first update received from the radio by SmartPTT Dispatcher. For details, see Telemetry.

Status Indicator

Square indicator filled with the color assigned to the current pin status in the element settings.

Telemetry Command

Button that sends the preconfigured telemetry command to the radio. The name of the button corresponds to the description specified in the telemetry action settings. For details, see Telemetry.

In the Properties area, you can customize the element in the following ways:

- Set the colors indicating the High Level and Low Level pin statuses by selecting the desired colors from expandable palettes. This color is displayed in the square status indicator on the element when the radio pin reports the corresponding state.
By default, the green color corresponds to the High Level status of the pin, dark gray - to the Low Level status.

- Show or hide the pin status indicator by selecting or clearing the **Show Status** check box.

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.3.11 Panel

The Panel element provides the ability to interact with multiple custom console elements at the same time. Panels may hold all types of custom console elements except another Panel element. Actions applied using functional elements, such as the PTT, TMS and Voice Notification elements, will be applied to all available elements located within the same Panel element.
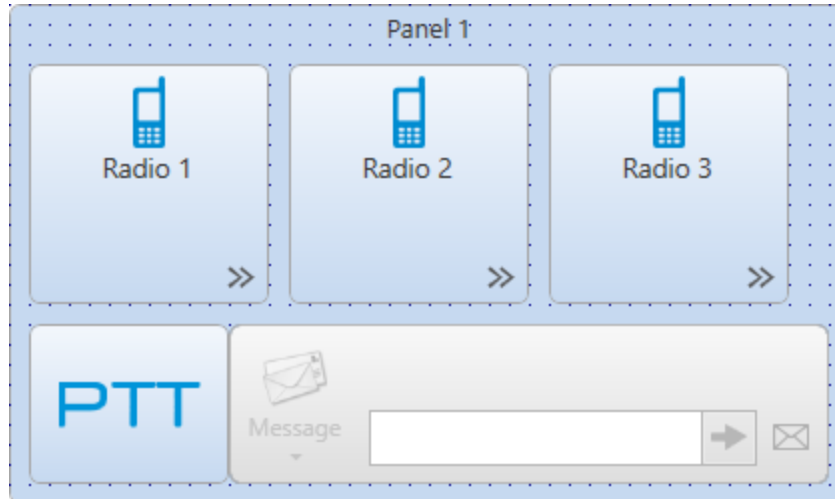
You can add elements to the panel by dragging them from the Elements area. All the elements within the panel are moved together with the panel.

If you remove an element from the panel or resize the panel so that some of the elements are located outside of it, the actions applied to the panel will not affect these elements. The elements located on the border of the panel are treated as located outside of it.

In the Properties area, you can customize the element in the following ways:

- Set the color applied to the element by specifying the corresponding parameter.

- Set the name displayed at the top of the element in the **Panel Name** box.

2.1.2.3.12 PTT

The PTT element provides the ability to initiate a call to all available radios, WAVE users and talkgroups that are located within the same Panel element as PTT.

To provide correct functioning of the PTT element, it must be added to a Panel element together with the desired radios, WAVE user, and/or talkgroups. When the PTT element is located outside any panel, or if there are no available radio objects added to it, the element becomes inactive.

In the Properties area, you can set the element color and gradient applied to it by specifying the corresponding parameters.

2.1.2.3.13 Radios

The Radio element provides the ability to initiate private voice calls to radios and WAVE users added to the SmartPTT Dispatcher list of radios.

Depending on the intended use, you can add two types of the Radio element:

- Element assigned to a specific (fixed or reassignable) radio or a WAVE user.

- Element with a number pad for calling radios and WAVE users by manual entering their ID or selecting them from the SmartPTT Dispatcher list of radios.

The assigned type of the Radio element can be added by dragging the desired radio or WAVE user from the expandable **Radios** list in the Elements Area to the workspace.
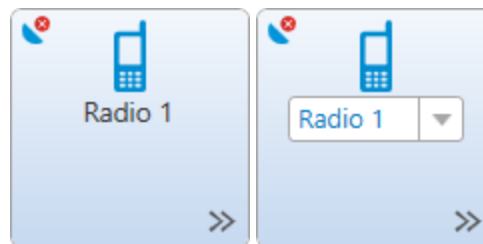
This type of the Radio element provides the following information and controls:

Radio Icon
Icon that is set in the radio or WAVE user settings. For details, see Common Radio Properties.

Radio Name
Name or ID of the radio or WAVE user. Depending on the settings, it may be a fixed radio or WAVE user, or an expandable list of radios added to SmartPTT Dispatcher.

> **NOTE**
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

Location Indicator
The Valid Coordinates ( ) / Outdated Coordinates ( ) icon. Depending on the update status of the radio or WAVE user's location data, the icon indicates that the radio or WAVE user's GPS coordinates are valid or outdated/missing. The icon appears only if the GPS service is activated and the coordinates update parameters are specified in the radio location settings. For details, see Radio Location Properties.

Actions (≫)
The radio or WAVE user's Actions menu button.
For information on actions, see Radio Actions Menu.

In the Properties area, you can customize an element of the assigned type in the following ways:

- Set the operator's ability to reassign the element to another radio or WAVE user by selecting or clearing the **Allow Changes** check box. If the check box is selected, the operator will be able to select the desired radio or WAVE user from the expandable list on the element. If the check box is cleared, the element will be associated with the radio or WAVE user you assign in the Console Configuration window.

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Show or hide the element icon by selecting or clearing the **Icon** check box.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

The Radio element with a number pad can be added by dragging the corresponding icon ( ) from the expandable **Radios** list in the Elements Area to the workspace.

This type of the Radio element provides the following information and controls:

Radio Icon

Default radio icon.

Actions (≫)

Button that opens the radio or WAVE user's Actions menu. The button becomes available when the operator enters the ID or selects from the list a radio or WAVE user added to SmartPTT Dispatcher list of radios.

Search Box

Box that provides the ability to find the desired radio by entering its ID on the keyboard or the number pad below.

Number Pad

Panel that provides controls for entering the desired radio or WAVE user ID. Instead of the number pad, the operator can use a keyboard.

Number Pad (⊞)

  Button that switches the element to the manual dialing mode by displaying the number pad under the search box.

List of Radios (📻)

  Button that switches the element to the selection mode by displaying the SmartPTT Dispatcher list of radios under the search box.

After the operator finds a radio or WAVE user that is added to the SmartPTT Dispatcher list of radios, the top part of the element starts functioning as the assigned type of the Radio element and provides the same information, controls, and indication options.

In the Properties area, you can set the element color and gradient applied to it by specifying the corresponding parameters.

2.1.2.3.14 SCADA Points

The SCADA point element provides information on the SCADA point parameters in the real time and can be used for quick access to the SCADA point dashboard in SmartPTT Dispatcher SCADA panel.

> **Important**
> The SCADA point element is available only if the SCADA module is activated in SmartPTT Dispatcher settings. For details, see Activating SCADA Module.

The SCADA element contains the icon and the name of the SCADA point that are set in the SCADA system and cannot be changed in SmartPTT Dispatcher.

To add a SCADA point element to the custom console, it must be added to SmartPTT Dispatcher SCADA module and appropriately configured in the SCADA system. For details, see *SCADA Module Setup and User Guide* and Adding SCADA Points.

In the Properties area, you can customize the element in the following ways:

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Show or hide the element icon by selecting or clearing the **Icon** check box.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.3.15 Talkgroups

The Talkgroups element provides the ability to interact with talkgroups ,temporary talkgroups, and initiate All Calls.

The custom console provides three types of the Talkgroup element:

- Element for interacting with talkgroups

- Element for initiating All Calls on the preconfigured channel

- Element for creating temporary talkgroups and interacting with them

> **Important**
> Temporary talkgroups are available in Capacity Max systems only, and must be preconfigured in SmartPTT Radioserver Configurator. For details, see "Adding and Editing Temporary Talkgroups" in *SmartPTT Installation and Configuration Guide*.

Depending on the type, the element may provide the following information and controls:

Talkgroup Icon

Default icon indicating the element type. The talkgroup and All Call icons ( ) differ from the temporary talkgroup icon ( ).

Name

Name of the All Call, or talkgroup, or temporary talkgroup. The All Call and talkgroup names are set in SmartPTT Radioserver Configurator. The temporary talkgroup name is set in SmartPTT Dispatcher and displayed in italics. When you add a new temporary talkgroup element, it is not assigned to any group, and does not contain any name. You need to assign the desired temporary talkgroup to the element in the custom console operation mode. For details, see Assigning Temporary Talkgroups.

Channel Name

Name of the channel that corresponds to the network name. The network name is set in SmartPTT Radioserver Configurator.

Radioserver Name

Name of SmartPTT Radioserver that is set in the radioserver settings in SmartPTT Dispatcher.

Mute ( ) / Unmute ( )

Button that provides the ability to mute/unmute the group sound.

> **NOTE**
> Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.

Actions (≫)

The group Actions menu button.

For information on actions, see Talkgroup Actions Menu, Temporary Talkgroup Actions Menu, and All Call Actions Menu.

In the Properties area, you can customize the element in the following ways:

- Set the operator's ability to reassign the element to another talkgroup by selecting or clearing the **Allow Changes** check box. If the check box is selected, the operator will be able to select the talkgroup from the expandable list on the element. If the check box is cleared, the element will be associated with the talkgroup you assign in the Console Configuration window.

- Show or hide the network name by selecting or clearing the **Channel Name** check box.

- Show or hide the radioserver name by selecting or clearing the **Radioserver Name** check box.

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Show or hide the element icon by selecting or clearing the **Icon** check box.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.3.16 Telephone Subscribers

The Telephone Subscriber element provides the ability to interact with telephone subscribers added to SmartPTT Dispatcher.

> **WARNING**
> The Telephone Subscriber element is available only if the Telephone Interconnect license is installed and the operator's profile is assigned the **Make phone calls** permission. For details, see Licenses and Operators.
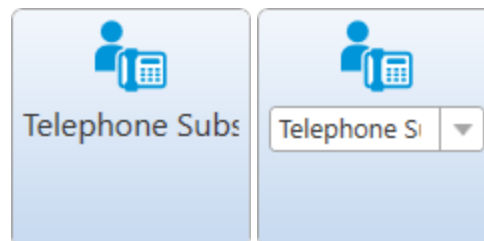
The Telephone Subscriber element provides the following information and controls:

- Avatar that is set in the telephone subscriber's settings. If no custom avatar is set, the default icon is used. For details, see Telephone Subscriber Window.

- Name of the telephone subscriber. Depending on the settings, it may be the name of a fixed subscriber or the subscriber selected by the operator from the expandable list of telephone subscribers added to SmartPTT Dispatcher.

In the Properties area, you can customize the element in the following ways:

- Set the operator's ability to reassign the element to another telephone subscriber by selecting or clearing the **Allow Changes** check box. If the check box is cleared, the element will be associated with the subscriber you assign in the Console Configuration window. If the check box is selected, the operator will be able to select the desired subscriber from the expandable list on the element.

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Show or hide the element icon by selecting or clearing the **Icon** check box.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.3.17 TMS

The TMS element provides the ability to send text messages to a single or multiple radios and talkgroups in the dispatched radio system.
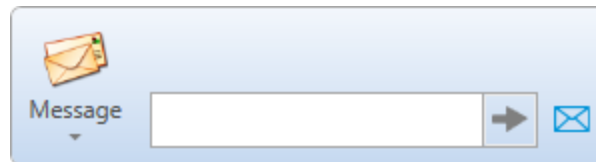
The TMS element provides the following information and controls:

Message ( )

Button that expands the list of preconfigured message templates. For information on message templates, see [Managing Message Templates](#).

Text Box

The box for typing the text of the message.

Send ( )

Button that sends the message from the text box.

Send Message ( )

Button that opens the **Send Message** window. For details, see [Send Message Window](#).

Selected Object Name

If the operator selects a Radio or a Talkgroup element in the custom console, the name of the selected object is displayed at the top of the element. If more than one radio object is selected, instead of the object name, the *Selected* heading is displayed.

Location of the TMS element affects the way the messages will be sent in the following way:

- If the TMS element is located within a Panel element, the message will be sent to all the radios and talkgroups located inside the same panel. For details, see Panel.

- If the TMS element is located outside any Panel element, the message will be sent to the radios and/or talkgroups selected by the operator in the custom console.

In the Properties area, you can set the element color and gradient applied to it by specifying the corresponding parameters.

2.1.2.3.18 Voice Notifications

The Voice Notifications element provides the ability play a preconfigured voice notification for a selected talkgroup or channel.
For information on voice notifications, see Voice Notifications.

> **Important**
> Voice notifications are created and configured in SmartPTT Radioserver Configurator. For details, see "Voice Notifications" in *SmartPTT Installation and Configuration Guide*.
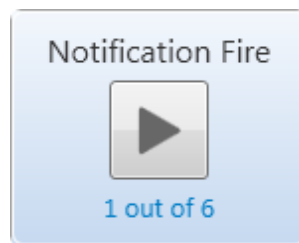
The Voice Notifications element provides the following information and controls:

- The voice notification name that is set in SmartPTT Radioserver Configurator.

- The Play (▶) / Stop (■) button that starts or stops the voice notification playback.

- The counter which shows the number of successful voice notification playbacks.

In the Properties area, you can customize the element in the following ways:

- Set the color and gradient applied to the element by specifying the corresponding parameters.

- Show or hide the radioserver name next to the name of the voice notification by selecting or clearing the **Radioserver Name** check box.

- Set the font size for the element text by specifying it in the **Font Size** list.

- Enable or disable word wrapping for the text inside the element by selecting or clearing the **Word Wrap** check box.

2.1.2.4 Managing Custom Consoles

Follow the procedure to to manage (add, edit, activate/deactivate, or delete) a custom console.

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Interface** → **Custom Consoles**.
   The **Custom Consoles** window appears.

2. In the **Custom Consoles** window, perform the desired action:

To add a new custom console,	perform the following actions:
	1. In the top part of the window, click **Add (➕)**. The Console Configuration window for adding a new console appears.
	2. Perform the desired configuration of the new console. For details, see Configuring Console Workspace.
	3. Click **Save** in the bottom part of the Console Configuration window to save changes and close the window. The configured console appears in the **Custom Consoles** window.
To edit an existing custom console,	perform the following actions:
	1. In the Custom Consoles table, select the desired console, and then click **Edit (✎)**. The Console Configuration window for editing the console appears.
	2. Edit the desired settings and/or elements. For details, see Configuring Console Workspace.
	3. Click **Save** to save changes and close the window.
To activate/deactivate an existing custom console,	in the Custom Consoles table, select the desired custom console, and then select or clear the **Active** check box. The console appears or disappears from the **Tools** menu.
To delete an existing custom console,	perform the following actions:
	1. In the Custom Consoles table, select the desired custom console, and then click **Delete (➖)**.
	2. In the confirmation window, click **OK**. The console is removed from the Custom Consoles table.

2.1.2.5 Configuring Console Workspace

Follow the procedure to set the custom console name and wallpaper and add, move, or resize the elements in the console workspace.

Procedure:

1. If closed, open the **Custom Consoles** window by clicking **Settings (⚙) → Interface → Custom Consoles** on the menu bar.
   The **Custom Consoles** window appears.

2. In the **Custom Consoles** window, in the Custom Consoles table, double-click the desired console name or select it, and then click **Edit (🖊)**.
   The Console Configuration window for editing the console appears.

3. *(Optional)* In the **Name** box in the top part of the window, type the custom console name.

4. *(Optional)* Next to the **Wallpaper** box in the top part of the window, click Browse (⬚), and then, in the window that appears, select the desired image.

5. Depending on the type of the element you want to add, perform one of the following actions:

   • For the elements located in the upper-left corner of the window, expand the list of the corresponding element type, and then drag the desired element to the console workspace.

   NOTE
   Some of the radio object elements, such as Radios and Channels, may be located in expandable lists under the main one.

   • For the elements located in the bottom-left corner of the window, drag the desired element to the workspace.

6. Select the element added to the console workspace, and then, in the Properties area, edit the desired element properties.
   For details, see description of the desired element in Custom Console Elements.

7. *(Optional)* Resize the element by dragging the resizing controls that appear when you select the element to the desired position.

Postrequisites:

• To remove the element added to the console workspace, select it, and then press Delete, or click **Delete (➖)** in the top part of the window.

• To remove the wallpaper, click **Delete (✖)** to the right of the **Wallpaper** box.

2.1.3 Call Window Settings

The **Call Window Settings** window provides the ability to customize Call Window appearance and behavior. For example, specify individually the maximum number of opened Call Windows or specify the Call Window closing timeout.

One can configure Call Window parameters by clicking **Settings (⚙) → Interface → Call Windows** on the menu bar of SmartPTT Dispatcher.
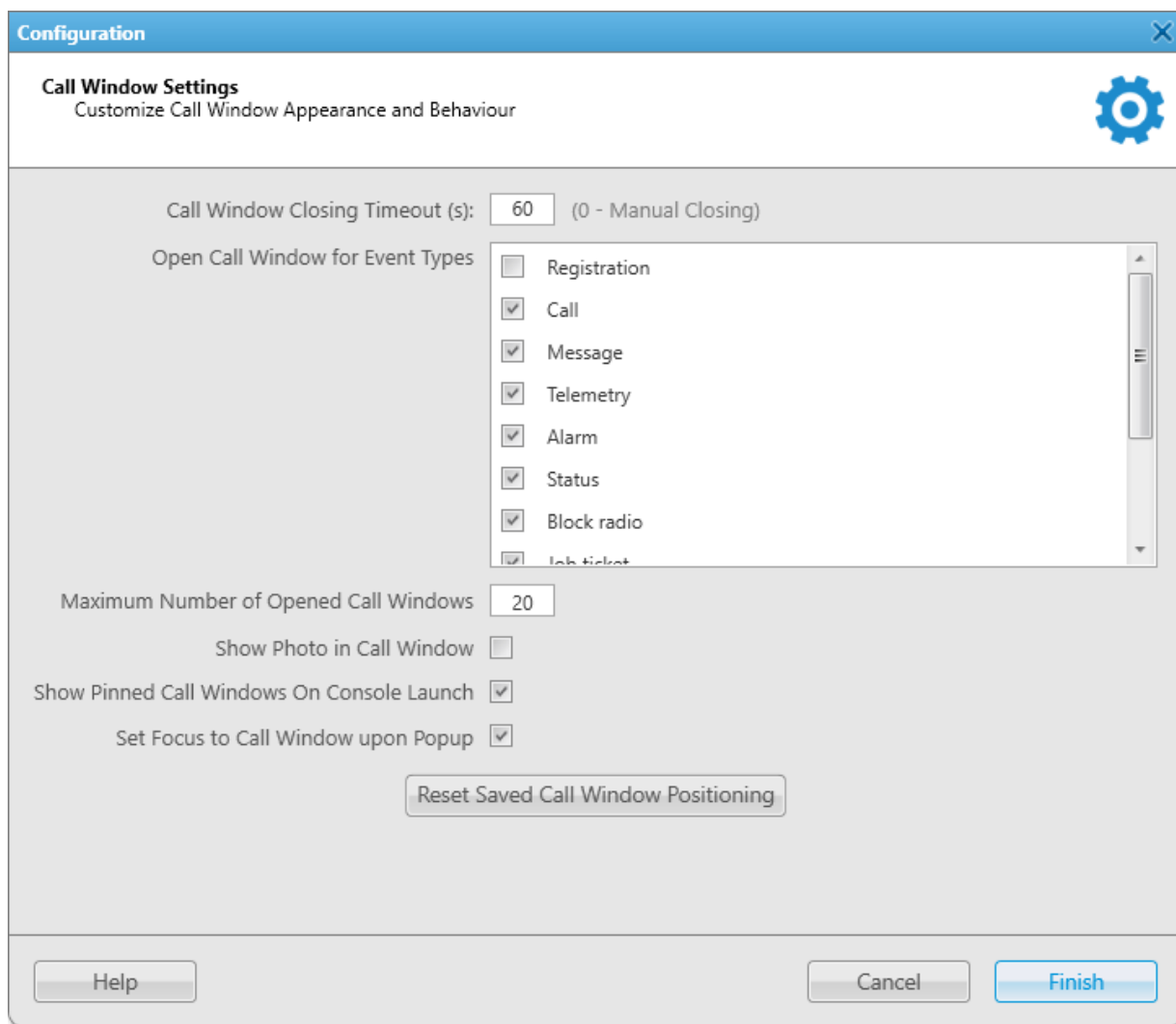
The **Call Window Settings** window provides the following elements:

Call Window Closing Timeout (s)

Sets the time period in seconds at the end of which Call Windows will be closed automatically. The default value is *60* seconds.

> **NOTE**
> If you enter *0* in the field, Call Windows will not be closed automatically. It suggests manual closing.

Open Call Window for Event Types

Specifies types of events triggering the Call Window opening. For information on event types, see Event Types.

Maximum Number of Opened Call Windows

Sets the maximum number of Call Windows opened automatically. The default value is *20*. The *0* value cancels automatic opening of Call Windows.

> **NOTE**
> This setting does not influence the quantity of Call Windows opened manually.

Show Photo in Call Window

Displays the radio avatar, the talkgroup avatar, the all call avatar in Call Windows.

For information on the Call Window of the desired object, see Radio Call Window, Talkgroup Call Window, or All Call Window.

Show Pinned Call Windows on Console Launch

Restores all pinned ( ) Call Windows before the SmartPTT Dispatcher closing during the next launch of SmartPTT Dispatcher.

Set Focus to Call Window upon Popup

Makes the Call Window active when it is opened.

Reset Saved Call Window Positioning

Resets the pinned earlier position of Call Windows on a monitor screen.

2.1.3.1 Configuring Call Windows

Follow the procedure to to configure Call Window appearance and behavior.

Procedure:

1. On the menu bar, click **Settings ( ) → Interface → Call Windows**.
   The **Call Window Settings** window appears.

2. In the **Call Window Settings** window, perform the desired actions:

To set the Call Window closing timeout,	type the desired value in the **Call Window Closing Timeout (s)** field. > **NOTE** > To reset the automatic closing of Call Windows, type the *0* value.
To specify types of events triggering the Call Window opening,	select check boxes of the desired event types in the **Open Call Window for Event Types** area.
To set the maximum number of Call Windows opened automatically,	type the desired value in the **Maximum Number of Opened Call Windows** field.
To display the radio avatar, the talkgroup avatar and the all call avatar in Call Windows,	select the **Show Photo in Call Window** check box.
To restore all pinned Call Windows during the next launch of SmartPTT Dispatcher,	select the **Show Pinned Call Windows on Console Launch** check box.

To make the Call Window active when it is opened,	select the **Set Focus to Call Window upon Popup** check box.
To reset the pinned earlier position of Call Windows on a monitor screen,	click the **Reset Saved Call Window Positioning** button.

3.   Click **Finish** in the bottom part of the window to save changes and close the window.

2.1.4 Notification Panels

The **Notification Panels** window provides the ability to configure the event processing in the system, including notifications through the **Emergencies**, **System Messages**, and **Recent Incoming Calls** panels.

To open the **Notification Panels** window, on the menu bar of the SmartPTT Dispatcher window, click **Settings (⚙) → Interface → Notification Panels**.
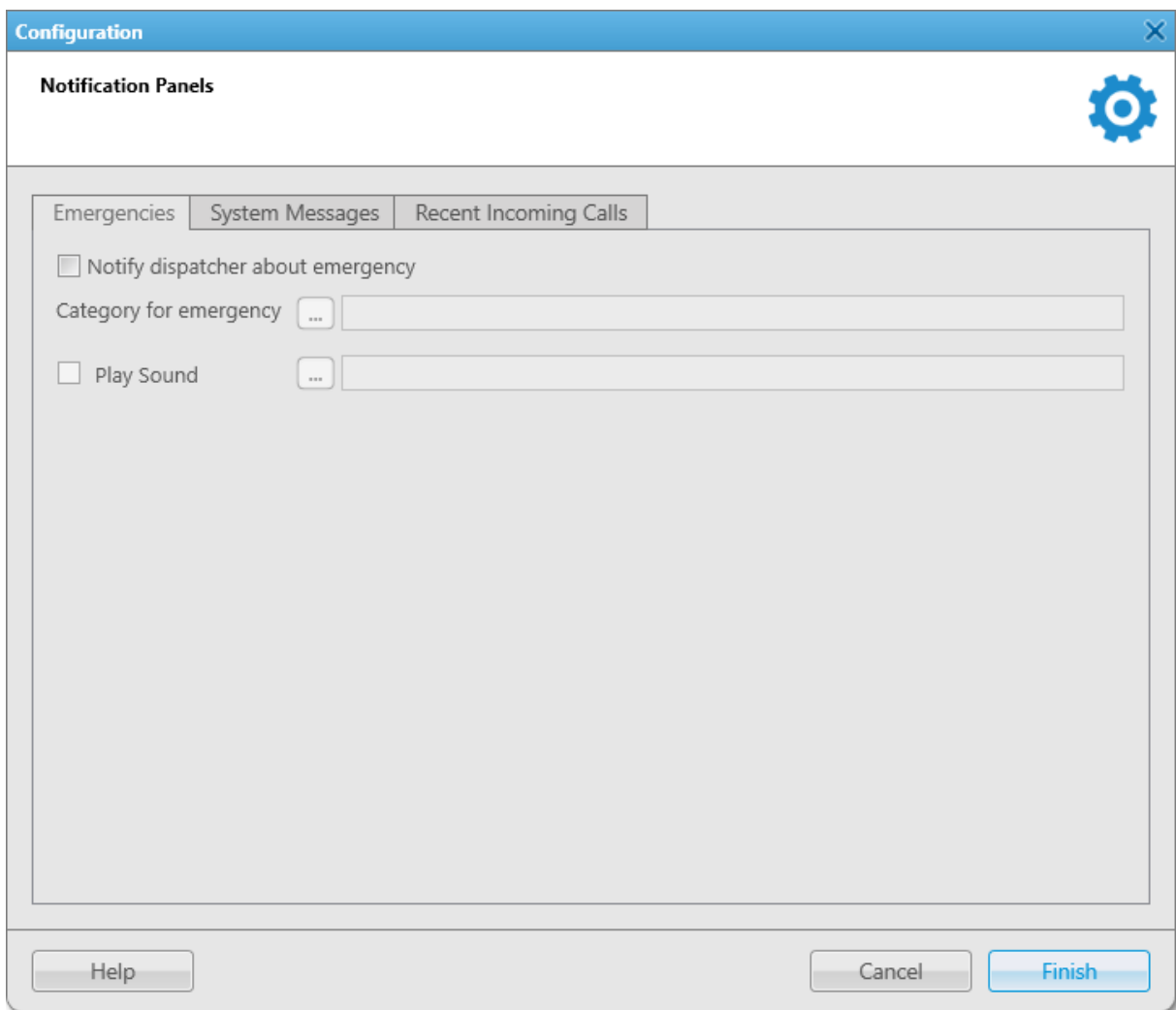
The **Notification Panels** window consists of three tabs. They provide the following settings:

- Settings for the emergencies.
  For details, see Emergencies.

- System message settings.

  For details, see System Messages.

- Recent incoming calls settings.

  For details, see Recent Incoming Calls.

For information on these settings, see the corresponding sections below.

2.1.4.1 Emergencies

On the **Emergencies** tab, you can configure the emergency situation processing.
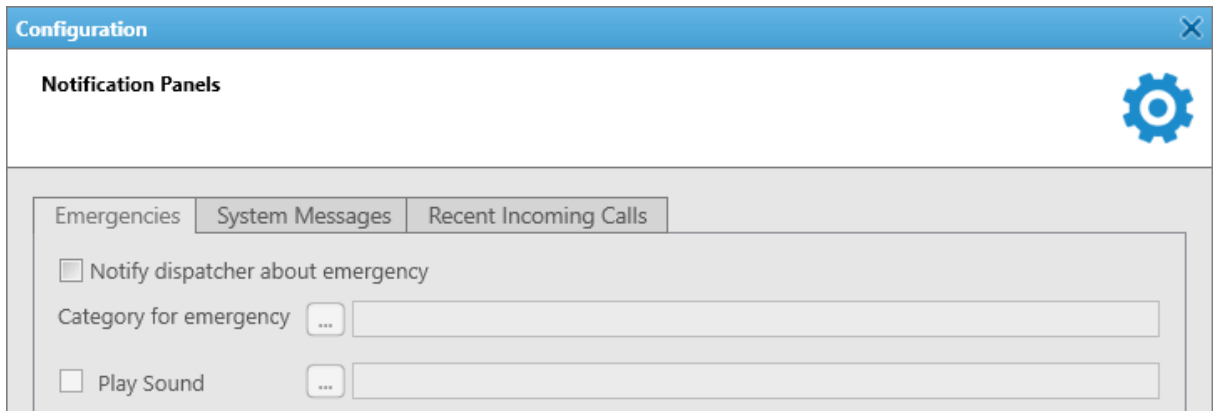
The **Emergencies** tab provides the following elements:

Notify dispatcher about emergency

- Opens the **Emergencies** panel automatically upon receipt of an incoming alarm signal from the radio. For details, see Emergencies.

  NOTE
  The **Emergencies** panel appears only when emergency signal is registered. You cannot open it manually.

- Displays the radio activated the emergency mode in the opened map window. For details, see Maps.

Category for emergency

Provides the ability to set the category of objects that will not be hidden on the map upon receipt of an alarm signal from a radio.
You can select the desired category by clicking the Browse (⬚) button.
For details, see Categories.

Play Sound

Activates playback of a special tone at the emergency situation.
You can select the desired audio file in the **Sound File Selection** window by clicking the Browse (⬚) button.
Audio file must comply with the specific requirements. For details, see "Audio File Requirements" in *SmartPTT Installation and Configuration Guide*.

2.1.4.1.1 Configuring Emergency Situation Processing

Follow the procedure to configure the emergency situation processing.

Prerequisites:

- To select a category for emergency, first add at least one category. For details, see <u>Managing Categories</u>.

- *(Optional)* Ensure that a map is opened to display the radios activated the emergency mode and the objects added to the category for emergency. For details, see <u>Maps</u>.

Procedure:

1. On the menu bar, click **Settings (⚙) → Interface → Notification Panels**.
   The **Notification Panels** window appears.

2. Select the **Notify dispatcher about emergency** check box to enable the emergency situation processing.

To enable the emergency situation processing,	select the **Notify dispatcher about emergency** check box.
To disable the emergency situation processing,	clear the **Notify dispatcher about emergency** check box.

3. *(Optional)* Configure additional settings for the emergency situation processing:

To add the category of objects that will not be hidden on the map upon receipt of an alarm signal from a radio,	perform the following actions: 1. Next to the **Category for Emergencies** field, click Browse (⬚). 2. In the **Categories** window, select the corresponding category. 3. Click **OK**.
To activate playback of the default audio file at the emergency situation,	select the **Play Sound** check box.
To configure a sound notification at the emergency situation,	perform the following actions: 1. Select the **Play Sound** check box. 2. Click Browse (⬚) to specify a path to the desired audio file.

4. Click **Finish** in the bottom part of the window to save changes and close the window.

2.1.4.2 System Messages

On the **System Messages** tab, you can configure the system messages processing, including displaying system messages on the **System Messages** panel. For details, see System Messages.
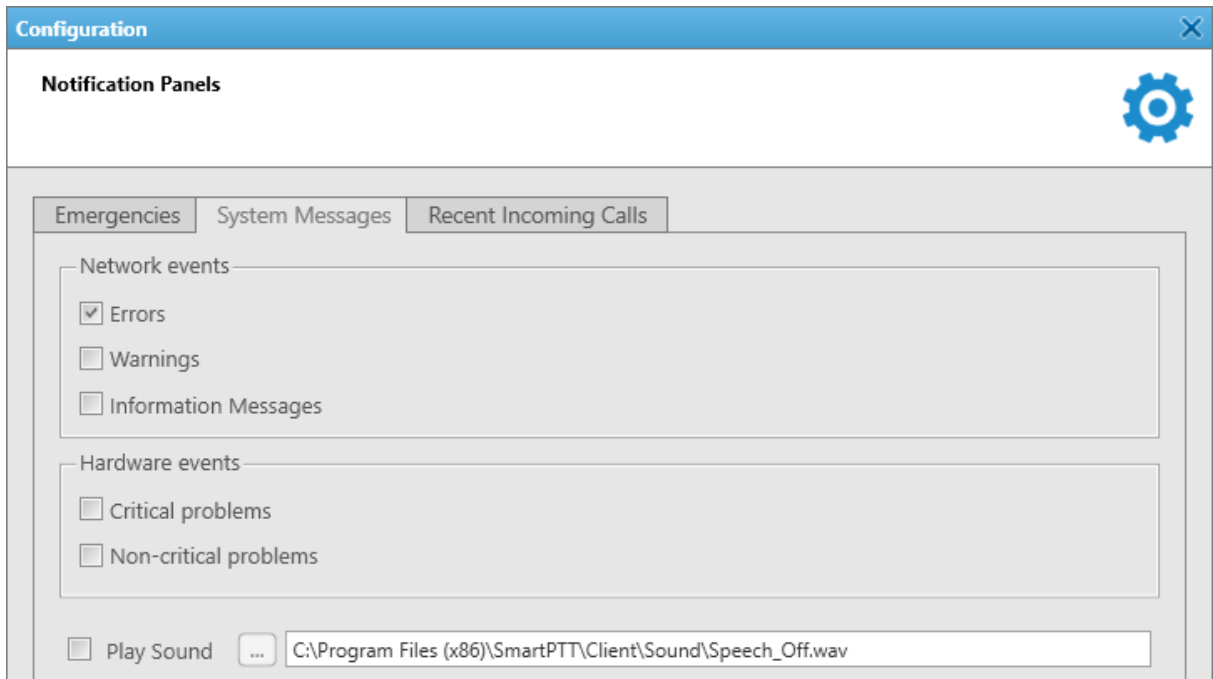
The **Network events** area provides the following elements:

Errors
Select to show error messages indicating major functionality failures, which can lead to the system breakdown, on the **System Messages** panel.
Clear to show error messages in separate windows.

Warnings
Select to show warning messages indicating minor functionality failures, which are not critical for the current system operation, on the **System Messages** panel.

Information Messages
Select to show information messages indicating functionality restoration after its failure on the **System Messages** panel.

The **Hardware events** area provides the following elements:

Critical problems
Select to show messages about the loss of a significant part of the radio network functionality on the **System Messages** panel.

Non-critical problems
Select to show messages about the loss of an insignificant part of the radio network functionality on the **System Messages** panel.

> **NOTE**
> Hardware events processing works only if Monitoring is activated. For details, see the "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide*.

If you select the check boxes in the **Network events** area or the **Hardware events** area when the **System Messages** panel is closed, it opens automatically with the appeared corresponding message.

If you do not select the check boxes in the **Network events** and **Hardware events** areas, system messages appear in the opened **System Messages** panel in any case. But if the panel is closed, it does not open automatically with the appeared corresponding message.

> **NOTE**
> If the **System Messages** panel is opened but inactive, all event messages appear in the background without notifications.

Play Sound

Activates playback of a special tone when system messages appears.

You can select the desired audio file in the **Sound File Selection** window by clicking the Browse (⬚) button. Audio file must comply with the specific requirements. For details, see "Audio File Requirements" in *SmartPTT Installation and Configuration Guide*.

2.1.4.2.1 Configuring System Messages Processing

Follow the procedure to configure the system messages processing.

Prerequisites:

(Optional) To process hardware events, ensure that Monitoring is activated. For details, see the "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide*.

Procedure:

1. On the menu bar, click **Settings (⚙) → Interface → Notification Panels**.
   The **Notification Panels** window appears.

2. Open the **System Messages** tab.

3. Configure the system status messages processing in the **Network events** area:

To show error messages on the **System Messages** panel,	select the **Errors** check box.
To show error messages in separate windows,	clear the **Errors** check box.
To show warning messages,	select the **Warnings** check box.
To show information messages,	select the **Information Messages** check box.

4. Configure the radio network functionality messages processing in the **Hardware events** area:

To show messages about the loss of a significant part of the radio network functionality,	select the **Critical problems** check box.
To show messages about the loss of an insignificant part of the radio network functionality,	select the **Non-critical problems** check box.

5. Configure an emergency alarm:

To activate playback of the default audio file at the emergency situation,	select the **Play Sound** check box.
To configure a sound notification at the emergency situation,	perform the following actions: 1. Select the **Play Sound** check box. 2. Click Browse (⬚) to specify a path to the desired audio file.

6. Click **Finish** in the bottom part of the window to save changes and close the window.

2.1.4.3 Recent Incoming Calls

On the **Recent Incoming Calls** tab, you can configure the **Recent Incoming Calls** panel.
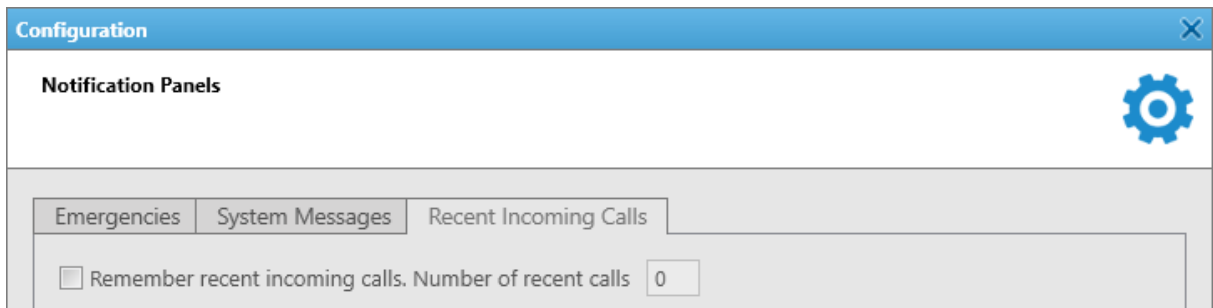
The **Recent Incoming Calls** tab provides the following elements:

Remember recent incoming calls

Select to display the latest radios which made a call in the radio network on the **Recent Incoming Calls** panel.

Number of recent calls

Enter the maximum number of radios displayed on the **Recent Incoming Calls** panel.

2.1.5 Web Pages

In SmartPTT Dispatcher you can add web pages compatible with Internet Explorer 11.

You can open the panel with a web page from the **Tools** menu after you added it in the **Web Pages** window.
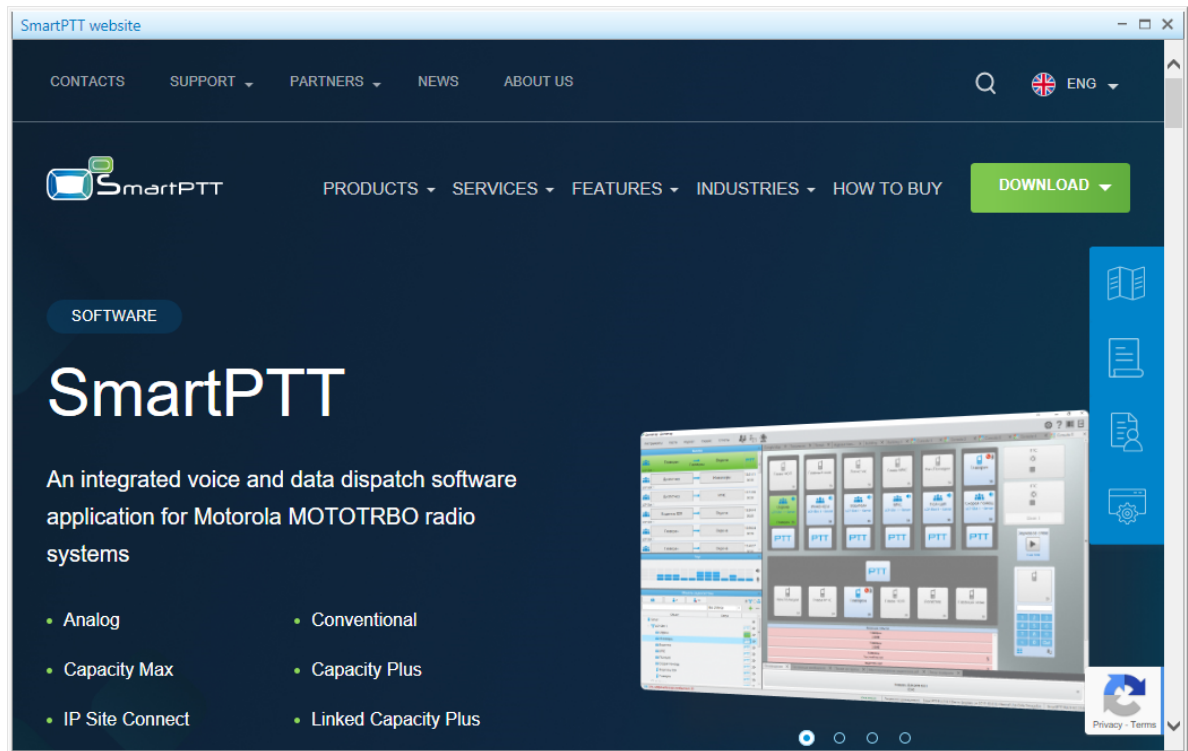
For information on web pages and their adding, see the sections below.

2.1.5.1 Web Pages Window

In the **Web Pages** window, you can manage web pages.

You can open the **Web Pages** window by clicking **Settings (⚙) → Interface → Web Pages**.
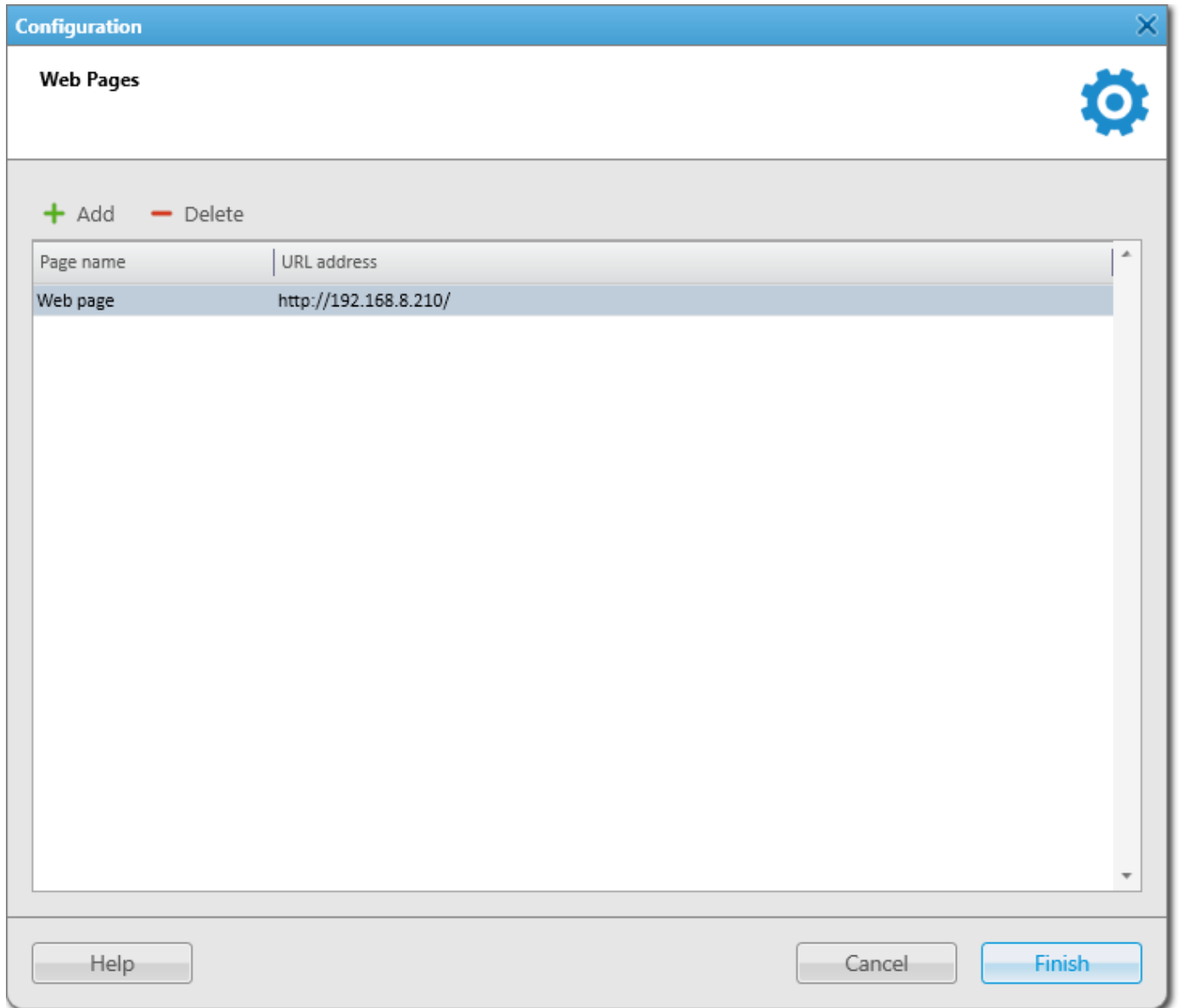
The **Web Pages** window provides the following elements:

Add

Adds a web page row to Web Pages table. The rows are used for adding web pages. You can add an unlimited number of rows. For information on adding web pages, see Adding Web Pages.

Delete

Removes the selected page.

Web Pages table

Contains a list of added pages with addresses. The table provides the following elements:

Page name

The column contains a name of a page. After adding the page, its name appears in the **Tools** menu. By clicking the name in the menu, the tab with the web-page opens.

URL address

The column contains a URL address of a page. When the web page row is added, its part in the URL address column contains no address and you should type it manually or paste.

2.1.5.2 Adding Web Pages

Follow the procedure to add a new web page to SmartPTT Dispatcher.

> **NOTE**
> To ensure stable performance, it is not recommended to add web pages containing audio or video materials.

Prerequisites:

Obtain URL address of the desired page.

Procedure:

1. Click **Settings (⚙) → Interface → Web Pages**.
   The **Web Pages** window appears.

2. In the **Web Pages** window, click **Add**.
   A new row in the page table appears.

3. In the **Page name** column, type the desired page name.

4. In the **URL address** column, enter the address in one of the following ways:

   • Type the address manually.

   • Copy the URL address to clipboard and paste it.

5. Click **Finish** to save changes and close the window.
   The added page appears in the **Tools** menu.

Postrequisites:

• To edit the page name or address, double-click the desired value and change it.

• To delete the page, click the desired row in the table and click **Delete**.

2.1.6 SCADA

The **SCADA Module** window provides controls for activating the SCADA module in SmartPTT Dispatcher and establishing a connection to the desired SCADA system.

> **WARNING**
> Access to the SCADA module functionality requires the SCADA license. For details, see Licenses.

For information on the SCADA module functionality in SmartPTT Dispatcher, see SCADA Module and the SCADA Module embedded help.

You can open the **SCADA Module** window by clicking **Settings (⚙) → Interface → SCADA** on the menu bar.

> **NOTE**
> The **SCADA** option is available only if the SCADA module is activated in SmartPTT Dispatcher settings. For details, see Activating SCADA Module.
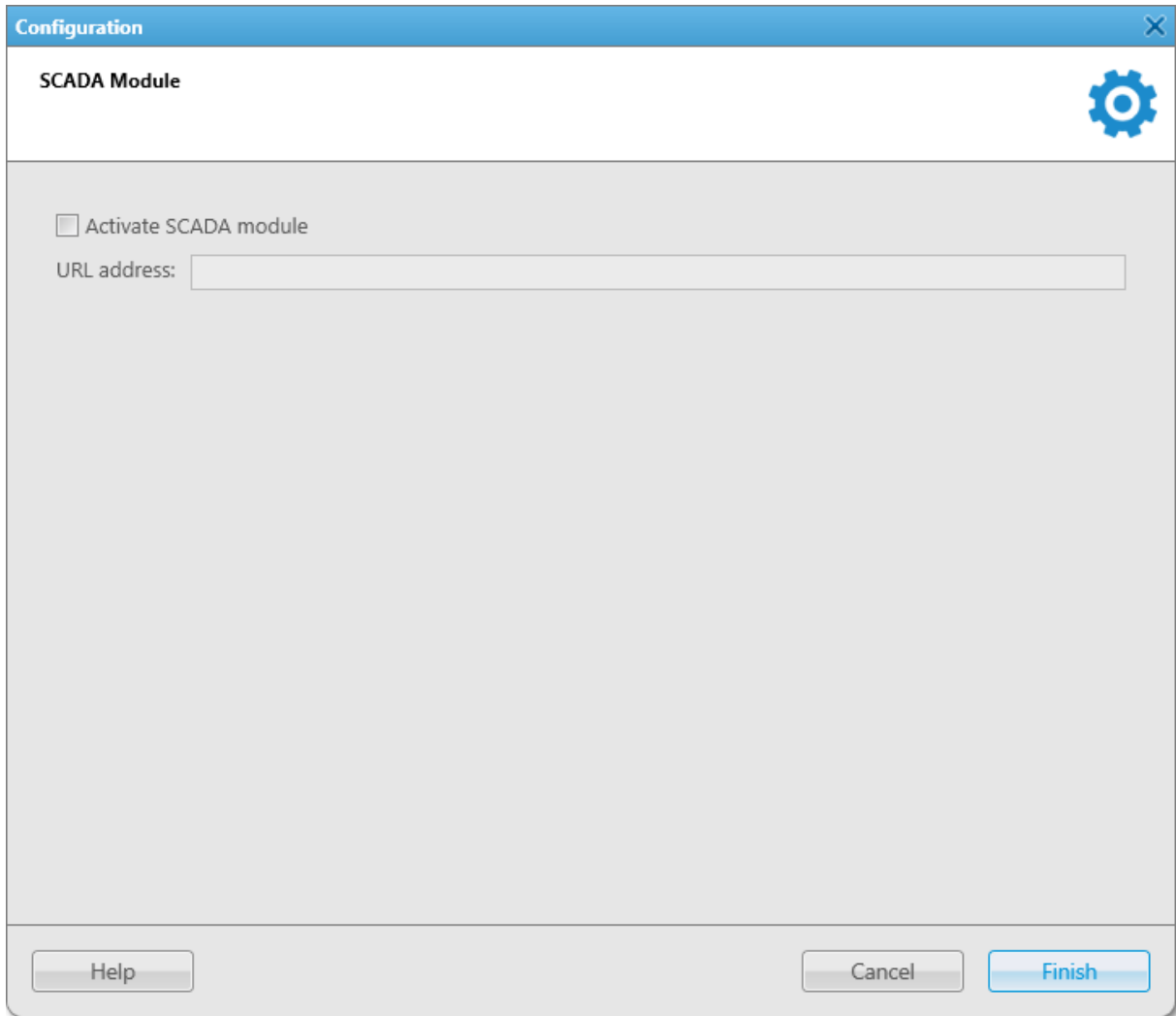
The **SCADA Module** window provides the following elements:

Activate SCADA module

Activates the SCADA module in SmartPTT Dispatcher.

When the check box is selected, the **URL address** box located below becomes active.

URL address

URL address of the SCADA system that will be accessed through the SCADA module in SmartPTT Dispatcher.

> **NOTE**
> The SCADA module activation requires restart of SmartPTT Dispatcher.

For information on activating the SCADA module in SmartPTT Dispatcher, see the section below.

2.1.6.1 Activating SCADA Module

Follow the procedure to activate the SCADA module in SmartPTT Dispatcher.

Prerequisites:

- Ensure that the SCADA license is installed. For details, see Licenses.

- Obtain the URL address of the SCADA system that will be accessed through the SCADA module in SmartPTT Dispatcher.

Procedure:

1. On the menu bar, click **Settings (⚙) → Interface → SCADA**.
   The **SCADA Module** window appears.

2. Select the **Activate SCADA module** check box.
   The **URL address** box becomes available.

3. In the **URL address** box, type the URL address of the desired SCADA module.

4. Click **Finish** to save changes and close the window.

5. Restart SmartPTT Dispatcher to apply changes.
   The **SCADA** option appears in the **Tools** menu on the menu bar.

2.2 Equipment

The **Equipment** submenu is available from the **Settings (⚙)** menu on the SmartPTT Dispatcher menu bar. It provides the following configuration options:

- Configuring control devices and keyboard shortcuts for quick access to the radio system objects and actions in SmartPTT Dispatcher.
  For details, see Control Devices.

- Configuring general sound settings and settings of connected audio output devices.
  For details, see Sound.

- Configuring the Tipro console parameters.
  For details, see Tipro Console.

2.2.1 Control Devices

In the **Control Devices** window you can perform the following actions:

- Configure actions on clicking or tapping the PTT button and other SmartPTT Dispatcher elements for interaction with the radio objects using a mouse or a touchscreen.

- Assign the desired keys or buttons to the desired system objects and actions as hotkeys.

The window is available by clicking **Settings (⚙)** → **Equipment** → **Control Devices** on the menu bar.

The **Control Devices** window provides you the following tabs:

- The **Pointing devices** tab. For details, see Pointing Devices.

- The **Keys** tab. For details, see Keys.

For information on configuring control devices, see the sections below.

2.2.1.1 Pointing Devices

In the **Pointing devices** tab, you can configure actions on clicking or tapping the PTT button and other SmartPTT Dispatcher elements for interaction with the radio object using a pointing device.
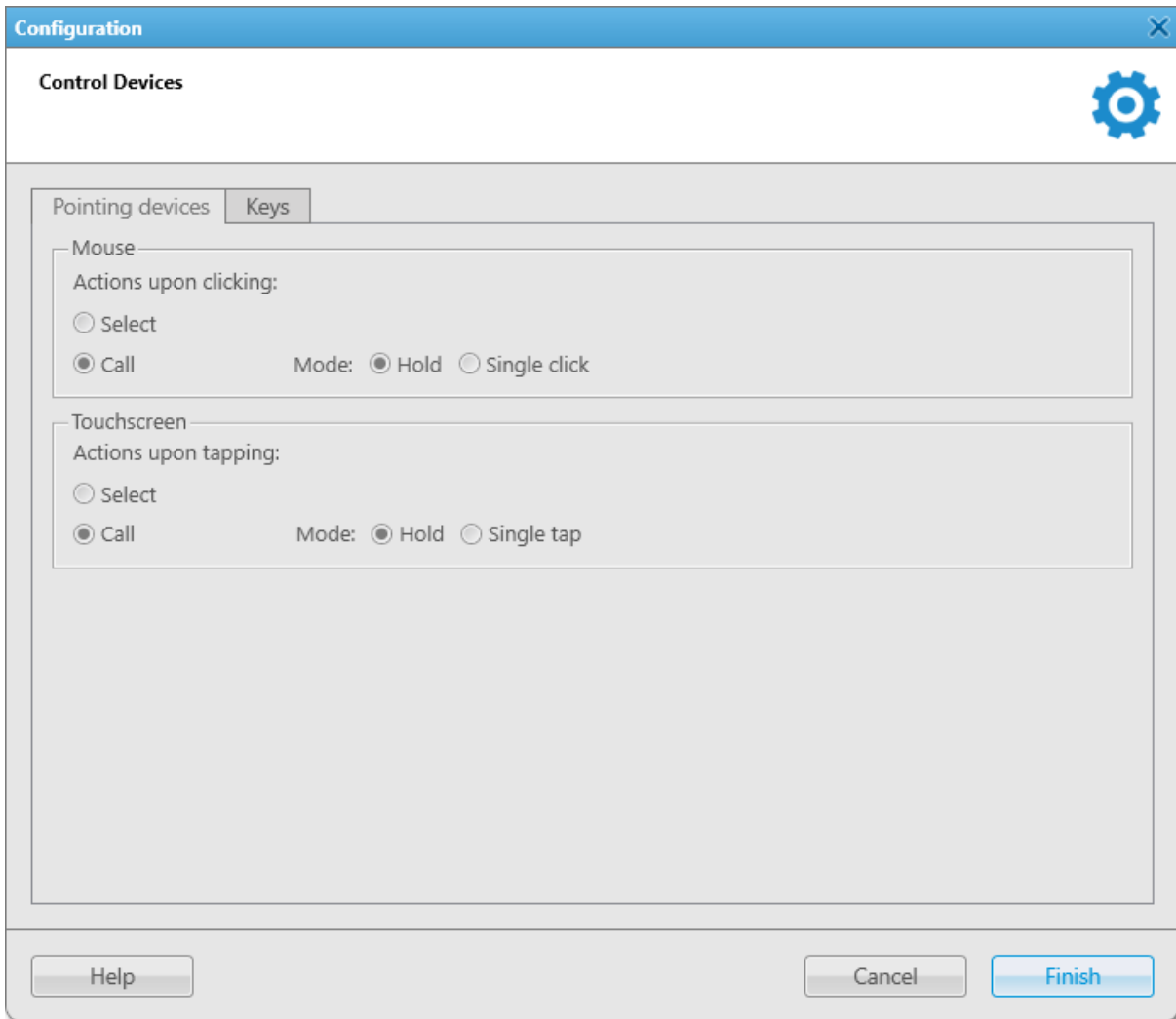
Two types of pointing devices are used in SmartPTT Dispatcher:

- Mouse

- Touchscreen

For both types the following buttons are available:

Select

Affects the action on clicking or tapping. When selected, the call element becomes selected when you click it or tap.

NOTE

Selected call element has a blue frame.

Call

Affects the action on clicking or tapping. When selected, you initiate a call when click or tap the call element. The button also provides you access to the controls that affect a call initiating:

- If **Hold** is selected, the call element should be pressed/tapped and held to initiate and continue a call. You can end the call by releasing the mouse button or releasing the call element on the touchscreen.

- If **Single click/tap** is selected, the call element should be clicked/tapped to initiate and continue a call. You can end the call by clicking or tapping the call element.

2.2.1.2 Keys

In the **Keys** tab, you can add and assign hotkeys to system objects and actions.
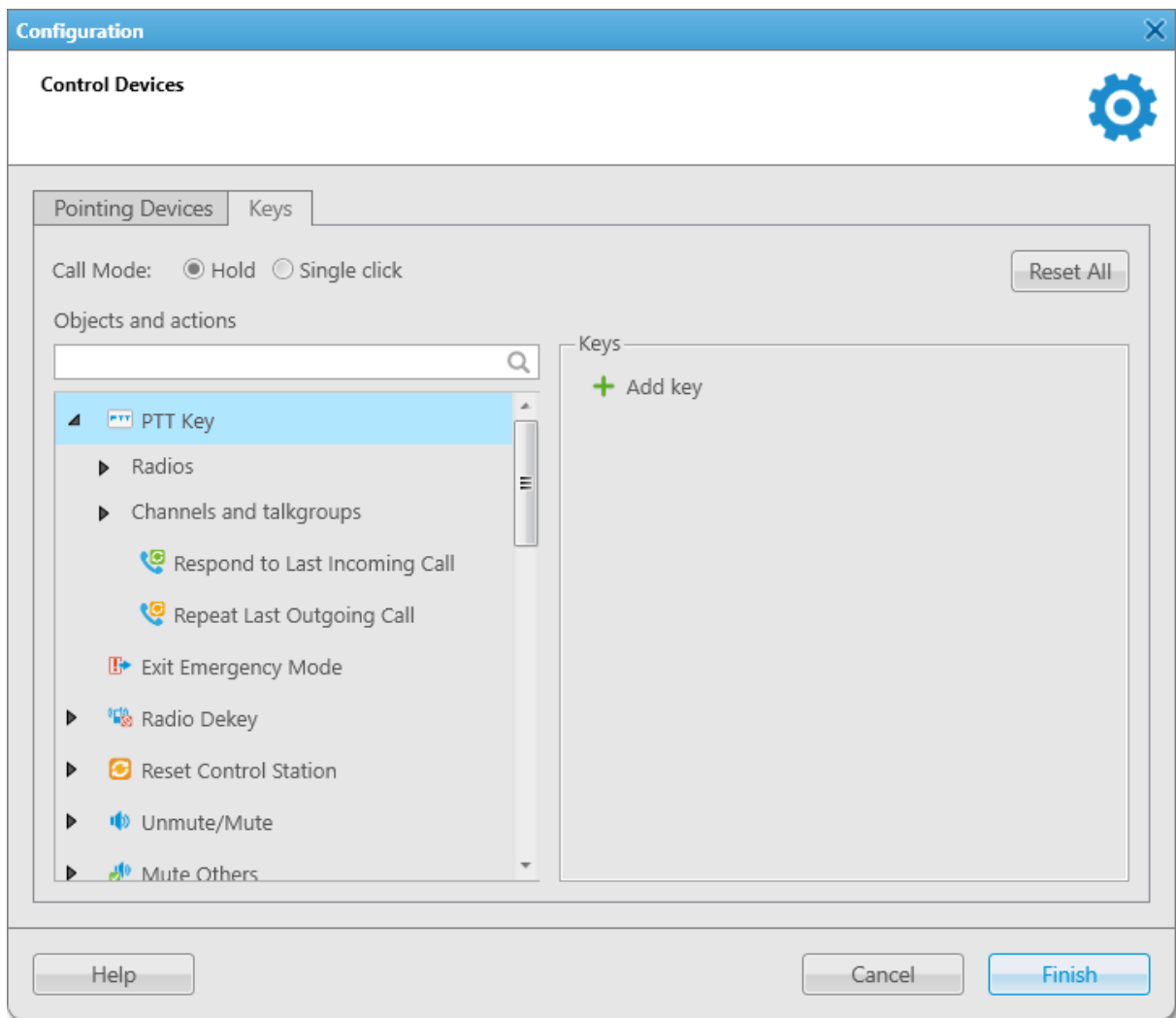
You can add any amount of hotkeys but each hotkey must have the unique key or key combination assigned.

If you use a keyboard as an input device, use the following information to assign hotkeys properly:

- Esc, Print Screen, and Windows keys cannot be assigned as hotkeys.

- F1 and Enter keys can be assigned only in Alt+Key or Shift+Alt+Key combinations.

Other keys can be used either separately or in the following combinations:

- Alt+Key

- Shift+Key

- Ctrl+Key

- Shift+Ctrl+Key

- Shift+Alt+Key

- Ctrl+Alt+Key

The **Keys** tab provides the following elements:

Hold
If selected, the hotkey should be pressed and held to initiate and continue a call, or perform an action.
You can end the call by releasing the hotkey.

Single click
If selected, the hotkey should be pressed to initiate and continue a call, or perform an action.
You can end the call by pressing the hotkey again.

Reset All
Deletes all hotkeys. The button does not delete the default hotkey of the PTT button, but reset the hotkey if it was reassigned by user.

Search box
Provides the ability to search for an object or an action by entering its name or ID (for radios). When searching for a radio, the nodes containing the desired radio appear in the list.

Objects and actions
Displays all objects and actions to which you can assign hotkeys. Almost all objects and actions are displayed as nodes that can be expanded to assign them a hotkey. Radios, categories, and talkgroups and channels are grouped under the corresponding titles. If the action is available only for one type of the selected objects (for example, only for radios), the list of objects is displayed under the action or object title without categories.

You can assign a hotkey to any action from the radio object Actions menu. For details, see Actions.

Besides the actions from the radio object Actions menu, the following actions are available:

- Respond to Last Incoming Call (under the **PTT** node)

- Repeat Last Outgoing Call (under the **PTT** node)

- End call

> **NOTE**
> The **End call** action is available only for outgoing calls in Capacity Max radio systems with FOACSU activated.

You can assign hotkeys to the following objects:

- PTT Key (by default, the hotkey for it is the Space key)

- Telephone Subscribers

- Dispatchers

NOTE

Hotkeys assigned to dispatchers open the **Dispatchers** window and automatically initiate a voice call to the specified dispatcher.

Hotkeys assigned to a telephone subscriber open the **Telephone Subscribers** window from which you can manually initiate a call.

Some actions can be activated only if you select the desired object (for example, a radio) before pressing the assigned hotkey.

Some actions assigned to a hotkey can be applied to more than one object. After selecting the desired objects and clicking the hotkey, the action is applied to all available objects. If the action is not available for a selected object,pressing the hotkey brings no result.

The **Keys** area provides the following elements for configuring the hotkeys settings:

Add key

Adds a hotkey.

Input Devices List

Appears after the **Add key** button is pressed. Provides a list of input devices that can be used for assigning hotkeys:

- **Keyboard** a standard keyboard connected to the computer.

- **Input Device (DirectInput)** provides the list of USB input devices connected to the computer.

Important

If you use a D-9 by Holmco microphone, do not select the **Input Device (DirectInput)** option.

- **Input Device (HID)** provides the list of USB HID input devices connected to the computer.

    It is recommended that you select **Input Device (HID)** for assigning hotkeys using external devices.

- **External Device COM Port** provides the list of devices connected using a COM port.

Assign Hotkey Button

The blue button that appears after the **Add key** button is pressed.

When you click the button, three dots appear on it. After it you can assign a hotkey to the selected action or object.

When the hotkey or hotkeys combination is already assigned to the selected action or object, its name is displayed on the button.

Delete

Appears after the **Add key** button is pressed. Deletes the hotkey.

2.2.1.3 Configuring the Call Element Actions

Follow the procedure to configure actions on clicking or tapping the PTT button and other SmartPTT Dispatcher elements for interaction with the radio object using a pointing device.

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Equipment** → **Control Devices**.
   The **Control Devices** window appears.

2. Open the **Pointing Devices** tab.

3. Configure the desired pointing device. For details, see Pointing Devices.

4. Click **Finish** to save changes and close the window.

2.2.1.4 Assigning Hotkeys

Follow the procedure to assign a hotkey.

Prerequisites:

Ensure the desired input device is connected to the computer and is active.

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Equipment** → **Control Devices**.
   The **Control Devices** window appears.

2. Open the **Keys** tab.

3. In the top part of the window, select the desired call mode.
   For information on call modes, see Keys.

4. In the **Object and Actions** area, select the desired object or action:

To add a hotkey for an action,	click the desired action. In the **Keys** area, the **Add key** button appears.
To add a hotkey for an action which is related to the desired object (radio, channel, talkgroup, or category),	expand the desired node, and then click the desired object. In the **Keys** area, the **Add key** button appears.
To add a hotkey for initiating a call to a telephone subscriber or a dispatcher,	perform the following actions: 1. Expand the **Telephone Subscribers** or **Dispatchers** node. The list of available telephone subscribers or dispatchers appears. 2. Click the desired object. In the **Keys** area, the **Add key** button appears.

5. In the **Keys** area, click the **Add key** button.

Controls for the hot key configuration appear in the **Keys** area.

6. From the Input Devices list, select the desired input device:

To use a keyboard,	select **Keyboard**.
To use an external DirectInput device connected using USB port,	perform the following actions: 1. Select **Input Device (DirectInput)**. The list of available devices appears next to the Input Devices list. 2. From the list that appears, select the desired USB device.
To use an external HID device connected using USB port,	perform the following actions: 1. Select **Input Device (HID)**. The list of available devices appears next to the Input Devices list. 2. From the list that appears, select the desired USB device.
To use an external device connected using COM port,	perform the following actions: 1. Select **External Device COM Port**. The list of available pins of COM port appears next to the Input Devices list. 2. From the list that appears, select the desired pin. 3. Perform [step 9]().

7.   Under the Input Devices list, click the Assign Hotkey button.
     White dots appear on the button, and the **Press desired key** message appears next to it.
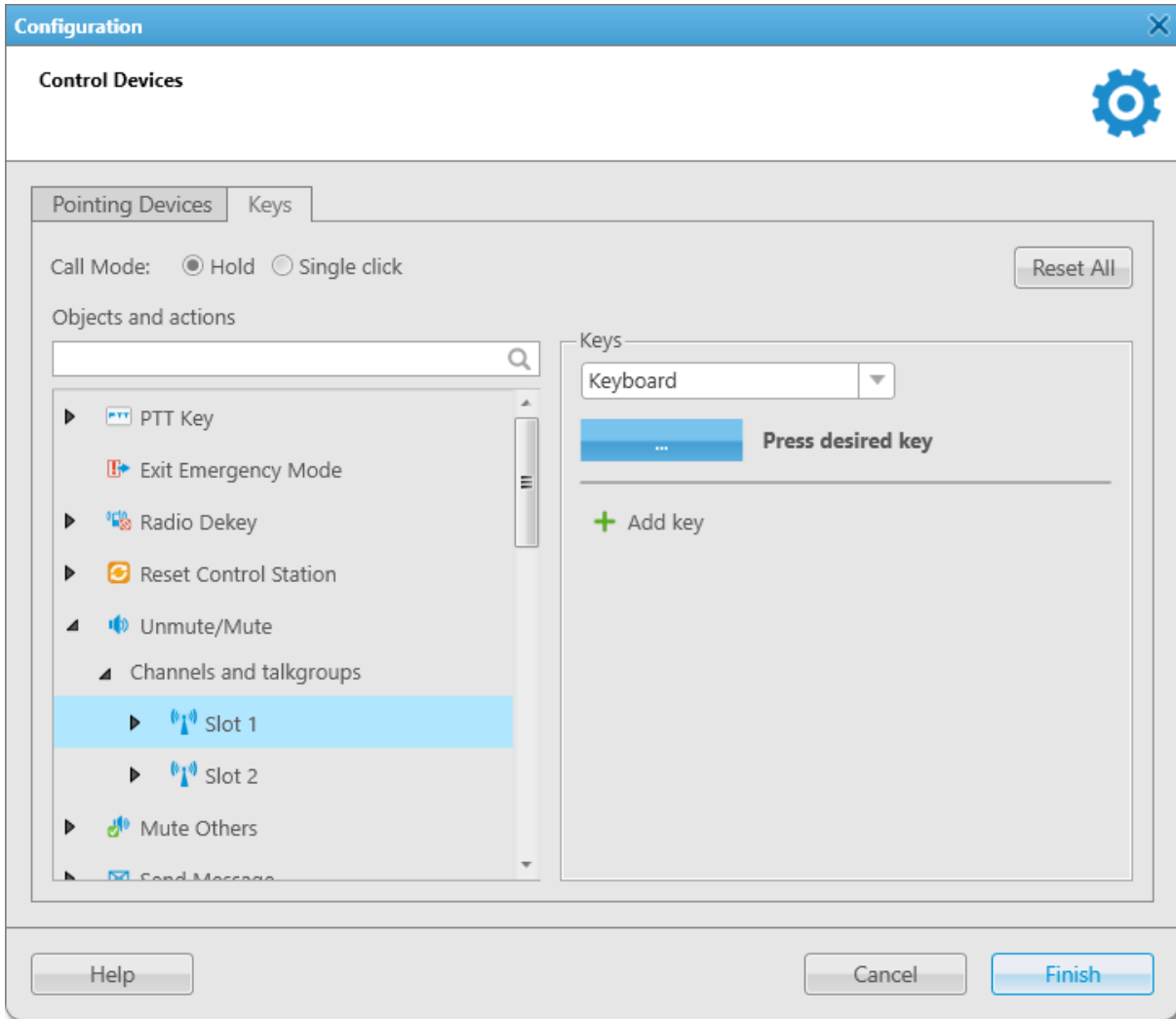
8.   Press the key or key combination you want to assign to the object or action. For details, see Keys.
     The key or key combination that you pressed is displayed on the Assign Hotkey button and the **Press desired
     key** message disappears.

9.   To save changes and close the window, click **Finish**.

Postrequisites:

To edit or delete the assigned hotkey, see Editing and Deleting Hotkeys.

2.2.1.5 Editing and Deleting Hotkeys

Follow the procedure to edit or delete a hotkey.

Procedure:

1.   On the menu bar, click **Settings (⚙)** → **Equipment** → **Control Devices**.
     The **Control Devices** window appears.

2.   Open the **Keys** tab.

3.   On the tab, perform one of the following actions:

To change the input device,	see step 6 of the <u>Assigning Hotkeys</u> procedure.
To assign another hotkey to an action or object,	see steps 7-8 of the <u>Assigning Hotkeys</u> procedure.
To delete a hotkey,	perform the following actions:

> 1.   In the **Objects and Actions** area, select the desired object or action by expanding the desired node.
>   In the **Keys** area, the hotkey assigned to the object or action appears.
>
> 2.   To the right of the desired assigned hotkey, click **Delete**.
>   The hotkey disappears from the **Keys** area.

To delete all added hotkeys,	click **Reset All**. All the hotkeys assigned to objects and actions in SmartPTT Dispatcher are deleted.

> **NOTE**
> The **Reset All** button cannot delete the default hotkey entry of the PTT button, but it can reset a hotkey assigned by the user.
> For information on the default PTT button hotkey, see <u>Keys</u>.

4.   To save changes and close the window, click **Finish**.

2.2.2 Sound

In the **Sound** window, you can perform the following actions:

* Configure general sound settings.

* Configure sound settings of a Tipro Phone Module.

* Configure output devices for system objects.

* Configure muting and dispatcher sound settings.

> **WARNING**
> Before configuring sound settings, ensure that all required sound devices are connected and enabled.
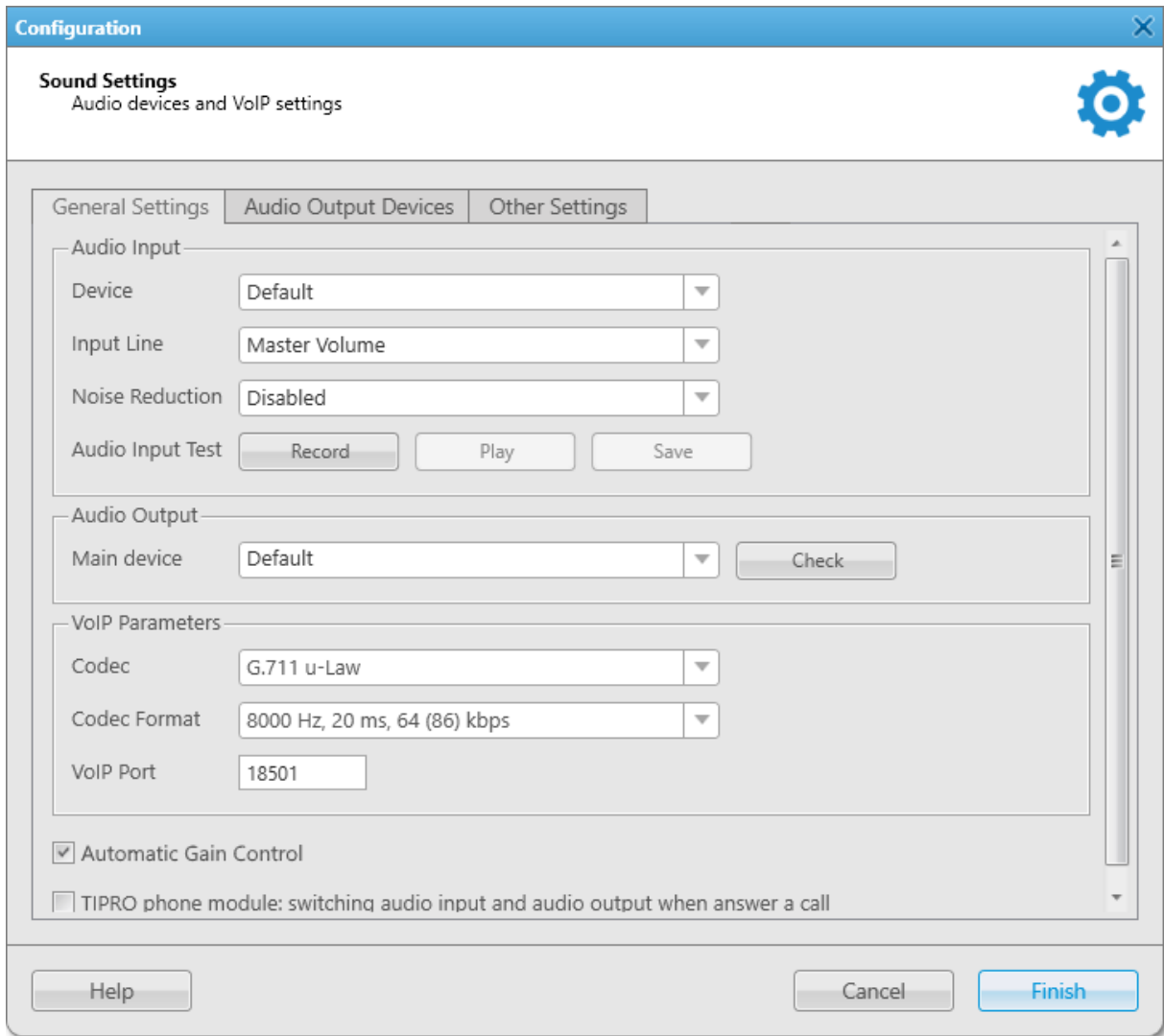
The window is available by clicking **Settings (⚙)** → **Equipment** → **Sound** on the menu bar and provides the following tabs:

- The **General Settings** tab. For details, see General Settings.

- The **Audio Output Devices** tab. For details, see Audio Output Devices.

- The **Other Settings** tab. For details, see Other Settings.

For information on SmartPTT Dispatcher sound settings, see the sections below.

2.2.2.1 General Settings

In the **General Settings** tab of the **Sound** window, you can configure general sound settings of SmartPTT Dispatcher.

> **WARNING**
> Before configuring sound settings, ensure that all required sound devices are connected and enabled.
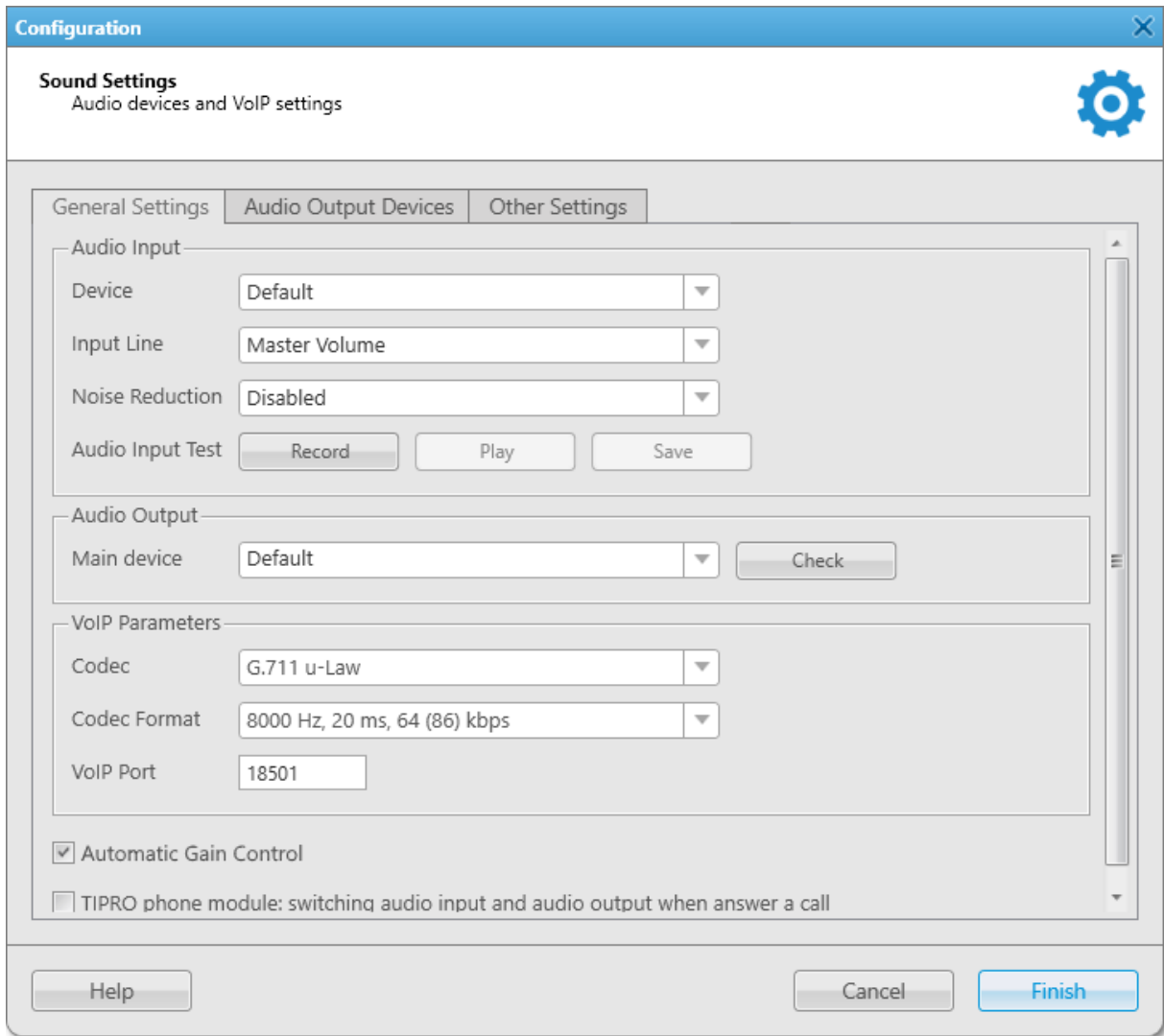
The **Audio Input** area provides the following elements:

Device

    A list of audio device to which the microphone is connected.

    By default the device used by the operating system is selected (*Default*).

    It is strongly recommended to select the specific device from the list instead of *Default*.

Input Line

    Audio mixer line used to connect a microphone.

Noise Reduction

    Makes dispatcher sound clearer by reducing noises. Disabled by default.

    You can select a level of noise reduction from 3 to 18 dB. If voice and noise levels are the same or close, do not enable noise reduction.

Audio Input test

    Provides buttons for checking a sound of the audio input device:

- The **Record** button initiates a microphone sound recording and unblocks **Play** and **Save** buttons after you stop the recording.

- The **Play** button plays the recorded sound.

- The **Save** button saves the recorded sound on the computer.

The **Audio Output** area provides the following elements:

Main device

The device that is used to play all sounds except for those for which personal audio output device is configured.

By default the device used by the operating system is selected (*Default*).

It is strongly recommended to select the specific device from the list instead of *Default*.

Check

Checks the sound of the selected audio output device. When pressed, changes to the **Stop** button.

The **VoIP Parameters** area provides the following elements:

Codec

Audio stream compression method.

Codec Format

Audio stream sampling frequency.

VoIP Port

The box in which you can specify a port for sound stream receiving.

Below the area the following elements are provided:

Automatic Gain Control

Enables feature that adjusts the volume of incoming calls. By default, the check box is selected.

TIPRO phone module: switching audio input and audio output when answer a call

The check box activates switching between main audio output/input devices and audio output/input devices of the phone module when you lift or put down the handset.

The check box also provides areas and controls for specifying audio devices for a Tipro phone module. The specified audio devices will be used after you lift the module handset.
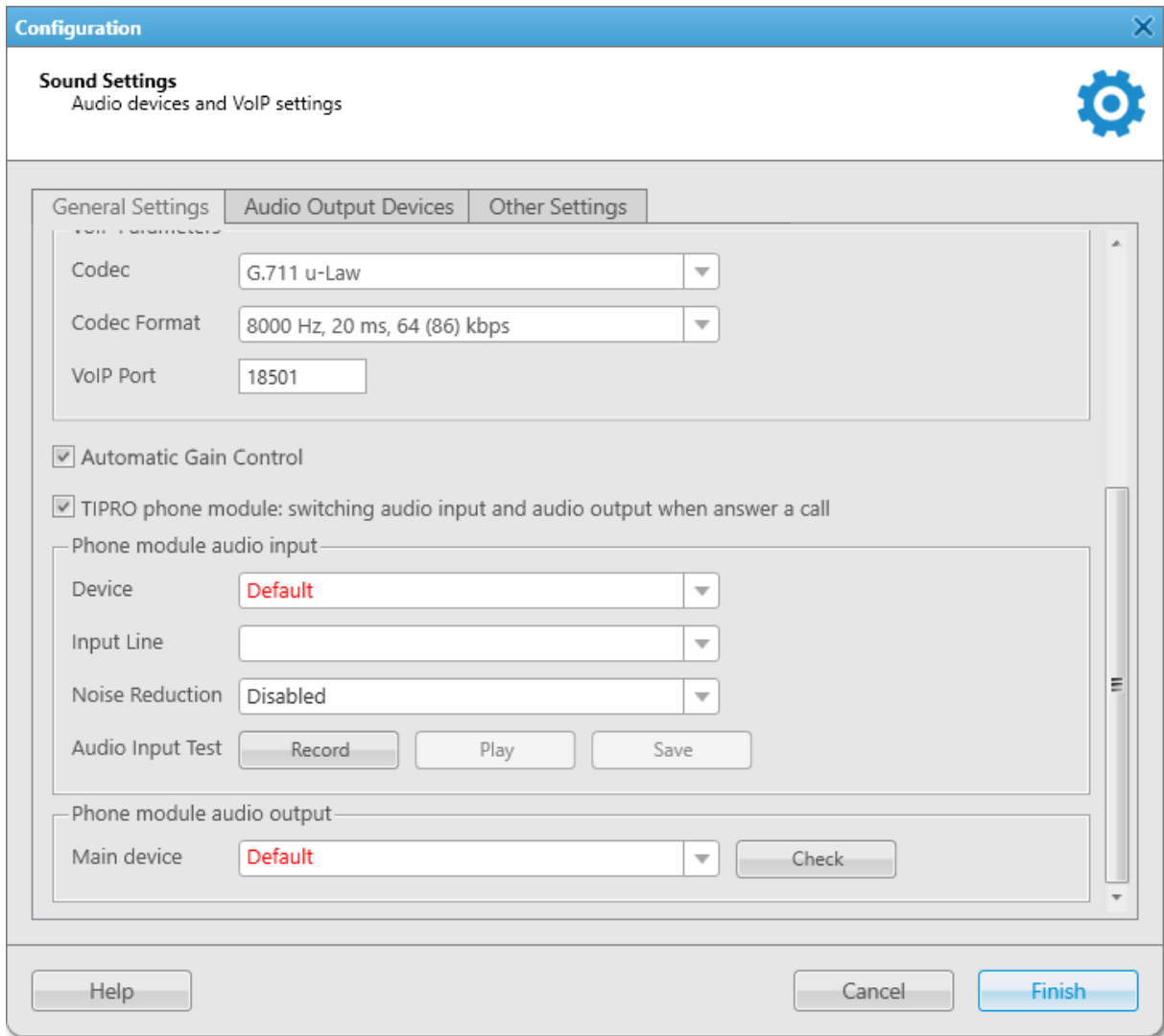
The **Phone module audio input** area provides the following elements:

Device

A list of audio devices of the Tipro Phone Module. It is recommended to select a specific audio input device instead of *Default*.

If the selected device matches the device selected as general input device, it becomes red and either phone module or general input device should be changed.

Input Line

Audio mixer line of the Tipro Phone Module handset.

Noise Reduction

Makes sound clearer by reducing noises. Disabled by default.

You can select a level of noise reduction from 3 to 18 dB. If voice and noise levels are the same or close, do not enable noise reduction.

Audio Input test

Provides buttons for checking a sound of the audio input device:

- The **Record** button initiates a microphone sound recording and unblocks **Play** and **Save** buttons after you stop the recording.

- The **Play** button plays the recorded sound.

- The **Save** button saves the recorded sound on the computer.

The **Phone module audio output** area provides the following elements:

Main device
> Audio device to which headsets or speakers are connected.

Check
> Checks the sound of the selected audio output device. When pressed, changes to the **Stop** button.

2.2.2.2 Audio Output Devices

In the **Audio Output Devices** tab you can manage virtual audio output devices, and then assign them to the desired system objects.
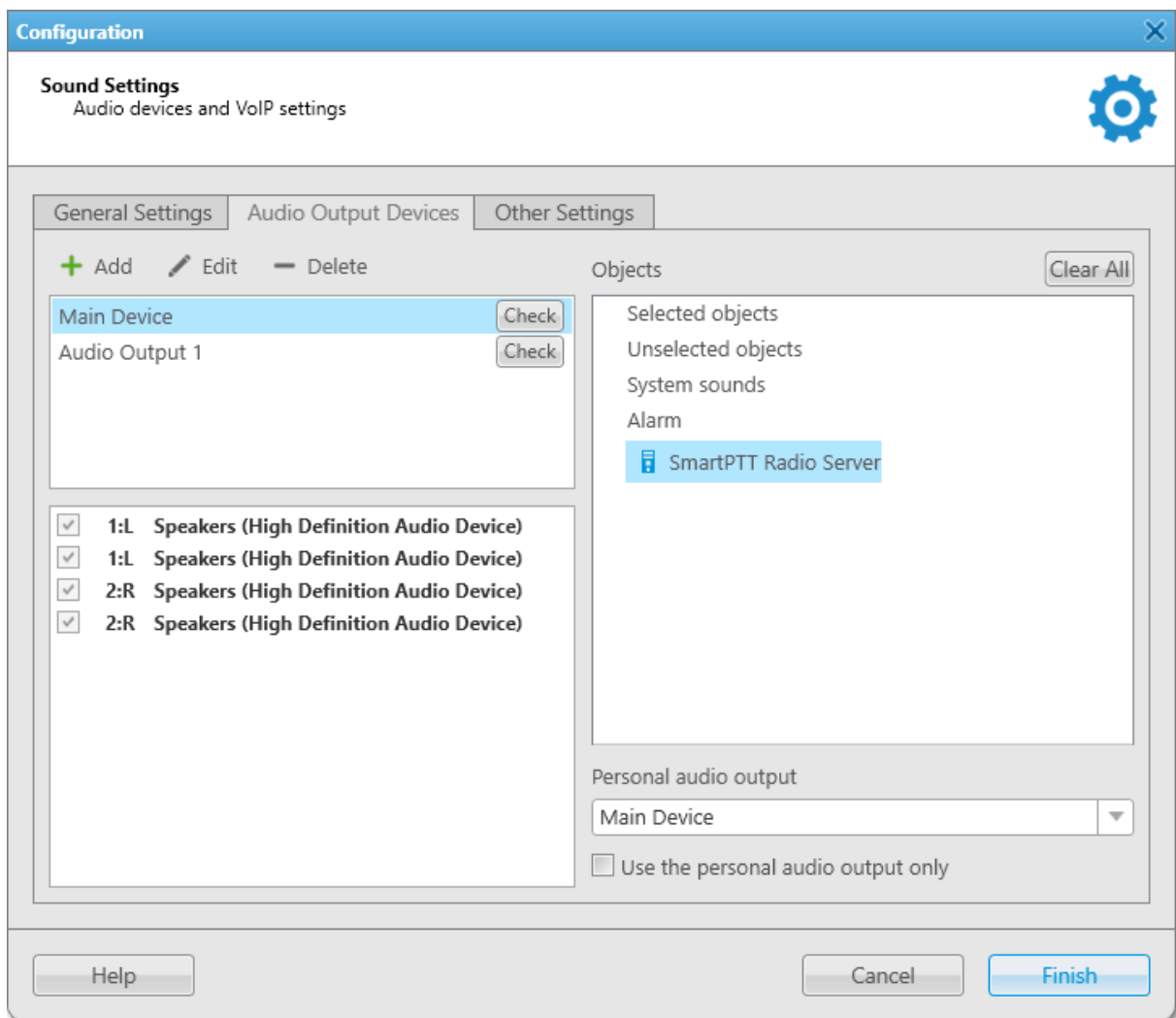
The **Audio Output Devices** tab provides the following elements:

Add
> Adds a new virtual audio output device to the Virtual audio output devices box. This device is used only in SmartPTT Dispatcher.

Edit

Can be used for renaming a virtual audio output device in the Virtual audio output devices box. You cannot rename the **Main Device** virtual device.

Delete

Deletes the selected virtual audio output device in the Virtual audio output devices box. You cannot delete the **Main Device** virtual device.

Virtual audio output devices

The box contains virtual audio output devices that are used only in SmartPTT Dispatcher. By default has **Main Device** virtual device that cannot be deleted and renamed.

You can use the **Add**, **Edit**, and **Delete** buttons to manage virtual devices in the box, and the **Check** button to check the sound of the virtual device.

NOTE
To check the sound of an added virtual device, you should select the desired sound channel in the Channels of virtual Audio Output devices box, and then press the **Check** button.

Sound channels of the virtual audio output device

The box contains audio channels of the virtual device selected in the **Audio Output virtual devices** box.

These channels can be selected for the virtual audio output device, using which the sound is played in the system.

All audio channels of the **Main Device** virtual device are selected by default and cannot be customized.

Objects

A box containing system objects to which you can assign a virtual audio output device.

The main objects in the **Objects** box are the following:

Selected objects

Objects that are selected or whose call window is open and active (the window has the blue title bar, and the PTT button has the blue frame). The volume of the selected objects is adjusted in the Sound panel.

By default, the **Main Device** virtual device is selected as an audio output device for selected objects.

NOTE
Telephone subscribers, other dispatchers, and conferences cannot be selected objects.

Unselected objects

Objects that are unselected. The volume of the selected objects is adjusted in the **Sound** panel. For details, see Sound.

By default, the **Main Device** virtual device is selected as an audio output device for unselected objects.

System sounds

All system sounds such as the following:

- Sound of a triggered rule

- Sound of the transmission initiating

- Notifications of dispatcher and telephone subscriber incoming calls

- Sound of call records played in the both dispatcher and radioserver Event Log

- Sound of system messages

- Notification of private radio call request

- Sound of the Call Alert command

The volume of the system sounds is adjusted in the **Sound** panel. For details, see Sound.

By default, the **Main Device** virtual device is selected as an audio output device for system sounds.

Alarm

Sound of emergency and emergency calls.

You cannot change the volume of emergency sound or mute it.

For information on changing volume of emergency calls sound, see Channel Properties.

NOTE

If *<No>* is selected from the **Personal audio output** list, the device selected for selected/unselected objects is used for emergency and emergency calls.

Other objects appear in the **Objects** box only when they are available in the system. These objects are:

- Radio servers (📱)

- Channels (📡)

- Talkgroups (👥)

Personal audio output

The list from which you can select the desired audio output device for the object. Independently on the selected device, the sound is also played using the main device. It is applicable to all objects except for system sounds. You can select the following devices:

- If you select *<No>*, the sound of a channel or a talkgroups is played using the devices selected for the selected/unselected objects, or using the main device. The sound of an alarm object or a radio server is played only using the device selected for the selected/unselected objects.
  Unavailable for selected/unselected objects and system sounds.

- If you select *Main Device*, the sound is played using the default virtual audio output device.
  The *Main Device* is assigned to selected/unselected objects and system sounds by default.

- If you select any of the devices manually added to the **Virtual audio output** devices box, the sound is played using this device.

Use the personal audio output only

If the check box is selected, main device and devices set for selected/unselected objects are ignored. The sound is played only using the device selected from the **Personal audio output** list.
Unavailable for main objects such as selected/unselected objects, system sounds, and alarm.

Clear All

Resets all system objects to default state.

2.2.2.3 Other Settings

In the **Other Settings** tab you can configure additional sound settings for SmartPTT Dispatcher.
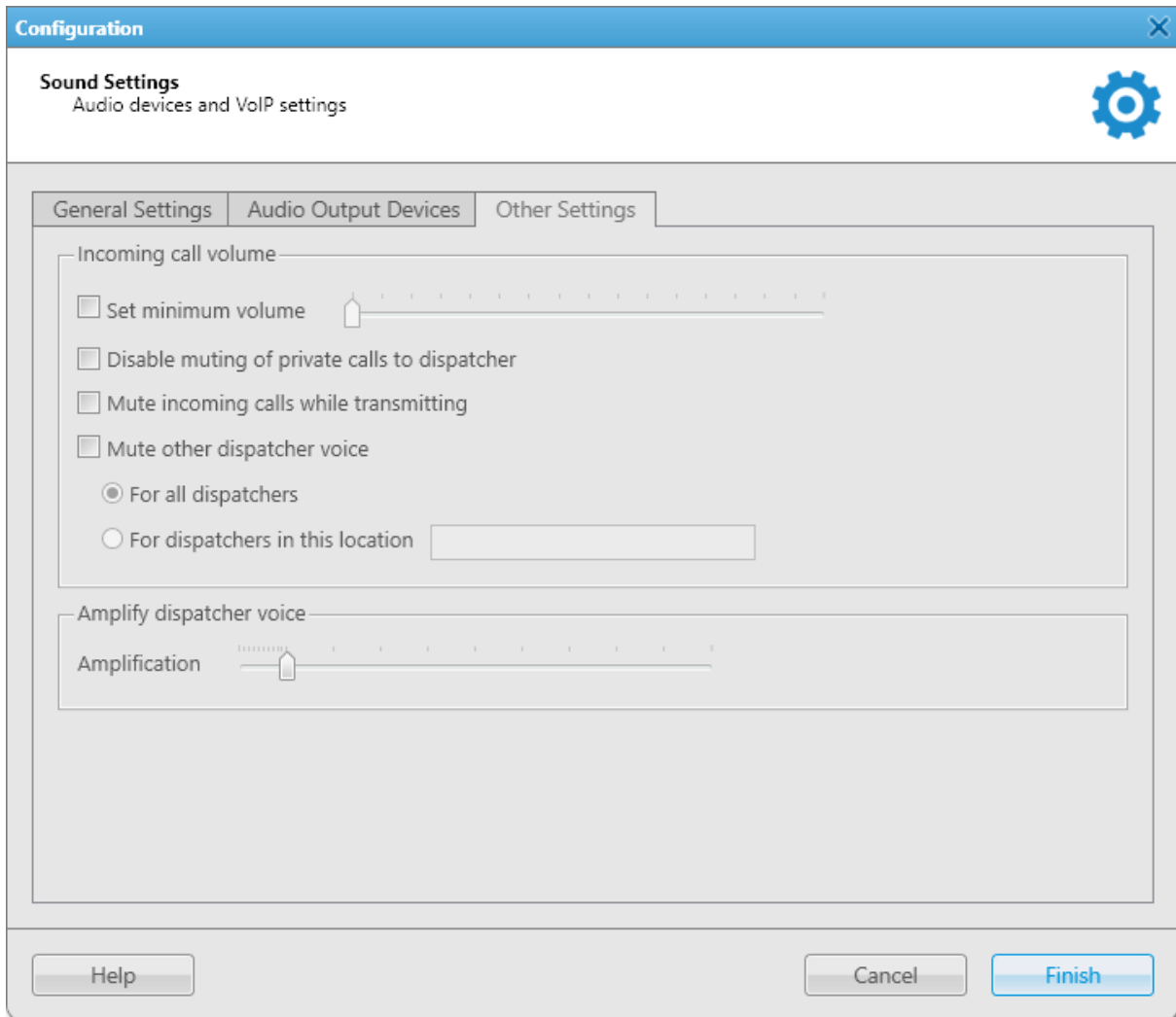
The **Incoming call volume** area provides the following elements:

Set Minimum Volume

If selected, dispatcher cannot mute SmartPTT Dispatcher sound, but only turn down the volume to minimum. The check box unblocks the slider for setting the minimum volume level in SmartPTT Dispatcher. The minimum value is 10% of the general volume level.

> **NOTE**
> The specified level affects only SmartPTT Dispatcher and depends on the volume level of the operating system.

Disable muting of private calls to dispatcher

If selected, incoming transmissions are never muted in SmartPTT Dispatcher.For example, if the channel sound is muted or the **Mute incoming calls while transmitting** check box is selected, dispatcher will still hear incoming private calls. For information on incoming calls, see Voice Calls.

Mute incoming calls while transmitting

If selected, all incoming calls are muted while outgoing transmission.

Mute other dispatcher voice

Activates muting of other dispatchers and unblocks the **For all dispatchers** and **For dispatchers in this location** options.

For all dispatchers

Mutes transmissions of all dispatchers in the system.

For dispatchers in this location

Unblocks the field in which you can specify a name or a number of a location where dispatchers are located. All dispatchers with the same value specified in the field will not hear each other's transmissions.
The location value must contain no more than 50 characters.

The **Amplify dispatcher voice** area provides the **Amplification** slider for increasing or decreasing the volume level of the dispatcher voice in outgoing transmissions. The default value is *1* (amplification is not applied).

2.2.2.4 Configuring Sound Settings

In SmartPTT Dispatcher you can perform the following actions for configuring its sound settings:

- Configure general sound settings. For details, see Configuring General Sound Settings.

- Configure sound settings of a Tipro Phone Module. For details, see Configuring Sound Settings of Tipro Phone Module.

- Configure muting settings. For details, see Configuring Muting Options.

- Configure dispatcher sound settings. For details, see Configuring Dispatcher Sound Options.

2.2.2.4.1 Configuring General Sound Settings

Follow the procedure to configure general sound settings.

Prerequisites:

Ensure the required audio input/output devices are connected and enabled.

Procedure:

1. On the menu bar, click **Settings (⚙) → Equipment → Sound**.
The **Sound Settings** window appears.

2. In the **Sound Settings** window, open the **General Settings** tab.

3. In the **Audio Input** area, configure settings of the audio input device:

   a. From the **Device** list, select the desired output device.

   b. From the **Input Line** list, select the desired input line.

   c. *(Optional)* From the **Noise Reduction** list, select the desired level of a noise reduction. For details, see General Settings.

4. Check the selected audio input device:

   a. Click the **Record** button and speak into the device.
   The **Record** button changes to **Stop**.

    b.   Click **Stop** to stop the recording.

        The **Stop** button changes to **Record** and other buttons become unblocked.

    c.   Click **Play** to listen to the recorded voice.

        The **Play** button changes to **Stop** and you will hear the voice if the input device works properly.

    d.   *(Optional)* Click **Save** to save the recorded voice sample.

5.   In the **Audio Output** area, configure settings of the audio output device:

    a.   From the **Main device** list, select the desired output device.

    b.   Click **Check** to check the selected output device.

        The **Check** button changes to **Stop** and you will hear the sound if the output device works properly.

    c.   Click **Stop** to stop the output device check.

6.   In the **VoIP Parameters** area, configure settings of the voice transmitting:

    a.   From the **Codec** list, select the desired codec.

    b.   From the **Codec Format** list, select the codec sampling frequency.

    c.   In the **VoIP Port** box, enter the desired port using which the voice is transmitted.

7.   *(Optional)* Select the **Automatic Gain Control** check box to adjust the volume of incoming calls.

8.   To save changes and close the window, click **Finish**.

2.2.2.4.2 Configuring Sound Settings of Tipro Phone Module

Follow the procedure to configure sound settings of a Tipro Phone Module.

> **NOTE**
> Audio input/output devices of the Tipro Phone Module should differ from general sound input/output devices.

Prerequisites:

Ensure the required audio input/output devices are connected and enabled.

Procedure:

1.   On the menu bar, click **Settings (⚙) → Equipment → Sound**.
    The **Sound Settings** window appears.

2.   In the **Sound Settings** window, open the **General Settings** tab.

3.   Configure the general sound settings of SmartPTT Dispatcher. For details, see Configuring General Sound Settings.

4.   Select the **TIPRO phone module: switching audio input and audio output when answer a call** check box.

5.   In the **Phone module audio input** area, configure audio input device of the phone module:

    a.   From the **Device** list, select the desired output device.

b.   From the **Input Line** list, select the desired input line.

c.   *(Optional)* From the **Noise Reduction** list, select the desired level of a noise reduction. For details, see General Settings.

6.   Check the selected audio input device:

a.   Click the **Record** button and speak into the device.
The **Record** button changes to **Stop**.

b.   Click **Stop** to stop the recording.
The **Stop** button changes to **Record** and other buttons become unblocked.

c.   Click **Play** to listen to the recorded voice.
The **Play** button changes to **Stop** and you will hear the voice if the input device works properly.

d.   *(Optional)* Click **Save** to save the recorded voice sample.

7.   In the **Phone module audio output** area, configure audio output device of the phone module:

a.   From the **Main device** list, select the desired output device.

b.   Click **Check** to check the selected output device.
The **Check** button changes to **Stop** and you will hear the sound if the output device works properly.

c.   Click **Stop** to stop the output device check.

8.   To save changes and close the window, click **Finish**.

2.2.2.4.3 Configuring Muting Options

Follow the procedure to configure muting options.

Procedure:

1.   On the menu bar, click **Settings (⚙)** → **Equipment** → **Sound**.
The **Sound Settings** window appears.

2.   In the **Sound Settings** window, open the **Other Settings** tab.

3.   In the **Incoming call volume** area, configure the mute settings:

To disable muting of incoming private calls,	select the **Disable muting of private calls to dispatcher** check box.
To mute incoming calls during outgoing transmissions,	select the **Mute incoming calls while transmitting** check box.
To activate muting of all dispatchers,	perform the following actions: 1. Select the **Mute other dispatcher voice** check box. 2. Select the **For all dispatchers** option.

To activate muting of the desired dispatchers,	perform the following actions: 1. Select the **Mute other dispatcher voice** check box. The options below become available. 2. Select the **For dispatchers in this location** option. 3. In the filed to the right, type the location name or number. 4. Using entered data, repeat the procedure for other dispatchers that should not hear each other. Dispatchers for whom in the **For dispatchers in this location** field the identical data is set, are unable to hear each other.

4. To save changes and close the window, click **Finish**.

2.2.2.4.4 Configuring Dispatcher Sound Options

Follow the procedure to configure dispatcher sound options.

Procedure:

1. On the menu bar, click **Settings (⚙) → Equipment → Sound**.
The **Sound Settings** window appears.

2. In the **Sound Settings** window, open the **Other Settings** tab.

3. On the **Other Settings** tab perform one of the following actions:

To set minimum volume in SmartPTT Dispatcher,	perform the following actions: 1. In the **Incoming call volume** area, select the **Set minimum volume** check box. 2. Move the slider to the desired volume level.
To adjust a dispatcher voice in outgoing transmissions,	in the **Amplify dispatcher voice** area move the **Amplification** slider to the desired volume level.

4. To save changes and close the window, click **Finish**.

2.2.2.5 Configuring Multichannel Sound

Configuring multichannel sound includes the following:

- Configuring virtual audio output devices. For details, see Configuring Audio Output Device.

- Assigning virtual audio output devices to system objects. For details, see Assigning Audio Output Devices to System Objects.

2.2.2.5.1 Configuring Audio Output Device

Follow the procedure to configure virtual audio output device.

Prerequisites:

Ensure that audio input/output devices of SmartPTT Dispatcher are configured.

Procedure:

1. On the menu bar, click **Settings (⚙) → Equipment → Sound**.
   The **Sound Settings** window appears.

2. In the **Sound Settings** window, open the **Audio Output Devices** tab.

3. Click **Add**.
   A new audio output device appears in the Virtual audio output devices box.
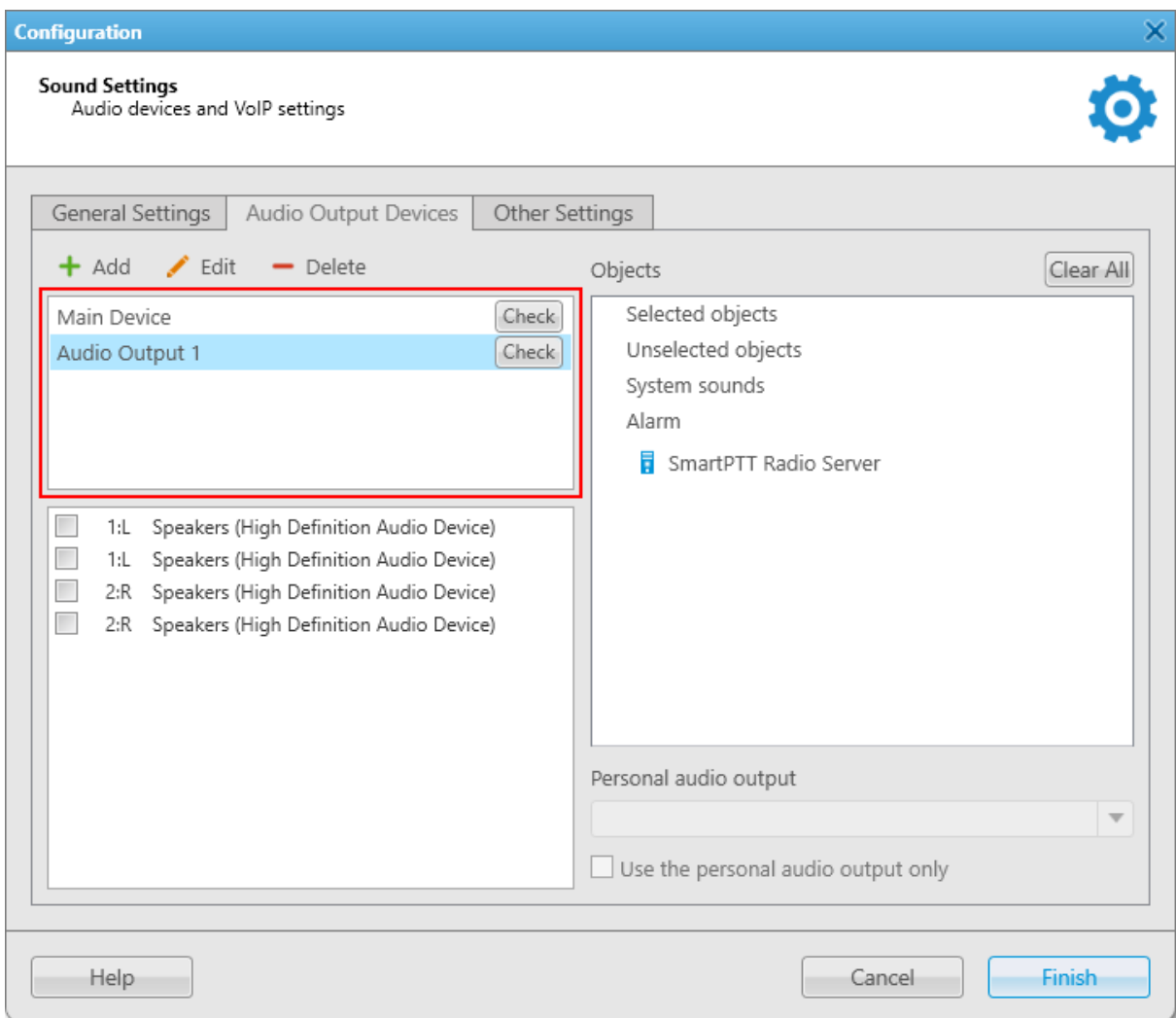
4.   *(Optional)* Click **Edit**, to rename the added virtual device, and then press Enter.

5.   In the Sound channels of virtual audio output devices box, select the desired sound channels for the added audio output device.
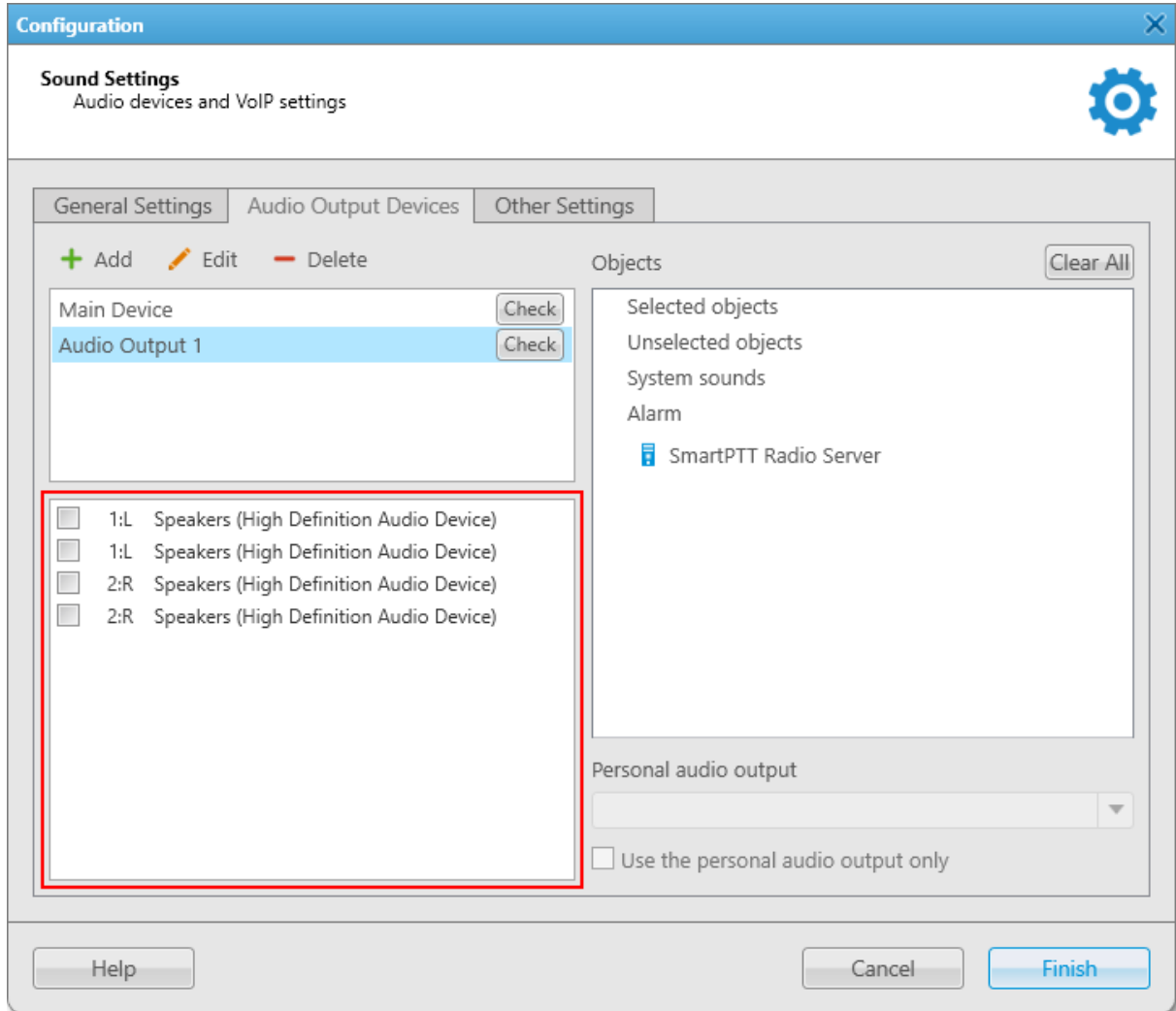
6.   In the Virtual audio output devices box, click **Check** to check the selected sound channels.
The **Check** button changes to **Stop**.

7.   Click **Stop** to stop the sound check.

8.   To save changes and close the window, click **Finish**.

Postrequisites:

To assign the added device to the system objects, see Assigning Audio Output Devices to System Objects.

2.2.2.5.2 Assigning Audio Output Devices to System Objects

Follow the procedure to assign virtual audio output device to a system object.

Prerequisites:

Ensure the desired virtual audio device is added to the Virtual audio output devices box and configured properly. For details, see Configuring Audio Output Device.

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Equipment** → **Sound**.
   The **Sound Settings** window appears.

2. In the **Sound Settings** window, open the **Audio Output Devices** tab.

3. In the **Objects** box of the **Audio Output Devices** tab, click the desired object.

4. From the **Personal audio output** list, select a virtual device for the object.

5. *(Optional)* Select the **Use the personal audio output only** check box to use for the system object only the device selected from the **Personal audio output** list.
   For details, see <u>Audio Output Devices</u>.

6. To save changes and close the window, click **Finish**.

Postrequisites:

To reset all system objects to default state, click **Clear All**.

2.2.3 Tipro Console

SmartPTT system supports third-party equipment, for example, Tipro modular console with BeFREE touchcomputer or without it.

To make the console work with SmartPTT system, perform the following actions:

1. For Tipro modular console with BeFREE touchcomputer, install additional applications: ChangeMe Utility, Tipro OPOS (these are delivered together with Tipro console), Microsoft Point of Service for .NET (POS for .NET) v1.14 (<u>http://www.microsoft.com/en-us/download/details.aspx?id=42081</u>).

2. For Tipro modular console without touchcomputer, connect Tipro console to the PC with SmartPTT Dispatcher installed. Install other additional software, such as ChangeMe Utility, Tipro OPOS (these are delivered together with Tipro console), Microsoft Point of Service for .NET (POS for .NET) v1.14 (<u>http://www.microsoft.com/en-us/download/details.aspx?id=42081</u>).

3. Contact SmartPTT support team (<u>http://support.smartptt.com/hc/en-us/requests/new</u>) for Tipro configuration file.

4. Apply the received Tipro configuration file using ChangeMe Utility.

For information on configuring sound settings of Tipro console, see <u>Configuring General Sound Settings</u>.
For information on configuring sound settings of Tipro Phone Module, see <u>Configuring Sound Settings of Tipro Phone Module</u>.
For information on actions on tapping call elements or assigning hotkeys using Tipro console, see <u>Configuring the Call Element Actions</u>.

2.3 Telephone Interconnect

The **Telephone Interconnect** submenu is available from the **Settings (⚙)** menu on the SmartPTT Dispatcher menu bar. It provides the following configuration options:

- Configuring settings required for establishing connection to telephone subscribers.
For details, see Telephone Interconnect Settings.

- Configuring the list of telephone subscribers in SmartPTT Dispatcher
For details, see Telephone Subscribers Settings.

2.3.1 Telephone Interconnect Settings

The Telephone Interconnect feature provides the ability to establish connection between operators and telephone subscribers. A call can be initiated both by operators and telephone subscribers. Voice between them is transmitted in full-duplex mode and through the Real-time Transport Protocol (RTP). Connection and subscriber addressing are performed over the Session Initiation Protocol (SIP). SmartPTT Dispatcher provides connection to telephone subscribers using one of two modes: the client mode (SIP account) or the gateway mode (SIP trunk).

Important
Access to full functionality of the Telephone Interconnect feature requires installing the corresponding license and having the corresponding permission (for operators). For details, see Licenses and Operators.

NOTE
The SIP protocol can be blocked by the Windows firewall. Contact your system administrator to check if your firewall settings allow SIP.

SmartPTT Dispatcher Telephone Interconnect features

- Voice call from SmartPTT Dispatcher to a telephone subscriber

- Voice call from a telephone subscriber to SmartPTT Dispatcher

- Service tones playback (sound alert for incoming call, sound alert for outgoing call)

- Software-based volume gain for calls

Telephony Glossary

VoIP gateway is a device bridging conventional telephone networks and equipment to VoIP telephone networks. Connection between SmartPTT Dispatcher and the PBX can be established with or without the VoIP gateway.

Private Branch eXchange (PBX) is a telephone exchange normally used in offices.

Public Switched Telephone Network (PSTN) is the wired phone system over which landline telephone calls are made using circuit switching.

Establishing connection via SIP account

To establish a connection using SIP account, the following conditions must be met:

- In the PBX settings, create a SIP account.

- Add the SIP account to SmartPTT Dispatcher.

- Allow calls to telephone subscribers in SmartPTT Dispatcher (by selecting the corresponding check box).

For information on establishing connection via SIP account, submit a request to the SmartPTT Technical Support Center.

Establishing connection via SIP trunk

To establish a connection using SIP trunk, the following conditions must be met:

- In the PBX settings, create a SIP trunk connection for SmartPTT Dispatcher.

- Connect SmartPTT Dispatcher to the PBX.

- Allow calls to telephone subscribers in SmartPTT Dispatcher (by selecting the corresponding check box).

For information on establishing connection via SIP trunk, submit a request to the SmartPTT Technical Support Center.

Important
If SIP trunk for SmartPTT Dispatcher is configured in the PBX settings, telephone calls will be established via SIP trunk by default, even if the SIP account mode is configured in SmartPTT Dispatcher.

To provide correct functioning of the Telephone Interconnect feature, you need to configure parameters of connection between SmartPTT Dispatcher and telephone subscribers in the **Telephone Interconnect** window.

You can open the window by clicking **Settings (⚙)** → **Telephone Interconnect** → **Telephone Interconnect** on the menu bar.

The **Telephone Interconnect** window consists of four tabs. They provide the following configuration options:

- General settings required for correct functioning of the Telephone Interconnect feature.
  For details, see General Settings.

- Audio codecs used for processing incoming and outgoing audio.
  For details, see Codec Settings.

- SIP trunk authentication.
  For details, see SIP Trunk Authentication.

- SIP accounts.
  For details, see SIP Accounts.

2.3.1.1 General Settings

The **General Settings** tab provides controls for configuring general settings required for correct functioning of the Telephone Interconnect feature.

The **General Settings** tab consists of two main areas:

- **Dispatcher Settings**

- **VoIP Gateway Default Settings** (for SIP trunk authentication)

The **Dispatcher Settings** area provides the following elements:

Allow Calls to Telephone Subscribers

Activates the Telephone Interconnect feature providing SmartPTT Dispatcher with the ability to establish connection with telephone subscribers.

> **NOTE**
> If the **Allow Calls to Telephone Subscribers** check box is not selected, the **Telephone Subscribers** button on the menu bar is unavailable.

Transport

The protocol (TCP or UDP) used for SIP commands transmit. Must match the corresponding parameter on the PBX.

SIP Port

The UDP or TCP port used for receiving and sending SIP data packets. The port specified in this box must be available for incoming and outgoing traffic.

The default value is *5060*.

Phone Number

Telephone number at which telephone subscribers can call SmartPTT Dispatcher. This number is also displayed on the screen of the called device.

Interface

IP address of the local computer that is used for voice and commands transmit.

If the computer has only one IP address, the system selects it automatically. If the computer has more than one IP address, the desired IP address must be manually specified and be available to the VoIP gateway. Otherwise, all physical interfaces available on the computer will be used (the *Automatically* option).

RTP Ports

The ports used for connection to telephone subscribers.

Each connection to a telephone subscriber occupies two ports. Even port numbers are used by the RTP protocol. Odd port numbers are used by the RTCP protocol. The ports you specify must be available both for incoming and outgoing traffic.

The default range is from 18700 to 18748.

> **NOTE**
> If SmartPTT Dispatcher and SmartPTT Radioserver are installed on the same computer, they must be assigned different RTP ports. For example, port 5060 for SmartPTT Radioserver and port 5061 for SmartPTT Dispatcher.

Displayed Subscriber Name

The SmartPTT Dispatcher name displayed on the screen of the device receiving the call.

The **VoIP Gateway Default Settings** area provides the following elements:

Dial Prefix for Outgoing Calls

Numeric prefix added to the subscriber's number by SmartPTT Dispatcher. The VoIP gateway uses the prefix to determine the source of the call and the rules that must be applied to it.

For information on configuring rules in SmartPTT Dispatcher, see Custom Rules.

Dial Prefix for Incoming Calls

Numeric prefix added to the SmartPTT Dispatcher number that is displayed to telephone subscribers and must be used for calling back. This prefix must match the corresponding parameter on the PBX.

Default VoIP Gateway Address

The VoIP gateway IP address.

SIP Port

Number of the VoIP gateway UDP or TCP port used for receiving and sending SIP data packets.

The default value is *5060*.

The **VoIP Gateway Default Settings** parameters are used for establishing connection to telephone subscribers. If they are specified, you need to dial only the subscriber's phone number, the rest will be substituted automatically.

Play sound alert for incoming call

Plays an alert sound when a telephone subscriber calls SmartPTT Dispatcher.

Play sound alert for outgoing call

Plays an alert sound when SmartPTT Dispatcher calls a telephone subscriber.

Sound Level

Adjusts the volume level of the sound received from telephone subscribers in SmartPTT Dispatcher.

2.3.1.2 Codec Settings

On the **Codec Settings** tab you can activate/deactivate available audio codecs and change their priority. The codec priority defines which codec will be used first for the audio processing.
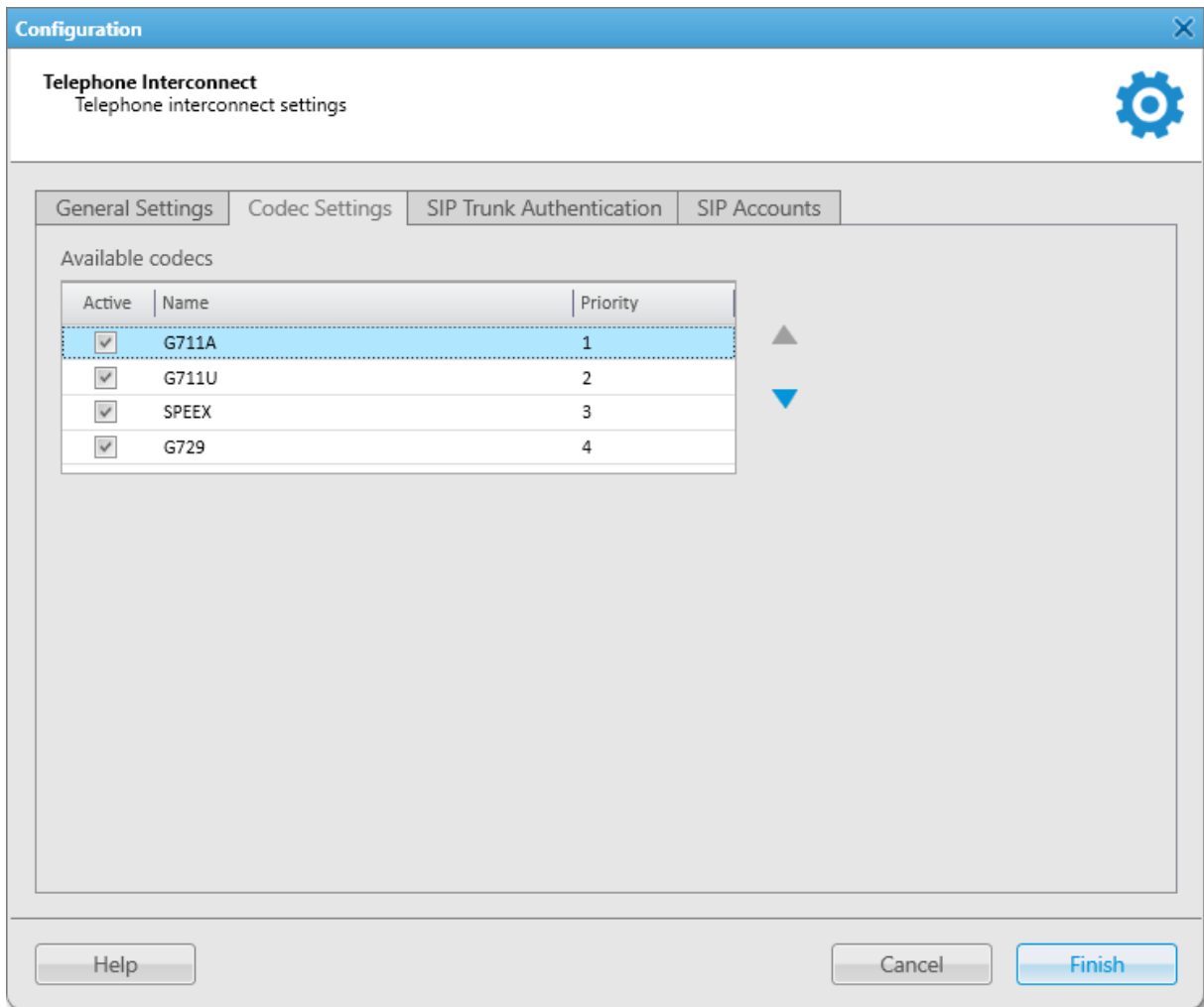
Currently, the following audio codecs are supported:

- G711A

- G711U

- SPEEX

- G729

NOTE
The G729 codec reduces audio quality due to a higher data compression ratio, which makes it suitable for low-capacity systems.

The **Codec Settings** tab contains the **Available codecs** table with information on available audio codecs and their priority.

The table consists of the following columns:

- The **Active** column contains the check box indicating the codec activation status.
  By selecting or clearing the check box, you can activate or deactivate the codec. Inactive codecs will not be used for the incoming audio processing.

> **Important**
> If the codecs supported by the PBX are deactivated in SmartPTT Dispatcher, voice data will not be transmitted.

- The **Name** column contains the audio codec name.

- The **Priority** column contains the number indicating the codec priority level. Audio codecs with higher priority will be used for audio processing in SmartPTT Dispatcher in the first place.
  The priority levels range from 1 to 4, from highest to lowest respectively. You can set the desired priority using the **Raise priority (▲)** and **Lower priority (▼)** buttons located to the right of the table.

For information on managing audio codecs, see the section below.

2.3.1.2.1 Managing Audio Codecs

Follow the procedure to activate/deactivate an audio codec or change its priority level.

Procedure:

1. Open the **Codec Settings** tab in the **Telephone Interconnect** window.

2. Perform the desired action:

To activate or deactivate the audio codec,	in the **Available codecs** table, in the **Active** column, select or clear the corresponding check box.
To change the audio codec priority,	perform the following actions: 1. In the **Available codecs** table, click the desired audio codec. 2. To the right of the **Available codecs** table, click **Raise priority (▲)** or **Lower priority (▼)** to raise or lower the codec priority respectively.

3. Click **Finish** to save changes and close the **Telephone Interconnect** window.

2.3.1.3 SIP Trunk Authentication

SIP trunking is used in the radio systems where SmartPTT Dispatcher has a static IP address. In this case, it registers on the PBX only once, without having to re-register on each session initiation. SIP trunking provides security by means of password authentication for incoming and outgoing calls.

The **SIP Trunk Authentication** tab provides controls for setting authentication parameters for incoming and outgoing calls. The tab consists of two main areas:

- Incoming Calls Authentication

- Outgoing Calls Authentication

The **Incoming Calls Authentication** area provides the following elements:

Enabled
   Activates the incoming calls authentication.

Realm

The parameter used for the incoming telephone calls authentication.

When SmartPTT Dispatcher receives a call, it requires the username and password valid for the specified realm. If the caller replies with valid credentials, connection to the called radio or talkgroup will be established.

If the parameter is not specified, SmartPTT Dispatcher replies to all authentication requests with the specified username and password.

User Name

The username required for authentication. Must be valid for the specified realm.

Password

The password required for authentication. Must be valid for the specified realm.

The **Outgoing Calls Authentication** area provides the following elements:

Enabled

Activates the outgoing calls authentication.

Realm

The parameter used for the outgoing telephone calls authentication.

If the parameter is specified, SmartPTT Dispatcher responds only to authentication requests with the username and password valid for the specific realm.

If the parameter is not specified, authentication is based on the username and password only.

User Name

The username required for authentication. Must be valid for the specified realm.

Password

The password required for authentication. Must be valid for the specified realm.

2.3.1.4 SIP Accounts

The **SIP Accounts** tab contains a table with information on SIP accounts added to SmartPTT Dispatcher. These parameters are used for establishing connection with subscribers on these servers.

Connection is established through a PBX account. SmartPTT Dispatcher regularly sends its authentication data and current IP address at defined intervals to re-register on the PBX and keep identification information on the server up-to-date.
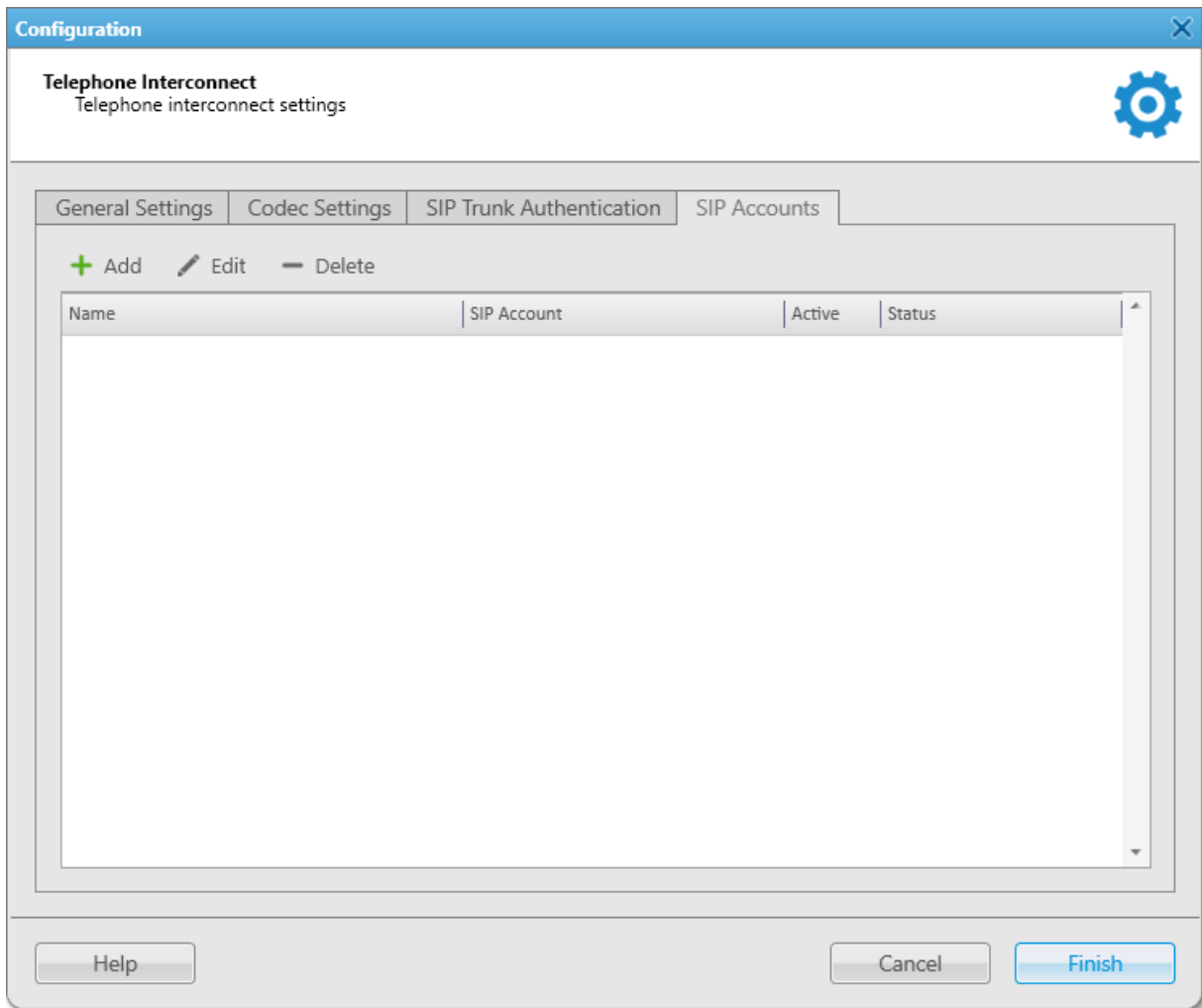
The table consists of the following columns:

Name

Displays the SIP account name.

SIP Account

Displays the full name of the SIP account.

Active

Displays the SIP account activation status. If the check box is selected, the account is active and can be used for establishing connection to telephone subscribers.

Status

Displays the account registration status on the PBX.

The following registration statuses are available:

- The *Registered* status indicates that the account is successfully registered on the PBX and is currently active.

- The *Not registered* status indicates that the account is not registered on the PBX and is currently inactive.

- The *Processing* status indicates that SmartPTT Dispatcher has sent a registration request and is currently waiting for the PBX response.

- Error messages indicate the errors that occurred during the registration process.

The entries in the table can be managed using the following controls:

Add (＋)

Opens the **SIP account** window for adding a new account.

For information on adding SIP accounts, see Managing SIP Accounts.

Edit (✎)

Opens the **SIP account** window for editing an existing account.

For information on editing existing SIP accounts, see Managing SIP Accounts.

Delete (▬)

Removes the selected account from the list.

For information on deleting SIP accounts, see Managing SIP Accounts.

For information on managing SIP accounts and the **SIP Account** window, see the sections below.
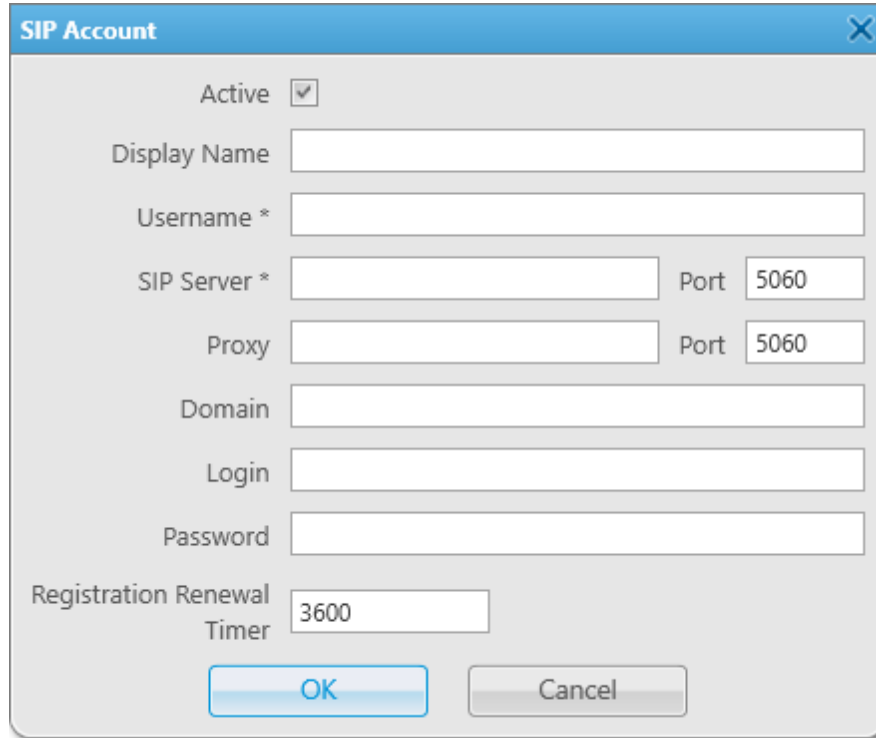
2.3.1.4.1 SIP Account Window

The **SIP Account** window provides the ability to add new or edit an existing SIP account.

You can open the **SIP account** window from the **SIP Accounts** tab of the **Telephone Interconnect** window in one of the following ways:

- By clicking the **Add (＋)** button in the top part of the window.

- By clicking the desired account in the table and then clicking the **Edit (✏)** button in the top part of the window.

- By double-clicking the desired account in the table.

The **SIP Account** window provides the following elements:

Active

Activates registration of the selected account on the PBX.

Display Name

The name that appears on the subscriber's device screen on receiving a call from SmartPTT Dispatcher.

Username

The account identifier on the PBX.

The required parameter.

SIP Server

The IP address of the remote PBX on which the account is registered.

The required parameter.

SIP Server Port

The PBX port used for receiving data.

The default value is *5060*.

Proxy

The IP address of a proxy server that can be used by SmartPTT Dispatcher for access to the PBX.

Some providers require using proxy for sending requests to PBXs.

Proxy Port

The proxy server port used for receiving data.

The default value is *5060*.

Domain

The PBX parameter facilitating telephone subscriber addressing. It is used by some PBXs for account authentication.

Login

Login for the account authentication on the PBX.

Password

Password for the account authentication on the PBX.

Registration Renewal Timer

The time period (in seconds) after which SmartPTT Dispatcher sends the SIP registration request and updates its current IP address on the PBX.

The default value is *3600*.

For information on managing SIP accounts, see the section below.

2.3.1.4.2 Managing SIP Accounts

Follow the procedure to add a new SIP account or activate/deactivate, edit, or delete an existing one.

Procedure:

1. On the menu bar, click **Settings (⚙) → Telephone Interconnect → Telephone Interconnect**.
   The **Telephone Interconnect** window appears.

2. Open the **SIP Accounts** tab, and then perform the desired action:

To add a new account,	perform the following actions:
	1. In the top part of the tab, click **Add (＋)**. The **SIP Account** window appears.
	2. In the **SIP Account** window, in the **Username** and **SIP Server** boxes, type your username and the desired PBX IP address.
	3. *(Optional)* Complete other boxes with desired information. For details, see <u>SIP Account Window</u>.
	4. Click **OK**. The new account appears in the table on the **SIP Accounts** tab.
To activate or deactivate an existing account,	in the table, select or clear the check box in the **Active** column.

To edit an existing account,	perform the following actions:
	1. In the table, click the desired account, and then click **Edit ( )**, or double-click the desired account. The **SIP Account** window appears.
	2. In the **SIP Account** window, edit the desired information, and then click **OK**.
To delete an existing account,	perform the following actions:
	1. In the table, click the desired account, and then click **Delete ( )**. The **Confirmation** window appears.
	2. In the **Confirmation** window, click **OK**. The selected account is removed from the table.

3. Click **Finish** to save changes and close the **Telephone Interconnect** window.

2.3.2 Telephone Subscribers

To facilitate interactions with telephone subscribers, you can configure the list of telephone subscribers in the **Telephone Subscribers** window. It provides the ability to add new telephone subscribers and edit and delete the telephone subscribers added earlier.

Connection to telephone subscribers not added to the list of telephone subscribers can be established by dialing their number manually using the dial pad.

You can open the **Telephone Subscribers** window by clicking **Settings (⚙)** → **Telephone Interconnect** → **Telephone Subscribers** on the menu bar.
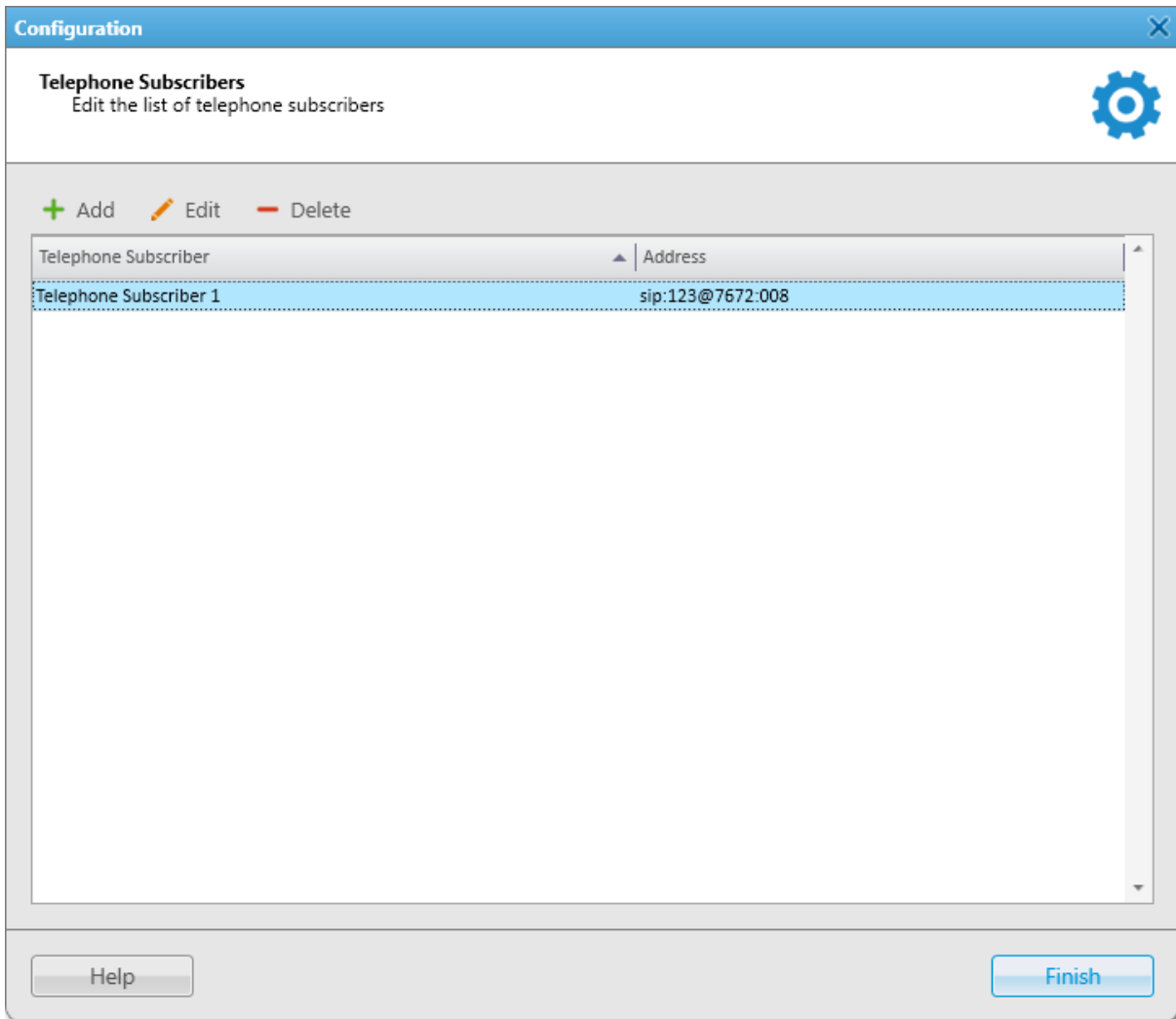
The **Telephone Subscribers** window contains a table with information on all registered telephone subscribers. It consists of the following columns:

- The **Telephone Subscriber** column contains the name of the telephone subscriber set in SmartPTT Dispatcher.

- The **Address** column contains the SIP address of the telephone subscriber.

The entries in the table can be managed using the following controls:

Add (+)

Opens the **Telephone Subscriber** window for adding a new telephone subscriber.

For information on adding new telephone subscribers, see <u>Adding and Editing Telephone Subscribers</u>.

Edit (✎)

Opens the **Telephone Subscriber** window for editing an existing telephone subscriber.

For information on this window, see <u>Telephone Subscriber Window</u>.

Delete (━)

Removes the selected subscriber from the SmartPTT Dispatcher list of telephone subscribers.

For information on managing telephone subscribers and the **Telephone Subscriber** window, see the sections below.

2.3.2.1 Telephone Subscriber Window

The **Telephone Subscriber** window provides the ability to add new and edit information on existing telephone subscribers.

You can open the **Telephone Subscriber** window from the **Telephone Subscribers** window in one of the following ways:

- By clicking the **Add (+)** button in the top part of the window.

- By clicking the desired subscriber in the table and then clicking the **Edit (✎)** button in the top part of the window.

- By double-clicking the desired subscriber in the table.

The **Telephone Subscriber** window provides the following elements:

Avatar

Area for configuring telephone subscriber's avatar. The area provides the following elements:

- **Current avatar** — subscriber's photo or other graphic image.

- **Select** — opens the window for selecting the telephone subscriber's avatar.

- **Delete Subscriber Photo (⌧)** — removes the selected avatar.

Subscriber

The telephone subscriber's name.

The **SIP-Address** area provides controls for selecting the desired SIP addressing format:

Automatic

Activates automatic SIP addressing. After specifying the subscriber's phone number in the **Number** box below, the outgoing and incoming addresses are generated automatically using default gateway settings.

Full Address

Activates manual SIP addressing. To call a subscriber, in the **Outgoing** and **Incoming** boxes, you will need to enter their full SIP addresses for incoming and outgoing calls in the following format:
sip:prefix number@gateway:port

Enable SIP Account

Activates a specific SIP account for connection to the telephone subscriber. If selected, you need to select the desired SIP account from the list to the right of the check box. For details, see SIP Accounts.

Sound for Incoming Call Alert

Provides the ability to configure an audio file that will play in SmartPTT Dispatcher on receiving a call from this telephone subscriber:

- **Use a system sound (⌧)** — clears the path to the selected audio file and resets the sound to default.

- **Select a sound file for an incoming call (···)** — opens a window for selecting the desired audio file.

- **Audio file path** — field with a full path to the selected audio file.

For information on adding and editing telephone subscribers, see the section below.

2.3.2.2 Adding and Editing Telephone Subscribers

Follow the procedure to add a new subscriber to the list of telephone subscribers in SmartPTT Dispatcher or edit an existing subscriber.

Prerequisites:

- From PBX settings obtain numbers of the desired telephone subscribers.

- If you do **not** use SIP automatic addressing, from SmartPTT Radioserver Configurator obtain the following information:

  - Radioserver call number. For details, see "Configuring Incoming Calls" in *SmartPTT Installation and Configuration Guide.*

- IP address and port number of SIP server. For details, see "Configuring Outgoing Calls" in *SmartPTT Installation and Configuration Guide.*

- If you want to use the automatic SIP addressing format, ensure that the VoIP gateway default settings are specified in the Telephone Interconnect settings. For details, see General Settings.

- If you want to use SIP account for connection to the telephone subscriber, ensure that the desired account is added to the SIP Accounts list in SmartPTT Dispatcher. For details, see SIP Accounts.

- *(Optional)* Prepare the following files:

  - Telephone subscriber's avatar.

  - Audio file that will play in SmartPTT Dispatcher on receiving a call from this telephone subscriber.

Procedure:

1. On the menu bar, click **Settings (⚙) → Telephone Interconnect → Telephone Subscribers**.
   The **Telephone Subscribers** window appears.

2. Perform one of the desired actions:

To add a new telephone subscriber,	in the top part of the window, click **Add (➕)**.
To edit an existing telephone subscriber,	perform the following actions: 1. Select the desired subscriber from the list. 2. In the top part of the window, click **Edit (✎)**.

The **Telephone Subscriber** window appears.

3. In the **Subscriber** field, type the subscriber's name.

4. Select the desired SIP addressing format:

To use default gateway settings,	perform the following actions: 1. In the **SIP-Address** area, select **Automatic**. 2. In the **Number** box, type the phone number of the telephone subscriber.
To use the subscriber's full address,	perform the following actions: 1. In the **SIP-Address** area, select **Full Address**. 2. In the **Outgoing** box, type the subscriber's SIP address for outgoing calls in the following format: *sip:prefix number@gateway:port* 3. In the **Incoming** box, type the subscriber's SIP address for incoming calls in the following format: *sip:prefix number@gateway:port*

5. *(Optional)* Select the **Enable SIP Account** check box, and then, from the list on the right, select the desired SIP account.

6. Configure incoming call alert sound:

To restore default settings and use the standard system sound,	next to **Sound for Incoming Call Alert**, click **Use a system sound (⊠)**.
To use custom sound,	perform the following actions: 1. Next to **Sound for Incoming Call Alert**, click **Select a sound file for an incoming call (…)**. 2. In the window that appears select the desired audio file.

7. Configure telephone subscriber's avatar:

To select an image for the subscriber's avatar,	perform the following actions: 1. In the upper-left corner of the window, click **Select**. 2. In the window that appears select the desired image.
To remove current subscriber avatar,	in the upper-left corner of the window, click **Delete Subscriber Photo (⊠)**.

8. In the **Telephone Subscriber** window, click **OK**.

Postrequisites:

To delete an existing telephone subscriber, in the **Telephone Subscribers** window, click the name of the subscriber, and then click **Delete (➖)**.

2.3.3 Telephone Interconnect Configuration

To ensure correct functioning of the Telephone Interconnect feature, you need to configure minimum required settings that provide access to its main functionality. This guide describes the recommended configuration settings required for the feature operability:

- Configuration of the Telephone Interconnect feature (the corresponding license is required).
  For details, see Configuring Telephone Interconnect Settings.

- Configuration of the conference call settings (the license is not required).
  For details, see Configuring Conference Calls Settings.

For information on these settings see the sections below.

2.3.3.1 Configuring Telephone Interconnect Settings

Follow the procedure to configure minimum required Telephone Interconnect settings in SmartPTT Dispatcher.

Prerequisites:

- Ensure that you have the license required for access to the Telephone Interconnect functionality. For details, see Licenses.

- Ensure that at least one of the codecs activated in SmartPTT Dispatcher is supported by the PBX.

- Ensure the required settings are configured on SmartPTT Radioserver. For details, see "Connecting to PBX" in *SmartPTT Installation and Configuration Guide.*

- For SIP Trunk Authentication, obtain the authentication parameters for incoming and outgoing calls (realm, username, password).

- For SIP Trunk Authentication, obtain the VoIP gateway parameters (dial Prefix for outgoing calls, IP address, SIP port).

Procedure:

1. On the menu bar, click **Settings (⚙) → Telephone Interconnect → Telephone Interconnect**.
   The **Telephone Interconnect** window appears.

2. On the **General Settings** tab, in the **Dispatcher Settings** area, configure the following settings:

   a. Select the **Allow Calls to Telephone Subscribers** check box.

   b. In the **Interface** box, select the IP address of the SmartPTT Dispatcher computer that must be used for connection to telephone subscribers.

   c. In the **RTP ports** box, specify the ports that must be used for connection to telephone subscribers.

   NOTE
   Configuration of the SmartPTT Dispatcher parameters must match the corresponding settings on the PBX.

3. Configure the authentication parameters:

To use the SIP trunk authentication format,	perform the following actions:
	1. On the **General Settings** tab, in the **VoIP Gateway Default Settings** area, perform the following actions:
	a. In the **Dial Prefix for Outgoing Calls** box, specify the prefix for outgoing calls matching the prefix specified in the VoIP gateway settings.
	b. In the **Default VoIP Gateway Address** box, specify the VoIP gateway IP address.
	c. In the **SIP port** box, specify the VoIP gateway port used for the SIP data packets transmit.

2. *(Optional)* If the incoming calls authentication is configured on SmartPTT Radioserver, perform the following actions:

   a. On the **SIP Trunk Authentication** tab, in the **Incoming Calls Authentication** area, select the **Enabled** check box.

   b. In the **Realm**, **User Name** and **Password** boxes, specify the authentication parameters configured on SmartPTT Radioserver.

3. *(Optional)* If the outgoing calls authentication is configured on the PBX, on the **SIP Trunk Authentication** tab, in the **Outgoing Calls Authentication** area, perform the following actions:

   a. Select the **Enabled** check box.

   b. In the **Realm**, **User Name** and **Password** boxes, specify the authentication parameters configured on the PBX.

To use the SIP account authentication format,	on the **SIP Accounts** tab, configure the desired account. For details, see <u>Managing SIP Accounts</u>. **NOTE** The specified parameters must match the corresponding settings on the PBX.

4. Click **Finish** to save changes and close the **Telephone Interconnect** window.

2.3.3.2 Configuring Conference Calls Settings

Follow the procedure to configure minimum required conference calls settings in SmartPTT Dispatcher.

Prerequisites:

- Obtain the VoIP gateway parameters (dial prefix for outgoing calls, IP address and SIP port used for connection to telephone subscribers).

- Ensure the required settings are configured on SmartPTT Radioserver. For details, see "SIP Telephony" in *SmartPTT Installation and Configuration Guide.*

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Telephone Interconnect** → **Telephone Interconnect**.
    The **Telephone Interconnect** window appears.

2. On the **General Settings** tab, in the **Dispatcher Settings** area, perform the following actions:

   a. Select the **Allow Calls to Telephone Subscribers** check box.

     b.   In the **Interface** box, select the IP address of the SmartPTT Dispatcher computer that must be used for connection to telephone subscribers.

     c.   In the **RTP ports** box, specify the ports that must be used for connection to telephone subscribers.

3.   In the **VoIP Gateway Default Settings** area, configure the following settings:

     a.   In the **Dial Prefix for Outgoing Calls** box, specify the prefix for outgoing calls matching the prefix specified in the VoIP gateway settings.

     b.   In the **Default VoIP Gateway Address** box, specify the IP address of the VoIP gateway.

     c.   In the **SIP port** box, specify the VoIP gateway port used for the SIP data packets transmit.

4.   Click **Finish** to save changes and close the **Telephone Interconnect** window.

2.3.4 Interaction with Telephone Subscribers

The Telephone Interconnect feature provides the ability to interact with telephone subscribers. A call can be initiated both by dispatchers and telephone subscribers. The voice between them is transmitted in full-duplex mode. SmartPTT Dispatcher provides the following connection options:

- Calls from telephone subscribers to SmartPTT Dispatcher. For details, see Accepting Calls from Telephone Subscribers.

- Calls from SmartPTT Dispatcher a telephone subscriber. For details, see Initiating Calls to Telephone Subscribers.

- Connection of radios or talkgroups with telephone subscribers established by SmartPTT Dispatcher. For details, see Connecting Radios with Telephone Subscribers.

- SmartPTT Dispatcher Conference calls initiated by SmartPTT Dispatcher for connection of telephone subscribers, radios and WAVE users, talkgroups and/or dispatchers. For details, see Conference Calls.

If connection is established between a telephone subscriber and a talkgroup, the dispatcher who initiated the call can participate in the conversation. If the established connection is private (between a telephone subscriber and a single radio), the dispatcher can only hear the conversation, not take part in it.

If SmartPTT Dispatcher establishes connection between a telephone subscriber and a radio or a talkgroup, only the call participants can finish it. SmartPTT Dispatcher cannot affect it in any way after the call initiation.

> **NOTE**
> A special tone indicates the end of the call on the radio. If the radio user initiates a new transmission before they hear the tone, the transmission will be initiated incorrectly and may fail.

For information on establishing connection to telephone subscribers and the **Telephone Subscribers** window, see the sections below.

2.3.4.1 Telephone Subscribers Window

The **Telephone Subscribers** window provides the ability to call telephone subscribers added to the SmartPTT Dispatcher list of telephone subscribers or dial a number manually to call subscribers not added to the list.

You can open the **Telephone Subscribers** window by clicking **Telephone Subscribers (** ⬛ **)** on the menu bar.

The left part of the window consists of two tabs:

- **Telephone Subscribers**

- **Dial Pad**
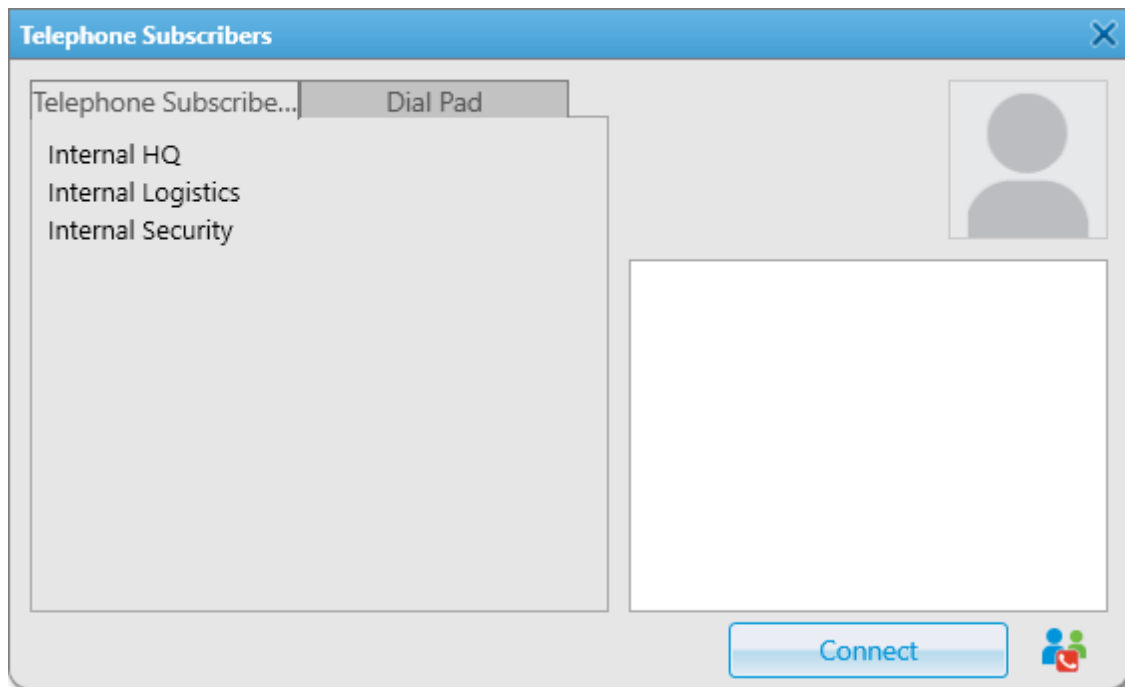
The **Telephone Subscribers** tab is used for calling subscribers added to the SmartPTT Dispatcher list of telephone subscribers. For details, see Initiating Calls to Telephone Subscribers.

The left pane contains the list of registered telephone subscribers from which you can select the desired subscriber.

After the call initiation the name of the called subscriber appears in the Recent Calls list located above separator line on top of the telephone subscribers list. The Recent Calls list contains calls from registered and unregistered telephone subscribers. The names of unregistered subscribers are in italic type.

NOTE
The Recent Calls list displays only the calls initiated by the dispatcher during the current session. The list is automatically cleared on every SmartPTT Dispatcher restart.
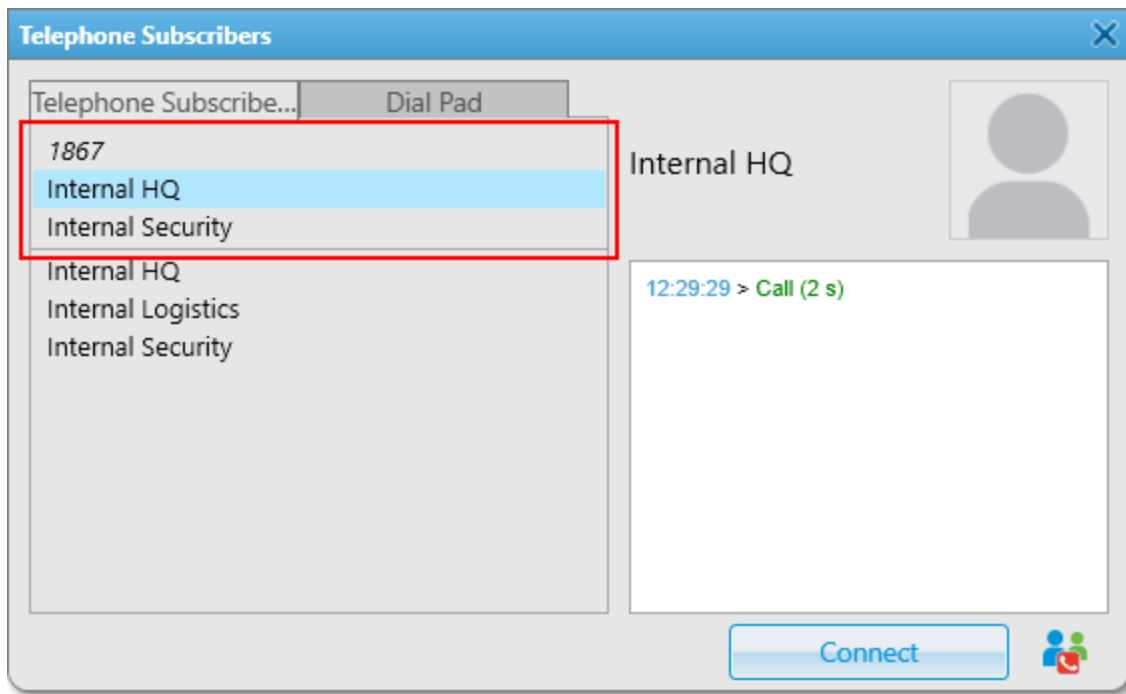
The **Dial Pad** tab is used for calling subscribers not added to the SmartPTT Dispatcher list of telephone subscribers.
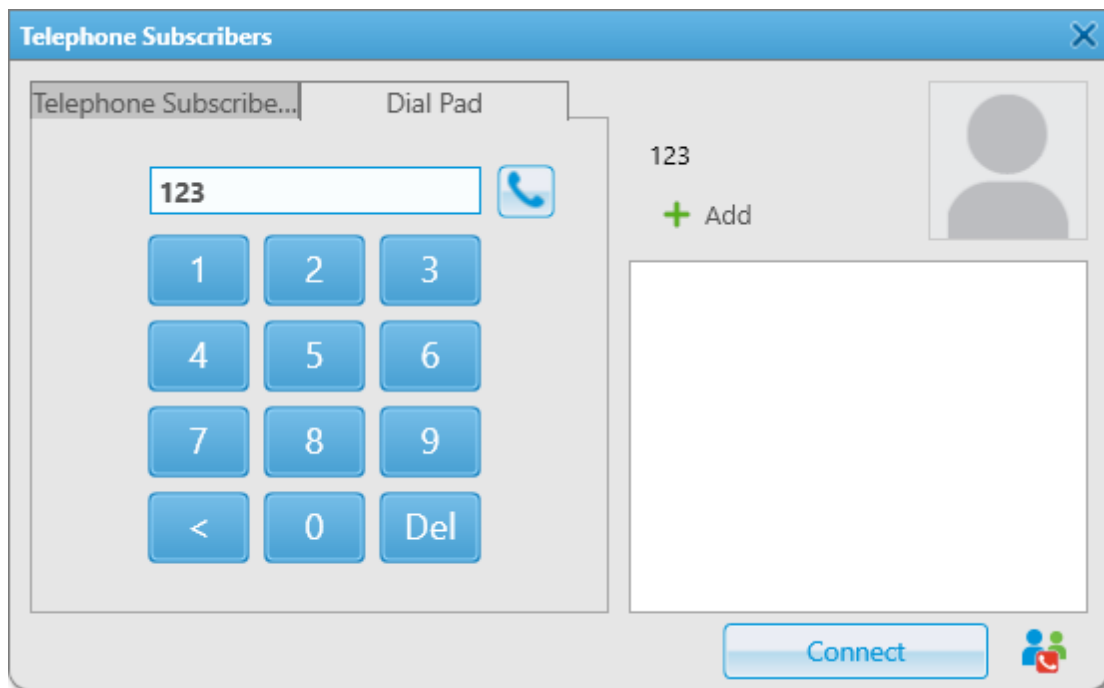
The **Dial Pad** tab provides the following elements:

Number Box

Displays the number dialed on the keyboard or the dial pad below.

Phone (📞)

Initiates a call to the dialed number.

Dial Pad

Provides controls for dialing the number of the desired telephone subscriber.

Add (+)

Opens the **Telephone Subscriber** window for adding the dialed number to the list of telephone subscribers in SmartPTT Dispatcher. Appears after you dial at least one digit.

The **Extension Dialing** tab appears instead of the **Dial Pad** tab after the call initiation. It contains the same elements as the **Dial Pad** tab and can be used for navigation in the voice menu of the called subscriber.
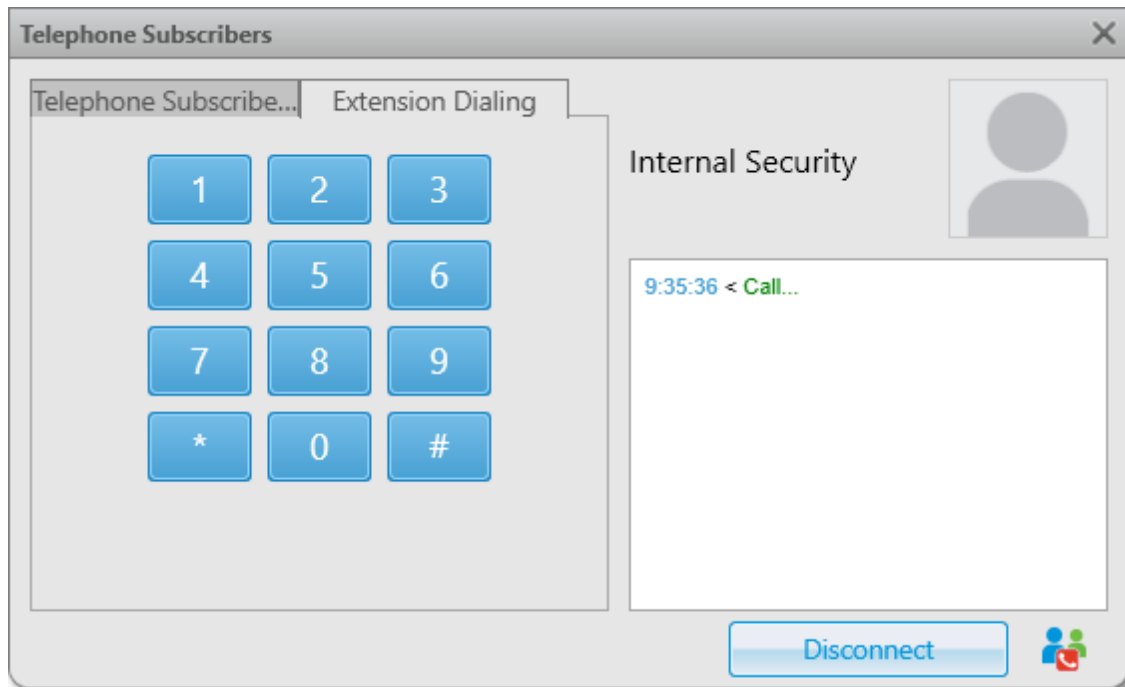
The right part of the window provides the following elements:

Telephone Subscriber

Displays the name and the avatar of the selected telephone subscriber in the top part of the window.

Log box

Displays information on connections to the telephone subscriber established during the current SmartPTT Dispatcher operation session.

Connect

Initiates a call to the dialed number. After the call initiation the **Connect** button changes to **Disconnect** that finishes the call.

Make Conference Call ( )

Initiates a conference call by sending an invitation request to the selected subscriber. For details, see Initiating Calls from the Telephone Subscribers Window.

For information on establishing connection to telephone subscribers, see the section below.

2.3.4.2 Initiating Calls to Telephone Subscribers

Follow the procedure to initiate a call to a telephone subscriber.

Procedure:

1. On the menu bar, click **Telephone Subscribers (▦)**.
   The **Telephone Subscribers** window appears.

2. Call the desired telephone subscriber:

To call a subscriber added to the SmartPTT Dispatcher list of telephone subscribers,	perform the following actions: 1. On the **Telephone Subscribers** tab, select the desired subscriber from the list. The name and the avatar (if set) of the selected subscriber appear in the upper-right corner of the window. 2. In the lower-right corner of the window, click **Connect**.
To call a subscriber that is not added to the SmartPTT Dispatcher list of telephone subscribers,	perform the following actions: 1. On the **Dial Pad** tab, dial the desired subscriber's number. The **Add (＋)** button appears in the right part of the window. **NOTE** If the VoIP gateway default settings are specified, you need to dial only the subscriber's phone number. If default settings are not specified, you need to dial the subscriber's full address. For details, see General Settings. 2. *(Optional)* Add the subscriber to SmartPTT Dispatcher by clicking the **Add (＋)** button and specifying information on them in the **Telephone Subscriber** window. For details, see Telephone Subscriber Window. 3. Click the **Phone (↘)** button to the right of the number box or click the **Connect** button in the lower-right corner of the window.

   The **Connect** button changes to **Disconnect**, the name of the called subscriber appears in the Recent Calls list above the list of telephone subscribers.

3. *(Optional)* On the **Extension Dialing** tab, dial the DTMF extension code for reaching the desired subscriber.

NOTE
After dialing the subscriber's number, apart from a private call, you can initiate a conference call by clicking the **Make Conference Call (▦)** button. For details, see Conference Calls.

4. To finish the call, click **Disconnect** or wait until it finishes automatically after the subscriber hangs up.

2.3.4.3 Connecting Radios with Telephone Subscribers

Follow the procedure to establish connection between a radio or a talkgroup and a telephone subscriber.

Procedure:

1. Open the window for selecting the desired telephone subscriber:

To open the window from the **Radio Fleet** panel,	click the desired radio or talkgroup Actions (≫) button, and then click **Call Telephone Subscriber** (📇).
To open the window from the **Radios** panel or the Custom Console panel,	click the desired radio or talkgroup Actions (≫) button, and then click **Call Telephone Subscriber** (📇).
To open the window from the **Maps** panel,	on the map or in the expandable Radios panel, right-click the desired radio, and then click **Call Telephone Subscriber** (📇).
To open the window from the radio or talkgroup Call Window,	in the Call Window of the desired radio or talkgroup, click **Call Telephone Subscriber** (📇). For information on Call Windows, see Radio Call Window and Talkgroup Call Window.

The window with the name of the selected radio or talkgroup appears.
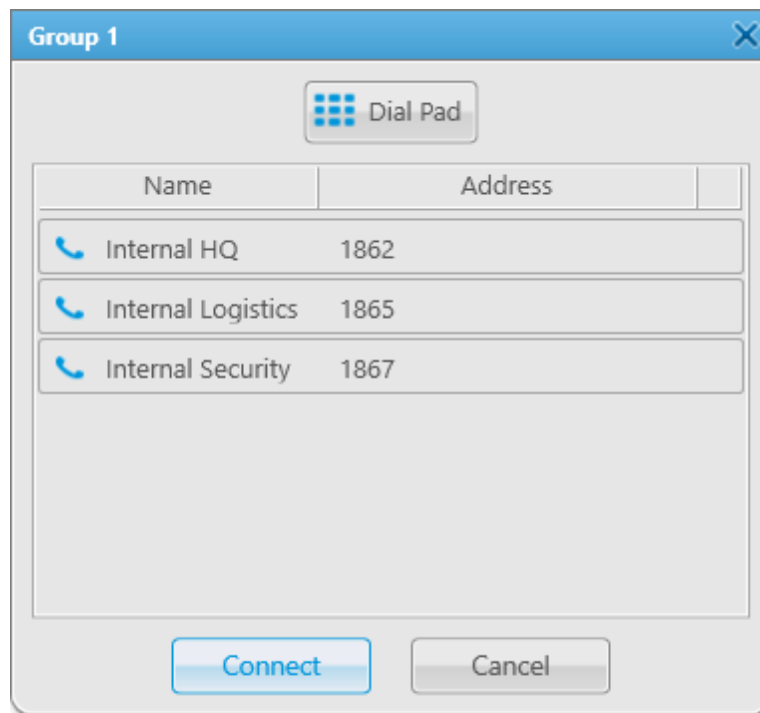
2. Establish the radio or talkgroup connection to the desired telephone subscriber:

To connect to a subscriber added to the SmartPTT Dispatcher list of telephone subscribers,	select the desired subscriber from the list of telephone subscribers, and then click **Connect**, or double-click the desired subscriber name.
To connect to a subscriber that is not added to the SmartPTT Dispatcher list of telephone subscribers,	perform the following actions: 1. Click the **Dial Pad (⊞)** button. The **Dial Pad** window appears. 2. Dial the desired subscriber's number, and then click the **Phone (☎)** button. **NOTE** If the VoIP gateway default settings are specified, you need to dial only the subscriber's phone number. If default settings are not specified, you need to dial the subscriber's full address. For details, see General Settings.

The Call Window of the called radio or talkgroup and the **Call Telephone Subscriber** window with information on the call participants and status appear.
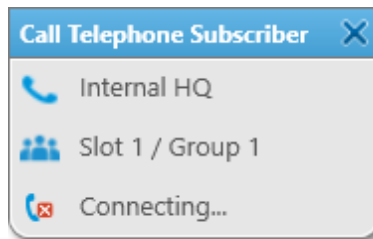
NOTE

Automatic appearance and disappearance of Call Windows in SmartPTT Dispatcher is configured in the Call Window settings. For details, see Call Window Settings.

3. To close the **Call Telephone Subscriber** window, click Close (×).

NOTE

Closing the window does not finish the call. Only the call participants can finish it.

2.3.4.4 Accepting Calls from Telephone Subscribers

Follow the procedure to accept an incoming call from a telephone subscriber.

Procedure:

1. In the **Incoming call** window that appears when a telephone subscriber calls SmartPTT Dispatcher, click **Accept**.
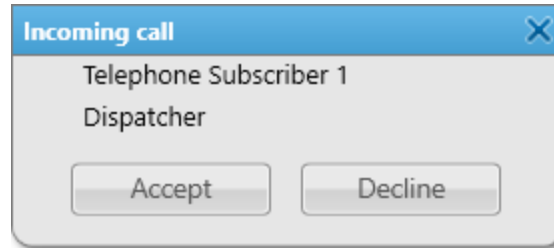
   The **Telephone Subscribers** window appears. The call starts.

2. To finish the call, click **Disconnect** or wait until the call finishes automatically after the subscriber hangs up. The **Disconnect** button changes to **Connect**.

3. *(Optional)* If the calling telephone subscriber is not added to the SmartPTT Dispatcher list of telephone subscribers, you can add them by performing the following actions:

   a. In the right part of the window, under the number of the calling subscriber, click **Add (➕)**. The **Telephone Subscriber** window appears.

   b. Select the desired SIP addressing format:

To use default gateway settings,	perform the following actions:
	1. In the **SIP-Address** area, select **Automatic**.
	2. In the **Number** box, type the subscriber's phone number.
To use the subscriber's full address,	perform the following actions:
	1. In the **SIP-Address** area, select **Full Address**.
	2. In the **Outgoing** box, type the subscriber's SIP address for outgoing calls in the following format: *sip:prefix number@gateway:port*
	3. In the **Incoming** box, type the subscriber's SIP address for incoming calls in the following format: *sip:prefix number@gateway:port*

   c. *(Optional)* In the upper-left corner of the window, click **Select**, and then, in the window that appears, select an image for the subscriber's avatar. The selected avatar appears above the **Select** button.

d.   *(Optional)* Select the **Enable SIP Account** check box, and then, from the list on the right, select the desired SIP account.

e.   *(Optional)* Click **Select a sound file for an incoming call (** … **)**, and then, in the window that appears, select an audio file with the desired incoming call alert sound.

f.   At the bottom of the window, click **OK**.

Postrequisites:

- To remove the subscriber avatar, click **Delete Subscriber Photo (** × **)**.

- To restore the standard system sound, click **Use a system sound (** × **)**.

- For information on editing and deleting telephone subscribers, see <u>Adding and Editing Telephone Subscribers</u>.

2.4 Operators

In SmartPTT Dispatcher it is possible to work under the Administrator, or an operator account. The Administrator account is created in the SmartPTT system by default.

> **Important**
> Upon logging in SmartPTT Dispatcher for the first time after installing the SmartPTT software, be sure to set a password for the Administrator account. For details, see <u>Operator Window</u>.

The Administrator account suggests unlimited access rights to all functionality of the system, including the possibility to add new operator accounts and provide operators with access to specific functionality of SmartPTT Dispatcher. Accordingly, an operator account is limited by functionality that the Administrator determined. The number of operator accounts in SmartPTT Dispatcher is not limited.

For information on operator access rights, see the sections below.

2.4.1 Operators Window

You can manage operator account rights in the **Operators** window by clicking **Settings (⚙) → Operators** on the menu bar.
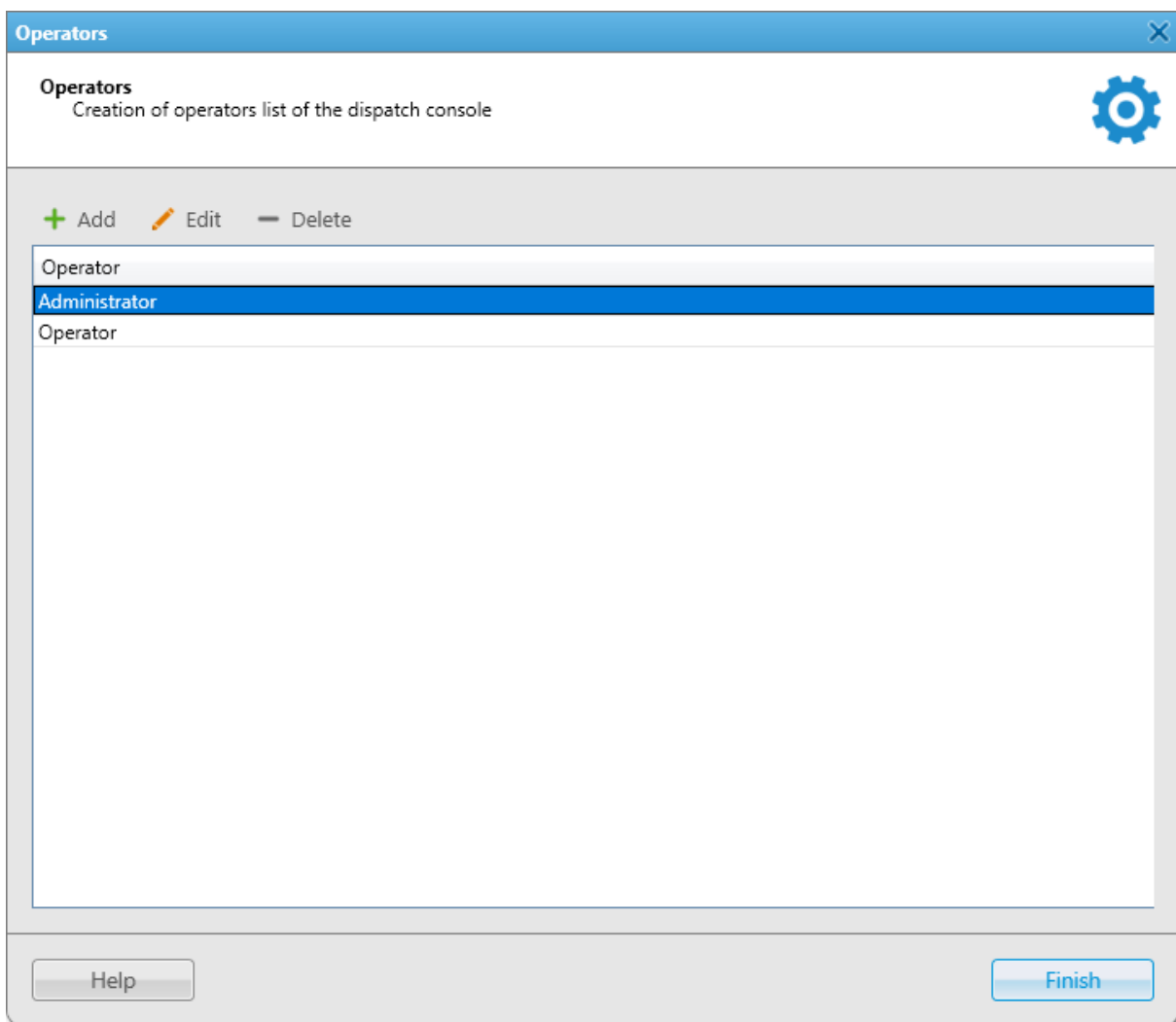
The **Operators** window provides the following elements:

Add

Opens the **Operator** window for adding a new operator account. For details, see [Operator Window](#).

Edit

Opens the **Operator** window for editing the selected operator account.

Delete

Removes the selected operator account from SmartPTT Dispatcher.

The list of operators

Contains the list of all added operators.

You can sort operator accounts by clicking the column header.

2.4.1.1 Operator Window

In the **Operator** window you can configure operator account rights, set the operator account password, or status.
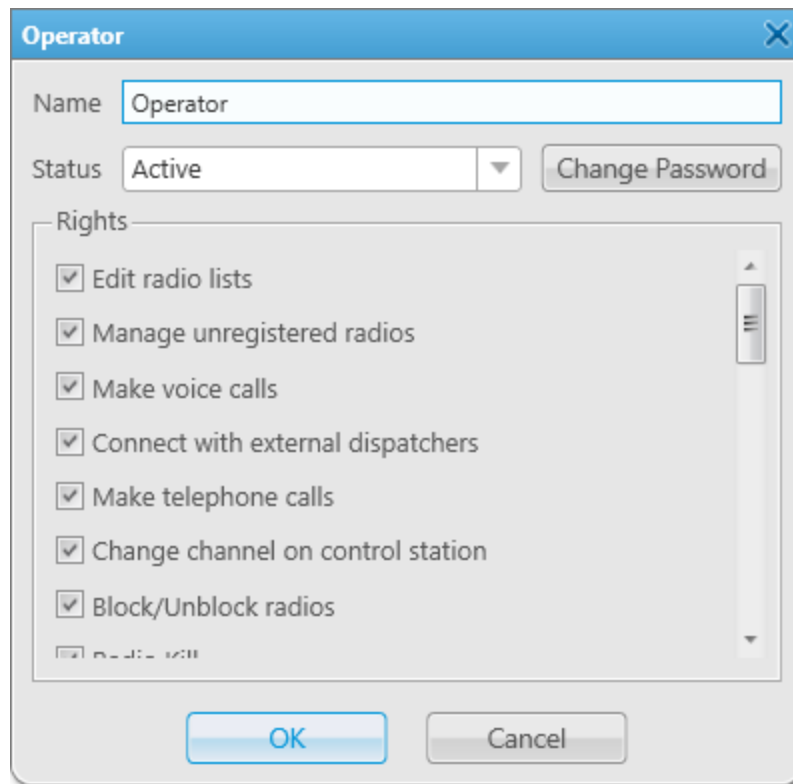
The **Operator** window provides the following elements:

Name

An operator name.

If Windows authentication is selected, ensure that the new operator account name matches the name of the Windows user or group. If Windows authentication is not selected, you can give any operator name.

For information on Windows authentication, see General Settings.

> **Important**
> If Windows authentication is selected, the name of the Windows user or group must not match the operator account name with the *Administrator* status not to lose access to the account with the *Administrator* status.

Status

The operator status. Statuses can be as follows:

- The *Administrator* status is given to the account with the name Administrator that is created by default. The account with the *Administrator* status has full access to SmartPTT functionality. You cannot delete the account with the *Administrator* status. The *Administrator* status cannot be assigned to another operator account.

- The *Active* status is applied for operator accounts that are used currently.

- The *Archive* status is used for operators which are not used any longer, but cannot be removed from the system as the Event Log contains entries referring to them.

Set/Change password

Sets a new operator password or changes the old one.

Rights

A list of permissions that provides operators with the ability to perform the following actions in SmartPTT Dispatcher:

Right	Description
Edit radio lists	Allows/denies adding, editing, or deleting radios in the **Radio Fleet** panel and in the **Radios** window. For details, see Radio Fleet and List of Radios.
Manage unregistered radios	Shows/hides radios which were not added to SmartPTT Dispatcher. For details, see Radios and List of Radios.
Make voice calls	Allows/denies initiating voice calls (except conference calls). For information on voice calls, see Voice Calls.
Connect with external dispatchers	Allows/denies communicating with other SmartPTT dispatchers. For details, see Dispatchers.
Make telephone calls	Allows/denies communicating with telephone subscribers. For details, see Telephone Subscribers Settings.
Change channel on control station	Allows/denies selecting control station channels. For details, see Channels and Systems and Channel Selector. **NOTE** This parameter does not affect the APX control stations, the list of which copies the list of groups.
Block/Unblock radios	Allows/denies using **Block Radio** and **Unblock Radio** commands. For details, see Radio Actions Menu.
Radio Kill	Allows sending the Radio Kill command for disabling radios. For details, see Radio Kill.
Remote monitor	Allows/denies using the **Remote Monitor** command (turning on the microphone on the radio). For details, see Radio Actions Menu.
Reboot control station	Allows/denies rebooting (restarting) control stations. For details, see Channel Actions Menu.
Manage radio location settings	Allow/denies configuring settings of radio location update. For information on location settings see Radio Location Properties and List of Radios.

Right	Description
Request radio location	Allows/denies performing the following actions related to the radio location: • Set Location (⊕) • Find on Map (🔍) • Show Address (🏠) • Remove from Map (❌) For details, see Radio Actions Menu.
Send text messages	Allows/denies sending text messages to radios, talkgroups, and radio categories. For details, see Text Messages.
Send telemetry commands	Allows/denies sending telemetry commands. For details, see Telemetry. **NOTE** This parameter does not relate to SmartPTT SCADA.
Manage bridging settings	Allows/denies configuring bridging service for SmartPTT Radioserver. For details, see Bridging Service.
Manage routes	Allows/denies managing routes. For details, see Routes.
Manage geofences	Allows/denies managing geofences on a map. For details, see Geofences.
Manage points of interest	Allows/denies managing points of interest on a map. For details, see Points of Interest.
Manage cameras	Allows/denies managing camera markers on a map. For details, see Cameras.
Manage tracks	Allows/denies displaying tracks and the radio movement along the track on a map. For details, see Tracks.
View coverage map	Allows/denies working with a coverage map. For details, see Coverage Map.
Build reports	Allows/denies build reports. For details, see Reports.

Right	Description
Edit custom radio properties	Allows/denies managing parameters in the **Others** tab of the **Radio Properties** window. For details, see Radio Custom Properties.
Make conference calls	Allows/denies initiating conference calls. For details, see Conference Calls.
View radioserver event log	Allows/denies showing the SmartPTT Radioserver Event Log. For details, see SmartPTT Radioserver Event Log. **NOTE** You will keep access to the SmartPTT Dispatcher Event Log.
Create deferred actions	Allows/denies creating deferred actions for radios. For details, see Deferred Actions.
Manage statuses	Allows/denies managing radio statuses. For details, see Statuses.
Manage custom rules	Allows/denies managing custom rules. For details, see Custom Rules.
Manage positioning rules	Allows/denies managing positioning rules. For details, see Positioning Rules.
Manage lone worker rules	Allows/denies managing lone worker rules. For details, see Lone Worker Rules.

2.4.2 Adding and Editing Operator Accounts

Follow the procedure to add a new operator, or edit an existing operator account.

Prerequisites:

Ensure that you are logged in as the operator with the *Administrator* status.

Procedure:

1. On the menu bar, click **Settings (⚙) → Operators**.
   The **Operators** window appears.

2. In the **Operators** window, perform one of the following actions:

To add a new operator,	click **Add**.
To edit an existing operator account,	perform the following actions: 1. In the **Operators** window, select the desired operator.

2.   Click **Edit**.

The **Operator** window appears.

3.   In the **Operator** window, in the **Name** field, type the operator name.

> **Important**
>
> If Windows authentication is selected, the name of the Windows user or group must match the operator account name with the *Administrator* status not to lose access to the account with the *Administrator* status.

4.   From the **Status** list, select the desired status:

To add a new operator account to the list of operator accounts that are used currently,	in the **Operator** window, from the list of available statuses, select *Active*.
To add the operator account to the archive,	in the **Operator** window, from the list of available statuses, select *Archive*.

5.   *(Optional)* To set/change a password, perform the following actions:

a.   Click **Set/Change Password**.
The **Enter/Change Password** window appears.
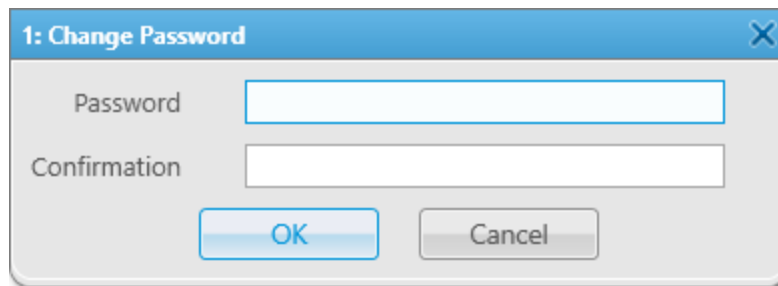
b.   In the **Password** field, type the desired password.

c.   In the **Confirmation** field, type the desired password again.

d.   Click **OK** to save the changes and close the window.

6.   In the **Rights** area, select the desired check boxes for assigning rights to an operator. For details, see Operator Window.

7.   In the **Operator** window, click **OK** to apply changes and close the window.
A new or an edited operator account appears in the list of operators in the **Operators** window.

8.   Close the **Operators** window.

Postrequisites:

To delete an operator account, in the **Operators** window, select the desired operator, and then click **Delete**.

> **NOTE**
>
> An operator account cannot be deleted if Event Log has entries associated with it. For information on Event Log, see Event Log.

2.4.3 Changing Operator

Follow the procedure to to log over SmartPTT Dispatcher using other operator credentials.

Procedure:

1.   On the menu bar, click **Change operator ( )**.

The user logs off from SmartPTT Dispatcher, and the **Authorization** window appears.
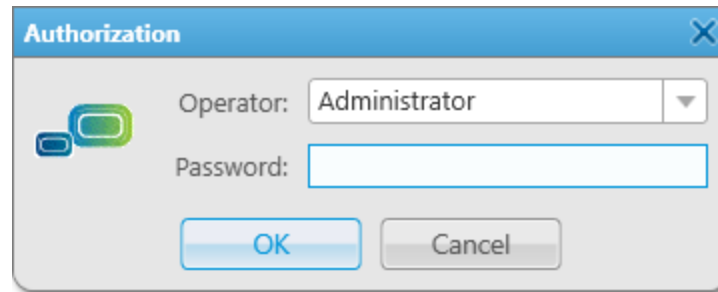
2.   In the **Authorization** window, from the **Operator** list, select the desired login.

3.   Type a password if it is necessary.

4.   Click **OK** to log in SmartPTT Dispatcher and get started.

2.5 Information Storage

The **Information Storage** submenu is available from the **Settings ( )** menu on the SmartPTT Dispatcher menu bar. It provides the following configuration options:

*   Activating and configuring call recording in SmartPTT Dispatcher.
    For details, see Records.

*   Activating and configuring automatic backup of the SmartPTT Dispatcher database.
    For details, see Database Auto Backup.

2.5.1 Records

SmartPTT Dispatcher provides the ability to record incoming and outgoing calls and save them as audio files to a local folder.

The audio recording settings can be configured in the **Audio Record Settings** window that you can open by clicking **Settings (⚙) → Information Storage → Records** on the menu bar.
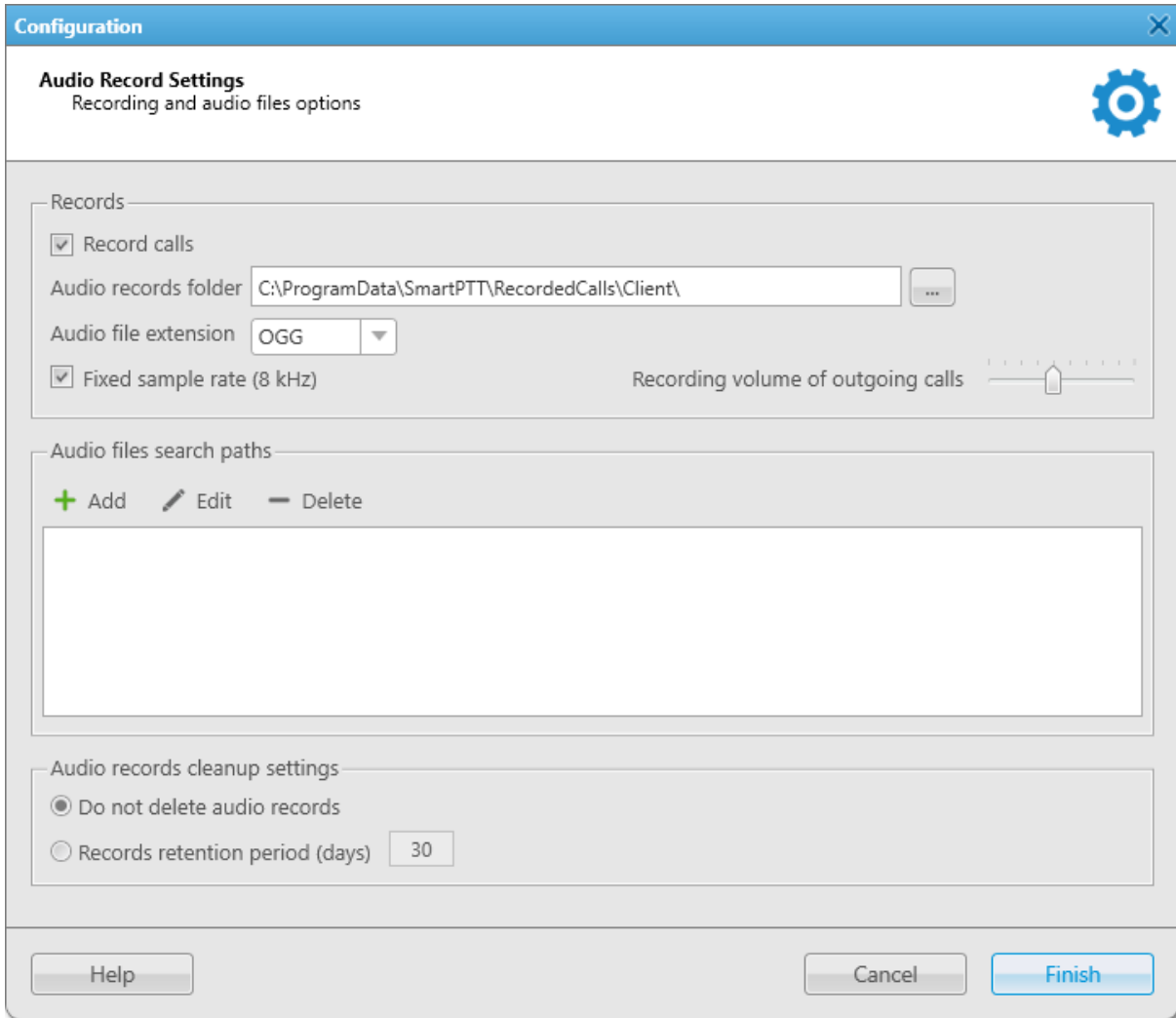
The **Audio Record Settings** window provides controls for configuring the audio recording parameters distributed into several areas.

The **Records** area provides the following elements:

Record calls

Activates recording of incoming and outgoing calls in SmartPTT Dispatcher.

Audio records folder

The folder to which call recordings are saved.

Audio file extension

The call recordings extension. The following options are available:

• MP3

- OGG

- WAV

By default, call recordings are saved as .ogg audio files.

Fixed sample rate (8 kHz)

Sets the fixed audio sample rate of 8 kHz for all call recordings. Such sample rate reduces the size of the saved audio files due to certain audio quality loss.

Recording volume of outgoing calls

The sound increase ratio applied to the current SmartPTT Dispatcher sound volume for recording voice calls. You can select a value from the range of *1* to *10* by moving the slider to the left or to the right for decrease or increase of the sound increase ratio respectively.

The default value is *5,* which provides the optimal audibility of the call recordings.

The **Audio Files Search Paths** area contains the box for specifying additional folders where call recordings are stored.

If SmartPTT Dispatcher cannot find the recording of a call in the main destination folder, it refers to the folders specified in this box.

When you change the path to the main destination folder specified in the **Audio records folder** box, the replaced folder is automatically added to the **Audio Files Search Path** box. This way, you can play call recordings and open their location from Event Log even if they are stored in a folder different from the main one. For details, see Playing Call Records and Opening Call Records Location.

The **Audio Files Search Paths** area provides the following elements:

Add (+)

Opens the window for selecting the folder in which call recordings are stored.

Edit (✎)

Opens the window for changing the path selected in the box below.

Delete (−)

Deletes the path selected in the box below.

To delete the path, you need to confirm the action by clicking **OK** in the window prompting you for confirmation.

The **Audio records cleanup settings** area provides controls for configuring parameters of the call recordings automatic cleanup.
The following options are available:

Do not delete audio records

If selected, call recordings are not deleted. Audio files are stored for as long as there is available disk space.

Records retention period (days)

If selected, call recordings are automatically deleted after the specified period of time. You can specify the desired retention period in the box to the right.

Available values range from *1* to *999*. The default retention period is *30* days.

If the retention period is *0* days, call recordings are deleted in 24 hours after their creation.

For information on configuring the call recording settings, see the section below.

2.5.1.1 Configuring Audio Recording

Follow the procedure to configure the audio recording settings in SmartPTT Dispatcher.

Procedure:

1. On the menu bar, click **Settings (⚙) → Information Storage → Records**.
   The **Audio Record Settings** window appears.

2. In the **Audio Record Settings** window, in the **Records** area, click **Record Calls**.

3. To the right of the **Audio records folder** box, click Browse (⬚), and then, in the window that appears, select a folder for storing call recordings.
   The path to the selected folder appears in the **Audio records folder** box.

4. In the **Audio file extension** box, select the desired audio file format from the list.

5. *(Optional)* Select or clear the **Fixed sample rate** check box to activate or deactivate application of the fixed sample rate (8 kHz) for all call recordings.

6. *(Optional)* Increase or decrease the call recordings sound volume by moving the **Recording volume of outgoing calls** slider to the left or right respectively.

7. *(Optional)* In the **Audio files search paths** area, specify additional call recordings locations:

To add a new folder,	click **Add (+)**, and then, in the window that appears, select the folder in which call recordings are stored. The path to the selected folder appears in the table.
To edit a folder,	perform the following actions: 1. In the **Audio files search paths** table, click the desired path. 2. Click **Edit (✎)**, and then, in the window that appears, select the desired folder. The path to the selected folder changes in the table.
To delete a folder,	in the **Audio files search paths** table, click the desired path, and then click **Delete (–)**. The path to the selected folder disappears from the table.

8. In the **Audio records cleanup settings** area, select the desired cleanup option:

To keep call recordings for as long as there is available disk space,	select **Do not delete audio records**.
To keep call recordings for a specified period of time,	select **Records retention period**, and then, in the box to the right, specify the desired retention period in days.

9. Click **Finish** to save changes and close the window.

2.5.2 Database Auto Backup

The Database Auto Backup functionality provides the ability to perform automatic backup of the SmartPTT Dispatcher database. Regular backups help to prevent data loss in case of the SmartPTT Radioserver hardware or software failure. For security purposes, it is strongly recommended that you configure the database automatic backup.

The automatic backup settings can be configured in the **Database Auto Backup Settings** window that you can open by clicking **Settings (⚙) → Information Storage → Database Auto Backup** on the menu bar.

The **Database Auto Backup Settings** window provides the following elements:

Allow Database Auto Backup
    Activates automatic backup of the SmartPTT Dispatcher database.

Backup Folder
    The folder for storing the generated database backup files. You can select the desired folder by clicking the Browse (⬚) button.

> **NOTE**
> The specified folder can store up to three backup files, after which the oldest one will be replaced with a new one.

Daily

Activates regular automatic backup with a specified day interval.

When selected, to the right appears the **Interval (days)** box where you can set the desired interval in days.

Weekly

Activates regular automatic backup with a specified week interval.

When selected, to the right appear controls for selecting the desired days for performing the backup. You can select one or multiple week days by selecting the corresponding check boxes. In the **Interval (weeks)** box you can set the desired backup interval in weeks.

Monthly

Activates regular automatic backup with a specified month interval.

When selected, to the right appear the **Day of month** and **Interval (month)** boxes where you can set the desired day of the month and interval in months for performing the backup.

Time

The time at which automatic backups are performed.

> **NOTE**
> The **Time** value is applied to all of the above-mentioned backup options.

Example

> If you select the **Daily** option, set *4* in the **Interval (days)** box, and *9:00* in the **Time** box, the database is backed up every fourth day at 9:00.
>
> If you select the **Weekly** option, select *Mo* and *We*, set *3* in the **Interval (weeks)** box, and *11:00* in the **Time** box, the database is backed up every third month on Monday and Wednesday at 11:00.
>
> If you select the **Monthly** option, set *5* in the **Day of month** box, set 2 in the **Interval (months)** box, and *15:00* in the **Time** box, the database is backed up on every fifth day of every second month at 15:00.

The **Backup Period** area provides controls for specifying the period of time that will be covered by the backup. The following parameters are available:

Start date

The first day of the backup period starting from which the database information will be backed up.

End date

The last day of the backup period starting from which the database information will not be backed up.

No end date

If selected, the database information will be backed up from the **Start Date** up to the moment of the performed backup.

> **NOTE**
> You can back up both local and remote databases. The restoration of the backed up database can be performed only from the backup file stored on the local computer.

For information on configuring the automatic database backup settings, see the section below.

2.5.2.1 Configuring Database Auto Backup

Follow the procedure to configure the automatic database backup settings in SmartPTT Dispatcher.

Procedure:

1. On the menu bar, click **Settings (⚙) → Information Storage → Database Auto Backup**.
    The **Database Auto Backup Settings** window appears.

2. In the **Database Auto Backup Settings** window, select the **Allow Database Auto Backup** check box.
    The areas below become available.

3. To the left of the **Backup folder** box, click Browse (⬚), and then, in the window that appears, select a folder for storing database backup files.
    The path to the selected folder appears in the **Backup folder** box.

4. In the **Backup Settings** area, select the desired backup mode:

To perform regular backups on a daily basis,	select **Daily**, and then, in the **Interval** box, type the desired interval in days, or select it using the Up (▲) and Down (▼) buttons.
To perform regular backups on a weekly basis,	perform the following actions: 1. Select **Weekly**. 2. On the right, select one or multiple days the week by selecting the corresponding check boxes. 3. In the **Interval** box, type the desired interval in weeks, or select it using the Up (▲) and Down (▼) buttons.
To perform regular backups on a monthly basis,	perform the following actions: 1. Select **Monthly**. 2. In the **Day of month** and **Interval** boxes, type the desired day of the month and interval in months, or select them using the Up (▲) and Down (▼) buttons.

5. In the **Time** box, type the desired backup time, or select using the Up (▲) and Down (▼) buttons.

6. In the **Backup Period** area, specify the desired period of time that will be covered by the backup:

    a. In the **Start Date** box, type the desired start date, or select it from the calendar by clicking the Calendar (🗓) button.

    b. Specify the desired end date:

To set a specific end date,	in the **End Date** box, type the desired end date, or select it from the calendar by clicking the Calendar (🗓) button.
To back up the database up to the moment of the performed backup,	select **No End Date**.

7.   Click **Finish** to save changes and close the window.

2.6 Radios

The **Radios** submenu is available from the **Settings (⚙)** menu on the SmartPTT Dispatcher menu bar. It provides the following configuration options:

- Configuring the list of radios and WAVE users and their properties.
  For details, see List of Radios.

- Configuring categories of radios, talkgroups, and WAVE users.
  For details, see Categories.

- Configuring radio, talkgroup, and WAVE user statuses displayed in the **Radio Fleet** panel.
  For details, see Statuses.

- Configuring telemetry commands.
  For details, see Telemetry.

- Configuring the job ticket statuses.
  For details, see Job Ticket Statuses.

- Configuring rules applied to radios and WAVE users in the Lone Worker mode.
  For details, see Lone Worker Rules.

- Configuring additional parameters displayed in the radio and WAVE user **Properties** window.
  For details, see Custom Radio Properties.

> **NOTE**
> WAVE users are users connected to a WAVE server. SmartPTT Radioserver gets information on WAVE users by means of the WAVE Connector middleware. For details, see "WAVE Systems" in *SmartPTT Installation and Configuration Guide*.

2.6.1 List of Radios

The **Radios** window provides the ability to configure the list of radios and WAVE users and their properties in SmartPTT Dispatcher.

> **NOTE**
> To edit the SmartPTT Dispatcher list of radios, the operator needs to have the **Edit radio lists** access right that can be assigned in the operator's account settings. For details, see Operators.

In the **Radios** window, you can perform the following actions:

- Add one or multiple radios to the SmartPTT Dispatcher list of radios. For details, see Adding Radios.

- Edit properties of one or multiple radios and WAVE users. For details, see Managing Radios.

- Delete one or multiple radios and WAVE users. For details, see Managing Radios.

You can open the **Radios** window by clicking **Settings (⚙) → Radios → List of Radios** on the menu bar.
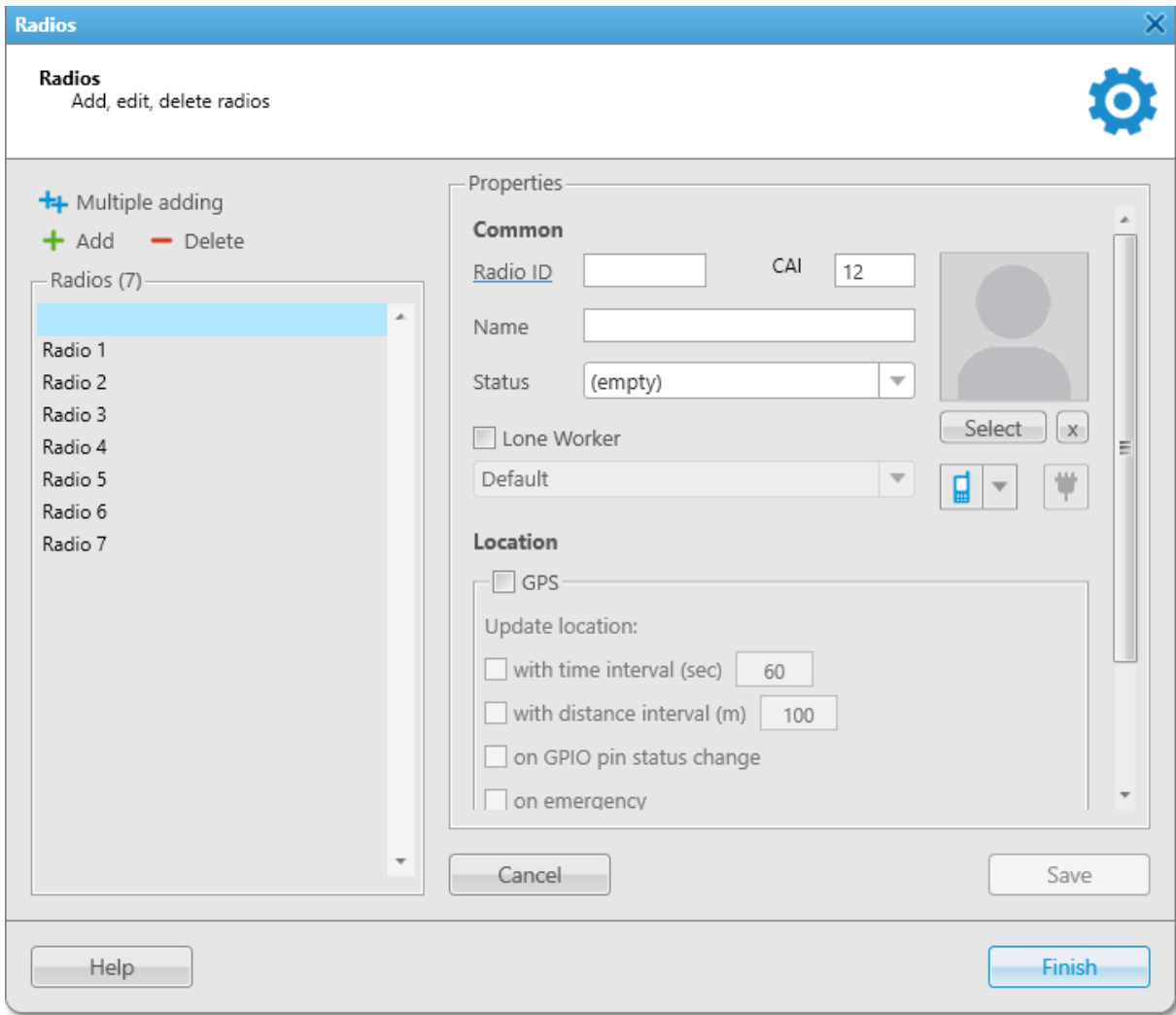
The **Radios** window consists of two areas:

- List of Radios

- Radio Properties

The List of Radios area is located in the left part of the window. It provides the following elements:

Multiple adding ( )

Provides the ability to add multiple radios at the same time by specifying the properties common to all of them. For details, see Adding Radios.

In the Multiple Adding mode, the radio individual properties, such as name and avatar, are unavailable. You can set them later for each radio or WAVE user individually in the editing mode. For details, see Managing Radios.

NOTE

The Multiple Adding mode is available only for the **Radio ID** input format. Radios that use analog signaling (MDC-1200 or 5 Tone) or P25 signaling must be added individually.

Add (+)

Provides the ability to add a new radio by specifying its properties in the **Properties** area in the right part of the window. For details, see Adding Radios.

Delete (−)

Provides the ability to delete the radios and WAVE users selected in the **Radios** list below. For details, see Managing Radios.

Radios

The list of radios and WAVE users registered in SmartPTT Dispatcher.

The **Properties** area provides controls for setting and editing properties of the radios and WAVE users. The parameters you specify in this area will be displayed and can be further edited in the radio or WAVE user **Properties** window. For details, see Radio Properties Window.

> **NOTE**
> The list of available radio properties depends on the radio system in which the radio is registered (analog or digital).

For information on working with the list of radios, see the sections below.

2.6.1.1 Adding Radios

Follow the procedure to add one or multiple radios to the SmartPTT Dispatcher list of radios.

Prerequisites:

Ensure that your operator's account is assigned the **Edit radio lists** access right. For details, see Operators.

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Radios** → **List of Radios**.
   The **Radios** window appears.

2. In the windows, perform one of the following actions:

To add a single radio,	perform the following actions:
	1. In the left part of the window, click **Add (+)**. The new radio properties appear in the **Properties** area on the right.
	2. In the **Properties** area, under the **Common** heading, specify the radio general parameters. For details, see Common Radio Properties.
	3. *(Optional)* Under the **Location** heading, specify the radio location parameters. For details, see Radio Location Properties.
	4. Click **Save**. The added radio appears in the **Radios** list.

Settings   Radios

To add multiple radios,   perform the following actions:

1. In the left part of the window, click **Multiple Adding (** ⊞ **)**.
   Radio properties that are common to all of the added radios appear in the **Properties** area on the right.

2. In the **Properties** area, in the **Radio ID** box, specify the added radio IDs using hyphens and/or commas. For example, *1-99, 150*

> **NOTE**
> The Multiple Adding mode is available only for the **Radio ID** input format. Radios that use analog signaling (MDC-1200 or 5 Tone) must be added individually.

3. In the **Properties** area, under the **Common** heading, specify the desired properties of the added radios. For details, see Common Radio Properties.

4. Under the **Location** heading, specify the desired location properties of the added radios. For details, see Radio Location Properties.

5. Click **Save**.
   The added radios appear in the **Radios** list.

Postrequisites:

- To edit properties of one or multiple radios, see Managing Radios.

- To delete one or multiple radios, see Managing Radios.

2.6.1.2 Managing Radios

Follow the procedure to edit properties or delete one or multiple radios and WAVE users.

Prerequisites:

Ensure that your operator's account is assigned the **Edit radio lists** access right. For details, see Operators.

Procedure:

1. On the menu bar, click **Settings (** ⚙ **)** → **Radios** → **List of Radios**.
   The **Radios** window appears.

2. In the **Radios** window, perform one of the following actions:

To edit properties of a single radio or WAVE user,	perform the following actions:
	1. In the left part of the window, select the desired radio from the **Radios** list. The properties of the selected radio appear in the **Properties** area on the right.
	2. In the **Properties** area, edit the desired properties, and then click **Save**.

To edit properties of multiple radios and/or WAVE users,	perform the following actions:
	1. In the left part of the window, select the desired radios from the **Radios** list in one of the following ways:
	• Press and hold Ctrl, and then click the desired radios.
	• Press and hold Shift, and then click the first and the last radio in the desired part of the list.
	Radio properties common to all of the added radios appear in the **Properties** area on the right.
	2. In the **Properties** area, edit the desired radio properties, and then click **Save**.

> **NOTE**
>
> If the property values differ among the selected radios, the value in the corresponding box is cleared. The check boxes of such properties are filled with solid gray (▣). By changing the common property value, you will change it for each of the selected radios.

To delete a single radio or WAVE user,	perform the following actions:
	1. In the left part of the window, select the desired radio from the **Radios** list, and then click **Delete (➖)**.
	2. In the window that appears, click **OK**. The radio is removed from the **Radios** list.

To delete multiple radios and/or WAVE users,	perform the following actions:
	1. In the left part of the window, select the desired radios from the **Radios** list in one of the following ways:
	• Press and hold Ctrl, and then click the desired radios.

- Press and hold Shift, and then click the first and the last radio in the desired part of the list.

2. Click **Delete (➖)**, and then, in the window that appears, click **OK**.
The selected radios are removed from the **Radios** list.

2.6.2 Categories

You can use categories for grouping radios and talkgroups, and for applying certain actions to all category objects (for example, assigning a status, sending a message).

Categories include the following objects:

- Radios registered in SmartPTT Dispatcher
- Talkgroups
- Other categories (subcategories)

You can open the **Categories** window by clicking **Settings (⚙)** → **Radios** → **Categories** on the menu bar.
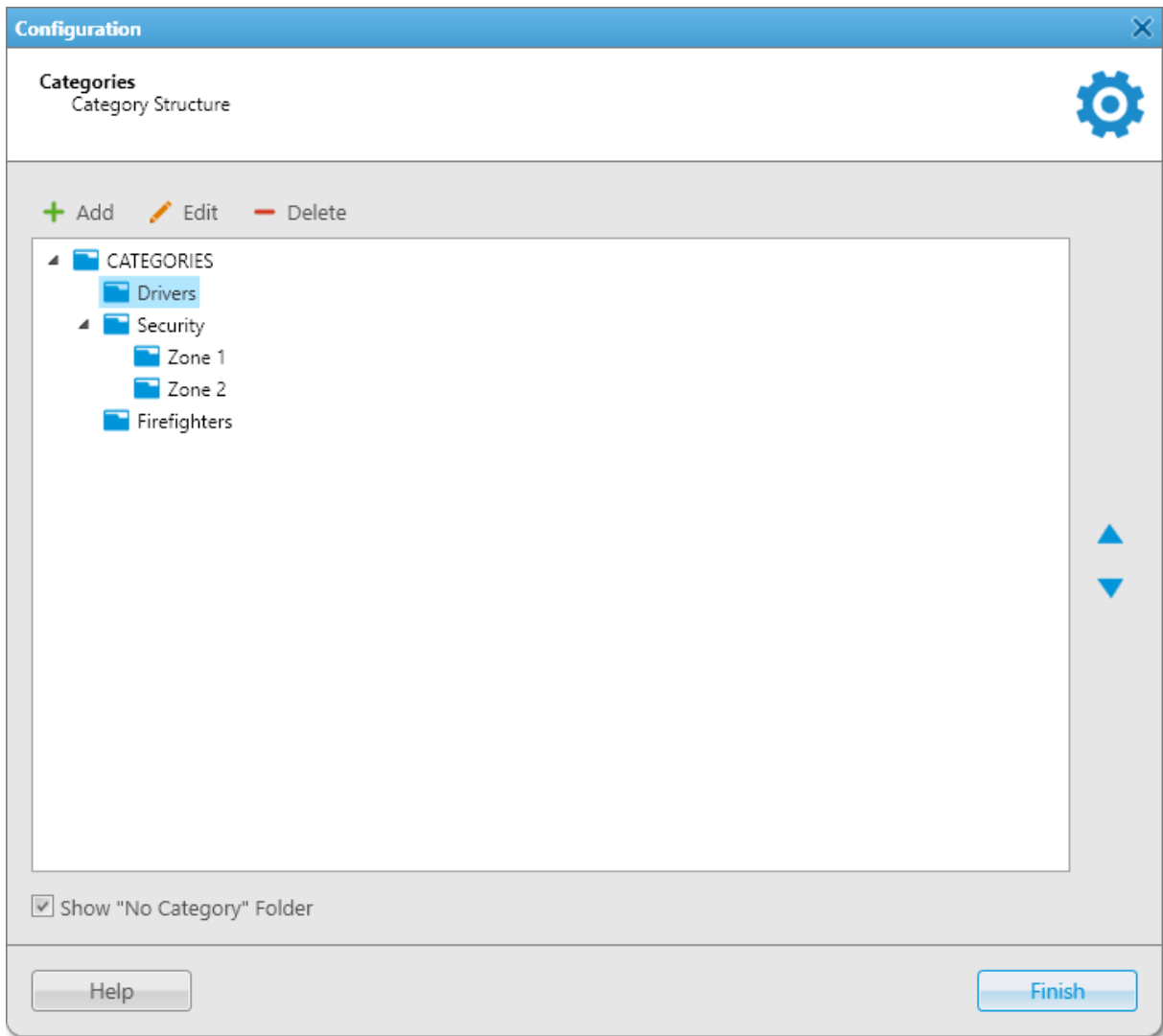
The **Categories** window provides the following elements:

Add

Opens the **Category** window for adding a new category. For details, see [Managing Categories](#).

Edit

Opens the **Category** window for editing the selected category.

Delete

Removes the selected category. If the selected category has nested categories, these categories will also be deleted.

Categories area

Contains all categories. You can set a structure for categories that will be displayed in the **Radio Fleet** panel using the following methods:

- You can change category nesting by dragging the desired category to another one. When you drag a category to the default **CATEGORIES** folder, the category becomes a first-level category.

- You can change the sequence of categories using the Up (▲) and Down (▼) buttons located to the right of the area. You can change sequence for categories of one level (first-level categories or subcategories of one category).

Show "No Category" Folder

Shows objects not included in any category on the **Radio Fleet** panel under the **No Category** folder. For information on categories on the **Radio Fleet** panel, see Categories.

For information on configuring and managing categories, see the sections below.

2.6.2.1 Category

The **Category** window provides the ability to configure or edit category settings.
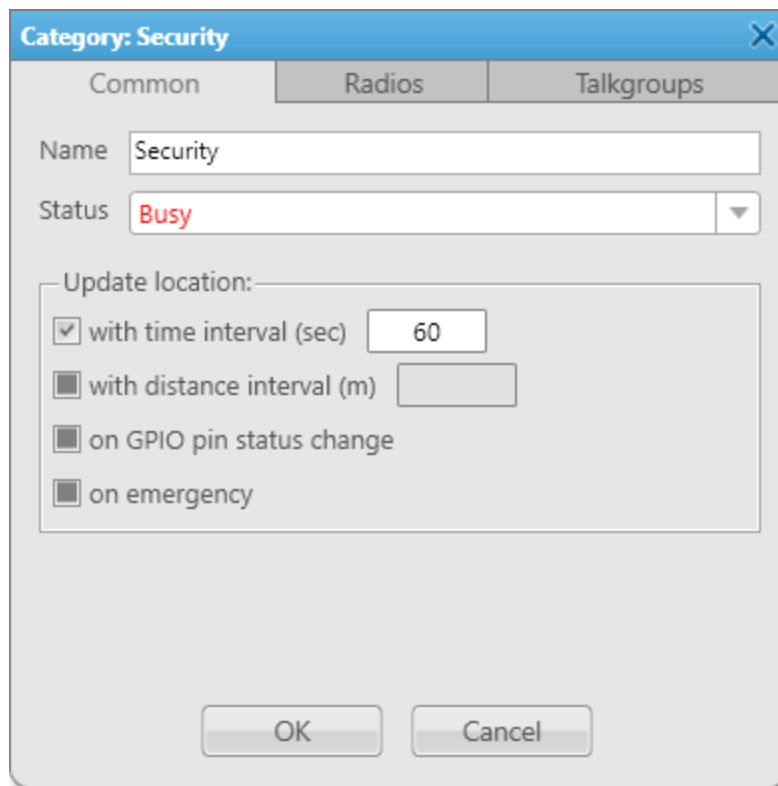
The **Category** window contains three tabs:

- The **Common** tab provides general category settings.

- The **Radios** tab provides a list of available radios that can be added to the category.

- The **Talkgroups** tab provides a list of talkgroups that can be added to the category.

The **Common** tab provides the following elements:

Name

Category name.

Status

Provides a list of available statuses in SmartPTT Dispatcher. The selected status will be assigned to all radios of the category. For information on radio statuses, see Statuses.

Update location

The area provides updating location parameters of all radios in the category:

- **With time interval (sec)** — location request is sent to a radio with a specific time interval. This parameter should not be smaller than its equivalent in SmartPTT Radioserver. For information on update intervals, see "Configuring GPS" in *SmartPTT Installation and Configuration Guide*.

- **With distance interval** — location request is sent to a radio when it passes a distance specified in the field on the right.

- **On GPIO pin status change** — location request is sent to a radio each time the assigned to the radio telemetry action is performed. For details, see Telemetry.

- **On emergency** — location request is sent to a radio when Emergency Alarm or Emergency Call is received from the radio.

NOTE

Configuring of location request parameters is unavailable if no radios are added to the category.

Check boxes in the **Update location** area have three different states:

- Solid gray (▣) — the parameter that is set in the individual settings of radios is applied.

- Selected (☑) — the selected parameter is applied to all radios of the category.

- Clear (☐) — the parameter is **not** applied to all radios of the category.

2.6.2.2 Managing Categories

Follow the procedure to add new, or edit/delete an existing category, or configure category settings.

- Ensure the desired radios are registered in SmartPTT Dispatcher.
  For details, see Radios.

- If you need to assign a status to all radios of the category, ensure the desired status is created in SmartPTT Dispatcher.
  For details, see Managing Statuses.

- Ensure that GPS is activated in the radio properties for requesting location of the radios included in the category. For details, see Radio Location Properties.

Procedure:

1. On the menu bar, click **Settings (⚙) → Radios → Categories**.
   The **Categories** window appears.

2. In the **Categories** window, perform one of the following actions:

To add a new category,	click **Add**. The **Category** window appears.
To edit an existing category,	select the desired category, and then click **Edit**. The **Category** window appears.

Settings

Radios

To delete an existing category,	perform the following actions: 1. Select the desired category, and then click **Delete**. **Important** If the selected category has nested categories, these categories will also be deleted. 2. In the confirmation window, click **OK**. 3. Proceed to the last step of the procedure.
To change sequence of categories,	perform the following actions: 1. Select the desired category, and then change its position using the Up (▲) and Down (▼) buttons. 2. Proceed to the last step of the procedure.
To change nesting of categories,	perform the following actions: 1. Drag the desired category to another one. 2. Proceed to the last step of the procedure.
To show objects not included in categories, on the **Radio Fleet** panel,	perform the following actions: 1. Select the **Show "No Category" Folder** check box. 2. Proceed to the last step of the procedure.

3. In the **Category** window, in the **Name** field, type the category name.

4. From the **Status** list, select the status that will be assigned to all radios of the category.

5. Set the category objects:

To add radios to the category,	perform the following actions: 1. Open the **Radios** tab. 2. Select the check boxes of the desired radios. **NOTE** You can add several radios simultaneously by selecting them using Shift or Ctrl, and then pressing the Space key.
To add talkgroups to the category,	perform the following actions: 1. Open the **Talkgroups** tab.

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	2. Expand nodes of the desired radio systems, and then select the check boxes of the desired talkgroups.
To delete a radio or talkgroup from the category,	perform the following actions: 1. Open the tab with the desired radios or talkgroups. 2. Clear the check boxes of the desired objects.

6. If radios are added to the category, configure their location request settings:

To apply the selected parameter to all radios in the category,	perform the following actions: 1. Select the check box (☑) next to the desired parameter. 2. If available, in the field to the right of the check box, enter the desired value.
To apply parameters that are set in individual settings of each radio in the category,	leave the check box filled with solid gray (▪).
To **not** apply the selected parameter to all radios in the category,	clear the check box (☐) next to the desired parameter.

7. In the **Category** window, click **OK** to save changes and close the window.

8. In the **Categories** window, click **Finish**.

2.6.3 Statuses

Statuses provide the ability to specify current condition of radios.

Statuses can be displayed on the following panels:

- On the **Radio Fleet** panel — to track and assign statuses, as well as filter radios by their statuses. For details, see Radios.

- On the **Radios** panel — to filter radios by their statuses. For details, see Radios.

- On map — to track current radio statuses (a frame of a status color around radio icon). For details, see Map Control Panel.

> **Important**
> Managing statuses is available to the Administrator, or to operators with the corresponding permission. For details, see Operators.

You can open the **Statuses** window by clicking **Settings (⚙)** → **Radios** → **Statuses** on the menu bar.

The **Statuses** window contains two tabs:

- The **Active** tab. For details, see Active Tab.

- The **Archive** tab. For details, see Archive Tab.

For information on configuring and managing statuses, see the sections below.

2.6.3.1 Active Tab

On the **Active** tab, you can manage all active radio statuses or add new statuses.
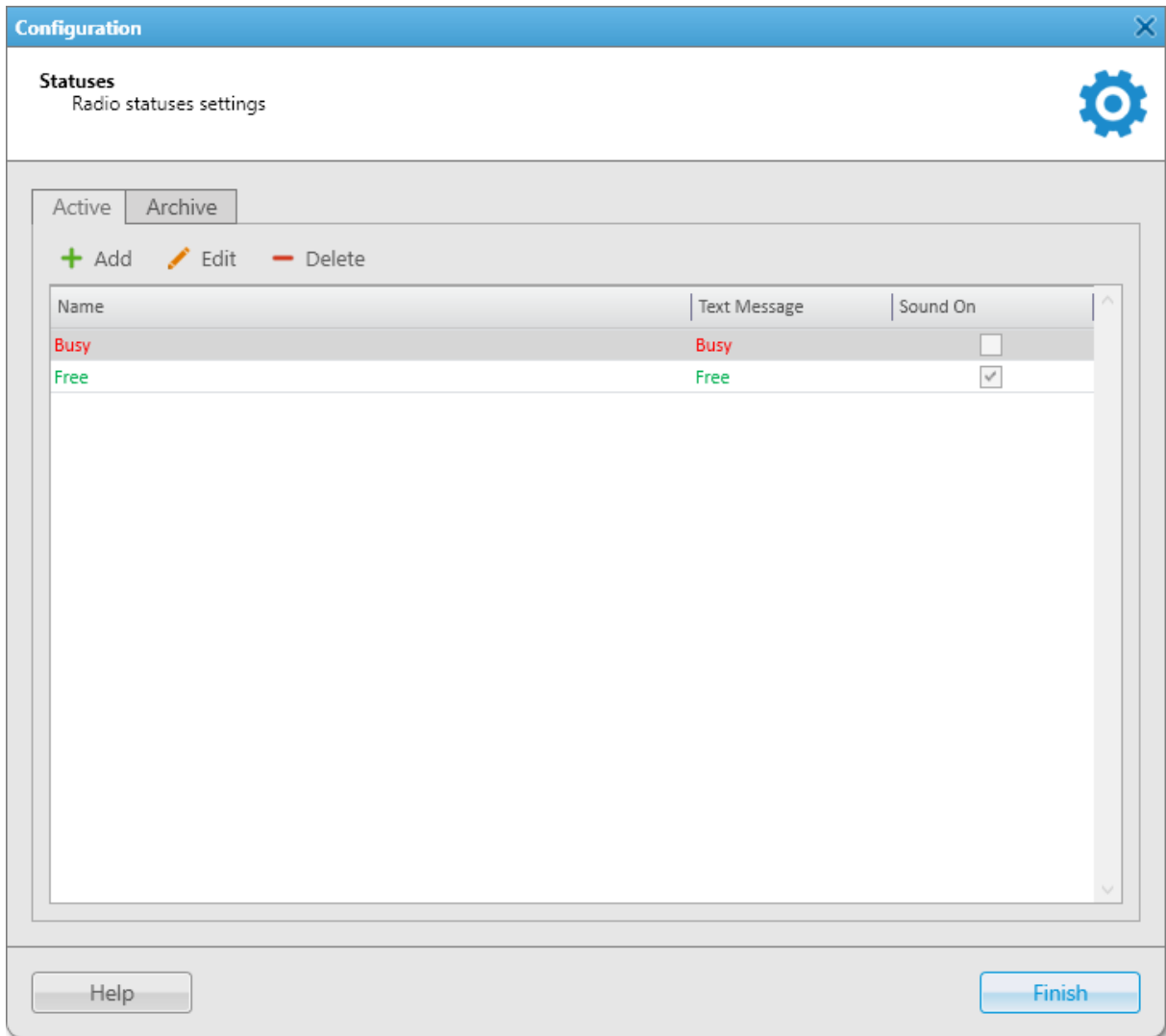
The tab provides the following elements:

Add

Opens the **Radio Status** window for adding a new radio status. For details, see Managing Statuses.

Edit

Opens the **Radio Status** window for editing the selected radio status. For details, see Managing Statuses.

Delete

Removes the selected status. If the status is currently assigned or was assigned to a radio, it cannot be deleted. You can move it to the archive, and, if needed, restore the archived status later. For details, see Managing Statuses.

Table with statuses

Provides a list of active statuses. The table consists of the following columns:

- **Name** — status name that is displayed with a color set for the status.

- **Text Message** — text message that is set for automatic status change. Message is displayed with a color that is set for the status.

- **Sound On** — displays whether a sound notification for status assignment is turned on or off.

2.6.3.2 Archive Tab

The **Archive** tab contains archived statuses that cannot be removed because they are currently assigned or were assigned to a radio.

On the tab, you can restore statuses that were moved to archive and make them active again.

Archived statuses cannot be assigned to radios and cannot be used when you configure alerts for dispatchers in rules. However, the statuses remain valid if they were assigned to radios before moving the status to the archive. For information on rules, see Rules.

Archived statuses are also displayed in the Event Log. For details, see [Dispatcher Event Log Table](#).

The tab provides the following elements:

Restore

Restores the selected status. The restored status will appear on the **Active** tab.

Table with statuses

Provides a list of archived statuses. The table consists of the following columns:

- **Name** — status name that is displayed with a color set for the status.

- **System Message** — text message that is set for automatic status change. Message is displayed with a color that is set for the status.

- **Sound On** — displays whether a sound notification for status assignment is turned on or off.
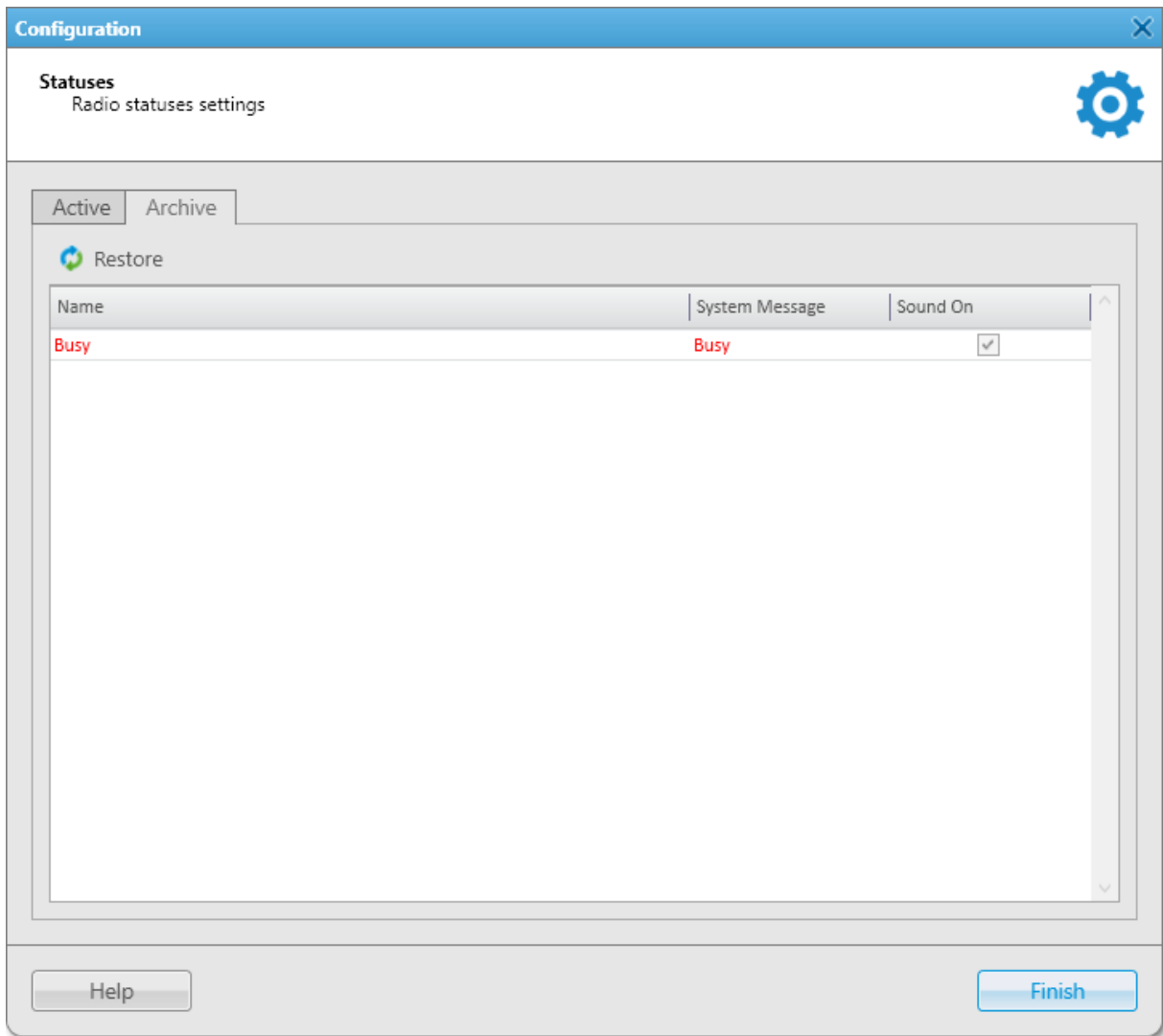
2.6.3.3 Radio Status

The **Radio Status** window provides the ability to configure settings of a new or existing radio status.
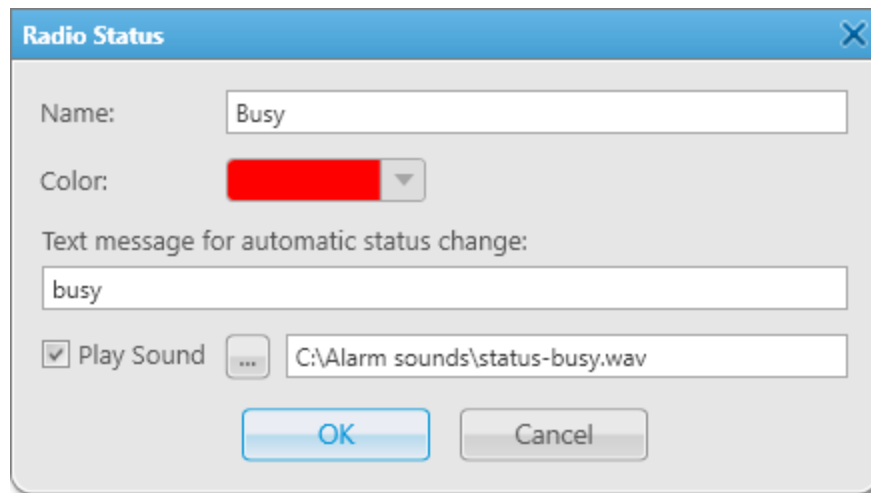
The **Radio Status** window provides the following elements:

Name

Status name.

Color

Color assigned to the status.

Text message for automatic status change

Message that initiates status assignment. When a radio sends the message to the dispatcher or to any other addressee, the status is assigned to the radio. Text messages cannot be the same for different statuses. If the text message is already specified for another status, the corresponding warning window appears.

Play Sound

Sound notification of automatic status assignment. The check box becomes available when a text message for status changing is set. You can select the desired audio file in the **Sound File Selection** window by clicking the Browse (⬚) button.

Audio file must comply with the specific requirements. For details, see "Audio File Requirements" in *SmartPTT Installation and Configuration Guide*.

2.6.3.4 Managing Statuses

Follow the procedure to add, edit, delete, or restore radio statuses.

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Radios** → **Statuses**.
   The **Statuses** window appears.

2. In the **Statuses** window, perform one of the following actions:

To add a status,	click **Add**.
	The **Radio Status** window appears.

To edit an existing status,	select the desired status, and then click **Edit**. The **Radio Status** window appears.
To delete an existing status,	perform the following actions:

1. Select the desired status, and then click **Delete**.

> **NOTE**
> If the status is currently assigned or was assigned to a radio, it cannot be deleted. You can move it to the archive.

2. In the confirmation window, click **OK**.

3. Proceed to [step 5](#).

To restore the archived status,	perform the following actions:

1. Open the **Archive** tab.

2. Select the desired status, and then click **Restore**.

3. Proceed to [step 5](#).

3. In the **Radio Status** window, perform the desired actions:

To set a name for a status,	in the **Name** field, type the status name.
To set a color for a status,	from the **Color** list, select the desired status color.
To set a message that will initiate status assignment,	in the **Text message for automatic status change** field, type the desired text.

> **NOTE**
> Text messages cannot be the same for different statuses.

To set a sound for status assignment,	perform the following actions:

1. Select the **Play Sound** check box.

2. Click Browse (⬚), and then, in the window that appears, select the desired audio file.

4. In the **Radio Status** window, click **OK**.

5. In the **Statuses** window, click **Finish**.

2.6.4 Telemetry

To set up actions based on incoming/outgoing telemetry commands, on the menu bar of the SmartPTT Dispatcher window, click **Settings (⚙) → Radios → Telemetry**.
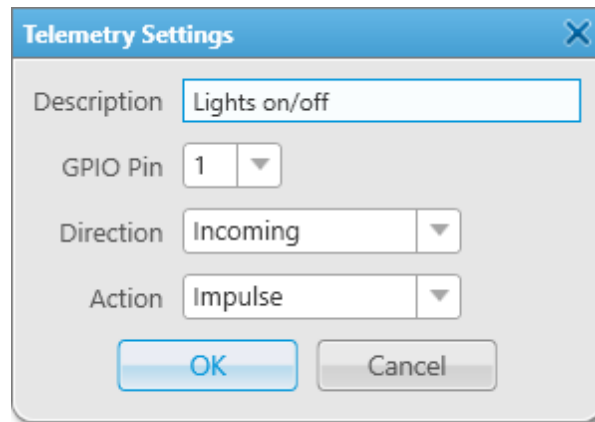
The **Telemetry Settings** window appears.
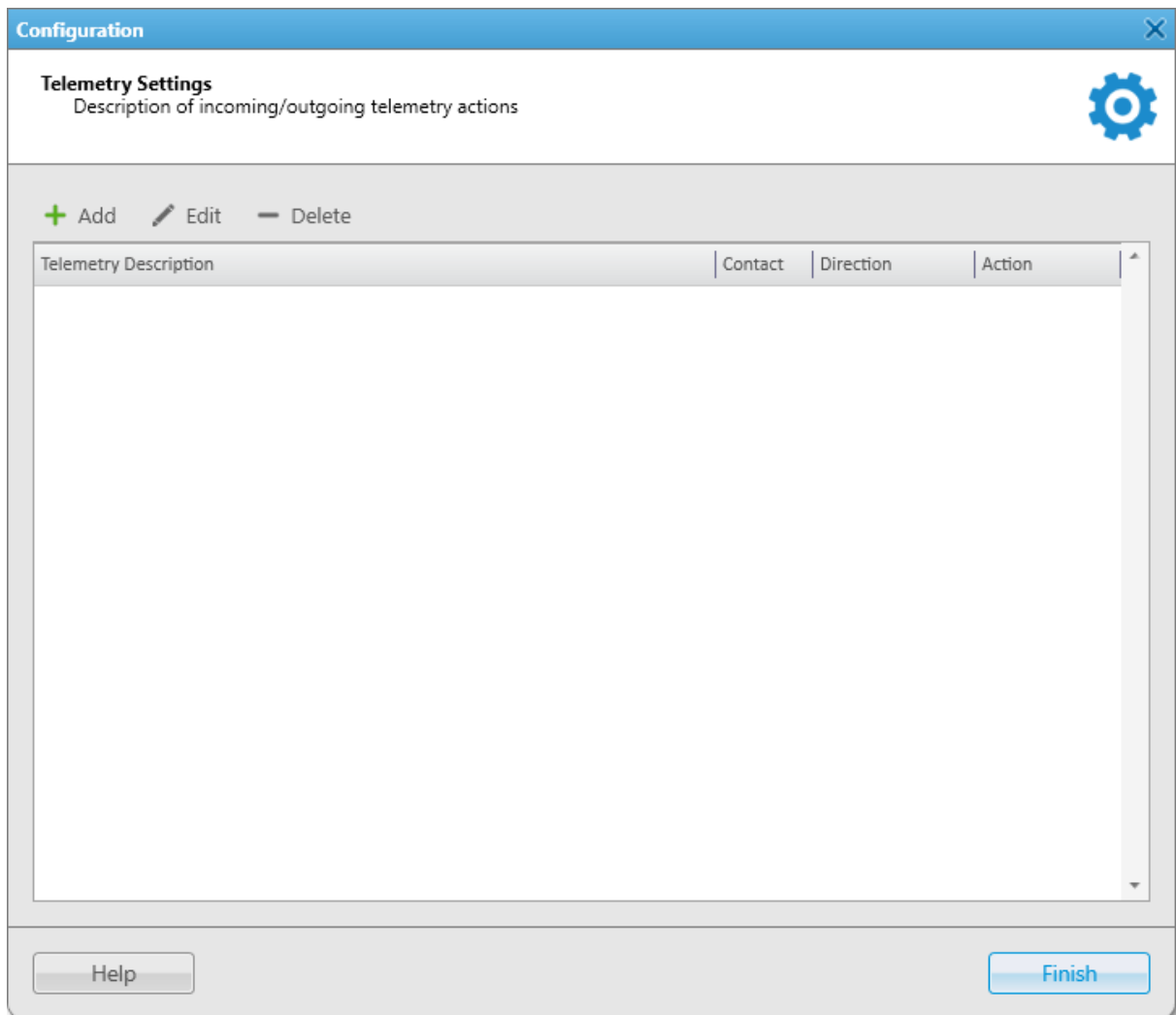
Important

Telemetry commands are available to operators with the corresponding permission. For details, see Operators.

To add a new telemetry command, click **Add**. The **Telemetry Settings** window is displayed.

Description

Description of the action to be triggered.

Contact

Select a contact or VIO from the list.

> **NOTE**
> Make sure the selected contact or VIO is mapped to a physical GPIO line in MOTOTRBO CPS.

Direction

Select direction (incoming or outgoing).

Action

Action type: *impulse*, *high level*, *low level*, *toggle level*.

To save the changes, click **OK** – the created settings appear in the list of settings.

To edit the existing settings, select the entry in the list of settings and click **Edit**.

To delete the settings, select the entry in the list of settings and click **Delete**.

How to Assign Telemetry to Radio

You can select telemetry settings in the radio **Properties** window.

For information on radio properties window, see Radio Properties Window.

> **NOTE**
> Only registered radios can be assigned to a telemetry command. For not registered radios the **Telemetry** button is unavailable.
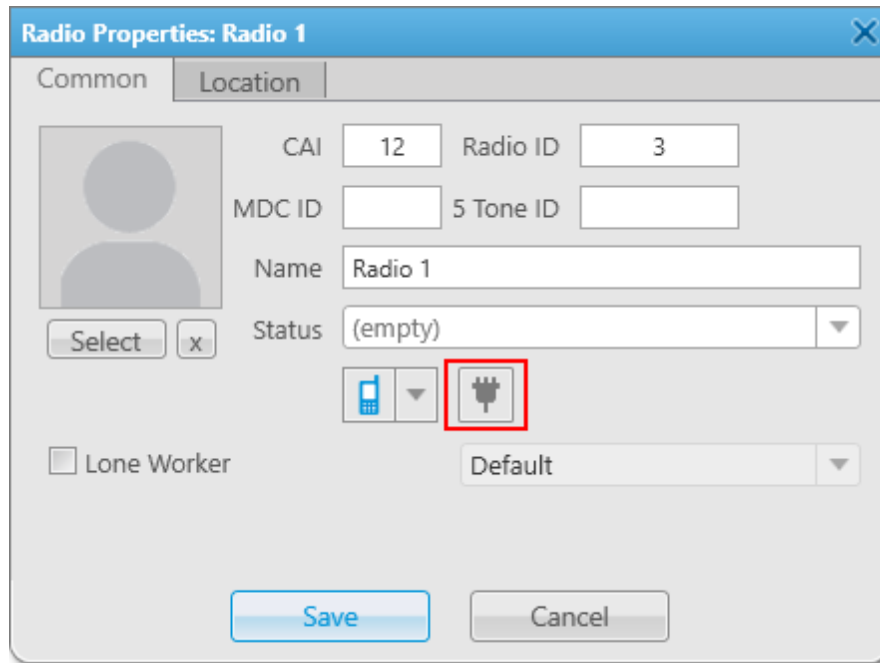
Click the **Telemetry** button to open the window for selecting available telemetry commands for the radio.
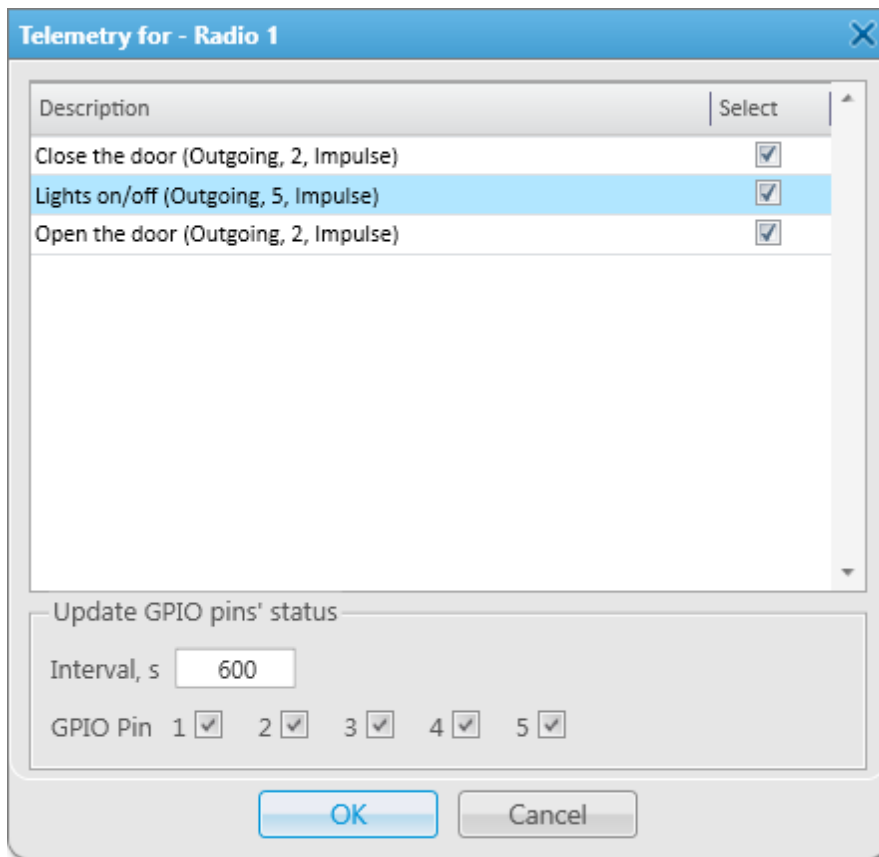
Select the required command to make it available in the **Call Window** of the radio and in the custom consoles. Also, it allows you to set automatic status updates of the GPIO pins. To receive status updates of the GPIO pins automatically, select the required GPIO pins in the **Update GPIO pins' status** area and set the update interval in seconds.

> **NOTE**
> Automatic GPIO pins' status update is applied only for incoming telemetry commands.

Then you can run the telemetry command from the radio **Call Window**. For information on radio call window, see Radio Call Window.
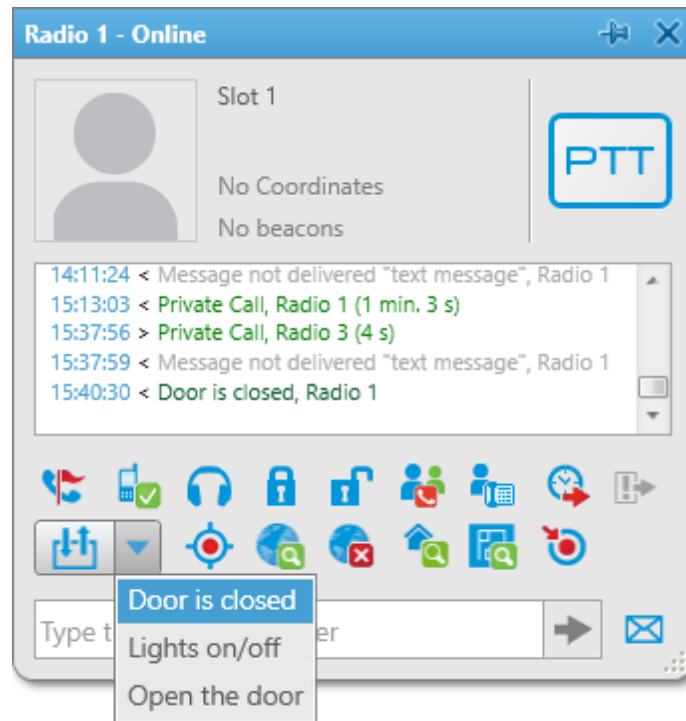
To receive the current telemetry status, click **Get Status of Telemetry Contact (** 📤 **)**. The updated status will be displayed in **Call Window** of the radio.
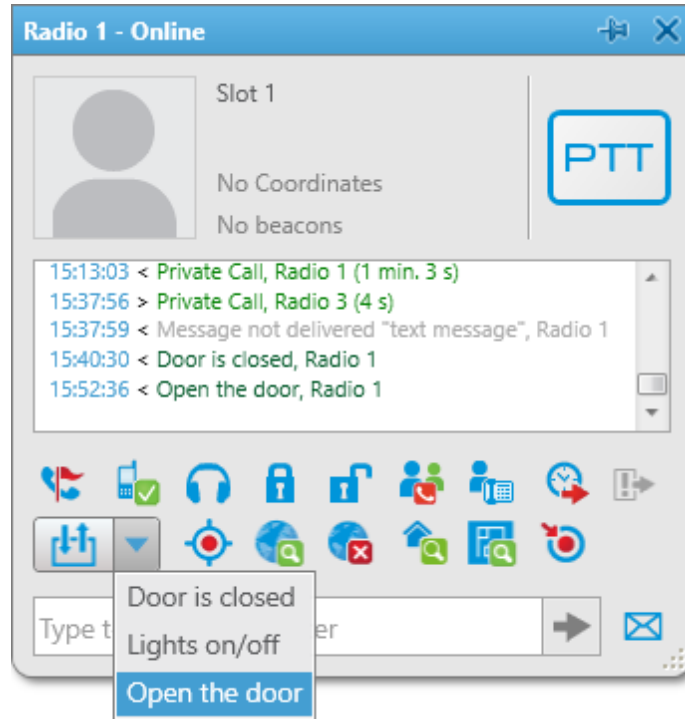
How to Assign Telemetry to Talkgroup

You can select telemetry settings in the **Properties** window of the talkgroup.

For information on talkgroup properties window, see Talkgroup Properties.
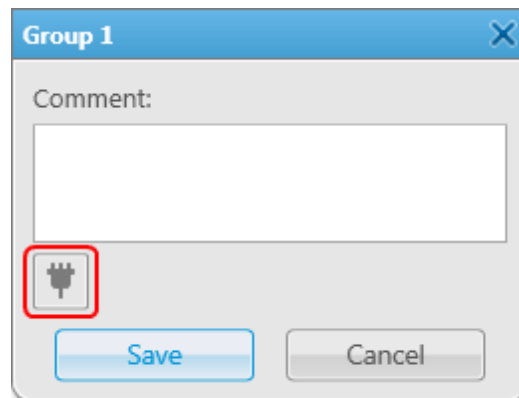
Click the **Telemetry** button and select available telemetry commands for the talkgroup.
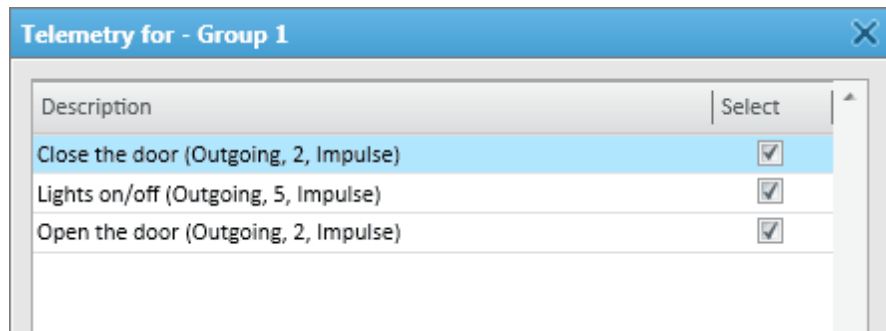
Then you can run the telemetry command from the talkgroup **Call Window**.

For information on talkgroup call window, see Talkgroup Call Window.
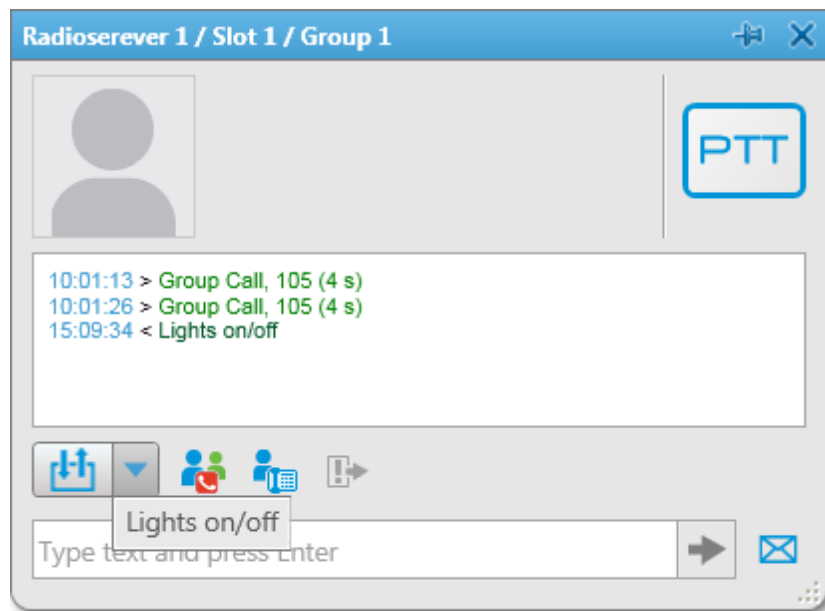
2.6.5 Job Ticket Statuses

You can create job ticket statuses and specify their settings. For example, assign a color to a status or add sound notification on status change.

You can open the **Job Tickets** window by clicking **Settings (⚙)** → **Radios** → **Job Tickets** on the menu bar.
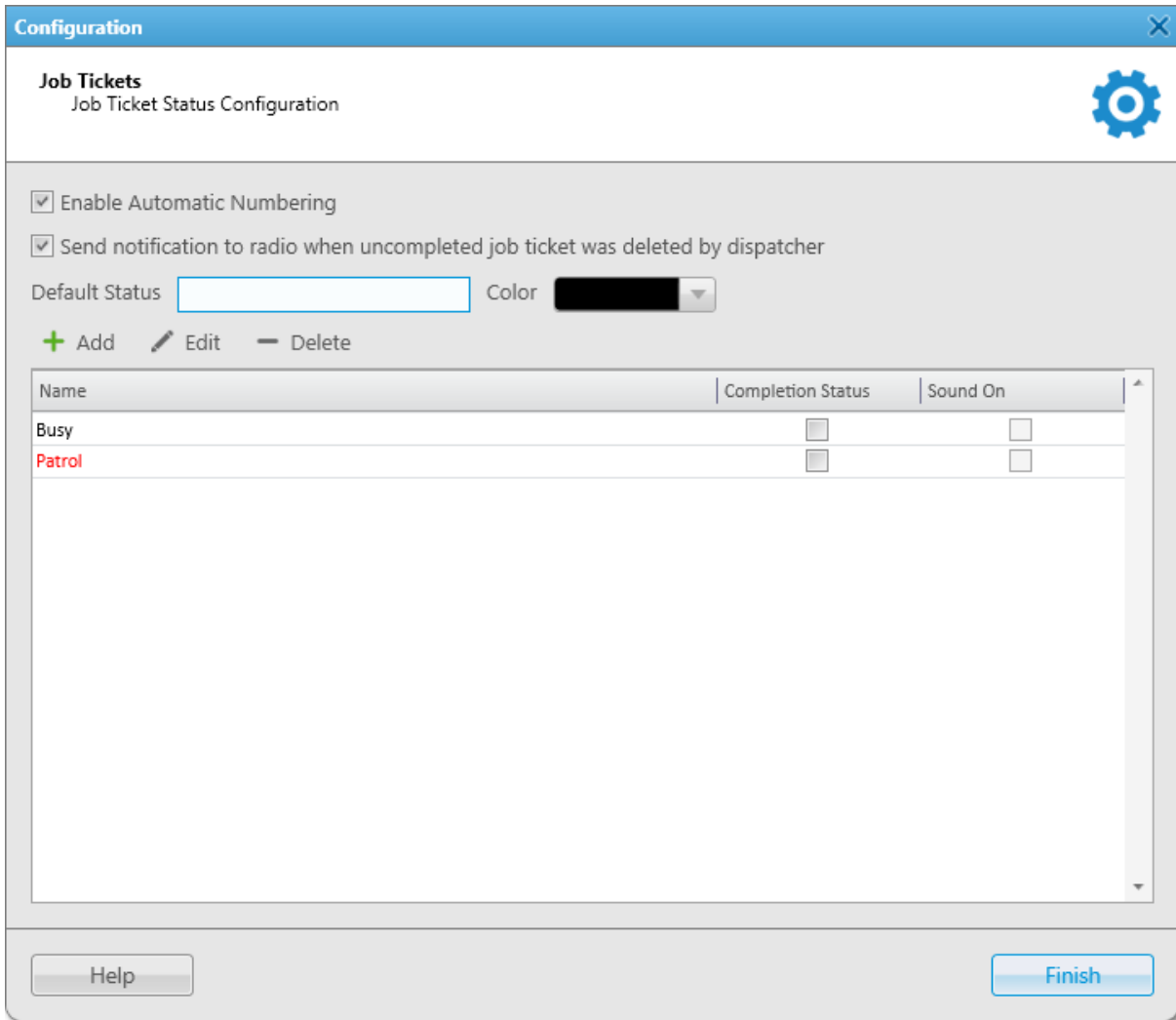
The **Job Tickets** window provides the following elements:

Enable Automatic Numbering

When this option is enabled, a unique number is assigned to each new job ticket. It is necessary to distinguish job tickets with same names.

Send notification to radio when uncompleted job ticket was deleted by dispatcher

If this option is enabled, a radio receives a message, if an incomplete job ticket was canceled.

Default Status

The job ticket status which is displayed when the operator creates a new job ticket. The status does not change, until the person modifies it. You do not need to set this status in the MOTOTRBO CPS settings. It is used only in SmartPTT Dispatcher, so you can add any value you like.

In the **Color** box select the color for the default status.

To add a job ticket status, click **Add**.

Name

Name of the status.

Color

Color of the status, which will be used in the job ticket table.

Completion status

Final status of a job ticket. If a job ticket has such status and if the **Show completed job tickets** check box is cleared, the job ticket will be hidden from the list. For details, see Management Area.

> **NOTE**
> You can also select the **Completion status** later in the **Job Tickets** configuration window.

Play Sound

Sound notification of changing job ticket status. You can select the desired audio file in the **Sound File Selection** window by clicking the Browse (⋯) button.

Audio file must comply with the specific requirements. For details, see "Audio File Requirements" in *SmartPTT Installation and Configuration Guide*.

> **Important**
> Added statuses must match statuses set in MOTOTRBO CPS. If the statuses of SmartPTT Dispatcher do not correspond to statuses in MOTOTRBO CPS, all settings (color, sound signal and status completion) will not be applied.

2.6.6 Lone Worker Rules

SmartPTT Dispatcher supports the Lone Worker mode for radios and WAVE users. For details, see Radios.

When a radio or a WAVE user is set to the Lone Worker mode, SmartPTT automatically tracks the following conditions:

- Absence of calls from a radio or a WAVE user during specified period of time

- Absence of GPS coordinates from a radio or a WAVE user during specified period of time

- Immobility of a radio or a WAVE user during specified period of time

When one of the specified conditions triggers, SmartPTT Dispatcher executes the actions defined by the settings.

To define special rules or profiles for lone workers, on the menu bar of the SmartPTT Dispatcher window, click
Settings (⚙) → Radios → Lone Worker Rules. The window for creation and/or editing the rules for lone workers
opens.

> **Important**
> Lone Worker rules are available to the Administrator, or to operators with the corresponding permission. For
> details, see Operators.
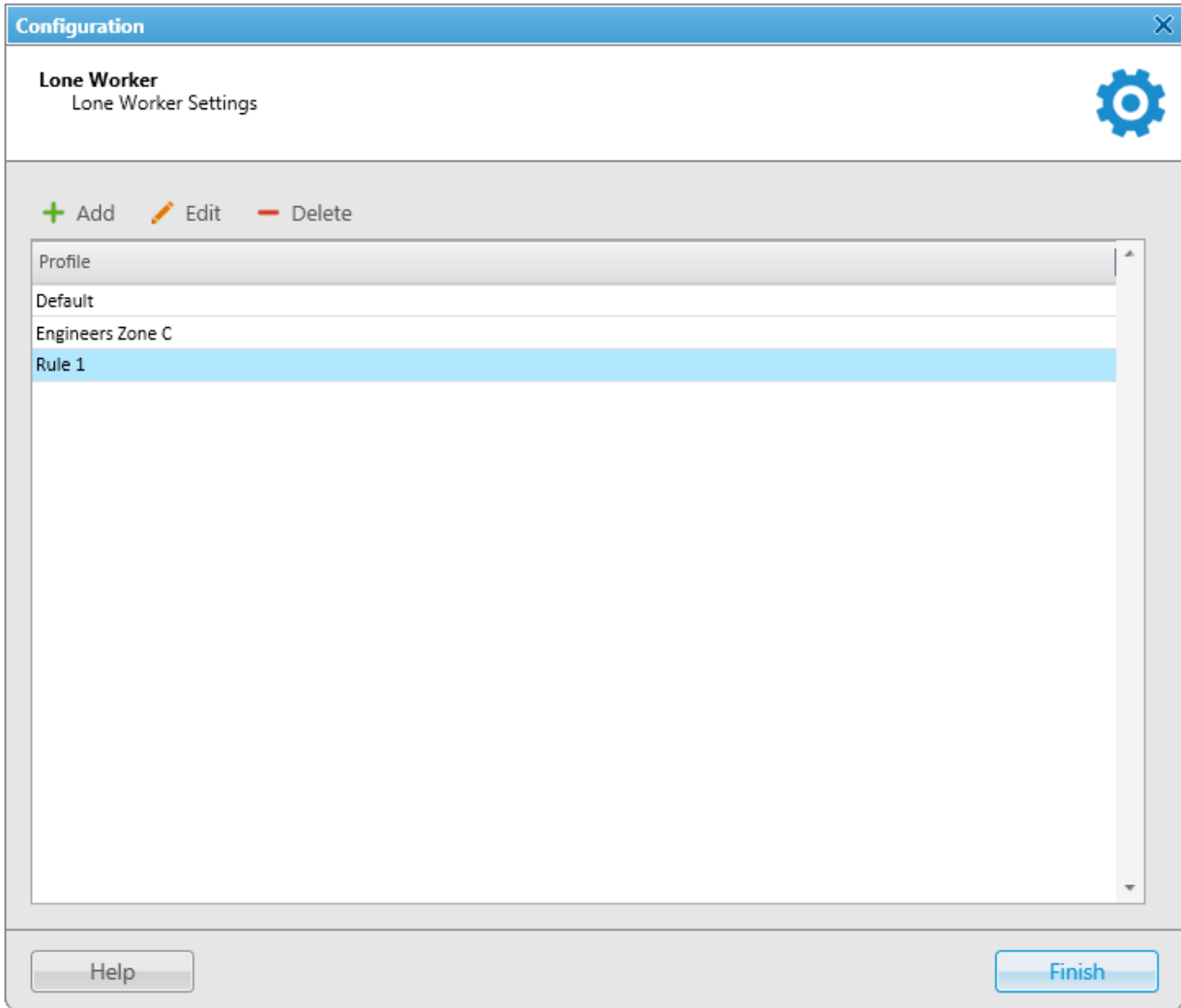
Here you can see the list of rules which get executed if the specified conditions are fulfilled. SmartPTT supports
multiple rules, so it is possible to create a lone worker rule for each radio or WAVE user.

All radios with assigned lone worker profile are displayed on the **Lone Workers** panel. For details, see Lone Workers.

To add a new rule, click **Add**. To make changes in the existing rule, select it and click **Edit**. To delete a rule, select it
from the list and click **Delete**.

> **NOTE**
> The default profile cannot be deleted.

At clicking **Add** or **Edit**, the **Profile Settings** window appears:

In the **Profile Settings** window you can set up rules for a new profile or edit rules for the existing profile. The window contains the following boxes and sections:

Name

Name of the profile. It is an obligatory box.

The **General** tab contains rule conditions to trigger an alert:

No calls

Specifies the period of time for a radio or a WAVE user to make a voice call. If the radio or the WAVE user does not make a call during the specified time period, the corresponding actions are executed.

No location data received

Specifies the period of time for a radio or a WAVE user to send GPS or Indoor data. If the radio or the WAVE user does not send its GPS or Indoor data during the specified time period, the corresponding actions are executed.

No change in location data

Specifies the period of time to check if a radio or a WAVE user is moving. If the radio GPS data (GPS data accuracy is 5 meters) or Indoor data do not change during the specified time period, the corresponding actions are executed.

> **NOTE**
> The **No change in location data** rule condition triggers only if the dispatcher receives radio or WAVE user GPS or Indoor data. So the **No change in location data** rule condition must be used together with the **No location data received** rule condition.

> **NOTE**
> A WAVE user can send only GPS data.

The **Radio Alert** area provides the following elements:

Text Message

When the event specified in one of the filters occurs, the text message is sent to the lone worker.

> **NOTE**
> This action is unavailable to WAVE users.

Audio Message

When the event specified in one of the filters occurs, an audio message is sent to the lone worker. To record the message, click the **Record** button. To stop recording, click the **Stop** button. To listen to the recorded message, click **Play**. To delete the recorded message, click **Delete**.

Call Alert

When the event described by one of the filters occurs, a Call Alert command is sent to the lone worker.

> **NOTE**
> This action is unavailable to WAVE users.

The **Actions** area provides the following elements:

Actions delay

Determines time interval after which **Actions** will be executed after **Radio Alert**.

If a rule corresponds to selected criteria, the system can execute the following actions:

- Actions addressed to the initiator
- Alerts addressed to the dispatcher
- Alerts addressed to the radio
- Other

Initiator Alert

Block Radio

If selected, the radio that triggered the rule, will be blocked.

> **NOTE**
>
> This action is unavailable to WAVE users.

Lone Worker

If selected and **On** is clicked, the lone worker profile will be set to the radio or the WAVE user that triggered the rule. If **Off** is clicked, the lone worker mode of the radio or the WAVE user will be deactivated.

> **NOTE**
>
> To set up the lone worker profile, see Lone Worker Rules in SmartPTT Dispatcher.

Message

A text message is sent to the initiator that triggered the rule.

> **NOTE**
>
> This action is unavailable to WAVE users.

Dispatcher Alert

Play Sound

Select the audio file to play in SmartPTT Dispatcher. The supported audio formats: MP3, OGG, WAV.

Show on Map

Shows on map a radio specified in the rule or the selected point of interest.

Set Radio Status

The radio or the WAVE user is assigned the specified status. It is selected from the list of statuses.

Alert

If the check box is selected, the **Notifications** panel with the specific-rule message will be opened when the rule is triggered. You need to type an alert header in the **Alert Caption** field, and an alert text in the **Alert Text** field to the right of the check box. For information on the **Notifications** panel, see Notifications.

Radio Alert

Send Message

A text message is sent to the selected radios, users, talkgroups or categories.

> **NOTE**
>
> This action is unavailable to WAVE users.

Other

HTTP Request

Is used for notification of the third party server of the changes occurred in SmartPTT system. It can render the event initiator radio ID and its status.

The HTTP request includes the following parts:

> **NOTE**
>
> Make sure that you have specified correct names for parameters 1 and 2. They must correspond to the parameters' names expected by the third party server.

> **NOTE**
>
> Under **@Status** SmartPTT system will send the system message corresponding to the newly assigned status selected in the **Dispatcher Alert** tab. Status system messages are set in the Statuses settings. For details, see Statuses.

E-mail

Is used for specifying e-mail address where a message should be sent in case the rules specified earlier are not fulfilled. To do this, the following boxes are to be filled:

Radioserver

Server name for e-mail sending. The name of the server is selected from the drop-down list.

E-mail

Electronic addresses to send the message.

Message

Text of the message.

SMS

If checked, the SMS message is sent to the specified phone number in case the rules specified earlier are not fulfilled.

Radioserver

Server name for SMS messages sending. The name of the server is selected from the drop-down list.

Phone Numbers

Telephone numbers to send SMS. The preferred number format is International Number Format, i.e. *<+><country code><mobile code><phone number>*.

Message

Text of the message.

> **NOTE**
> See information about SmartPTT Radioserver configuration for sending and receiving e-mails and SMS messages in SmartPTT Radioserver Configurator Help under **Telephone Interconnect** and **SMS Gateway**.

How to assign a Lone Worker Profile to a radio or WAVE user

To assign the created lone worker profile to a radio or a WAVE user open its **Properties** window.

In the opened window select the **Lone Worker** check box, and in the drop-down list select the created profile.
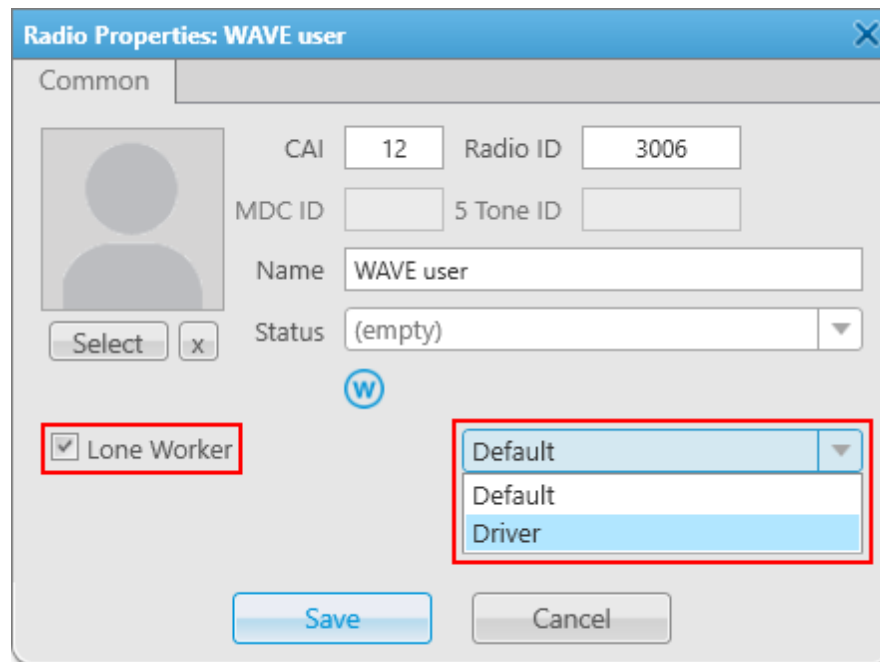
To remove the profile from a radio or a WAVE user, clear the **Lone Worker** check box.

2.6.7 Custom Radio Properties

SmartPTT Dispatcher provides the ability to add custom properties of a radio and a WAVE user, which can be used for giving additional information. Custom radio and WAVE user properties have the following four types:

- Text

- Numeric

- Date

- List

To create custom properties, on the menu bar of the SmartPTT Dispatcher window, click **Settings (⚙) → Radios →**
Custom Radio Properties.
The **Custom Radio Properties** window appears.
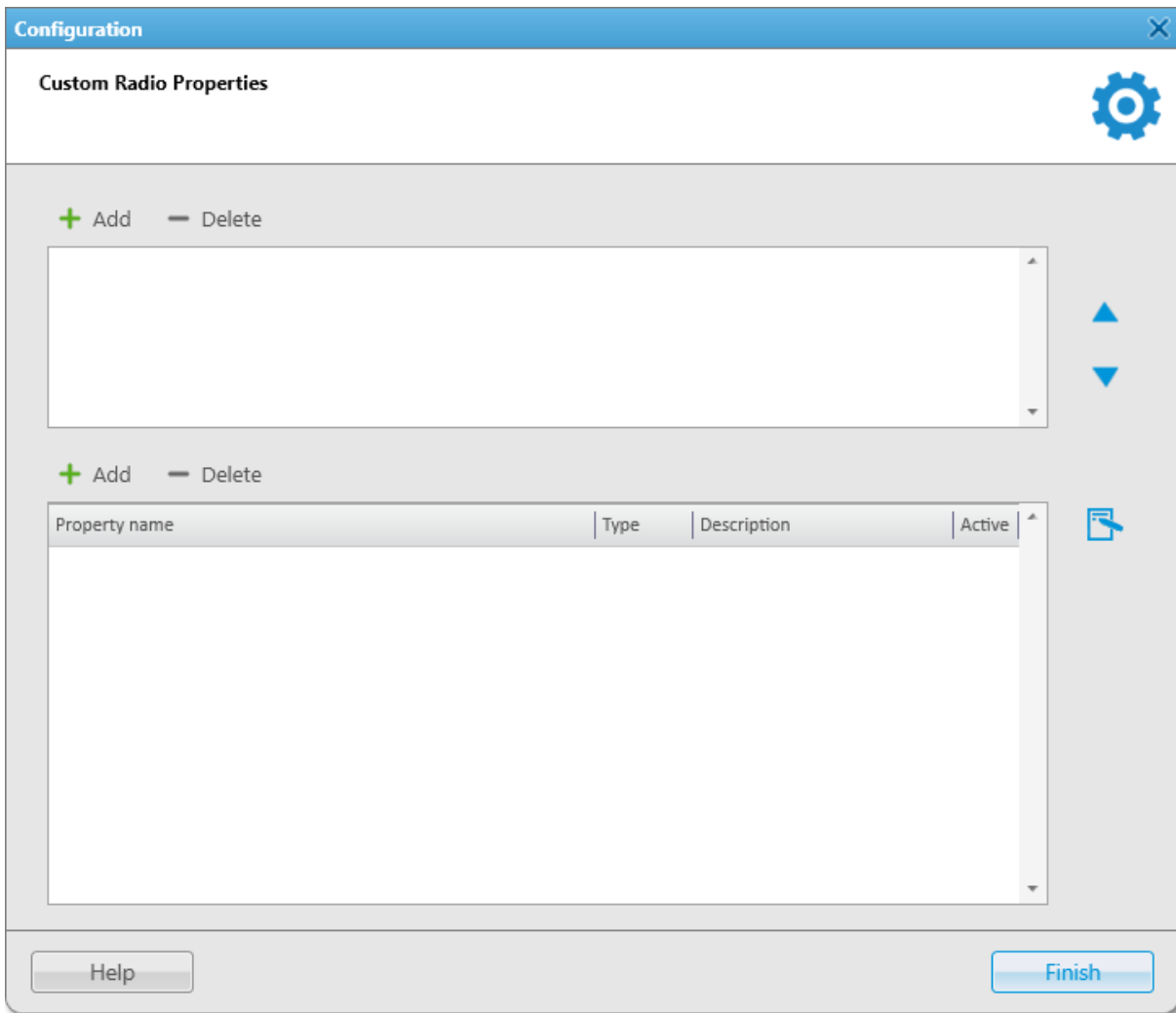
The top list contains custom property groups.

To add a custom property group, click **Add** at the top. To delete the group, click **Delete**. Arrows on the right allow moving groups inside the list.

The bottom list contains the properties of the created groups.

Property Name

Custom name of the property which will be displayed in the **Properties** window.

Type

Property type (Text, Numeric, Data or List).

Description
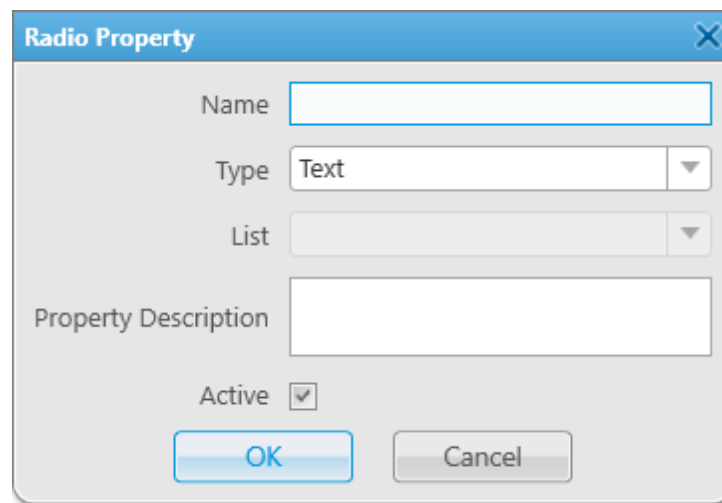
Text description added when creating a property.

Active

Select the check box, to have the property displayed in the **Properties** window.

To add a property into the property group, select the created property group in the top list and then click **Add** above the bottom list.

The **Radio Property** window appears:

Fill all the boxes required.

- **Text** — you can enter a text;

- **Numeric** — you can enter data in numerical format;

- **Date** — you can enter data as a number;

- **List** — you can select a value from the list provided.

Select the **Type** and click **OK**.

> **NOTE**
> If you want to select **List** in the **Type** list, before that you need to create the list. Otherwise, the list will be empty.

To create the list, click the **Create/Edit Lists (** 🔄 **)** button. The window appears:
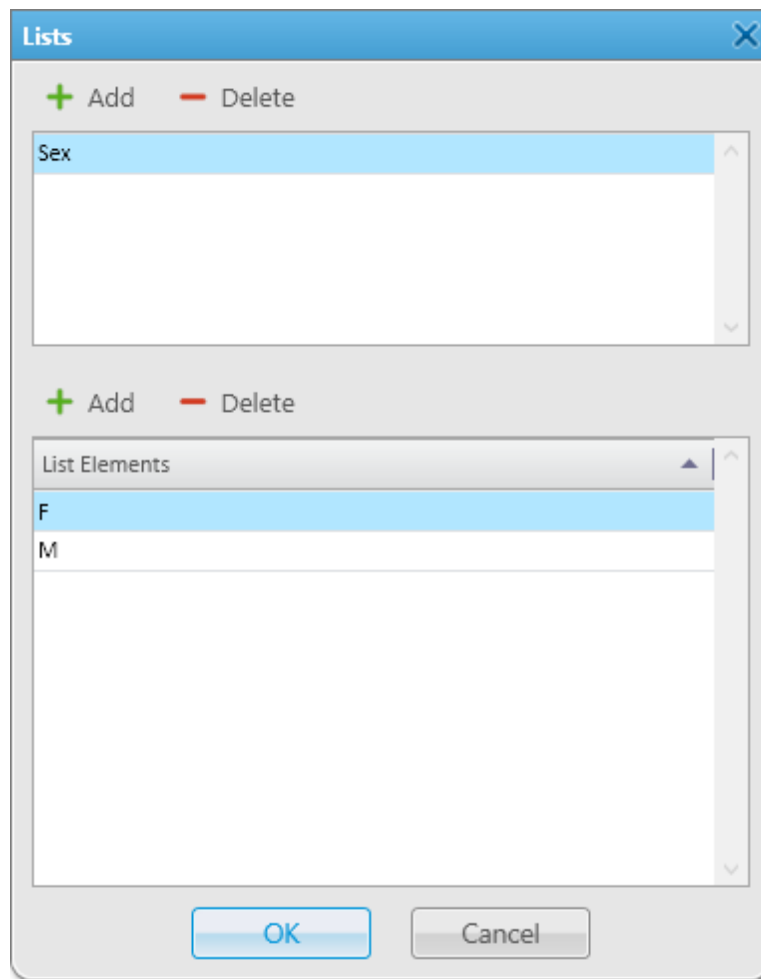
In the top box add list names by clicking **Add**.

Select the created list and add elements of the list. To do it, go to the bottom box and click **Add** just above it.

To view the active custom properties go to the radio or WAVE user **Properties** window, **Custom** tab.
For details, see Radio Custom Properties.

2.7 Positioning Systems

To determine GPS or Indoor settings, on the menu bar of the SmartPTT Dispatcher window, click **Settings (⚙)** →
Positioning Systems.

The **Positioning Settings** window appears.

The **Positioning Settings** window provides the following elements:

Validity of GPS coordinates (min):

> The parameter sets GPS data validity period in minutes. If new GPS coordinates were not received during this
> period, the radio or WAVE user label is removed from the map.

> **NOTE**
> The parameter is inapplicable for radios in whose properties GPS is activated. For details, see Radio Location
> Properties.

Validity of beacon signals (min)

> The parameter determines the time period during which the received beacon signal is relevant. If new beacon
> signals were not received during this period, the radio label is removed from the building plan.

Time interval for GPS coordinates update (sec)

It sets the default time interval for updating radio and WAVE user location data. For details, see Radio Properties Window. The value set in this parameter will be applied to all unregistered radios, and will be displayed in the **Properties** window of a radio in the **Location** tab.

Accuracy Radius

It sets the maximum coordinate error margin. If the received error value exceeds the value specified in this box, the coordinate is invalid.

Address data provider

The check box that activates a map service to determine an object address according to the current GPS coordinates of a radio or WAVE user. When the check box is selected, the list with the following address services becomes available:

- *Google* — using of Google service as an address data provider. When you select it, the Google API Key field appears in which you must type an API key to allow usage of Google service. If the API key is already typed in the map settings, you do not need to type it in this field. For details, see Map Settings.

NOTE
Google's address service requires activation of address module in the account settings for which the key was generated.

- *OpenStreetMap Nominatim* — using of a standard OpenStreetMap online service as an address data provider. When you select it, the Address field with the service address appears. The field is unavailable for editing.

- *Dedicated OpenStreetMap Nominatim server* — using of an OpenStreetMap service that is running in the customer network or in the Internet. When you select it, the **Address** field for entering a service address appears. For details, see Map Settings.

Data Format area

It determines the format of location data to display in the radio and WAVE user Call window. For details, see Call Window Settings.

Coordinates

It provides ability to select the format of GPS coordinates:

- Decimal degrees. GPS coordinates are displayed as: lat: 56,47568, long:84,98779

- Degrees, Minutes, Seconds. GPS coordinates are displayed as: lat: 56°28'32", long:84°59'16"

- Universal Transverse Mercator Coordinate System. GPS coordinates are displayed as: 45V 376108 B 6260913 C

System of Units

It provides ability to select the measurement system (*Metric* or *Imperial*).

NOTE
When changing measurement system, the data previously logged will not be recalculated according to the new measurement system.

Speed

Provides the ability to select the format of a radio speed. The format depends on the system of units selected in the list above.

- For *Metric* system: *Meters per second*, *Kilometer per hour*, or *Knots*.

- For *Imperial* system: *Feet per second*, *Miles per hour*, or *Knots*.

Save GPS Locations in Database

It determines if GPS coordinates received from radios and WAVE users are stored in the database.

Database cleanup settings area

It determines the scheme of deleting coordinates from the database.

Do not delete GPS locations

If selected, the coordinates are not deleted from the database.

Coordinates retention period (days)

It determines coordinates retention period in database.

2.8 Dispatchers

In SmartPTT Dispatcher you can communicate with other dispatchers of SmartPTT system in the following ways:

- Initiate and receive voice calls

- Exchange text messages

> **Important**
> To communicate with external dispatchers, operator need to have the corresponding permission. For details, see Operators.

For information on configuring dispatcher settings and establishing communication with external dispatchers, see the sections below.

2.8.1 Dispatchers Settings

In the **Dispatchers** window you can perform the following actions:

- Configure SmartPTT Dispatcher settings for communication with external dispatchers

- Add external dispatchers

- Manage added external dispatchers

You can open the window by clicking **Settings (⚙) → Dispatchers** on the menu bar.
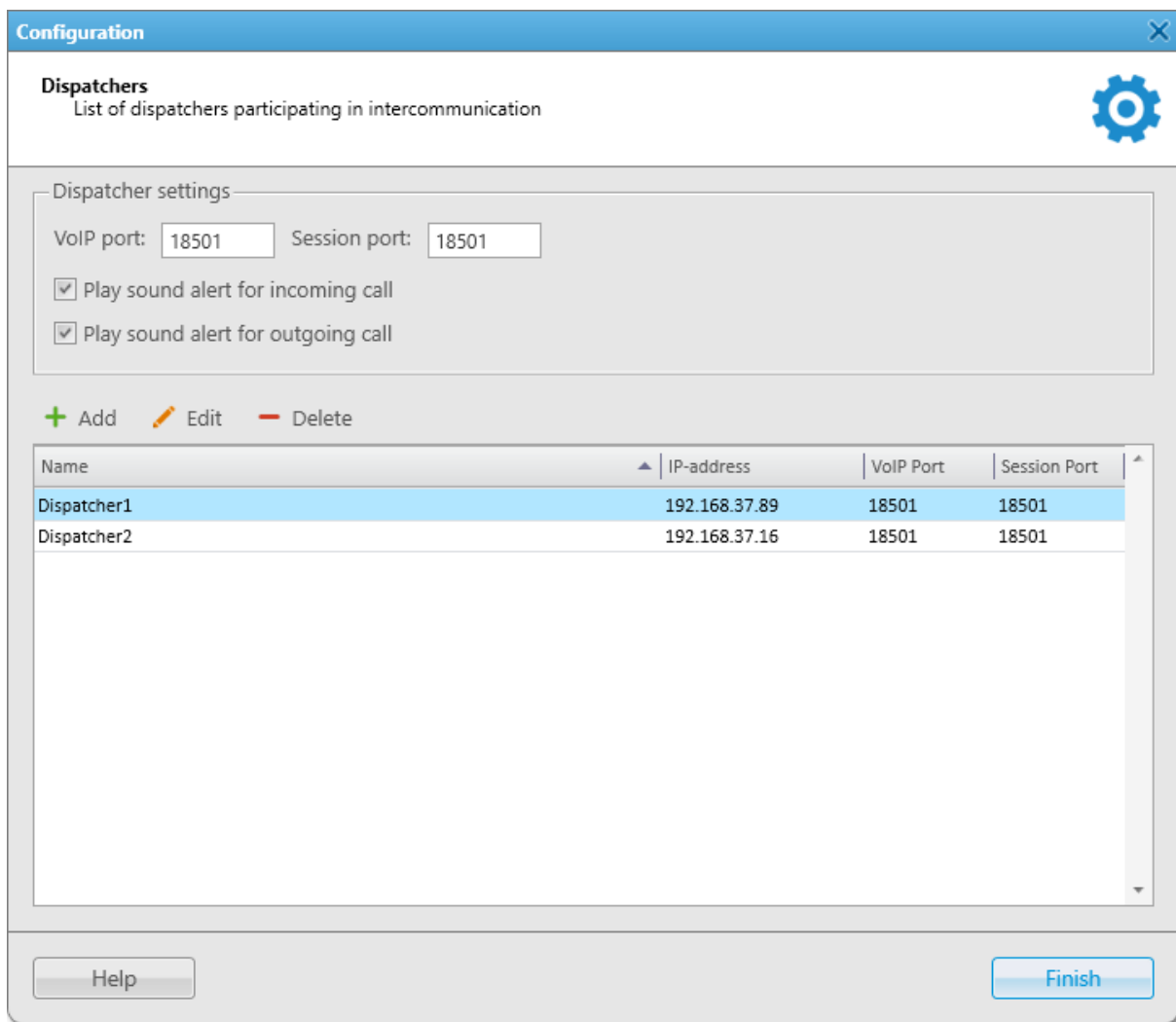
The **Dispatchers** window provides the following elements:

VoIP Port

UDP port of the dispatcher computer for the voice transmission. The default value is *18501*.

Session Port

TCP port of the dispatcher computer for the commands and text messages transmission. The default value is *18501*.

Play Sound Alert for Incoming Call

When selected, a tone is played at incoming dispatcher calls.

Play Sound Alert for Outgoing Call

When selected, a tone is played at outgoing dispatcher calls.

Add

Opens the **Dispatcher** window for adding a new external dispatcher. For details, see Dispatcher Window.

Edit

Opens the **Dispatcher** window for editing the added dispatcher parameters.

Delete

Deletes the selected dispatcher.

Dispatchers Table

Displays all added external dispatchers. The table consists of the following columns:

- The **Name** column contains the dispatcher name.

- The **IP address** column contains the dispatcher IP address.

- The **VoIP Port** column contains the UDP port which is selected for the voice transmission.

- The **Session Port** column contains the TCP port which is selected for the commands and text messages transmission.

You can sort the dispatchers in the table by columns and arrange the entries in ascending or descending order by clicking the name of the desired column. You can sort entries only by one column. Clicking the name of another column automatically discards the sorting order applied earlier.

2.8.2 Dispatcher Window

In the **Dispatcher** window you can configure external dispatcher parameters.

The window opens when you add a new external dispatcher, or edit an existing external dispatcher.
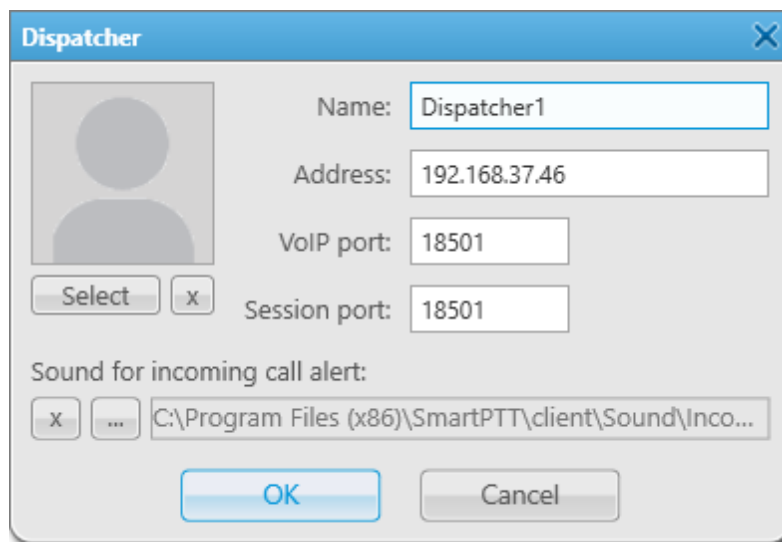
The **Dispatcher** window provides the following elements:

Name

The external dispatcher name.

Address

IP address of the external dispatcher computer (DNS name can be used).

VoIP Port

UDP port of the external dispatcher computer for voice transmission.

Session Port

TCP port of the external dispatcher computer for transmission of commands and text messages.

Select

Opens the window for selecting the dispatcher avatar.

You can remove the selected avatar by clicking **Clear the image of the dispatcher (** ✕ **)** next to the **Select** button.

Sound for Incoming call alert

The path to the audio file that is played in SmartPTT Dispatcher on receiving a call from this dispatcher.

By default, a standard system sound is used. You can replace it with the desired audio file by clicking the **Select a sound file for an incoming call** (…) button.

You can clear the path to the selected audio file and reset the sound to default by clicking the **Use a system sound (** ✕ **)** button.

2.8.3 Dispatchers Window

In the **Dispatchers** window you can communicate with other dispatchers by initiating and receiving voice calls or exchanging text messages.

You can open the **Dispatchers** window by clicking the **Dispatchers** (👤) button on the menu bar.

> **NOTE**
> The **Dispatchers (** 👤 **)** button is unavailable if no external dispatchers are added to SmartPTT Dispatcher or you have no corresponding permission to communicate with them. For details, see Dispatchers Settings and Operators.
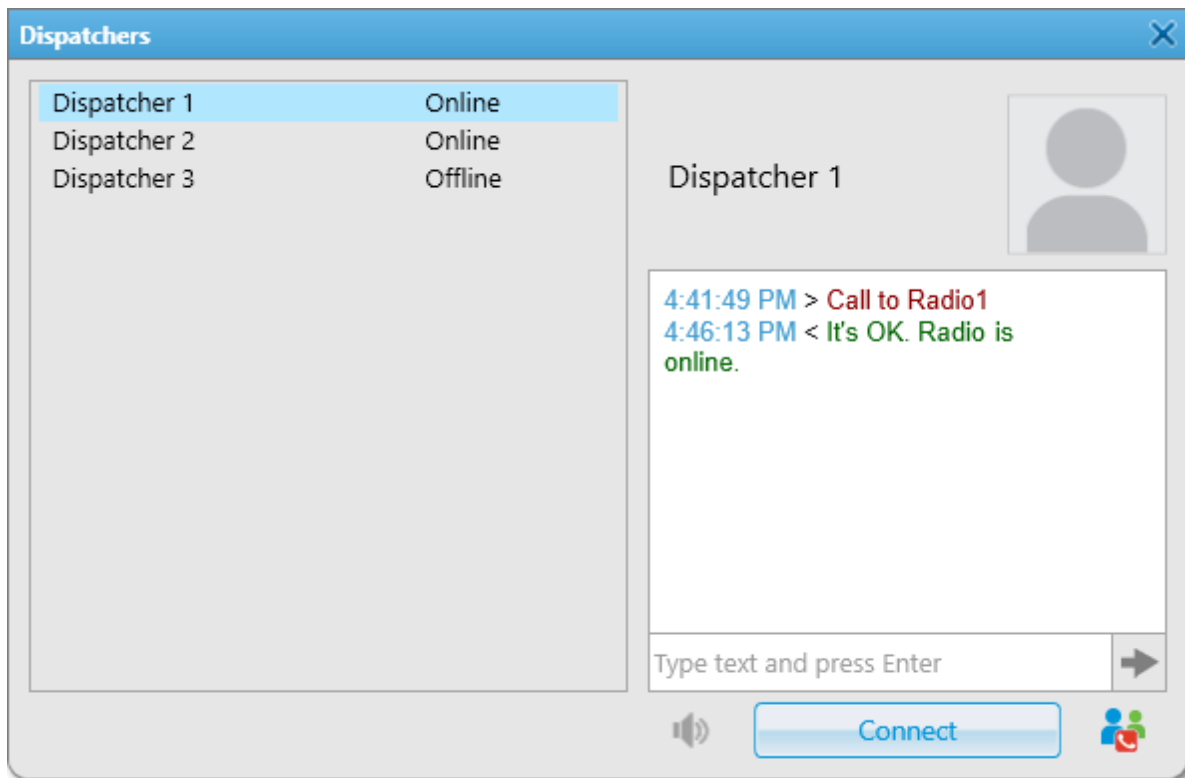
The **Dispatchers** window provides the following elements:

Dispatchers List

Contains a list of dispatchers added in the **Dispatcher Settings** window.

On the right of the dispatcher name a status is displayed. The statuses can be the following:

- The *Offline* status indicates that the dispatcher is unavailable (SmartPTT Dispatcher has not been started or dispatcher has no corresponding permission to communicate with external dispatchers).

- The *Online* status indicates that the dispatcher is available for communication.

- The *Ringing* status indicates that voice communication with the dispatcher is establishing.

- The *Call* Voice status indicates that communication is established.

Dispatcher Name and Avatar

The name and avatar set in the **Dispatcher** window. For details, see Dispatcher Window.

The following elements are available only if the selected dispatcher is online:

Chat box

Contains the messages log. The green text indicates incoming messages, and the red text indicates outgoing messages.

Send (➡)

Sends the typed message to the selected dispatcher. After sending, the text message appears in the chat box above, and in the SmartPTT Dispatcher Event Log.

Mute (🔊) / Sound On (🔇)

Mutes or unmutes your voice transmission. The button becomes available when the call is started. When your transmission is muted, you can still hear the other dispatcher.

Connect

Initiates a call to the selected dispatcher. During a call, the button changes to **Disconnect**.

Make Conference Call (👥)

Opens the **Conference Calls** window and adds the selected dispatcher to a conference call. For details, see
Conference Calls.

2.8.4 Configuring Dispatcher

For communicating with external dispatchers in SmartPTT Dispatcher you need to perform the following actions:

- Configure SmartPTT Dispatcher settings for communication with external dispatchers. For details, see
Configuring Dispatcher Settings.

- Add external dispatchers. For details, see Adding Dispatchers.

2.8.4.1 Configuring Dispatcher Settings

Follow the procedure to configure the SmartPTT Dispatcher settings for communicating with external dispatchers.

Prerequisites:

Obtain UDP and TCP ports of your SmartPTT Dispatcher computer.

Procedure:

1. On the menu bar, click **Settings (⚙) → Dispatchers**.
   The **Dispatchers** window appears.

2. In the **Dispatchers** window, in the **VoIP port** box, type the UDP port of the current dispatcher computer.

3. In the **Session port** box, type the TCP port of the current dispatcher computer.

4. *(Optional)* Select the **Play sound alert for incoming call** check box for playing a tone at incoming dispatcher
   calls.

5. *(Optional)* Select the **Play sound alert for outgoing call** check box for playing a tone at outgoing dispatcher
   calls.

6. Add the desired external dispatchers.
   For details, see Adding Dispatchers.

7. Click **Finish** to close the window.

Postrequisites:

- To edit the desired dispatcher, select the entry in the Dispatchers Table, and then click **Edit**.

- To delete the desired dispatcher, select the entry in the Dispatchers Table, and then click **Delete**.

2.8.4.2 Adding Dispatchers

Follow the procedure to add a new dispatcher.

Prerequisites:

Obtain the external dispatcher IP address, UDP, and TCP ports.

Procedure:

1. On the menu bar, click **Settings (⚙) → Dispatchers**.
   The **Dispatchers** window appears.

2. In the **Dispatchers** window, click the **Add** button.
   The **Dispatcher** window appears.

3. In the **Dispatcher** window, in the **Name** box, type the dispatcher name.

4. In the **Address** box, specify the dispatcher IP address.

5. In the **VoIP port** box, specify the UDP port of the external dispatcher's computer.

6. In the **Session port** box, specify the TCP port of the external dispatcher's computer.

7. *(Optional)* In the left part of the window, click **Select**, and then in the window that appears, select the avatar for the dispatcher.

8. *(Optional)* Click Browse (⊡), and then in the window that appears, select a tone for incoming dispatcher calls.

9. Click **OK** to save the changes and close the window.
   The added dispatcher appears in the Dispatchers Table.

Postrequisites:

- To delete the dispatcher avatar, click **Clear the image of the dispatcher**.

- To set the default call alert, click **Use a system sound**.

2.8.5 Communicating with External Dispatchers

In SmartPTT Dispatcher you can communicate with external dispatchers in the following ways:

- By initiating and accepting voice calls. For details, see Initiating Voice Calls to Dispatchers and Accepting External Dispatcher Calls.

- By sending text messages. For details, see Sending Messages to Dispatchers.

2.8.5.1 Initiating Voice Calls to Dispatchers

Follow the procedure to initiate a voice call to an external dispatcher.

Prerequisites:

Ensure the following conditions are met:

- The **Dispatchers (	)** button on the menu bar is available. If not, ensure you have the corresponding permission or at least one dispatcher is added.
  For details, see Operators and Dispatchers Settings.

- The desired dispatcher is online.
  For details, see Dispatchers Window.

Procedure:

1. On the menu bar, click the **Dispatchers (	)** button.
   The **Dispatchers** window appears.

2. In the **Dispatchers** window, from the list of dispatchers on the left, select the desired dispatcher.

3. Click the **Connect** button.
   The **Connect** button changes to **Disconnect**. The *Online* status changes to *Ringing*.

4. Wait until the dispatcher accepts the call.
   After the dispatcher accepts the call, and the status changes to *Call*, speak into your microphone.

5. Click **Disconnect** to end the call.
   The **Disconnect** button changes to **Connect**.

2.8.5.2 Sending Messages to Dispatchers

Follow the procedure to send a text message to an external dispatcher.

Prerequisites:

Ensure the following conditions are met:

- The **Dispatchers (	)** button on the menu bar is available. If not, ensure you have the corresponding permission or at least one dispatcher is added.
  For details, see Operators and Dispatchers Settings.

- The desired dispatcher is online.
  For details, see Dispatchers Window.

Procedure:

1. On the menu bar, click the **Dispatchers (👤)** button.
   The **Dispatchers** window appears.

2. In the **Dispatchers** window, from the list of dispatchers on the left, select the desired dispatcher.

3. In the text box on the right, type the message, and then press Enter or click the **Send (➜)** button.
   The sent message appears in the chat box above the text box.

Postrequisites:

You can view the sent message details in the Event Log. For details, see SmartPTT Dispatcher Event Log.

2.8.5.3 Accepting External Dispatcher Calls

Follow the procedure to accept an incoming call from an external dispatcher.

Procedure:

1. In the **Incoming call** window, click the **Accept** button.
   The **Dispatchers** window appears. The call starts.
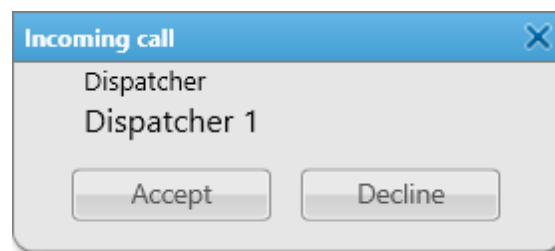
2. Click **Disconnect** to finish the call.

The **Disconnect** button changes to **Connect**.

3. *(Optional)* If the incoming call is made by by a dispatcher that is not added to SmartPTT Dispatcher, you can add a new dispatcher to the list by performing the following actions:

a.   Under the dispatcher IP address, click the **Add** button.
The **Dispatcher** window appears.
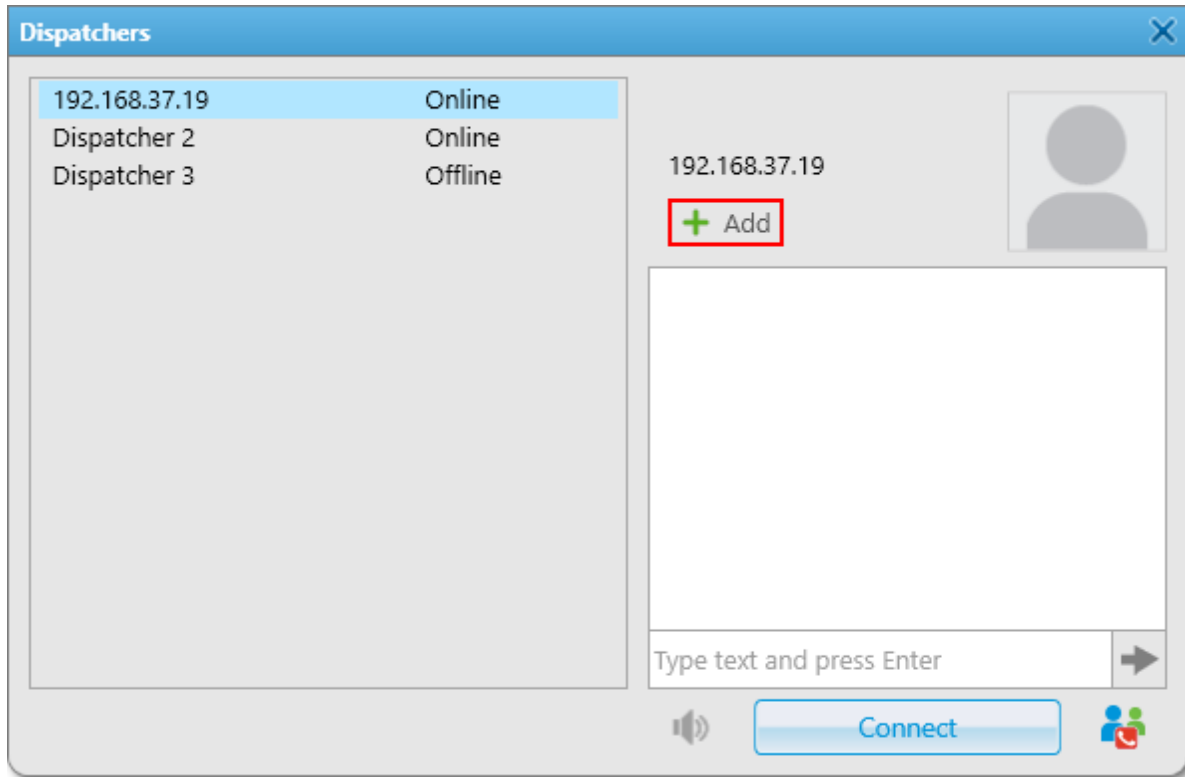
b.   In the **Dispatcher** window, in the **Name** box, type the dispatcher name.

c.   *(Optional)* In the left part of the window, click **Select**, and then in the open window, select the avatar for the dispatcher.

d.   *(Optional)* Click Browse (⬚), and in the open window select a tone for incoming dispatcher calls.

e.   In the **Dispatcher** window, click **OK** to save the changes and close the window.
The dispatcher IP address changes to the dispatcher name.

2.9 Rules

The **Interface** submenu is available from the **Settings (⚙)** menu on the SmartPTT Dispatcher menu bar. It provides the following configuration options:

• Configuring SmartPTT Dispatcher behavior in response to general radio system event types.
For details, see Custom Rules.

• Configuring SmartPTT Dispatcher behavior in response to the radio system events related to the GPS and Indoor Tracking data.
For details, see Positioning Rules.

2.9.1 Custom Rules

Custom rules are set for the automatic notifications of dispatchers, radios, or other communication participants. Custom rules include automatic sending of messages, playing alert tones in SmartPTT Dispatcher and on the radio, changing the radio or WAVE user status, etc.

> **Important**
>
> Custom rules are available to the Administrator, or to operators with the corresponding permission. For details, see Operators.

The rule is a combination of preconfigured conditions and actions. When the system has registered an event matching the specified rule, the rule is considered as triggered, and the system performs preconfigured actions.

Rules can also be configured in SmartPTT Radioserver Configurator. For information on rule configuring in the SmartPTT system, see the "Rules" section in *SmartPTT Installation and Configuration Guide*.

For information on the **Custom Rules** functionality, see the sections below.

2.9.1.1 Custom Rules Window

The **Custom Rules** window provides the ability to manage custom rules.

You can open the **Custom Rules** window by clicking **Settings (⚙)** → **Rules** → **Custom Rules** on the menu bar.
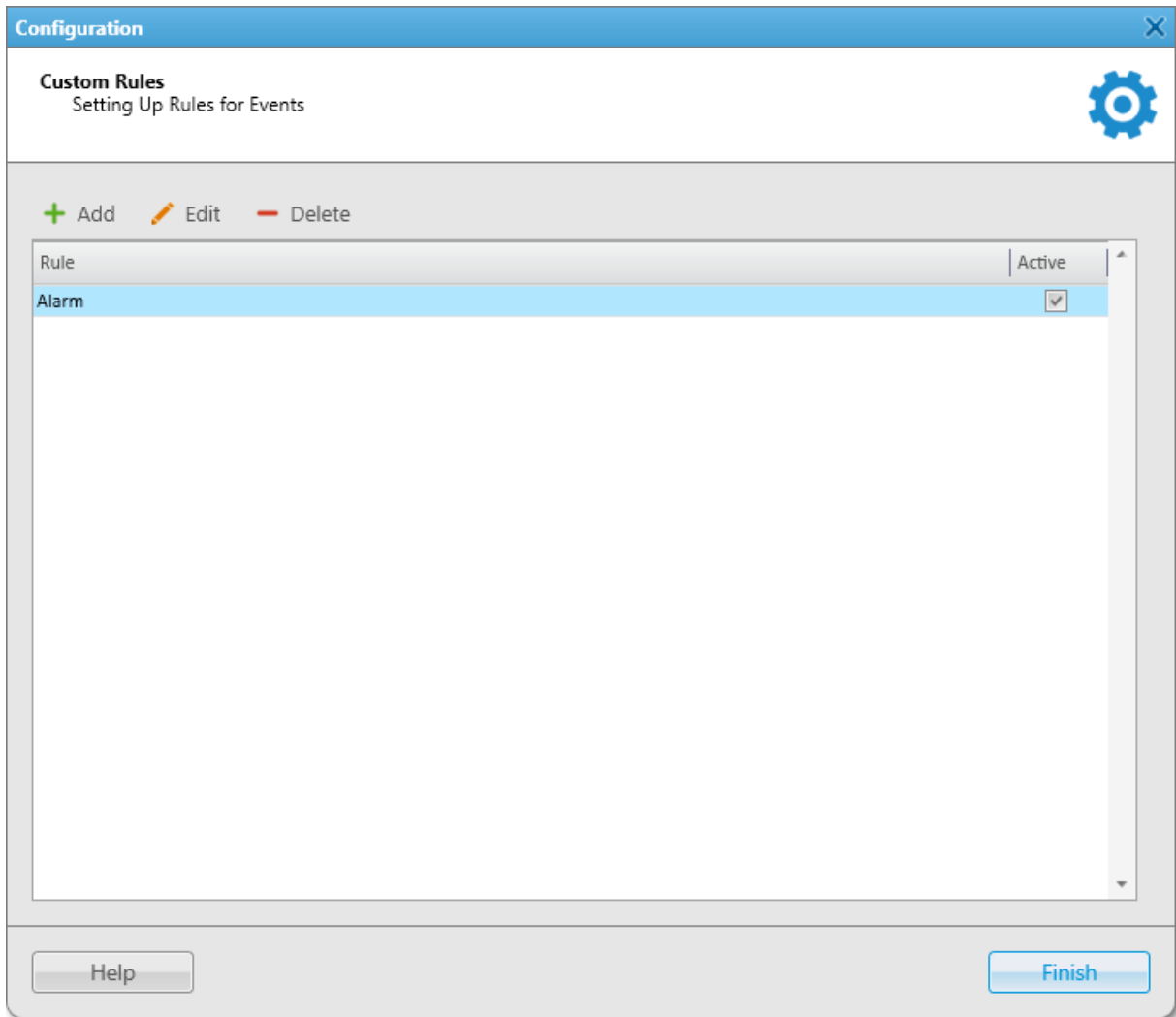
The **Custom Rules** window provides the following elements:

Add

Opens the **Rule Settings** window for adding a new rule. For details, see Rule Settings Window.

Edit

Opens the **Rule Settings** window for editing the selected rule.

Delete

Removes the selected rule from SmartPTT Dispatcher.

Custom Rules Table

Provides the list of all added rules. The table consists of the following columns:

• The **Name** column contains the custom rule name.

• The **Active** column contains the check box for activating or deactivating the selected rule.

You can sort content of the table by clicking the desired column header.

2.9.1.2 Rule Settings Window

The Rule Settings window provides the ability to configure custom rules.

The window appears when you add a new rule, or edit an existing rule.

The **Rule Settings** window provides the following elements:

Active

Activates/deactivates a rule by selecting this check box.

Name

Name of a rule.

Conditions Table

Provides the ability to configure rule conditions. The table consists of the following columns:

- The **Attribute** column contains a list of available condition attributes.

- The **Operation** column determines how the attribute is compared with the set values.

- The **Value 1**, **Value 2**, and **Value 3** columns become available after selecting conditions in the **Operation** column and provide the possibility to set the values corresponding to the selected operation.

A rule condition is a combination of an attribute, operation and value. One rule can contain more than one such combination. Conditions description is available in the following table:

Attribute	Description
Direction	Event direction *Incoming* (events are addressed to SmartPTT Dispatcher), or *Outgoing* (events are initiated by SmartPTT Dispatcher). To select the desired direction, you need to set the *Equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Event type	The list of available event types. To select the desired event type, you need to set the *Equal to* value, or the *Not Equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored. For information on event types, see Event Types.
Date/Time	Date interval, when the rule can be triggered. To select the desired date period, you need to set the *Between* value in the **Operation** column. If the dates are not selected, the rule will be triggered without reference to dates. The *No* value causes the attribute to be ignored. **Important** For the Date/Time attribute it is possible to select only date, not time.
Additional information	You can type the information corresponding to the event type, or leave the box empty. For example: • **Alarm** — Date and time of the alarm acknowledgment, and the operator name who acknowledged it. For SCADA points, the parameter that reported the alarm state. • **Call** — Identifiers of call initiators, or operator name, or cause of a call denial. • **Job Ticket** — Job ticket number, name, and its description. • **Message** — Message text. • **Status** — Changing of radio status. • **Telemetry** — Description of telemetry action set in telemetry settings. • **Temporary Talkgroup** — Information on operator actions related to a temporary talkgroup. Additional information is displayed in the Event Log in the **Additional Information** column. For details, see Additional Information Column.

Attribute	Description
	To type information, you need to set the *Equal to* value, or the *Contains* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Not read	Message status: *Read*, or *Not read* that triggered the rule. To select the desired message status, you need to set the *Equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Operator	Name of the operator who participates in the event. To select the desired name, you need to set the *Equal to* value, or the *Not Equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Radioserver	Radioserver name where the rule is triggered. To select the desired radioserver, you need to set the *Equal to* value, or the *Not equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Channel	Channel name where the rule is triggered. To select the desired channel, you need to set the *Equal to* value, or the *Not equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Radio	A radio name or a WAVE user that are the event participants. To select the desired radio or the WAVE user, you need to set the *Equal to* value, or the *Not equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Talkgroup	Name of the talkgroup that receives a voice or another transmission. To select the desired talkgroup, you need to set the *Equal to* value, or the *Not equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Status	Event status from the list of statuses. For details, see Status Column. To select the desired status, you need to set the *Equal to* value, or the *Not equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Duration	Event duration in seconds. To type the desired duration, you need to set one of the values in the **Operation** column. The *No* value causes the attribute to be ignored.

Attribute	Description
Connection Type	The list of available connection types: • *DMR*: Over-the-air connection made via repeaters and control stations. • *IP*: Dispatcher-Dispatcher connection. • *PBX*: Telephone connection. To select the desired connection type, you need to set the *Equal to* value, or the *Not equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Destination	Recipient from the list of radios that is the event participant. To select the desired connection type, you need to set the *Equal to* value, or the *Not equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
Record	Call record availability: *Recorded*, or *Not recorded*. To select the desired value, you need to set the *Equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
User	Authorized radio user name that is the event participant. To select the desired user, you need to set the *Equal to* value, or the *Not equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored.
SCADA point	SCADA point from the list of SCADA points added to SmartPTT Dispatcher. To select the desired SCADA point, you need to set the *Equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored. **NOTE** If a SCADA point is deleted from the SmartPTT Dispatcher list of SCADA points, or if it is currently unavailable, the rules that affect the point are not deleted.
SCADA Alarm	SCADA point parameter capable of indicating alarm states.. To select the desired SCADA alarm, you need to set the *Equal to* value in the **Operation** column. The *No* value causes the attribute to be ignored. **NOTE** This attribute is not set without selecting SCADA point.
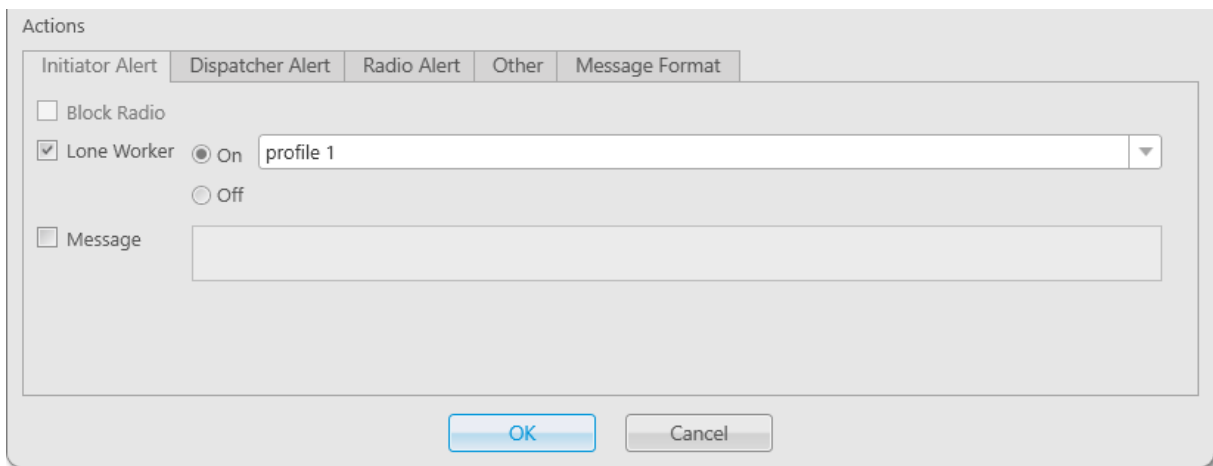
Actions

The **Actions** area consists of the following tabs:

- The **Initiator Alert** tab provides ability to configure actions concerning activating/deactivating the **Block Radio** command, assigning the Lone Worker profile, and message sending. For details, see Initiator Alert.

- The **Dispatcher Alert** tab provides ability to configure actions concerning playing an audible alarm, showing radio or point of interest on a map, changing radio status, or sending alerts. For details, see Dispatcher Alert.

- The **Radio Alert** tab provides ability to configure actions concerning message sending to the desired communication participants in the SmartPTT system. For details, see Radio Alert.

- The **Other** tab provides ability to configure actions concerning sending HTTP request, e-mails, or SMS. For details, see Other.

- The **Message Format** tab provides ability to configure format of messages that will be sent when the rule is triggered. For details, see Message Format.

2.9.1.2.1 Initiator Alert

On the **Initiator Alert** tab, you can configure actions addressed to the event initiator that will be performed when the rule is triggered.

The **Initiator Alert** tab provides the following elements:

Block Radio

If the check box is selected, the **Block Radio** command is sent to the alert initiator. This check box does not work in radio systems where SmartPTT does not support voice calls for different reasons (for example, Capacity Max is without voice radio commands).

Lone Worker

If the check box is selected, the Lone Worker mode will be assigned to the radio or the WAVE user that triggered the rule. You can select one of the following options:

- The **On** option activates the Lone Worker mode, and provides the ability to select the Lone Worker profile from the list to the right of the option.

- The **Off** option deactivates the Lone Worker mode.

For information on the Lone Worker mode, see Lone Worker Rules.

Message

If the check box is selected, a text message will be sent to the rule initiator when the rule is triggered. You can type the message text in the field to the right of the check box.

You can specify message format settings on the **Message Format** tab. For details, see Message Format.

NOTE

Actions **Block Radio**, and **Message** are unavailable to WAVE users.

2.9.1.2.2 Dispatcher Alert

On the **Dispatcher Alert** tab, you can configure actions addressed to the dispatcher that will be performed when the rule is triggered.

The **Dispatcher Alert** tab provides the following elements:

Play Sound

If the check box is selected, an audible alarm will be played when the rule is triggered. You can select the desired audio file in the **Sound File Selection** window by clicking the **Select Sound File (…)** button.

Audio file must comply with the specific requirements. For details, see "Audio File Requirements" in *SmartPTT Installation and Configuration Guide.*

Show on Map

If the check box is selected, it is unblocks/blocks two options (the **Radio** and **Point of Interest** options):

- If the **Radio** option is selected, the radio appears on the map framed in red when the rule is triggered, and the map is centered on it.

NOTE

If the SmartPTT database has no actual radio GPS coordinates, the rule will not be triggered.

- If the **Point of interest** option is selected, the desired point of interest appears on the map when the rule is triggered, and the map is centered on it. You can select the desired point of interest from the list of points of interest to the right of the option. For details, see Points of Interest.

Important

If the dispatcher does not work with the map, the object will not be displayed on it.

Set Radio Status

If the check box is selected, the desired status will be assigned to the radio or WAVE user when the rule is triggered. The desired status is selected from the list of statuses to the right of the check box. For details, see Statuses.

The selected status will be displayed in the **Radio Fleet** panel when the rule is triggered. For details, see Radios.

Alert

If the check box is selected, the **Notifications** panel with the specific-rule message will be opened when the rule is triggered. You need to type an alert header in the **Alert Caption** field, and an alert text in the **Alert Text** field to the right of the check box. For information on the **Notifications** panel, see Notifications.

2.9.1.2.3 Radio Alert

On the **Radio Alert** tab, you can configure message sending to the desired communication participants in SmartPTT including radios, users, talkgroups, and categories when the rule is triggered.

> **NOTE**
> This action is unavailable to WAVE users.
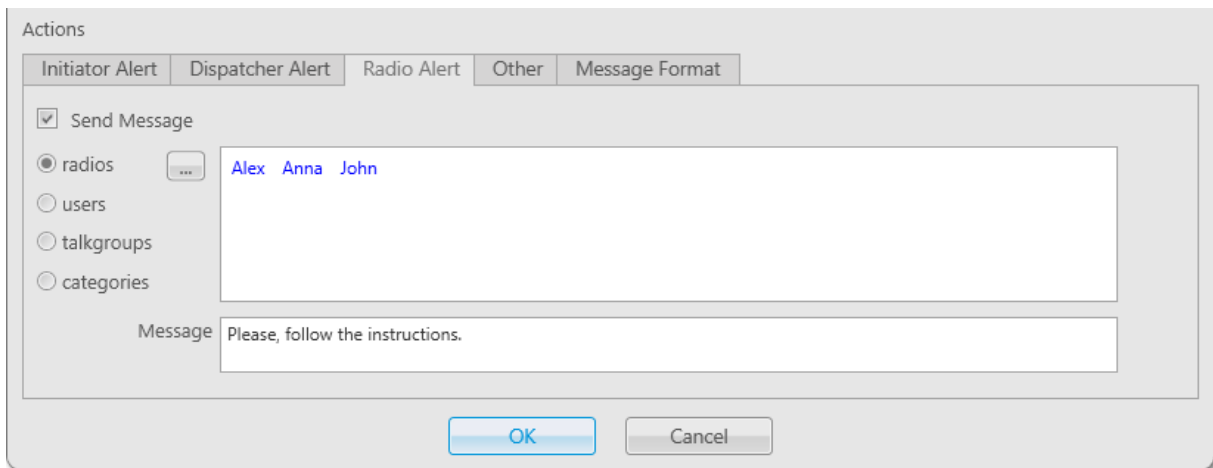
The **Radio Alert** tab provides the following elements:

Send Message

If the check box is selected, it is unblocks/blocks four options on the tab (the **Radios**, **Users**, **Talkgroups**, and **Categories** options) and the **Message** field.

The check box provides the following options:

Radios

If the option is selected, it provides ability to add radios in the list of message recipients. You can select the desired radios in the **Radios** window by clicking the **Open Radio List (⋯)** button.

Users

If the option is selected, it provides ability to add authorized users in the list of message recipients. You can select the desired users in the **Users** window by clicking the **Select From List (⋯)** button.

Talkgroups

If the option is selected, it provides ability to add talkgroups in the list of message recipients. You can select the desired talkgroups in the **Talkgroups** window by clicking the **Select From List (⋯)** button.

Categories

If the option is selected, it provides ability to add radios that belongs to the specified category in the list of message recipients. You can select the desired categories in the **Categories** window by clicking the **View List of Categories (⊡)** button.
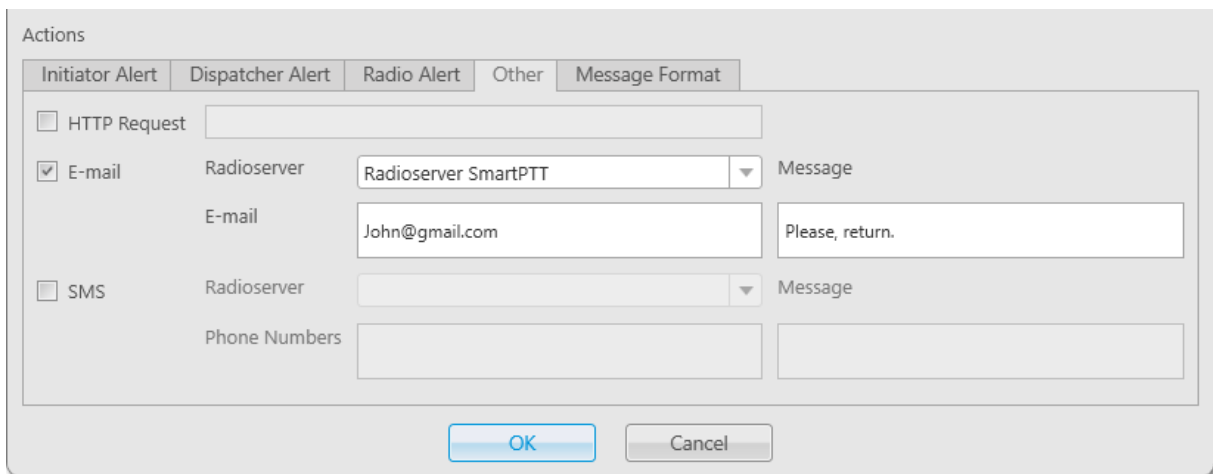
A list of communication participants is displayed in the field to the right of the check box.

Message

If the **Send Message** check box is selected, the **Message** field becomes available for typing a text message. You can specify message format settings on the **Message Format** tab. For details, see [Message Format](#).

2.9.1.2.4 Other

On the **Other** tab, you can configure message sending using web, SMS, or e-mail services when the rule is triggered.

The **Other** tab provides the following elements:

HTTP Request

If the check box is selected and an HTTP request is typed, a third-party server will be notified about changing the radio status when the rule is triggered. The HTTP request is typed in the field to the right of the check box.

> **NOTE**
> To send the HTTP request to the third-party server, you need to select the status that will be assigned to the initiator of the rule in the **Dispatcher Alert** tab. For details, see [Dispatcher Alert](#).

The HTTP request includes the following parts: http://192.168.0.124:11235/loneworker?rid=55&status=unavailable

> **NOTE**
> Ensure that you specified correct radio ID and radio status. They must correspond to the names expected by the third-party server.

E-mail

If the check box is selected, a message will be sent to the specified e-mail address when the rule is triggered. When the check box is selected, the following elements become available:

- The **Radioserver** list provides the ability to select the desired SmartPTT Radioserver which is configured for e-mail sending.

- The **E-mail** field provides the ability to type one or several electronic addresses for message sending.
Use semicolons to separate multiple e-mails.

- The **Message** field provides the ability to type a message text.

> **NOTE**
> For information on configuring e-mail messages, see "E-mail Services" in *SmartPTT Installation and Configuration Guide*.

SMS

If the check box is selected, SMS will be sent to the specified phone number when the rule is triggered. When the check box is selected, the following elements become available:

- The **Radioserver** list provides the ability to select the desired SmartPTT Radioserver which is configured for SMS sending.

- The **Phone Numbers** field provides the ability to type one or several telephone numbers for sending SMS.
The preferred number format is International Number Format: <+><country code><mobile code><phone number>.
Use semicolons to separate multiple phone numbers.

- The **Message** field provides the ability to type a message text.

> **NOTE**
> For information on configuring SMS messages, see "Mobile Phone Networks" in *SmartPTT Installation and Configuration Guide*.

You can specify message format settings in the **Message Format** tab. For details, see Message Format.

2.9.1.2.5 Message Format

On the **Message Format** tab, you can configure format of messages (text message, SMS, or e-mail), that will be sent when the rule is triggered. These messages are sent to the communication participants set on the **Initiator Alert**, **Radio Alert** or the **Other** tab. For details, see Initiator Alert, Radio Alert, and Other.

The **Message Format** tab provides two areas:

- The **Event Information** area provides the ability to include in a message the information about the event that triggered message sending.

- The **Radio Information** area provides the ability to include in a message the information about the radio that triggered message sending.

The **Event Information** provides the following elements:

Event Type

If the check box is selected, a message will include the type of the event which triggered the rule.

Date/Time

If the check box is selected, the date and time of the event that triggered the rule will be added to a message. You can set the date format displayed in a message (*Date/Time*, or *Time* only) by selecting it from the list.

Time Zone

If the check box is selected, a message will include the time zone.

Coordinates

If the check box is selected, the latest radio GPS coordinates will be added to a message. You can set the coordinates format displayed in a message (*Decimal Degrees*, or *Degrees, Minutes, Seconds*) by selecting it from the list.

The **Radio Information** provides the following elements:

Radio ID

If the check box is selected, the ID of the radio which triggered the rule will be added to a message.

Radio Name

If the check box is selected, the name of the radio which triggered the rule will be added to a message.

2.9.1.3 Managing Custom Rules

Follow the procedure to to activate/deactivate, or delete an existing rule.

Prerequisites:

Ensure that you are logged in as the Administrator or that your operator's account is assigned the **Manage Custom Rules** permission.
For information on operator rights, see [Operator Window](#).

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Rules** → **Custom Rules**.
   The **Custom Rules** window appears.

2. In the **Custom Rules** window, perform one of the following actions:

To activate an existing rule,	perform the following actions:
	1. In the Custom Rules table, select the desired rule.
	2. Select the **Active** check box.

> **NOTE**
>
> You can also activate the desired rule by selecting the **Active** check box in the upper-left corner of the **Rule Settings** window.

To deactivate an existing rule,	perform the following actions:

1. In the Custom Rules table, select the desired rule.

2. Clear the **Active** check box.

> **NOTE**
>
> You can also deactivate the desired rule by clearing the **Active** check box in the upper-left corner of the **Rule Settings** window.

To delete an existing rule,	perform the following actions:

1. In the Custom Rules table, select the desired rule, and then click **Delete (➖)**.

2. In the confirmation window, click **OK**.
   The rule is removed from the Custom Rules table.

Postrequisites:

For information on adding a new rule, or editing an existing one, see Adding and Editing Custom Rules.

2.9.1.4 Adding and Editing Custom Rules

Follow the procedure to add a new custom rule, or edit an existing rule.

Prerequisites:

Ensure that you are logged in as the Administrator or that your operator account is assigned the **Manage Custom Rules** permission.
For information on operator rights, see Operator Window.

Procedure:

1. On the menu bar, click **Settings (⚙) → Rules → Custom Rules**.
   The **Custom Rules** window appears.

2. In the **Custom Rules** window, perform one of the following actions:

To add a new custom rule,	in the top part of the window, click **Add (➕)**.
To edit an existing rule,	in the Custom Rules table, click the desired rule, and then click **Edit (✏)**.

   The **Rule Settings** window appears.

3. *(Optional)* Select or clear the **Active** check box for activating or deactivating an existing rule.

4. In the **Name** field, type the rule name.

5. In the **Conditions** table, set the desired rule conditions:

   a. In the **Attribute** column, select the desired attribute.

   b. In the **Operations** column, select the desired operation.

   c. In the **Value 1** column, set the desired value.

   d. If required, set the desired values in the **Value 2** and **Value 3** columns.

   NOTE

   Some fields in the **Value 2** and **Value 3** columns are impossible to fill.

6. In the **Actions** area, configure actions that will be performed when the rule is triggered:

To configure alerts addressed to the alert initiator,	see Configuring Initiator Alerts.
To configure alerts addressed to the dispatcher,	see Configuring Dispatcher Alerts.
To configure message sending to a list of communication participants,	see Configuring Radio Alerts.
To configure sending messages using web, SMS, or E-mail services,	see Configuring Other Services.

7. Click **OK** to save changes and close the window.
   The configured rule appears in the **Custom Rules** window.

8. Click **Finish** to close the **Custom Rules** window.

2.9.1.4.1 Configuring Initiator Alerts

Follow the procedure to configure alerts addressed to the alert initiator.

Prerequisites:

- Set the desired rule conditions for rule triggering.

- If required, ensure that the Lone Worker profile is configured.
  For information on the Lone Worker mode, see Lone Worker Rules.

Procedure:

1. In the **Rules Settings** window, in the **Actions** area, open the **Initiator Alert** tab.

2. In the **Initiator Alert** tab, perform one of the following actions:

To block the radio,	select the **Block Radio** check box.
To activate/deactivate the Lone Worker mode for the radio or WAVE user when the rule is triggered,	perform the following actions: 1. Select the **Lone Worker** check box.

<table>
<tr><td></td><td>2. Select the **On**, or the **Off** option to activate, or deactivate the mode.

3. If the **On** option is selected, to the right of the option, select the desired Lone Worker profile from the list.</td></tr>
<tr><td>To send a message to the alert initiator when the rule is triggered,</td><td>perform the following actions:

1. Select the **Message** check box.

2. To the right of the check box, in the **Message** field, type a message text.

3. *(Optional)* Specify message format settings. For details, see <u>Message Format</u>.</td></tr>
</table>

Postrequisites:

For information on configuring other actions in the **Actions** area, see <u>Configuring Dispatcher Alerts</u>, <u>Configuring Radio Alerts</u>, <u>Configuring Other Services</u>.

2.9.1.4.2 Configuring Dispatcher Alerts

Follow the procedure to configure alerts addressed to the dispatcher.

Prerequisites:

- Set the desired rule conditions for rule triggering.

- If required, ensure that the desired audio files are added on your PC for playing the sound.

- If required, ensure that the desired points of interests are added to SmartPTT Dispatcher.

- If required, ensure that the desired statuses are added to SmartPTT Dispatcher.

Procedure:

1. In the **Rule Settings** window, in the **Actions** area, open the **Dispatcher Alert** tab.

2. In the **Dispatcher Alert** tab, perform one of the following actions:

<table>
<tr><td>To select an audio file to play when the rule is triggered,</td><td>perform the following actions:

1. Select the **Play Sound** check box.

2. To the right of the check box, click the **Select Sound File (⬚)** button.
The **Sound File Selection** window appears.

3. In the **Sound File Selection** window, select the desired audio file, and then click **Open**.
The path to the audio file appears in the field to the right of the **Select Sound File (⬚)** button.</td></tr>
</table>

To show the desired object on the currently open map when the rule is triggered,	perform the following actions:
	1. Select the **Show on Map** check box.
	2. Select one of the following options:
	   • Click the **Radio** option to show the radio on the map.
	   • Click the **Point of Interest** option to show the point of interest on the map.
	3. If the **Point of Interest** option is selected, to the right of the option, select the desired point of interest from the list.
	
	Important
	If the dispatcher does not work with the map, the object will not be displayed on it.

To assign status to the radio or WAVE user when the rule is triggered,	perform the following actions: 1. Select the **Set Radio Status** check box. 2. To the right of the check box, select the desired status from the list of statuses.
To display the notification in the Notifications panel when the rule is triggered,	perform the following actions: 1. Select the **Alert** check box. 2. To the right of the check box, in the **Alert Caption** field, type an alert title. 3. To the right of the check box, in the **Alert Text** field, type an alert text.

Postrequisites:

For information on configuring other actions in the **Actions** area, see Configuring Initiator Alerts, Configuring Radio Alerts, Configuring Other Services.

2.9.1.4.3 Configuring Radio Alerts

Follow the procedure to configure message sending to a preconfigured list of communication participants.

Prerequisites:

• Set the desired rule conditions for rule triggering.

• Ensure that you have the desired radios, users, talkgroups, or categories to send a message to in SmartPTT Dispatcher.

Procedure:

1. In the **Rule Settings** window, in the **Actions** area, open the **Radio Alert** tab.

2. In the **Radio Alert** tab, select the **Send Message** check box.

3. Specify a list of desired communication participants:

To send a message to radios when the rule is triggered,	perform the following actions: 1. To the right of the **Radios** option, click the **Open Radio List (…)** button. The **Radios** window appears. 2. Select the desired radios from the list of radios. 3. Click **OK** to save the changes and close the window.
To send a message to authorized users when the rule is triggered,	perform the following actions: 1. To the right of the **Users** option, click the **Select From List (…)** button. The **Users** window appears. 2. Select the desired users from the list of users. 3. Click **OK** to save the changes and close the window.
To send a message to talkgroups when the rule is triggered,	perform the following actions: 1. To the right of the **Talkgroups** option, click the **Select From List (…)** button. The **Talkgroups** window appears. 2. Select the desired talkgroups from the list of talkgroups. 3. Click **OK** to save the changes and close the window.
To send a message to radios that belongs to the specified category when the rule is triggered,	perform the following actions: 1. To the right of the **Categories** option, click the **View List of Categories (…)** button. The **Categories** window appears. 2. Select the desired categories from the list of categories. 3. Click **OK** to save the changes and close the window.

The selected communication participants appear in the field to the right of the options.

4. Type a message text in the **Message** field.

5. *(Optional)* Specify message format settings. For details, see Message Format.

Postrequisites:

For information on configuring other actions in the **Actions** area, see Configuring Initiator Alerts, Configuring Dispatcher Alerts, Configuring Other Services.

2.9.1.4.4 Configuring Other Services

Follow the procedure to configure message sending using web, SMS, or E-mail services.

Prerequisites:

- Set the desired rule conditions for rule triggering.

- If required, obtain the third-party server address to send HTTP request to.

- If required, ensure that the desired statuses are added to SmartPTT Dispatcher.

- If required, obtain the required e-mail addresses or phone numbers to send a message to.

- If required, obtain the desired radioserver name.

Procedure:

1. In the **Rule Settings** window, in the **Actions** area, open the **Other** tab.

2. On the **Other** tab, perform one of the following actions:

To notify a third-party server about changing the radio status when the rule is triggered,	perform the following actions: 1. Select the **HTTP-request** check box. 2. In the field to the right of the check box, type the desired request.
To send e-mail when the rule is triggered,	perform the following actions: 1. Select the **E-mail** check box. 2. To the right of the check box, from the **Radioserver** list, select the desired SmartPTT Radioserver. 3. In the **E-mail** field, type one or several electronic addresses for message sending. Use semicolons to separate multiple e-mails 4. In the **Message** field, type a message text.
To send SMS when the rule is triggered,	perform the following actions: 1. Select the **SMS** check box.

2. To the right of the check box, from the **Radioserver** list, select the desired SmartPTT Radioserver.

3. In the **Phone Numbers** field, type one or several telephone numbers for sending SMS. Use semicolons to separate multiple phone numbers.

4. In the **Message** text field, type a message text.

3. *(Optional)* Specify message format settings. For details, see [Message Format](#).
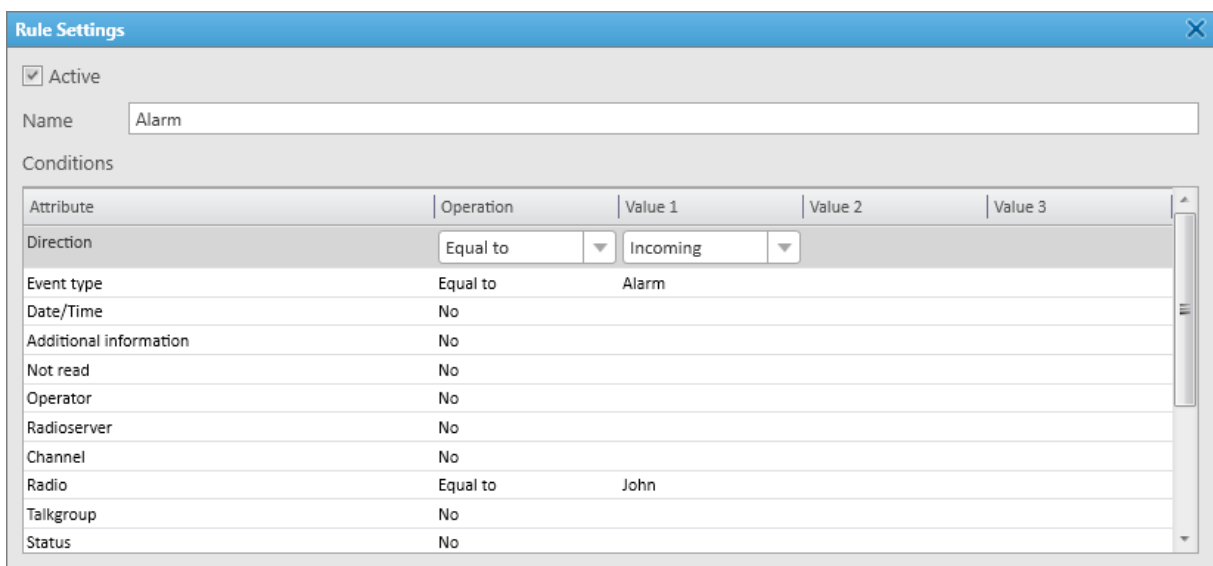
Postrequisites:

For information on configuring other actions in the **Actions** area, see [Configuring Initiator Alerts](#), [Configuring Dispatcher Alerts](#), [Configuring Radio Alerts](#).

2.9.1.4.5 Example of the Rule

Assume that you need to configure a rule that must be triggered with incoming alarm from the radio named *John*. The reaction must be change of the radio status, playing of special sound, and appearance of the **Notifications** panel with preconfigured text.

For this, set rule conditions in the following way:

Then, set actions in the following way:

After clicking **OK** the changes will be saved, and the rule will be configured. Now the *Alarm* rule will be triggered when the dispatcher receives incoming alarm signal from the radio named *John*.

2.9.2 Positioning Rules

You can set response rules for GPS and Indoor events registered in SmartPTT system. GPS events include receiving or not receiving radio or WAVE user GPS coordinates, and Indoor events include receiving or not receiving positioning data from special beacons. Response rules may include automatic sending of messages, playing alerts in SmartPTT Dispatcher and on the radio, changing radio or WAVE user statuses, and other.

To set up a positioning rule, on the menu bar of the SmartPTT Dispatcher window, click **Settings (⚙) → Rules → Positioning Rules**.

> **Important**
> Positioning rules are available to the Administrator, or to operators with the corresponding permission. For details, see Operators.

Configuration   ✕

Positioning Rules
Configuration of special rules based on GPS and Indoor events

➕ Add   ✏ Edit   ➖ Delete

Rule	GPS/Indoor	Type	Active

Help   Finish

To add a new rule, click **Add**. In the window that opened specify parameters of the future rule.

Active

If the check box is selected, processing of events starts in accordance with the selected criteria. If the check box is
not selected, the rule is unavailable.

Name

Name of the rule.

There can be two kinds of positioning rules: Indoor and GPS.

> **NOTE**
> You can assign only GPS positioning rules to WAVE users.

Type

Rule types:

- **No radio movement** — this rule type checks if a radio or a WAVE user coordinates do not change for a
preconfigured time period.

- **Location data received** — this rule type checks the radio or WAVE user coordinates appear after the period
when there were no coordinates.

- **No location data** — this rule type checks if there are no radio or WAVE user coordinates for a period longer than a specified period of time.
  Coordinates like "...Lat: 0 Long: 0" are not regarded as valid coordinates, and they won't be taken into account when applying positioning rules.

- **Zone/route entry** — this rule type checks if the radio or the WAVE user has entered the zone or the route, i.e. the previous radio coordinates were outside the defined zone or route, and the current coordinates are within this zone or the route.

- **Zone/route exit** — this rule type checks if the radio or the WAVE user has left the zone or the route.

- **Speeding** — this rule type checks if there was any speeding based on the received GPS data.

- **Number of radios in geofences/on routes** — this rule type checks the number of radios and WAVE users in the selected geofences or on selected routes.

The table lists the criteria used in positioning rules:

Attribute	Value
All Radios **Select Radios / Select Users / Select Categories**	Select all radios including WAVE users, or some radios, or some WAVE users, or radio users, or categories, to whom the rule will be applied.
Time period with no motion detected	Time interval during which a radio or a WAVE user can stay at one place (min)
Time period before receiving location data	Period of time after which a radio or WAVE user coordinates are received again (min)
Time period with no location data received	Period of time during which there are no radio or WAVE user coordinates (min)
Geofences and Routes	Select geofences or routes to follow in the rule.
Speeding	If speeding is registered, the rule is executed. **NOTE** The rule triggers only when over-speed occurs in the area of the selected geofence or on the selected route. Otherwise, the rule is not triggered.
Number of radios in geofences/on routes	The number of radios and WAVE users in selected geofences or on selected routes.
Select Area (Geofences/ Routes)	Select geofences or routes to follow in the rule.
Notify constantly	Select this check box to notify the dispatcher about violation of one of the criteria every time it happens. If the

Attribute	Value
	check box is not selected, the actions which follow the violation of the specified criteria will occur only once.
Notify about new location	If a radio or a WAVE user starts moving, and before that the radio or the WAVE user stopped for a time period longer than the specified one, the notification window will be displayed

If the rule meets selected criteria, the system can perform the following actions:

- Actions addressed to the initiator

- Alerts addressed to the dispatcher

- Alerts addressed to the radios

- Other actions

If finished, click **OK** to save the rule, and the created rule appears in the list of rules.

To edit rule settings, select it in the list of rules and click **Edit**. To remove the rule, select it in the list of rules and click **Delete**.

Initiator Alert

Block Radio

   If selected, the radio that triggered the rule, will be blocked.

   NOTE
   This action is unavailable to WAVE users.

Lone Worker

   If selected and **On** is clicked, the lone worker profile will be set to the radio or the WAVE user that triggered the rule. If **Off** is clicked, the lone worker mode of the radio or the WAVE user will be deactivated.
   To set up the lone worker profile, see Lone Worker Rules in SmartPTT Dispatcher. For details, see Lone Worker Rules.

Message

A text message is sent to the initiator of triggering of the rule.

> **NOTE**
>
> This action is unavailable to WAVE users.

Dispatcher Alert

Play Sound

If the check box is selected, an audible alarm will be played when the rule is triggered. You can select the desired audio file in the **Sound File Selection** window by clicking the **Select Sound File (…)** button.

Audio file must comply with the specific requirements. For details, see "Audio File Requirements" in *SmartPTT Installation and Configuration Guide.*

Show on Map

Location of a radio or a WAVE user specified in the rule is shown on the map (with an icon).

Alert

If the check box is selected, the **Notifications** panel with the specific-rule message will be opened when the rule is triggered. You need to type an alert header in the **Alert Caption** field, and an alert text in the **Alert Text** field to the right of the check box. For information on the **Notifications** panel, see Notifications.

> **NOTE**
>
> For rules **Stop control** and **No location data** the alert text cannot be set — it is generated by the system automatically.

Set Radio Status: The radio or the WAVE user is assigned the specified status. It is selected from the list of statuses.

Radio Alert

Send Message

A text message is sent to the selected radios, users, talkgroups or categories.

> **NOTE**
> This action is unavailable to WAVE users.

Other

HTTP Request

Is used for notification of the third party server of the changes occurred in SmartPTT system. It can render the event initiator radio ID and its status.

The HTTP request includes the following parts:

NOTE

Make sure that you have specified correct names for parameters 1 and 2. They must correspond to the parameters' names expected by the third party server.

NOTE

Under "@Status" SmartPTT system will send the system message corresponding to the newly assigned status selected in the **Dispatcher Alert** tab. Status system messages are set in the Statuses settings. For details, see [Statuses](#).

E-mail

Is used for specifying e-mail address where a message should be sent in case the rules specified earlier are not fulfilled. To do this, the following boxes are to be filled:

Radioserver

Server name for e-mail sending. The name of the server is selected from the drop-down list.

E-mail

Electronic addresses to send the message.

Message

Text of the message.

SMS

If selected, the SMS message is sent to the specified phone number in case the rules specified earlier are not fulfilled. To do this, the following boxes are to be filled:

Radioserver

Server name which is configured for SMS messages sending. The name of the server is selected from the drop-down list.

Phone Numbers

Telephone numbers to send SMS. The preferred number format is International Number Format, i.e. <+><country code><mobile code><phone number>.

Message

Text of the message.

NOTE

See information about SmartPTT Radioserver configuration for sending and receiving e-mails and SMS messages in the "Email Services" and "Mobile Phone Networks" sections in *SmartPTT Installation and Configuration Guide*.

2.10 Licenses

To use SmartPTT Dispatcher a license is needed.

To install the license, on the menu bar of the SmartPTT Dispatcher window, click **Settings (⚙) → Licenses**.

In the opened **Licenses** window you can install the license that defines functions available in the system:
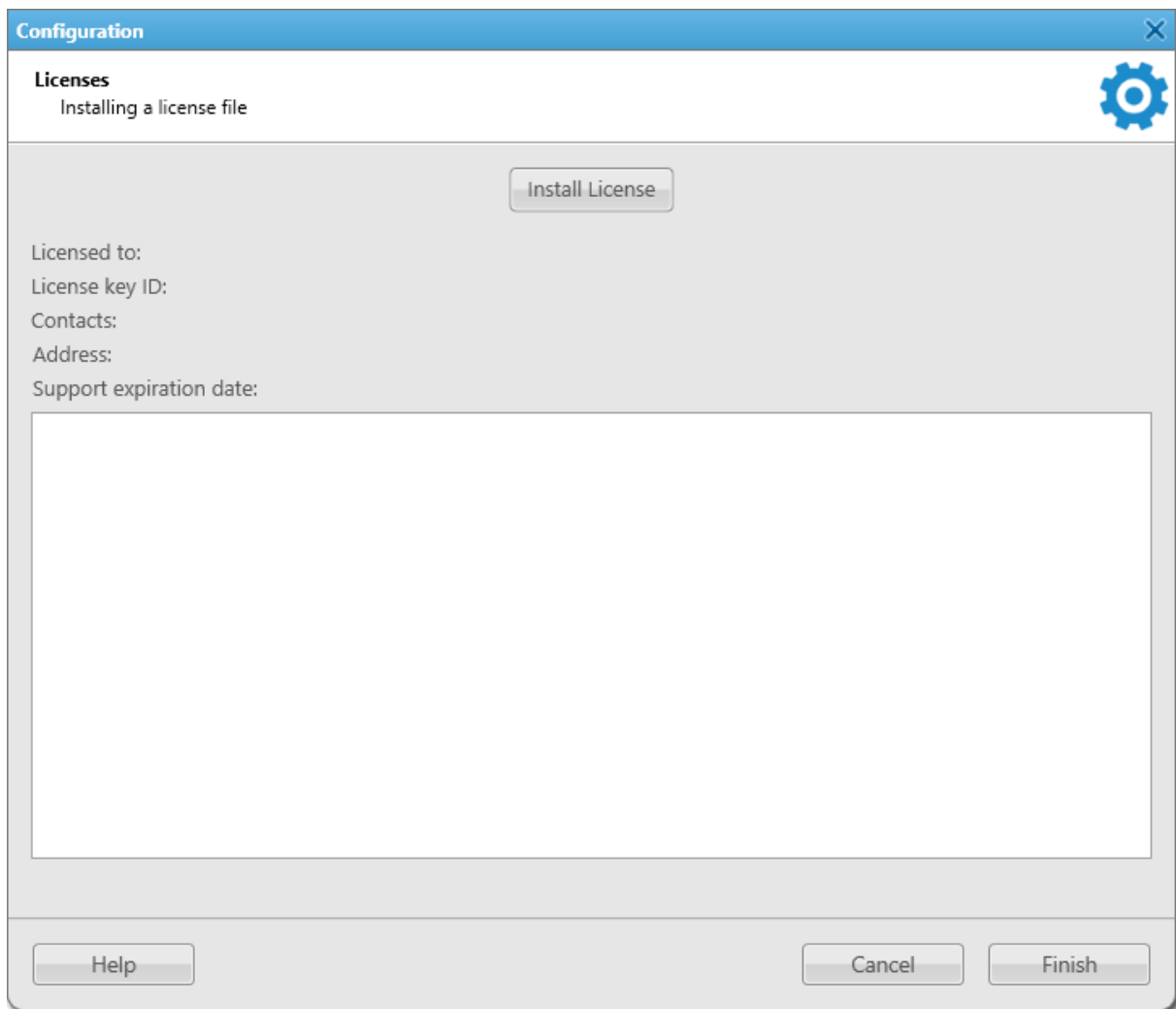
Click **Install License** and specify the license file location.

After the license installing, the **Install License** button changes to the **Restore License** button. The system licensing window displays information on the license type and scope of functions.

By clicking the **Restore License** button, you return to the previous license. After closing the **License** window, the latest displayed license is applied.
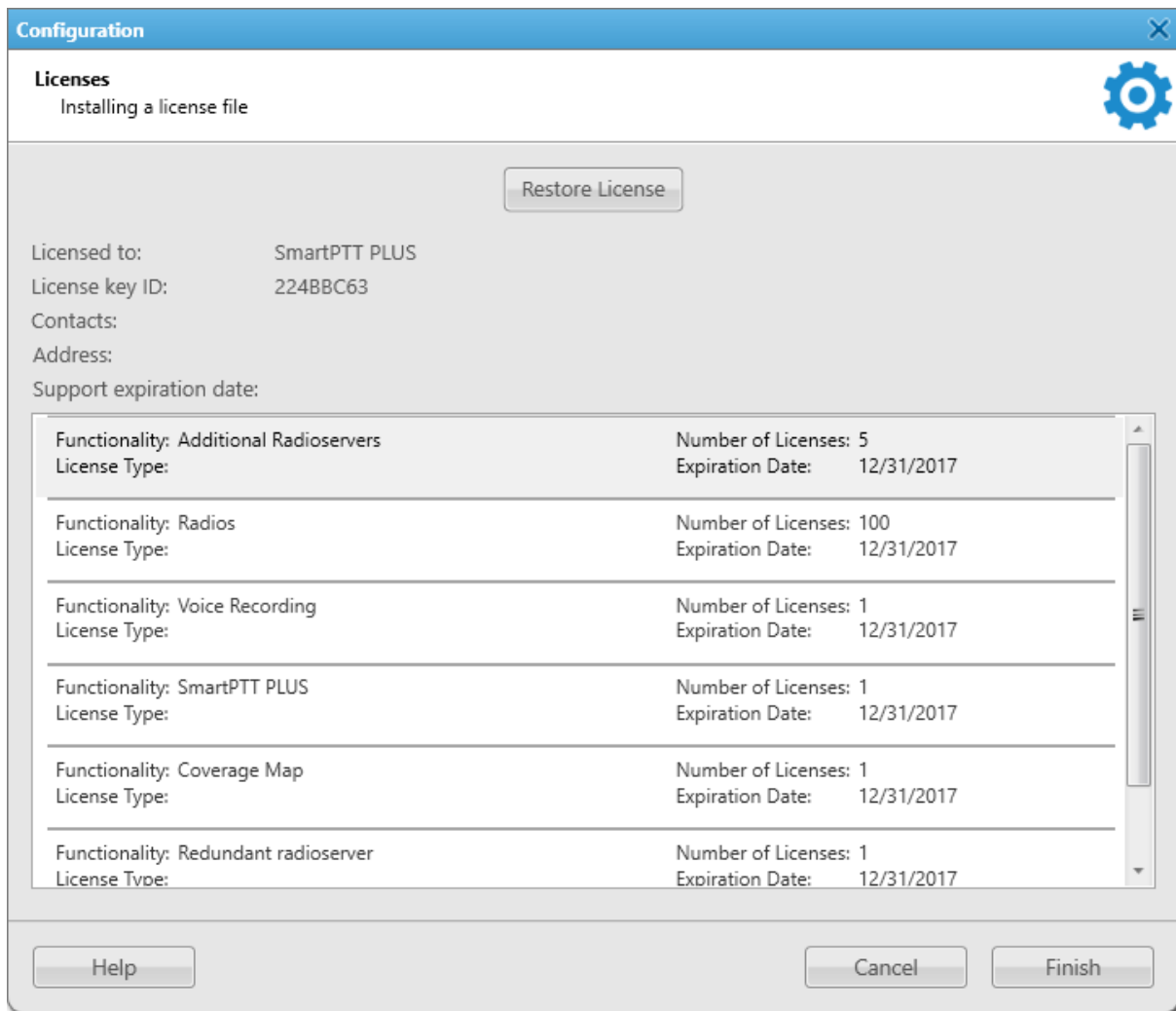
NOTE

If the radioserver and the dispatch console are installed on the same machine, you can install licenses either for SmartPTT Radioserver Configurator or for SmartPTT Dispatcher. If the radioserver and the dispatcher console are installed on different computers, you should install licenses for both applications.

2.11 Database

To connect to the database, on the menu bar, click **Settings (⚙)** → **Database**. The **Database** window appears.

Before creating a new database, connect to the database server. For this, fill in the **Database server name** box, and click **Connect**. In case of a successful connection, you will see the following message in the **Database** section: *"Connection is established successfully!"*. If connection was not established, you will see a message with the error description at the bottom of the window.

> **NOTE**
> For the database server installed together with the SmartPTT Dispatcher application enter the name using the format: Name of PC\SQLExpress (for example, *MYCOMP\SQLExpress*).

Authorization Mode
> Allows you to select authorization mode with the database.

SQL Server Authorization
> You must have the login and password of the account which has access to the SQL server.

Windows NT Authorization
> The user who has logged into the Windows system, must be listed in the SQL server's list of users to make connection.

To create a new database, click **Create Database**. In the opened window, enter the name of the new database and click **Save**.

Current database

Allows you to connect to one of the created databases.

Restore Database

Allows you to restore the current database using automatic backups. You can set up auto backups of the database in **Settings (⚙)** → Database Auto Backup. For details, see [Database Auto Backup](#).

> **NOTE**
> If SmartPTT Dispatcher is connected to a remote database, on default you cannot restore it from a backup file located on a remote database computer.

To save the changes, click **Finish**. To apply the changes with the database, restart the dispatch console.

2.12 Radioservers

The **Radioservers** window provides the ability to add new radioservers, and manage the existing ones.

The window is available by clicking **Settings (⚙) → Radioservers** on the menu bar.
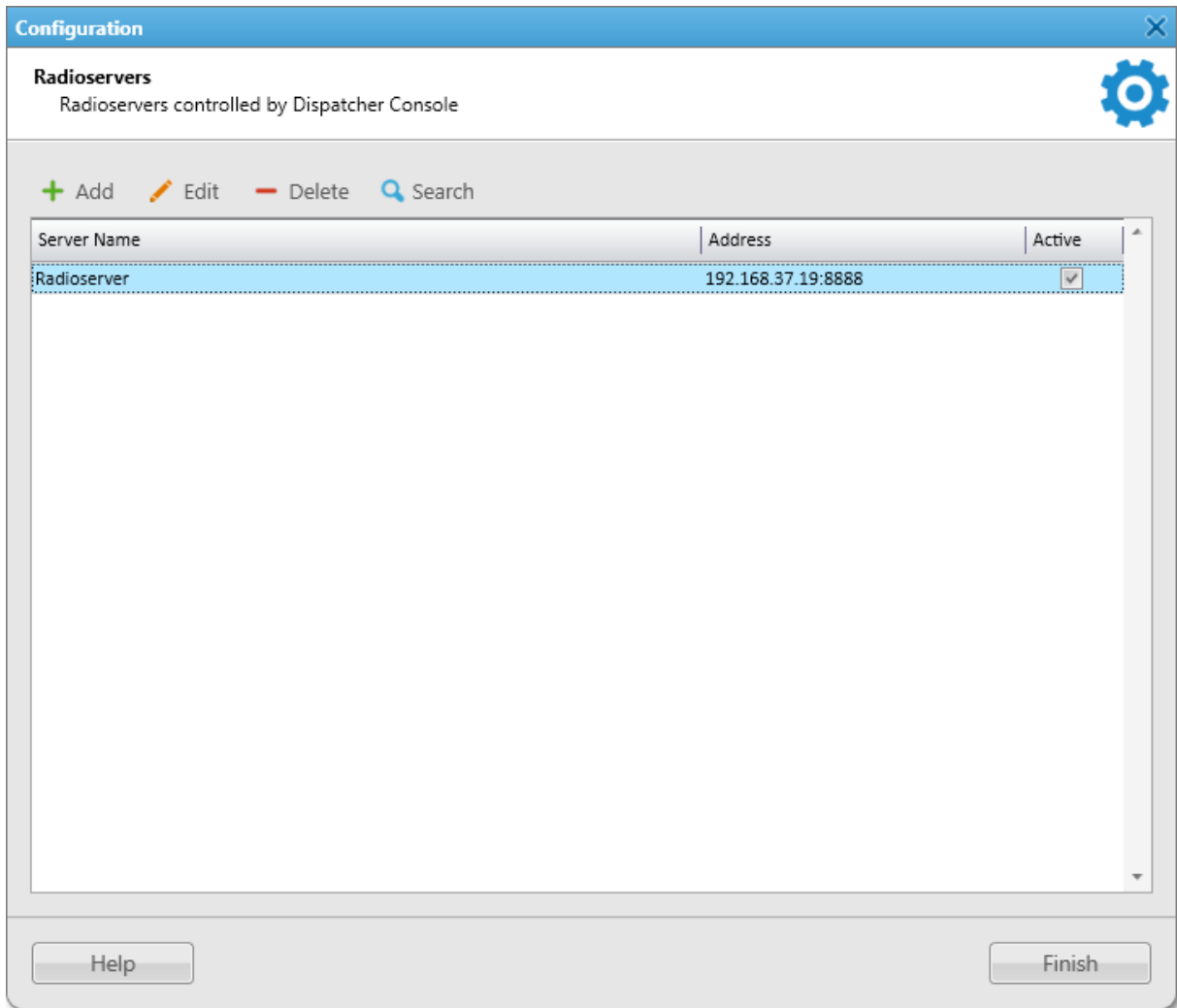
By default, the list of radioservers is empty.

The **Radioservers** window provides the following elements:

Add

Opens the **Radioserver** window for configuring settings of a new radioserver. For details, see Radioserver Window.

For information on adding radioservers, see Managing Radioservers.

> **Important**
> If a redundant radioserver is used in the system, you must add both primary and redundant radioservers to SmartPTT Dispatcher.

When the redundant radioserver is added, it is displayed in the **Radio Fleet** panel as active with no objects belonging to it. When the connection with primary server is lost, all objects from the primary radioserver appear under the redundant radioserver. Primary radioserver can have only one redundant radioserver.

Edit

Opens the **Radioserver** window for configuring settings of the radioserver already added to SmartPTT Dispatcher.

Delete

Removes the selected radioserver.

Search

Can be used for searching all running radioservers in the network. The searched radioservers appear in the Radioservers table.

Radioservers Table

Contains radioservers added to SmartPTT Dispatcher. The table consists of the following columns:

- **Server Name** — contains the radioserver name.

- **Address** — contains the radioserver IP address and port number.

- **Active** — contains a check box for activating or deactivating the radioserver.

You can sort the column content by clicking the desired column header.

For information on configuring and managing radioservers, see the sections below.

2.12.1 Radioserver Window

The **Radioserver** window provides the ability to configure or edit radioserver settings.

The window contains two tabs:

- The **General** tab. For details, see Radioserver General Tab.

- The **IPMI** tab. For details, see Radioserver IPMI Tab.

2.12.1.1 Radioserver General Tab

On the **General** tab, the radioserver settings are configured.

The tab provides the following elements:

Name

The radioserver name which is displayed in SmartPTT Dispatcher.

IP address

IPv4 address (in dot-decimal notation) or domain name of a computer with installed radioserver for establishing connection between the radioserver and SmartPTT Dispatcher.

Port

The WCF (TCP) port number of SmartPTT Radioserver that is used for establishing connection between the radioserver and SmartPTT Dispatcher. The default port number is *8888*.

Establish Connection

Establishes connection between the radioserver and SmartPTT Dispatcher.
If authentication of clients is enabled on SmartPTT Radioserver, in the lower part of the window the table with operators and client accounts appears. For information on clients and their authentication, see the "Clients connection" section of *SmartPTT Installation and Configuration Guide*.

> **NOTE**
> If no client account is assigned, an operator can manage all radios, talkgroups, and services provided by the radioserver. In this case, the operator actions are limited only by the operator rights that are set in SmartPTT Dispatcher. For details, see Operators.

List of operators

Provides the list of operator accounts added to SmartPTT Dispatcher. In this table, it is required to set the client accounts, registered in SmartPTT Radioserver Configurator, for operators. This allows the radioserver to send to SmartPTT Dispatcher operators only information that is permitted for the client account. The table consists of the following columns:

- **Operator** — contains a list of all active operators added to SmartPTT Dispatcher. For details, see Operators.

- **Client Name** — contains the name of the desktop client registered in SmartPTT Radioserver Configurator.

- **Password** — contains the password of the desktop client registered in SmartPTT Radioserver Configurator.

Important
The same client account can be used for different operator accounts.

NOTE
The table with operators appears after clicking the **Establish Connection** button.
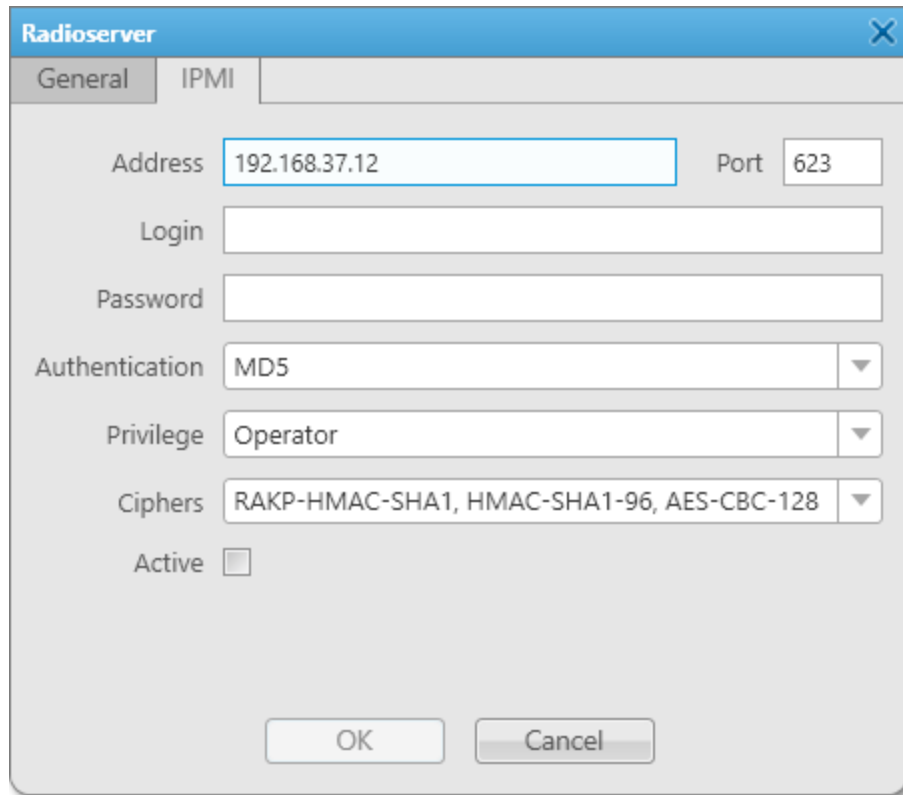
NOTE
It is not necessary to type client credentials for all operators in the table. It is enough to type the client name and password for the desired operator. If the client's name and password are not set for an operator, he or she will not be able to connect to the radioserver.

2.12.1.2 Radioserver IPMI Tab

IPMI (Intelligent Platform Management Interface) is a standardized computer system interface that is used for out-of-band management of computer systems, and monitoring system operation.

SmartPTT system uses IPMI for managing and monitoring remote radioservers. You can use IMPI for viewing the hardware characteristics of the radioserver machine, and turning it on or off remotely.

On the **IPMI** tab, you can configure IPMI settings for the radioserver.

The tab provides the following elements:

Address

IP address of the SmartPTT Radioserver host that is used for establishing IPMI connection.

Port

The port number of the radioserver computer that is used for establishing IPMI connection.

Login and Password

Obligatory fields for filling. They must match the login and password set in IPMI configuration settings on the SmartPTT Radioserver host.

Authentication

Provides the list of authentication types. It is recommended to use *MD5* as default authentication type.

Privilege

Provides the list of the privileges with different permissions for the dispatcher. It is recommended to use *Operator* as default.
For information on the privileges, see the official IPMI documentation.

Ciphers

Provides the list of ciphers to be used. It is recommended to use the default cipher.

For information on the ciphers, see the official IPMI documentation.

Active

Activates IPMI functionality for the radioserver.

> **NOTE**
>
> For information on managing the radioserver with using of IPMI, see Radioserver Remote Controlling.

2.12.2 Managing Radioservers

Follow the procedure to to add a new radioserver connection or to edit the existing one.

Prerequisites:

- Obtain IP address or domain name of a computer with installed radioserver.

- Obtain radioserver port set in SmartPTT Radioserver Configurator.

- If authentication for desktop clients is used in SmartPTT Radioserver Configurator, obtain the client name and password.

- Add the desired operator accounts. For details, see Operators.

Procedure:

1. On the menu bar, click **Settings (⚙)** → **Radioservers**.

2. In the **Radioservers** window, perform one of the following actions:

To add a new connection to a radioserver,	perform the following actions: 1. In the **Radioservers** window, click **Add**. The **Radioserver** window appears. 2. Proceed to the following step.
To edit an existing connection to a radioserver,	perform the following actions: 1. In the **Radioservers** window, click the desired radioserver, and then click **Edit**. The **Radioserver** window appears. 2. Proceed to the following step.
To delete a connection to a radioserver,	perform the following actions: 1. In the **Radioservers** window, click the radioserver name connection to which you want to delete. 2. Click the **Delete** button. 3. Proceed to the last step.

3. In the **Radioserver** window, open the **General** tab.

4. *(Optional)* In the **Name** field, type the desired radioserver name.

5. In the **IP Address** field, type the IP address of the radioserver or domain name of the computer with installed radioserver.

6. In the **Port** field, enter the radioserver WCF port number.

7. Click the **Establish Connection** button to establish connection to the specified radioserver.
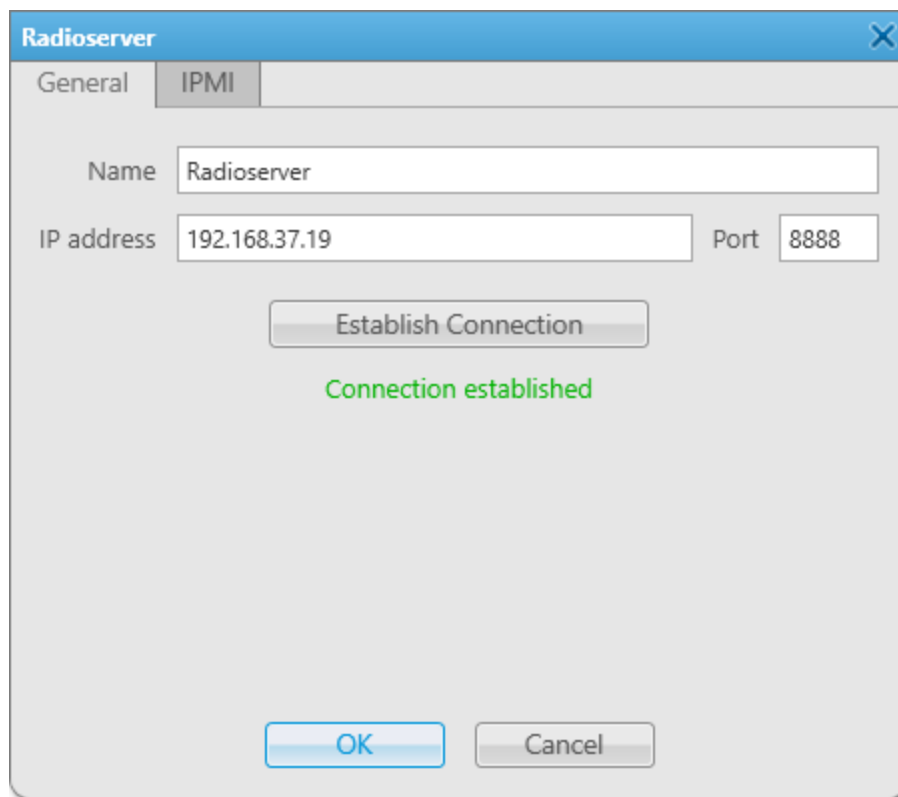
8. If in SmartPTT Dispatcher the table with operators appears, perform the following actions:

   a. In the **Client Name** column, in the entry next to the desired operator, type the client account name.

   b. In the **Password** column, in the entry next to the desired operator, type the client account password.

9. *(Optional)* Repeat the previous step for other operator accounts.

10. Click **OK** to apply changes and close the window.

11. In the **Radioservers** window, click **Finish**.

2.12.3 Configuring IPMI Settings

Follow the procedure to to configure the radioserver IPMI settings.

Prerequisites:

Ensure at least one radioserver is added. For details, see Managing Radioservers.

Procedure:

1. On the menu bar, click **Settings (⚙) → Radioservers**.

2.   In the **Radioservers** window, double-click the desired radioserver.
     The **Radioserver** window appears.

3.   In the **Radioserver** window, open the **IPMI** tab.

4.   On the **IPMI** tab, perform the following actions:

   a.   In the **Address** and **Port** fields, type the IP address and port number of the SmartPTT Radioserver host
        that is used for establishing IPMI connection.

   b.   In the **Login** and **Password** fields, type the login and password set in IPMI configuration settings on the
        SmartPTT Radioserver host.

   c.   From the **Authentication** list, select the desired authentication type.

   d.   From the **Privilege** list, select the desired privilege for the dispatcher.

   e.   From the **Ciphers** list, select the desired cipher.

   NOTE
   In the **Authentication**, **Privilege**, and **Ciphers** lists, it is recommended to use the default values.

   f.   Select the **Active** check box to activate the IPMI for the radioserver.

5.   In the **Radioservers** window, click **Finish**.

Postrequisites:

• To deactivate IPMI on the radioserver, in the **IPMI** tab, clear the **Active** check box.

• To edit the IPMI settings of the radioserver, in the **Radioservers** window, select it, and then click **Edit → IPMI**.

3 Tools

The **Tools** menu provides access to the main SmartPTT Dispatcher panels from which you can monitor and control the dispatched radio system.

> **NOTE**
> The **Tools** menu elements are unavailable if the layout is locked.
> For details, see Locking Layout.

The following panels are available:

- **Calls** panel provides the abilities to see the ongoing calls activity, to answer the incoming call or initiate a call, and to see information about the registered calls.
  For details, see Calls.

- **Sound** panel provides controls for adjusting the volume settings.
  For details, see Sound.

- **Cross Patches** panel provides controls for establishing and controlling connection between talkgroups from different bandwidths or network types.
  For details, see Cross Patches.

- **Radio Fleet** panel provides information on the radio system objects.
  For details, see Radio Fleet.

- **SCADA** panel provides access to the SCADA module where you can monitor and control the SCADA points added to SmartPTT Dispatcher.
  For details, see SCADA Module.

> **NOTE**
> The **SCADA** option appears in the **Tools** menu only after the SCADA module activation in SmartPTT Dispatcher settings.
> For details, see Activating SCADA Module.

- **Channels** panel displays information and provides controls for working with control stations and repeater system channels.
  For details, see Channels.

- **Radios** panel provides controls for monitoring and interacting with radios.
  For details, see Radios.

- **Job Tickets** panel provides controls for sending job tickets to radios and talkgroups and monitoring their status.
  For details, see Job Tickets.

- **Monitoring** panels provide tools for graphical representation and real-time analysis of the radio system operation.
  For details, see Monitoring.

- **Lone Workers** panel provides information on the radios that are currently in the Lone Worker mode.
  For details, see Lone Workers.

- **Recent Incoming Calls** panel displays the latest radios which made a call in the radio network.

  For details, see Recent Incoming Calls.

- **Notifications** panel displays alerts configured for specific rules.

  For details, see Notifications.

- **System Messages** panel provides information on events related to the radio system operation, such as errors and connection status changes.

  For details, see System Messages.

- **Server Tasks** panel provides information on SmartPTT Dispatcher commands that are currently processed by SmartPTT Radioserver.

  For details, see Server Tasks .

- **Custom Console** panel provides quick access to the radio system objects and functionality in the preconfigured workspace.

  For details, see Custom Consoles.

NOTE
Custom consoles appear in the **Tools** menu only if they were added.
For details, see Custom Consoles.

- Web pages panel opens a web page that was added to SmartPTT Dispatcher. Each added web page has a corresponding separate panel.
  For details, see Web Pages.

3.1 Calls

The **Calls** panel provides the ability to perform the following actions:

- Make a call to the recipient radio or into the recipient talkgroup by clicking the call entry

- Answer the incoming call for the dispatcher by clicking the call entry

- See the ongoing calls activity

- See history of all calls in the radio network, time of call and its duration (during the current session only)

- Initiate a call by clicking the button with the initiator or recipient name

The panel displays only calls that occur in the radio system.

The first time you install SmartPTT, the **Calls** panel opens automatically. The panel can also be opened or closed manually. To do this, expand the **Tools** menu on the menu bar of the SmartPTT Dispatcher window and click **Calls**.

A call entry on the **Calls** panel can be of two types:

- Ongoing call entry

- Finished call entry

The ongoing call entry displays current transmission, including the hang time, and provide the dispatcher the ability to answer the incoming call or make a call to the recipient radio or into the recipient talkgroup by clicking anywhere on the call entry.
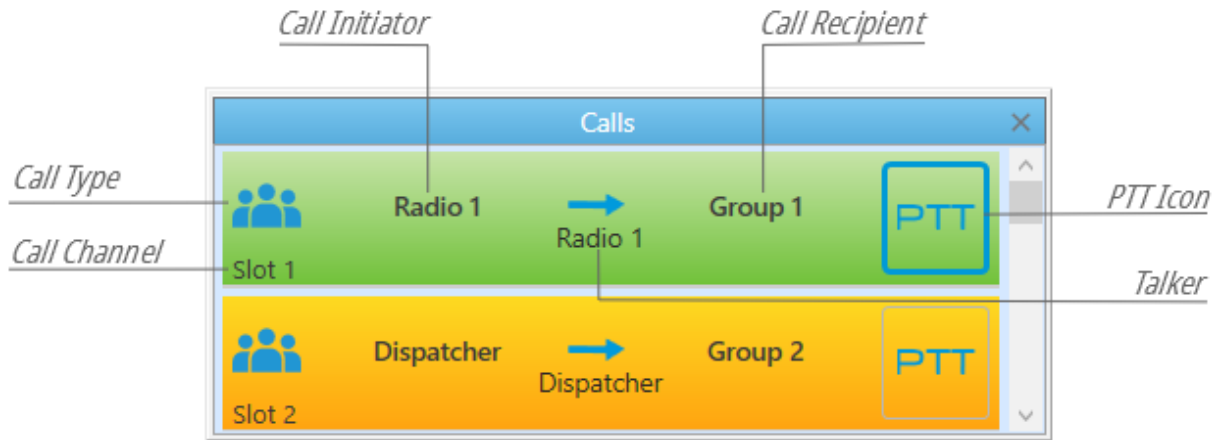
A call status is determined by the color of the call entry. For information on the color indication of voice calls, see Color Indication of Voice Calls.

The ongoing call entry contains the following information and elements:

Call Type

The icon has six indications depending on the call type:

- Private call ( )

- Private telephone call or private conference call ( )

- Group call ( )

- Group telephone call or telephone All Call, or group conference call or conference All Call ( )

- Emergency call ( )

- Remote monitoring ( )

Call Channel

A channel that is used for the voice transmission. For details, see Channels and Systems.

Call Initiator

A radio, a telephone subscriber or a dispatcher that has initiated the ongoing call.

Talker

An object that is currently transmitting voice.

> **NOTE**
> During remote monitoring, the monitored radio is displayed as Call Initiator and Talker.

If a call can not be initiated and call attempts continue, the cause of a holding can be displayed on the call entry instead of the talker name.
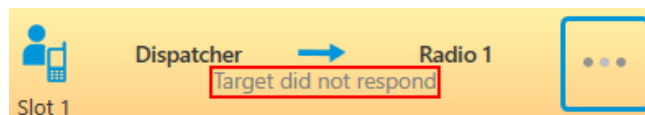
Call Recipient

A party that is receiving the ongoing call.

> **NOTE**
>
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

PTT icon

Displays the possibility to interact with the ongoing call entry. The blue frame appears when selecting the call recipient or, if the dispatcher himself is the call recipient, the call initiator.

Key (🔑) icon

Appears next to the talker name when a secured call is initiated.

The finished call entry provide the abilities to see information about the registered call and to initiate a call by clicking the Call Initiator or the Call Recipient name.
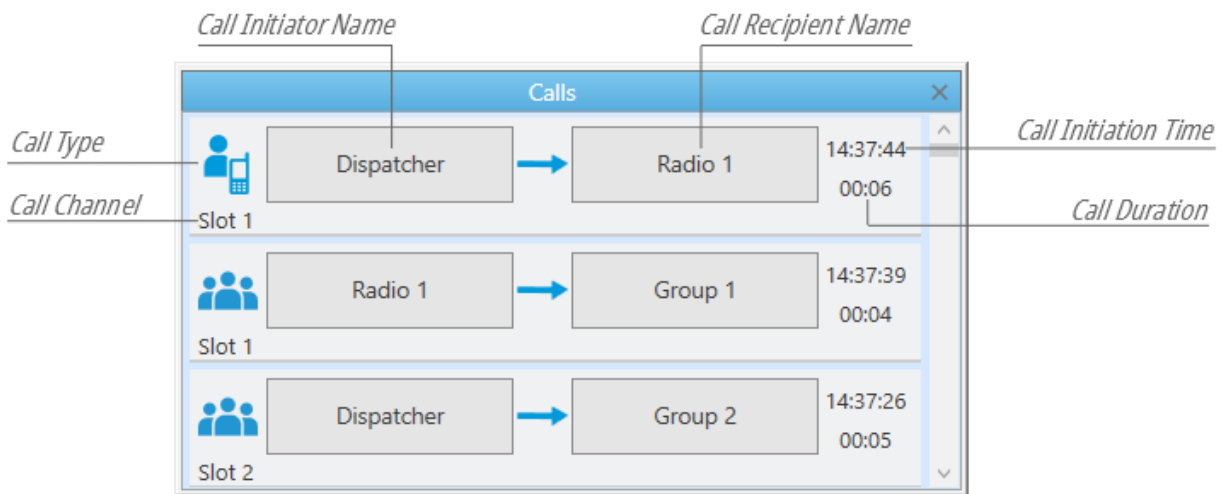
When an outgoing call can not be initiated in some radio systems for any reason, the **Call not allowed** label is displayed on the finished call entry.

For information on initiating Voice Calls using the finished call entry, see Initiating Voice Calls on Calls Panel.

3.1.1 Initiating Voice Calls on Calls Panel

Follow the procedure to initiate a private or a group call using the finished call entry on the **Calls** panel.

> **NOTE**
>
> Call can also be initiated using hotkeys. For information on hotkeys, see Keys.

Prerequisites:

- Check the current settings of the pointing devices. For details, see Pointing Devices.

- Ensure the **Calls** panel is open. For details, see [Calls](#).

Procedure:

1. Initiate a call by clicking the Call Initiator or the Call Recipient name.
   A new ongoing call entry appears at the top of the **Calls** panel. The call entry becomes light-orange (▧), and the button with three dots appears on it.

2. When the call entry becomes orange (■), speak into your microphone.

3. To end the transmission, click the ongoing call entry.
   The call entry becomes blue (■).

4. When the blue color indication (■) appears, perform one of the following actions:

To transmit again,	click the ongoing call entry.
To listen to the radio transmission,	wait until the ongoing call entry becomes green (■), and audio is heard from the speakers or headsets.
To end the call,	wait until the blue indication (■) disappears.
	NOTE In some cases, on the ongoing call entry, the cross (✖) button can be available. It provides the ability to end a call at any time.

3.2 Sound

The **Sound** panel is used for performing volume control of system objects and system sounds.

The panel is open by default. If it is closed, you can open it on the menu bar, by clicking **Tools → Sound**.
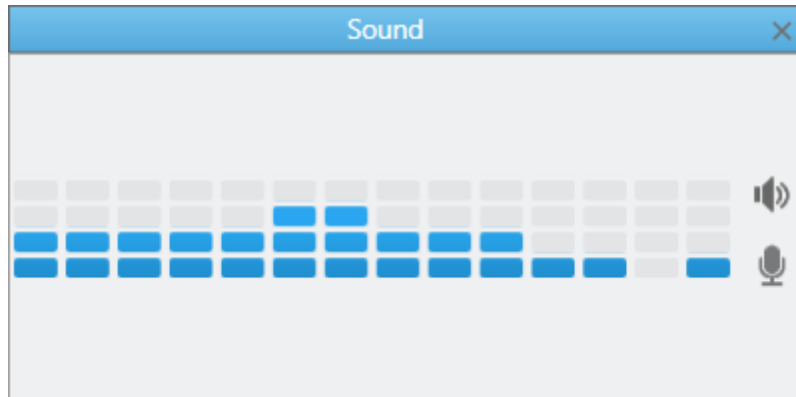
The **Sound** panel provides the following elements:

- The audio visualizer shows the volume of incoming and outgoing sound (voice, audio, tones) on audio frequencies supported by the codec.

- The **Speakers ( )** button toggles sliders of speakers volume.

- The **Microphone ( )** button toggles sliders of microphone volume.

After you click the **Speakers ( )** button, the following sliders appear:
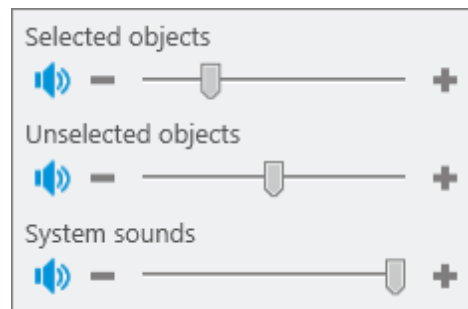
Selected objects

Adjusts the volume level of all selected objects.

Selected objects are objects that are selected, have a blue frame, or whose call window is open and active (the window has the blue title bar, and the PTT button has the blue frame).

> **NOTE**
> You can see a name of the selected object on the Information Bar in green.
> If you select several objects, the **Multiselect** caption appears.

Unselected objects

Adjusts the volume level of all unselected objects.

Unselected objects are objects that do not have a blue frame or open and active.

System sounds

Adjusts the volume level of system sounds.

System sounds include the following sounds:

- Sound of a triggered rule

- Sound of the transmission initiating

- Notifications of dispatcher and telephone subscriber incoming calls

- Sound of call records played in the both Dispatcher and Radioserver Event Log

- Sound of system messages

- FOACSU call notification

- Sound of the Call Alert command

After you click the **Microphone (🎤)** button, a slider for adjusting the microphone volume appears.

For information on adjusting volume of selected/unselected objects and microphone, see the sections below.

3.2.1 Adjusting Volume of Objects and System Sounds

Follow the procedure to adjust the volume of selected/unselected objects or system sounds.

Procedure:

1. If the **Sound** panel is closed, on the menu bar, click **Tools → Sound**.
   The **Sound** panel appears.

2. In the **Sound** panel, click the **Speakers (🔊)** button.
   The volume sliders appear.

3. Adjust the volume of selected/unselected objects or system sounds:

To increase the volume,	move the desired volume slider right, or click the Increase Volume (➕) button.
To decrease the volume,	move the desired volume slider left, or click the Decrease Volume (➖) button.
To mute the sound,	click the **Mute (🔊)** button next to the desired slider. The slider becomes inactive, and the button changes to **Unmute (🔇)**.

Postrequisites:

To unmute selected/unselected objects or system sounds, click the **Unmute (🔇)** button.

3.2.2 Adjusting Microphone Volume

Follow the procedure to adjust the microphone volume.

Procedure:

1. If the **Sound** panel is closed, on the menu bar, click **Tools → Sound**.
   The **Sound** panel appears.

2.   In the **Sound** panel, click the **Microphone (🎤)** button.
     The volume slider appears.

3.   Adjust the volume of the microphone:

To increase the volume,	move the volume slider right, or click the Increase Volume (➕) button.
To decrease the volume,	move the volume slider left, or click the Decrease Volume (➖) button.
To mute the microphone,	click the **Mute** (🎤) button next to the slider. The slider becomes inactive, and the button changes to **Unmute (🔇)**.

Postrequisites:

To unmute the microphone, click the **Unmute (🎤)** button.

3.3 Cross Patches

You can use cross patches for establishing connection between talkgroups from different bandwidths or network types within the one radioserver.

All participants of the cross patch hear a call made to it. A call made to a talkgroup included in the cross patch is heard by all participants of the cross patch. It is also true for a call made by a dispatcher or a telephone subscriber.

Cross patches are created in SmartPTT Dispatcher by an operator. After creating the cross patch, all operators in the SmartPTT system get the opportunity to see this cross patch, edit, enable or disable it (if they have a permission). If an operator who created the cross patch logs off or closes the application, the cross patch will remain available to other operators.

> **Important**
> When all operators log off or closes the applications, the cross patch will remain enabled and will continue to operate.

For information on configuring and using cross patches, see the sections below.

3.3.1 Cross Patches Panel

The **Cross Patches** panel is used for creating and managing cross patches.

You can open the **Cross Patches** panel by clicking **Tools → Cross Patches** on the menu bar.

> **NOTE**
> If the radioserver is inactive, the added cross patches are not displayed in the **Cross Patches** panel.

On default, the **Cross Patches** panel provides the following elements:

- **All** shows all existing cross patches.

- **Active** shows only active cross patches.

- **Add cross patch (＋)** opens the **Cross Patch** window where you can configure new cross patches. For details, see Cross Patch Window.

Added cross patches appear below as entries. A cross patch entry provides the following elements:

- Expand (─) / Collapse (＋) buttons that show or hide the cross patch details.

- Name of the cross patch.

- PTT button that initiates a call to the cross patch.

- The Actions (≫) button that opens the Actions menu for managing the cross patch. For information on the actions, see Cross Patch Actions Menu.
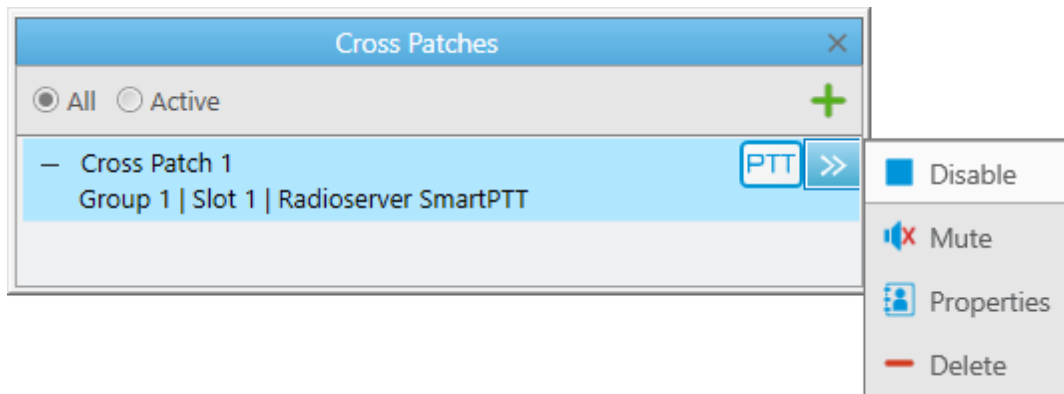
3.3.1.1 Cross Patch Actions Menu

The Actions (≫) menu of the cross patch provides the ability to perform the following actions:

Action	Description
Disable (■) / **Enable (▶)**	Activates or deactivates the cross patch. Inactive cross patch is displayed in grey and unavailable for initiating calls.
Mute (🔇) / **Unmute (🔊)**	Turns on or off the sound for all parties of the cross patch. If the cross patch is muted, the dispatcher cannot hear participants, but all the cross patch participants can hear the dispatcher. If the cross patch is unmuted, but one of the talkgroups is muted, the dispatcher can hear all participants except this talkgroup.

Action	Description
	NOTE If the cross patch contains groups from network topologies based on control stations and direct connection, and you can hear hoarse voice, select *DMR Vocoder* as a codec in the sound settings in the dispatch console (see General Settings) and in the audio settings of the control station in SmartPTT Radioserver Configurator.
Properties (🔲)	Opens the **Cross Patch** window for editing the cross patch. For details, see Cross Patch Window.
Delete (▬)	Deletes the cross patch.
Clear Element (✖)	Removes the assigned cross patch from the element.
	NOTE Available only for cross patches on a custom console. For details, see Assigning Cross Patches.

3.3.2 Cross Patch Window

In the **Cross Patch** window, you can configure a new, and edit an existing cross patch.
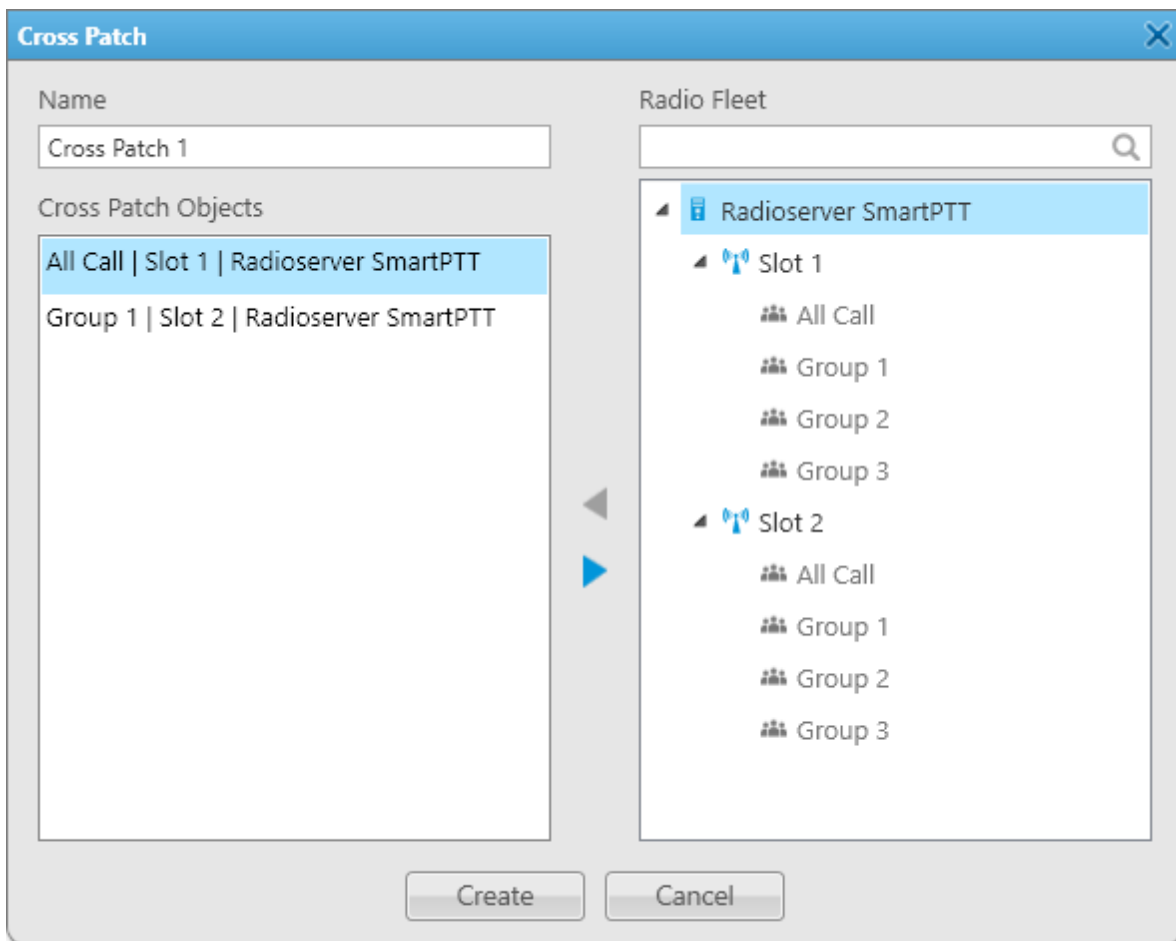
The **Cross Patch** window provides the following elements:

Name

Contains the name of the cross patch. You can leave the default name, or type the desired name.

Cross Patch Objects

Displays elements that are included in the cross patch in the <participant name>|<channel name>|
<radioserver name> format.

Search Field

Field that provides the ability to find the desired group by typing its name.

Radio Fleet

Displays objects of the **Radio Fleet** panel that can be added to the cross patch. You cannot add radioservers, control stations, and channels to the cross patch.

Add (◀) / Remove (▶)

Adds or removes the selected object to or from the **Cross Patch Objects** box. You can also double-click or drag the desired object to add it to or remove from the box.

Create

Creates the cross patch and enables it. If you edit a cross patch, the button is replaced by the **OK** button.

3.3.3 Managing Cross Patches

You can use the Cross Patches feature to perform the following actions:

- Create and edit cross patches. For details, see Creating Cross Patches and Editing Cross Patches.

- Disable, enable and mute cross patches. For details, see Disabling and Enabling Cross Patches and Muting Cross Patches.

- Initiate calls to cross patches. For details, see Initiating Cross Patch Calls.

3.3.3.1 Creating Cross Patches

Follow the procedure to create a cross patch.

Procedure:

1. If the **Cross Patches** panel is closed, on the menu bar, click **Tools → Cross Patches**.
The **Cross Patches** panel appears.

2. In the **Cross Patches** panel, click **Add cross patch (✚)**.
The **Cross Patch** window appears.

3. Add the desired object to the **Cross Patch Objects** box in one of the following ways:

   - Double-click the desired object.

   - Drag the desired object to the box.

- Select the desired object, and then click Add (▶).

4. Click the **Create** button.

   A new cross patch appears in the **Cross Patches** panel, and becomes enabled.

3.3.3.2 Disabling and Enabling Cross Patches

Follow the procedure to disable or enable a cross patch.

Procedure:

1. If the **Cross Patches** panel is closed, on the menu bar, click **Tools → Cross Patches**.
   The **Cross Patches** panel appears.

2. In the **Cross Patches** panel, in the right part of the desired cross patch entry, click the Actions (≫) button.
   The cross patch Actions menu appears.

3. In the Actions menu, depending on the cross patch state, perform one of the following actions:

To disable the cross patch,	click the **Disable (▪)** button. The button changes to **Enable (▶)**; the cross patch entry becomes shaded.
To enable the cross patch,	click the **Enable (▶)** button. The button changes to **Disable (▪)**.

3.3.3.3 Muting Cross Patches

Follow the procedure to to mute a cross patch.

Procedure:

1. If the **Cross Patches** panel is closed, on the menu bar, click **Tools → Cross Patches**.
   The **Cross Patches** panel appears.

2. In the **Cross Patches** panel, click the Actions (≫) button of the desired cross patch, and then click **Mute (🔇)**.

Postrequisites:

To unmute the cross patch, click the Actions (≫) button of the cross patch, and then click **Unmute (🔊)**.

3.3.3.4 Editing Cross Patches

Follow the procedure to edit a cross patch.

Procedure:

1. If the **Cross Patches** panel is closed, on the menu bar, click **Tools → Cross Patches**.
   The **Cross Patches** panel appears.

2. Open the properties of the existing cross patch in one of the following ways:

   - In the **Cross Patches** panel, double-click the desired cross patch.

- In the **Cross Patches** panel, in the right part of the desired cross patch entry, click the Actions (≫) button, and then select **Properties (** 🔲 **)**.

  The **Cross Patch** window appears.

3. In the **Cross Patch** window, perform the desired changes.

4. Click **OK** to apply changes and close the window.

3.3.3.5 Initiating Cross Patch Calls

Follow the procedure to initiate a cross patch call.

Prerequisites:

- Ensure the **Cross Patches** panel is opened. For details, see Cross Patches Panel.

- Ensure the desired cross patch is added and enabled. For details, see Creating Cross Patches.

- Obtain the current settings of the pointing devices and hotkeys from the Administrator.

Procedure:

Initiate the cross patch call in one of the following ways:

- Depending on the settings of the pointing devices, press and hold, or click the PTT button of the desired cross patch.

- Select the cross patch, and then depending on the PTT button hotkey settings, press and hold, or press the hotkey.

3.4 Radio Fleet

The **Radio Fleet** panel provides communication objects in the dispatched radio systems. These objects are:

- Radios and WAVE users
  For details, see Radios.

- Talkgroups and site-specific group of radios
  For details, see Talkgroups and All Calls.

- Channels which include the following objects:

  - Control stations

  - System wide and local channels of conventional radio systems

  - Single and multisite trunked radio systems

  For details, see Channels and Systems.

- SmartPTT Radioservers
  For details, see Radioservers.

The panel does not show non-radio objects like other SmartPTT dispatchers, phone users, SmartPTT Web Client, and third-party dispatch applications.

If the panel is closed, you can open it by clicking **Tools → Radio Fleet** on the menu bar.
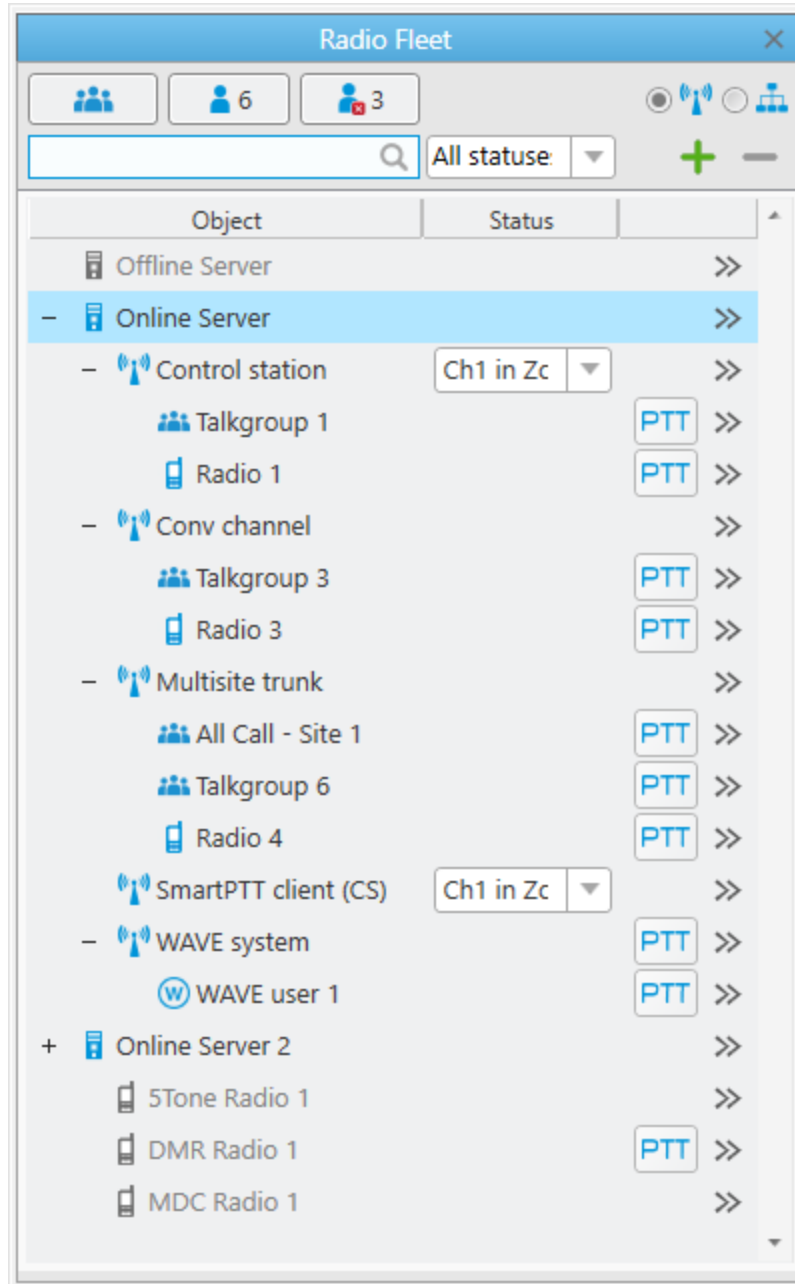
The **Radio Fleet** panel provides the following elements:

Hide talkgroups (👥)

   Shows or hides talkgroups. Other objects and categories remain visible in the Object Table.

Hide online radios (👤)

   Shows or hides radios that appear registered in the Object Table. Other objects and categories remain visible.

Hide offline radios (👤)

Shows or hides radios that appear unregistered or unavailable in the Object Table. Other objects and categories
remain visible.

> **WARNING**
> Radios that use MDC-1200 or 5 Tone signaling always appear offline in the **Radio Fleet** panel.

Search box

Can be used for searching a radio or talkgroup by typing its name or ID.

List of statuses

Provides a list of statuses for filtering radios.

Filter by channel (📶)

Shows objects organized according to the dispatch system configuration and based on the radio presence
information.

Filter by category (🏛)

Shows objects organized according to the categories and sub-categories created in SmartPTT Dispatcher.
For information on categories, see Categories.

> **NOTE**
> If you click **Filter by category**, you cannot access channels, systems, and SmartPTT Radioservers.

Add radio (➕)

Opens the **Radio Properties** window for adding a radio.

Delete radio (➖)

Deletes the selected radio.
Removed online radios automatically deregister in SmartPTT dispatch system.

Object Table

The table consists of the following columns:

Object

The column contains the name and the icon of objects or categories.

Status

The column contains statuses of radios, or channel selection controls of the corresponding control stations. The
statuses are related to SmartPTT statuses of radios, not the statuses provided by MOTOTRBO radio system. For
information on radio statuses, see Statuses.

> **NOTE**
> If no statuses added in SmartPTT Dispatcher, the **Status** column disappears from the Object Table, and the
> channel selection control will be available only in the custom console.

Unnamed column

In the column, you can see the PTT button of the corresponding object and the Actions (≫) button. The color of
the PTT button refers to the call status. For details, see Color Indication of Voice Calls. The button is unavailable for
SmartPTT Radioservers, categories and radios from analog radio systems that use MDC-1200 or 5 Tone signaling.

> **NOTE**
> The PTT button is available even if the specific type of voice calls is forbidden to the dispatch console user.

For information on the **Radio Fleet** objects, see the sections below.

3.4.1 Actions

SmartPTT Dispatcher provides various actions for interacting with system objects.

The actions can be performed either from the Actions menu or a Call Window of the corresponding object. For information on Call Windows, see Radios or Talkgroup Call Window.

You can open the Actions menu in one of the following ways:

- By clicking the Actions (≫) button to the right of the object name in the **Radio Fleet** panel.

- By clicking the Actions (≫) button on the desired radio element in the **Radios** or custom console panel.

- By right-clicking the radio on a map or in the expendable **Radios** panel of the open map control panel. For information on map control panel, see Map Control Panel.

For information on actions for interacting with system objects, see the corresponding sections below.

3.4.2 Radioservers

In the **Radio Fleet** panel, radioserver entries represent radioservers available to a dispatcher. For information on managing radioservers in SmartPTT Dispatcher, see Radioservers.
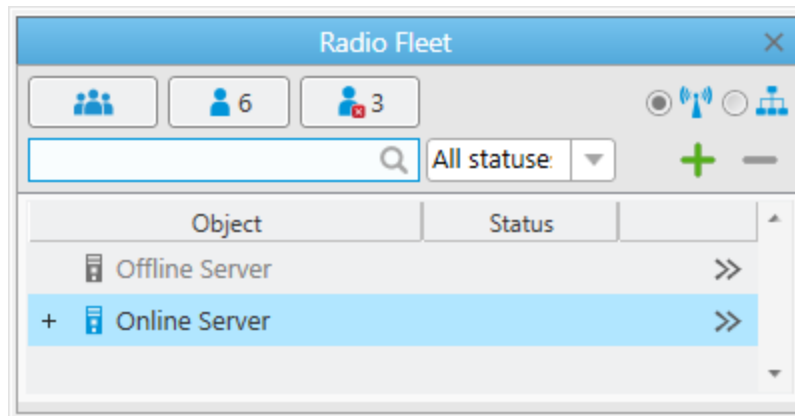
The radioserver entries are displayed only when the **Filter by channel ( )** view is active.

Each radioserver entry provides the following elements:

Expand (+) / Collapse (−)
Shows or hides the objects that belong to the radioserver.
If the radioserver has no objects belonging to it or they are hidden due to profile settings, the element is unavailable.

Radioserver Icon ( )
Displays the state of the radioserver:

- The blue color ( ) indicates that the server is online.

- The gray color (▌) indicates that the server is offline.

Radioserver Name

The name that is set in the **Radioserver** window.

For information on the window, see Radioserver Window.

Actions (≫)

Opens the Actions menu of the radioserver.

For information on the actions, see Radioserver Actions Menu.

3.4.2.1 Radioserver Actions Menu

The Actions (≫) menu of the radioserver provides the ability to perform the following actions:

Action	Description
Show Radioserver Event Log (▤)	Displays the event log of a radioserver for the specified period of time. For information on the radioserver Event Log, see SmartPTT Radioserver Event Log. **NOTE** The action is available if the radioserver event log is activated in SmartPTT Radioserver Configurator. For details, see "Configuring Event Log Database Connection" in *SmartPTT Installation and Configuration Guide*. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Configure Call Bridging Table (⚙)	Opens the **Bridging Configuration** window in which you can configure the bridging service. For information on bridging, see Bridging Service. **NOTE** The action is available if bridging is activated in SmartPTT Radioserver Configurator. For details, see "Managing Bridging" in *SmartPTT Installation and Configuration Guide*. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.

Action	Description
Selection of Audio Output Device (🔊)	Provides a list of audio output devices using which the sound of the radioserver is played. By default, *<No>* and *Main device* values are available. For information on audio output devices configuring and assigning procedures, see [Configuring Audio Output Device](#) and [Assigning Audio Output Devices to System Objects](#).
View Properties (🖼)	Opens the radioserver properties window. For details, see [Radioserver Properties](#).

3.4.2.2 Radioserver Properties

In the properties window of the radioserver, you can obtain information on its current version and leave comments for other users of SmartPTT Dispatcher.

You can open the window by double-clicking the entry of the desired radioserver or selecting the **View Properties (** 🖼 **)** from the Actions menu of the radioserver.
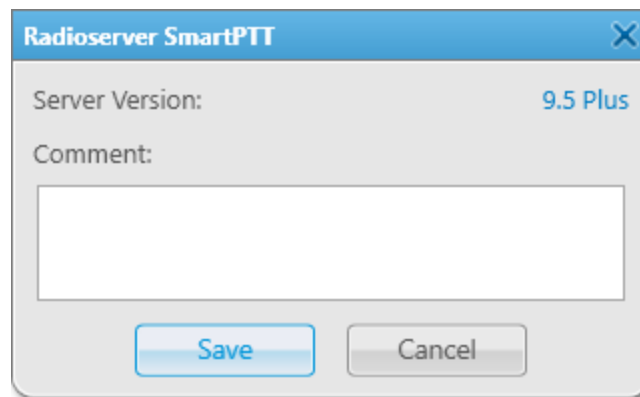
The properties window provides the following elements:

Server Version

The current version of SmartPTT Radioserver. If the version does not match the version of SmartPTT Dispatcher, it is displayed in red color.

Comment

A box in which you can type any additional information about the radioserver. For example, that the radioserver is redundant.

Save

Save the comment which is typed in the box above.

3.4.3 Radios

Radios are the most important objects of the **Radio Fleet** panel and the whole dispatch system.
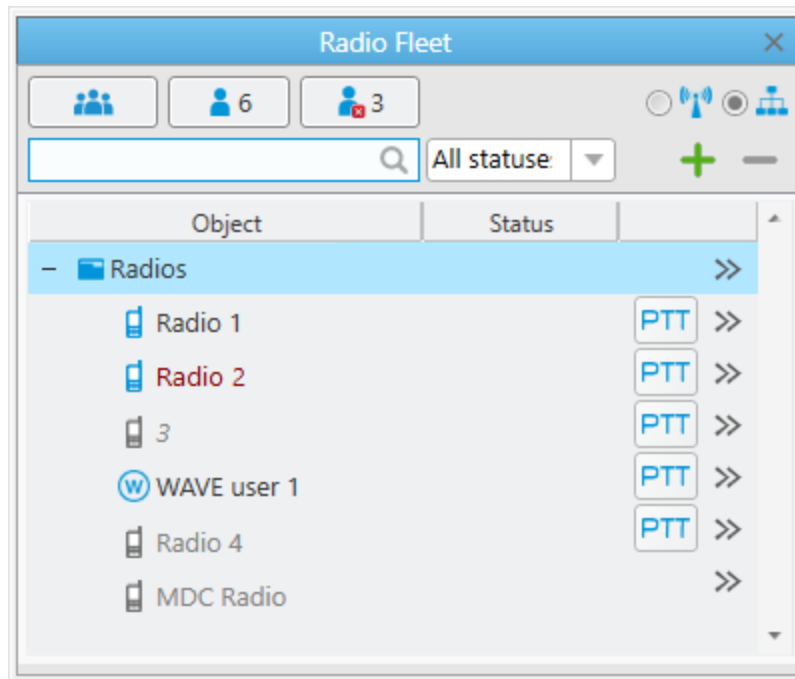
If SmartPTT is integrated with WAVE systems, WAVE users are represented similarly.

Each radio entry provides the following elements:

Object Icon

The icon of a radio ( ) or a WAVE user ( ) appears on the left of the object name. While the radio is registered over the Automatic Registration Service (ARS), the icon is blue. If the radio is unregistered or deregistered, the icon is gray (appears dimmed). Radios and WAVE users are the only objects that may have a custom icon.

NOTE
Radios with the ID in the MDC-1200 or 5 Tone format always appear offline since they does not provide registration information.

Object Name

Object name can be received from the SmartPTT Radioserver metadata database or set manually by the dispatcher. It can be changed when the radio user sends a message in the *profile%name:<new name>* format to SmartPTT Dispatcher. If no name is set, the radio ID or IP address appears. If the user provides its Authentication ID, the ID or its alias is displayed next to the radio name. The radio name color and type indicates the radio state:

- Regular black indicates registered online radios.

- Regular gray (dimmed) indicates registered offline radios.

- Italic indicates deregistered online radios.

- Dark red indicates radios in Emergency Mode.

Location Indicator

The icon appears if geotracking is turned on for the radio. Depending on the status, the Valid Coordinates (⬤) or Outdated Coordinates (⬤) icon is displayed.

For information on radio geotracking, see Radio Location Properties.

Status

The text that appears in the **Status** column of the Object Table is the status provided by SmartPTT to the dispatcher. It is not the MOTOTRBO Radio Status. The status can be set to the radio by a dispatcher or changed manually when a radio sends a specific text message.

For information on statuses for radios, see Statuses.

PTT

The **PTT** button always appears for MOTOTRBO radios and WAVE users, even if voice calls are turned off for these objects. The button provides the standard indication of the call status.

For details, see Color Indication of Voice Calls. PTT button is unavailable for non-MOTOTRBO radios (those with MDC ID, 5 Tone ID, or P25 ID).

Actions (≫)

The button that opens the radio or WAVE user Actions menu.

For information on actions, see Radio Actions Menu.

3.4.3.1 Radio Actions Menu

The Actions (≫) menu of the radio provides the ability to perform the following actions:

Action	Description
Send Message (✉)	Opens the **Send Message** window in which you can type and send messages or manage message templates. For details, see Send Message Window. Available for DMR radios. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Call Alert (🎺)	Sends the Call Alert command to the desired radio. Available for DMR radios.
Radio Check (📲)	Sends the Radio Check command to the desired radio. Available for DMR radios.
Monitoring (🎧)	Initiates remote monitoring of the desired radio during which you can listen to the radio without notifying it. While the remote monitoring is active, the radio cannot initiate calls. Available for DMR radios.

Action	Description
	The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Set Location (⊕)	Provides the ability to set the location of a radio on a map manually. If no map panel is open in the main area, the action opens the **Select Map** window from which you can select the map to set the radio location. For information on the radio location setting, see Setting Radio Location. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Show Track (↵)	Shows the track of the radio for a specific period of time. You can select the following periods to show the track: • *For the last hour* • *For today* • *Specify a time range* (a custom period) Period selection is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators. If no map is open in the main area, the action opens the **Select Map** window, from which you can select the map to show the track. If the *Specify a time range* is selected, you should manually set the **Start date** and **End date** in the open **Track** panel of the map control panel, and then click the **Show** button. For information on the track showing, see Displaying Tracks. Available for DMR radios.
Find on Map (🌐)	Shows a radio on a map. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.

Action	Description
Show Address (🏠)	Shows the radio address in the log box of the open radio Call Window. Opens the window if it is closed.
	The radio address is based on the current GPS coordinates. If the address is unavailable, the *No Coordinates* entry appears in the log box. If you reopen the Call Window, the address disappears from the log box.
	Important The action is available only when the service of address data provider is active in SmartPTT Dispatcher. For details, see Positioning Systems.
	The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Remove from Map (🌐)	Hides a radio on a map.
	The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Find on Indoor Map (🗺)	Shows the radio on the open building map. If the building map is closed, the action opens the **Select building plan** window in which you can specify a path to the desired map.
	NOTE Available only if the **Indoor tracking** check box is selected in the radio properties. For details, see Radio Location Properties.
	The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Block Radio (🔒)	Depending on SmartPTT Radioserver settings, the action denies access to a trunked system, or remotely switches the radio off. For information on blocking settings, see "Configuring Radioserver" in *SmartPTT Installation and Configuration Guide*.
	Available for DMR radios.
	The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Unblock Radio (🔓)	Sends the command to the radio which is opposite to the **Block Radio (🔒)** command.
	Available for DMR radios.

Action	Description
	The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Make Conference Call ( )	Opens the **Conference Calls** window from which the conference call can be initiated. For information on the window, see Conference Calls. Available for DMR radios. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Call Telephone Subscriber ( )	Opens the **Telephone Subscribers** window, from which the call between the selected radio and a telephone subscriber can be initiated. **Important** The call is possible if the required settings are configured on SmartPTT Radioserver. For details, see "Connecting to SIP Server" in *SmartPTT Installation and Configuration Guide.* Available for DMR radios.
Create Point of Interest ( )	Opens the **Point of interest** window in which you can set the parameters of the point of interest and create it. By default the last radio coordinates are used. **NOTE** The action is unavailable if SmartPTT cannot request coordinates from a radio. For details, see Radio Location Properties. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Create Deferred Action ( )	Opens the **Create Deferred Action** window in which you can create a deferred action. For information on the window, see Create Deferred Action Window. Available for DMR radios. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
View Radio Properties ( )	Opens the **Radio Properties** window. For details, see Radio Properties Window.

Action	Description
Exit Emergency Mode (**)**	Acknowledges an incoming Emergency Alarm. It turns off the Emergency Tone and the Emergency indication.

> **NOTE**
> The action is available when a radio sends an emergency alarm.

Available for DMR radios.

3.4.3.2 Radio Call Window

The radio Call Window provides information on a radio, and ability to interact with it in various ways.
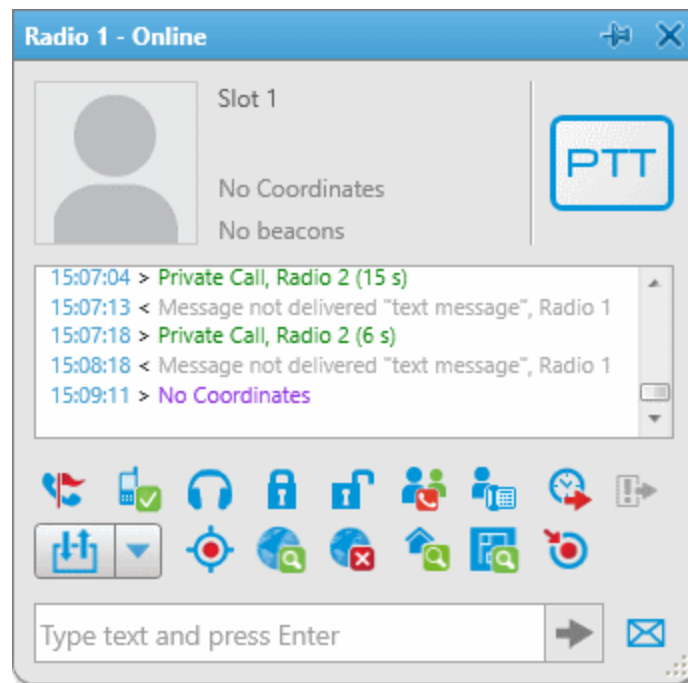
Depending on the settings, the call window appears automatically when events connected with the radio occur. For details, see Call Window Settings.

If the Call Window does not appear automatically, you can open it in one of the following ways:

- By double-clicking the desired radio entry in the **Radio Fleet** panel.

- By right-clicking the desired radio element in the **Radios** panel or Custom Console.

The radio Call Window provides the following elements:

Pin/Unpin ( )

Pins the window on top of other windows and panels. When the window is pinned, it does not close after the timeout expires. For details, see Call Window Settings.

Avatar

Displays the radio avatar depending on the Call Window settings.

> **NOTE**
>
> If in the Call Windows settings the **Show Photo in Call Window** check box is clear, no avatar is displayed. For details, see Call Window Settings.

Channel Name

The name of the current channel.

Coordinates

Displays the radio coordinates if the GPS positioning is activated in the radio properties.

For details, see Radio Location Properties.

Beacons

Displays available beacons if the Indoor tracking is activated in the radio properties.

For details, see Radio Location Properties.

PTT Button

Initiates a private call, and indicates call statuses. PTT button always appears in the window, even if voice calls are unavailable.

For information on voice call statuses, see Color Indication of Voice Calls.

Log Box

Displays all events connected with the radio.

Actions

The set of action buttons that you can use to perform the corresponding actions involving the radio.

For information on actions, see Radio Actions Menu.

Outgoing Telemetry (📤)

Provides the list of outgoing telemetry actions, configured in the **Telemetry**, and selected in the **Telemetry for** window.

For details, see Telemetry and Common Radio Properties.

Quick Message Box

The box that is used for typing and sending quick messages to the radio.

Send Message (✉)

Opens the **Send Message** window for creating and sending messages.

3.4.3.3 Radio Properties Window

You can open the **Radio Properties** window by right-clicking the existing radio or WAVE user in the **Radio Fleet** panel. The window also opens when you add the radio.

The **Radio Properties** window provides the following tabs:

- The **Common** tab. For details, see Common Radio Properties.

- The **Location** tab. For details, see Radio Location Properties.

- The **Other** tab. For details, see Radio Custom Properties.

> **NOTE**
>
> The **Other** tab appears only if custom properties were created for radios. For details, see Custom Radio Properties.

3.4.3.3.1 Common Radio Properties

The **Common** tab provides general parameters of a radio.

The **Common** tab provides the following elements:

Radio ID

Provides the unique decimal identification number of the MOTOTRBO radio used in the digital radio system. It is editable only if you are adding the radio.

When you add the radio, you can set the MDC-1200, 5 Tone, or P25 format. If you point to the box, the tooltip appears with the alternative identification format (IP address).

MDC ID

The parameter refers to MDC-1200 radio signaling used in analog radio systems. When you add a new radio in SmartPTT Dispatcher, you can switch to this format of the Radio ID by clicking **Radio ID**. Permitted symbols are standard for MDC-1200 (hexadecimal 4-digit number; allowed range is 0001–DEEE; digit F is forbidden). You cannot edit this parameter after you have added the radio.

> **NOTE**
> If the first digits of the ID are zeros (0), SmartPTT Dispatcher omits them when shows MDC ID.

5 Tone ID

The parameter refers to the 5 Tone radio signaling used in analog radio systems. When you add a new radio in SmartPTT Dispatcher, you can switch to this format of the Radio ID by clicking **Radio ID**. Permitted symbols are standard for 5 Tone. You cannot edit this parameter after you have added the radio.

P25 ID

The parameter refers to the P25 radio signaling. When you add a new radio in SmartPTT Dispatcher, you can switch to this format of the Radio ID by clicking **Radio ID**. You cannot edit this parameter after you have added the radio.

CAI

CAI refers to as "common air interface" and is set in the radio codeplug. This parameter is the decimal number. The parameter appears only if the **Radio ID** option is selected.

For details, see the MOTOTRBO CPS embedded help.

Name

The parameter stores the name of the radio given by the dispatcher.

Status

Status of the radio set by the dispatcher. The status can be changed based on the text message received from the radio.

For details, see Statuses.

Lone Worker

If the check box is selected, additional rules are applied to the radio depending on its activity or inactivity in the network. The rules are configured separately in the lone worker profiles which the dispatcher selects from the **Lone Worker** list.

For information on lone worker mode, see Lone Worker Rules.

Avatar

Shows the radio user avatar. The avatar appears in the radio Call Window. To change the avatar, you can click **Select** at the bottom of the avatar placeholder and select the desired bitmap image in one of the formats: JPG/JPEG, BMP, PNG, or GIF).

Radio icon

Shows the icon of the radio and provides you a set of pre-configured icons to replace the default one.

> **NOTE**
> You cannot upload your own icon to the set and you cannot set the default icon back after you changed it and saved your changes.

Pre-configured icons of the radio available to dispatch console users in the *abonentIcons* directory of the installed SmartPTT Dispatcher application. If you want to add your own (custom) icon, upload it to this directory.

Custom icons must fulfill the following requirements:

- File format is .ico with the single bitmap embedded.

- Resolution is 48 × 48 px.

Telemetry ( )

Opens the **Telemetry for** window where you can assign the telemetry action to the radio.

For details, see Telemetry.

For information on configuring the general radio settings, see Configuring General Radio Parameters.

3.4.3.3.2 Radio Location Properties

The **Location** tab contains settings for updating the radio location on a map.
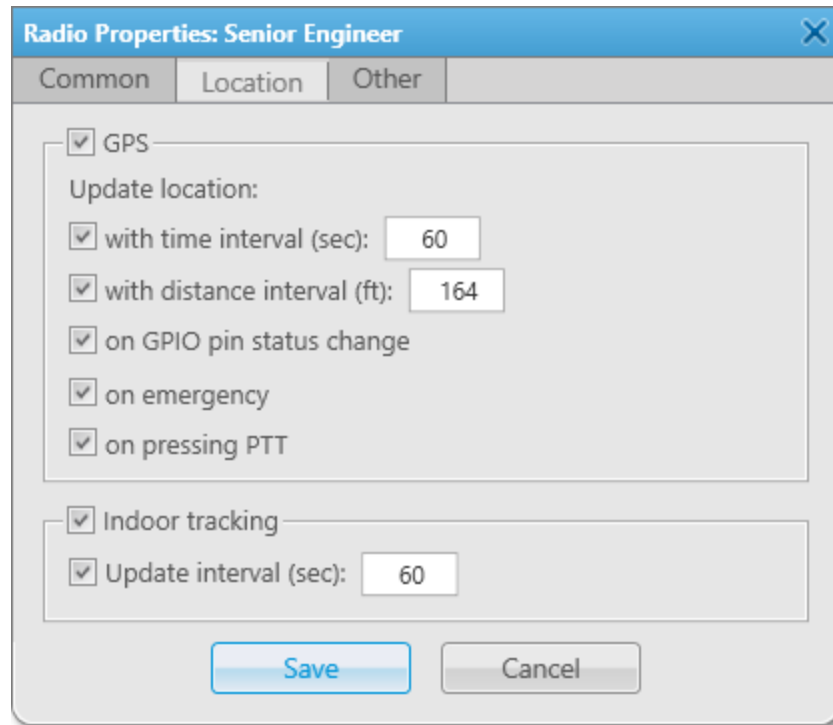
The **Location** tab provides the following elements:

GPS

The check box unlocks the radio-specific update rules of outdoor coordinates. To apply changes, SmartPTT Radioserver must be configured to accept them.

For details, see "Configuring GPS" in *SmartPTT Installation and Configuration Guide*.

> **NOTE**
> The update rules of radio outdoor coordinates are unavailable if the operator does not have the **Manage radio location settings** and **Request radio location** permissions.
> For information on the operator rights, see Operators.

With time interval

If selected, the radio provides its coordinates with a specific time interval (in seconds).

With distance interval

If selected, the radio provides its coordinates when the radio passes a certain distance.

On GPIO pin status change

If selected, the radio provides its coordinates along with the telemetry signal.

For details, see Telemetry.

On emergency

If selected, the radio provides its coordinates along with the Emergency Alarm or Emergency Call.

On pressing PTT

If selected, the radio provides its coordinates when the PTT button is pressed on it.

> **NOTE**
>
> For information on the algorithm for choosing between the conditions for requesting/receiving location data configured in SmartPTT Radioserver Configurator for radio groups and the update rules of outdoor coordinates configured in SmartPTT Dispatcher for specific radios, see "Location" in *SmartPTT Installation and Configuration Guide*.

Indoor tracking

The check box unlocks the radio-specific update interval of indoor coordinates.

> **NOTE**
>
> The update parameters of radio indoor coordinates are unavailable if the operator does not have the **Manage radio location settings** permission.

Update interval

The parameter sets the indoor position update interval for the radio. This parameter should not be smaller than its equivalent in the beacon settings. Contact your system administrator to receive the minimum update interval.

For information on configuring the radio position update rules, see Setting Up Radio Location Update Settings.

3.4.3.3 Radio Custom Properties

The **Other** tab includes only custom properties which were created in the **Custom Radio Properties** window. If no properties were created, the tab is unavailable.

All the properties appear grouped as designed in the **Custom Radio Properties** window. For details, see Custom Radio Properties. Each group can be expanded and collapsed.

Properties appear in the two-column table without headings. Left column of the table provides the property name. Right column of the table provides one of the following controls:

Text box

Provides the place for text input or number-only input.

Date box

Shows the date in the Windows short date format. The Calendar Icon (🗓) in the right corner of the box opens the calendar for selecting the date.

List

Provides a number of preconfigured values of the parameter.

When you click the parameter name or the box next to it, the detailed description of the parameter appears at the bottom of the **Radio Properties** window.

For information on configuring the custom radio properties, see Configuring Custom Radio Properties.

3.4.4 Talkgroups

In the **Radio Fleet** panel, talkgroup entries represent talkgroups available to a dispatcher.
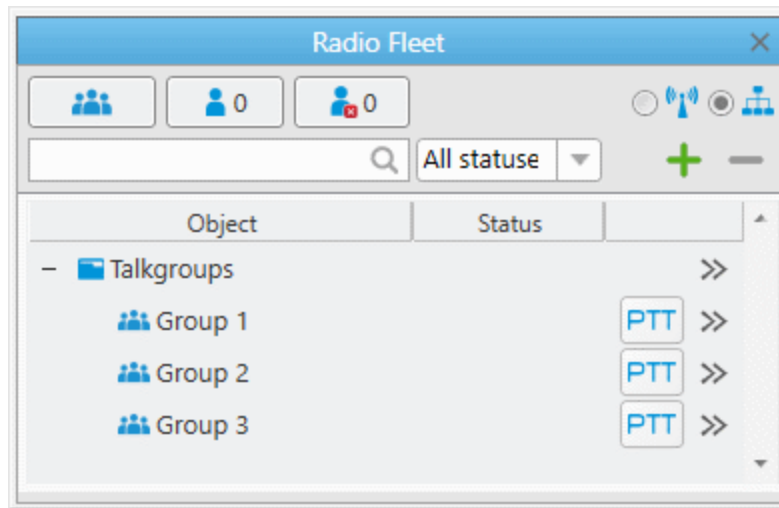
Each talkgroup entry provides the following elements:

Talkgroup Icon (👥)

Displays a talkgroup in the Objects Table. If the group sound is muted, the Mute (👥) icon is displayed.
The same icon is used for site All Calls.
For information on All Calls, see All Calls.

Talkgroup Name

The name that is set in SmartPTT Radioserver Configurator. You cannot change the name of the talkgroup in SmartPTT Dispatcher.

PTT Button

Initiates a talkgroup call, and indicates call status. PTT button always appears in the panel, even if voice calls are unavailable.
For information on voice call statuses, see Color Indication of Voice Calls.

Actions (≫)

Opens the Actions menu of a talkgroup.
For information on actions, see Talkgroup Actions Menu.

3.4.4.1 Talkgroup Actions Menu

The Actions (≫) menu of the talkgroup provides the ability to perform the following actions:

Action	Description
Send Message (✉)	Opens the **Send Message** window in which you can type and send messages or manage message templates. For details, see Send Message Window. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Call Mode: Standard Call (📞) / Call Mode: Broadcast Call (📢)	Provides the ability to switch between **Standard Call** (a group call with hang time) and **Broadcast Call** (a group call without hang time). **NOTE** Available only for Capacity Max talkgroups.
Make Conference Call (👥)	Opens the **Conference Calls** window from which the conference call can be initiated. For information on the window, see Conference Calls. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Call Telephone Subscriber (📇)	Opens the **Telephone Subscribers** window, from which the call between the selected talkgroup and a telephone subscriber can be initiated. **Important** The call is possible if the required settings are configured on SmartPTT Radioserver. For details, see "Connecting to SIP Server" in *SmartPTT Installation and Configuration Guide.*
Mute (🔇) / Unmute (🔊)	Mutes or unmutes the talkgroup. **NOTE** Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.

Action	Description
Selection of Audio Output Device (🔊)	Provides a list of audio output devices using which the sound of the talkgroup is played. By default, *<No>* and *Main device* values are available. For information on audio output devices configuring and assigning procedures, see <u>Configuring Audio Output Device</u> and <u>Assigning Audio Output Devices to System Objects</u>.
Properties (🛈)	Opens the talkgroup properties window. For details, see <u>Talkgroup Properties</u>.
Exit Emergency Mode (↪)	Acknowledges an incoming Emergency Alarm. It turns off the Emergency Tone and the Emergency indication. **NOTE** The action is available when a radio sends an emergency alarm.

3.4.4.2 Talkgroup Call Window

The talkgroup Call Window provides various controls for interacting with the talkgroup and obtaining information on events connected with it.
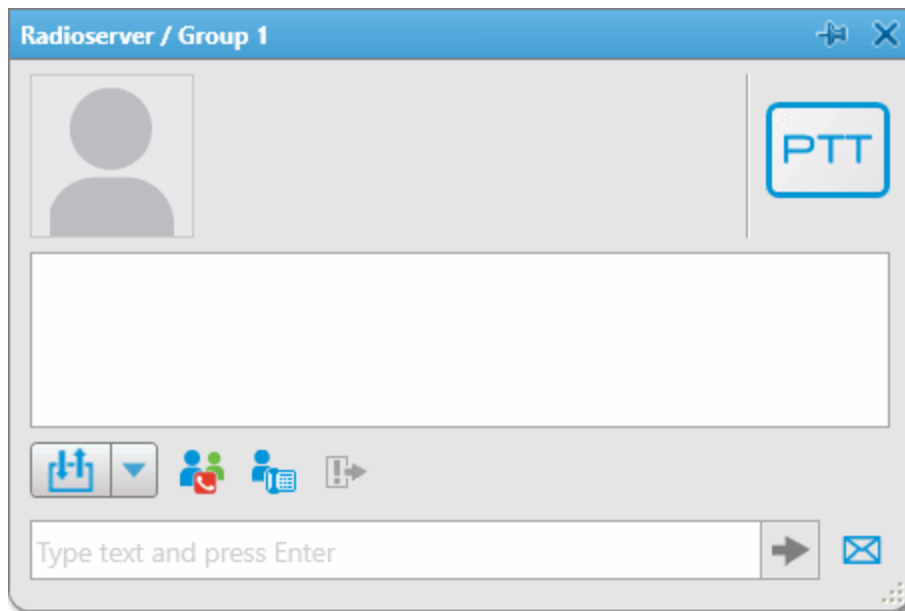
Depending on the settings, the Call Window appears automatically at occurring events connected with the talkgroup. For details, see Call Window Settings.

If the Call Window does not appear automatically, you can open it manually in the **Radio Fleet** panel by double-clicking the desired talkgroup entry.

The talkgroup Call Window provides the following elements:

Pin/Unpin ( )

When clicked, the All Call window remains on top of other windows and panels, and does not hide itself when the timeout expires. For details, see Call Window Settings.

Avatar

Displays the talkgroup avatar.

> **NOTE**
> If in the Call Windows settings the **Show Photo in Call Window** check box is clear, no avatar is displayed. For details, see Call Window Settings.

PTT Button

Initiates a talkgroup call, and indicates call statuses. PTT button always appears in the window, even if voice calls are unavailable.

For information on voice call statuses, see Color Indication of Voice Calls.

Log Box

Displays all events connected with the talkgroup.

Actions

The set of action buttons that you can use to perform the corresponding actions involving the talkgroup.

For information on actions, see Talkgroup Actions Menu.

Outgoing Telemetry ( )

Provides the list of outgoing telemetry actions, configured in the **Telemetry** window, and selected in the **Telemetry for** window.

For details, see Telemetry and Talkgroup Properties.

Message Box

The box that is used for typing and sending messages to the talkgroup.

Send Message ( )

Opens the **Send Message** window for creating and sending messages.

For information on the window, see Send Message Window.

3.4.4.3 Talkgroup Properties

In the properties window of a talkgroup, you can assign telemetry actions to the talkgroup, and leave comments for other users of SmartPTT Dispatcher.

You can open the window by double-clicking the desired talkgroup entry or selecting the **View Properties ( )** form the Actions menu of the talkgroup.
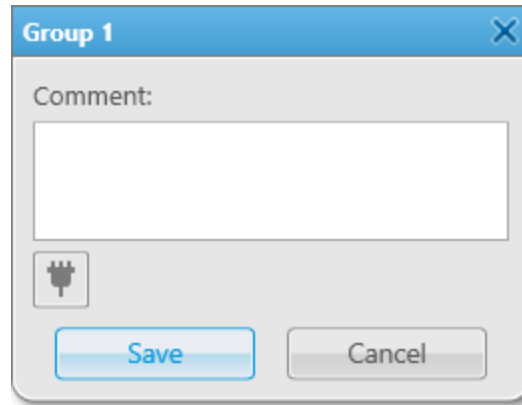
The talkgroup properties window provides the following elements:

Comment

A box in which you can type comments for other users of SmartPTT Dispatcher.

Telemetry ( )

Opens the **Telemetry for** window in which you can assign a telemetry action to the talkgroup.
For details, see Telemetry.

Save

Saves the comment typed in the **Comment** box.

3.4.5 Temporary Talkgroups

In the **Radio Fleet** panel, temporary talkgroup entries represent active and inactive temporary talkgroups that are created in SmartPTT Dispatcher.

You have the ability to manage temporary talkgroups and perform the following actions:

- Create new and delete existing temporary talkgroups.

- Add and remove members to and from temporary talkgroup.

- Activate and deactivate temporary talkgroups.

Important
Temporary talkgroups are available for Capacity Max systems only, and must be preconfigured in SmartPTT Radioserver Configurator. For details, see "Adding and Editing Temporary Talkgroups" in *SmartPTT Installation and Configuration Guide*.
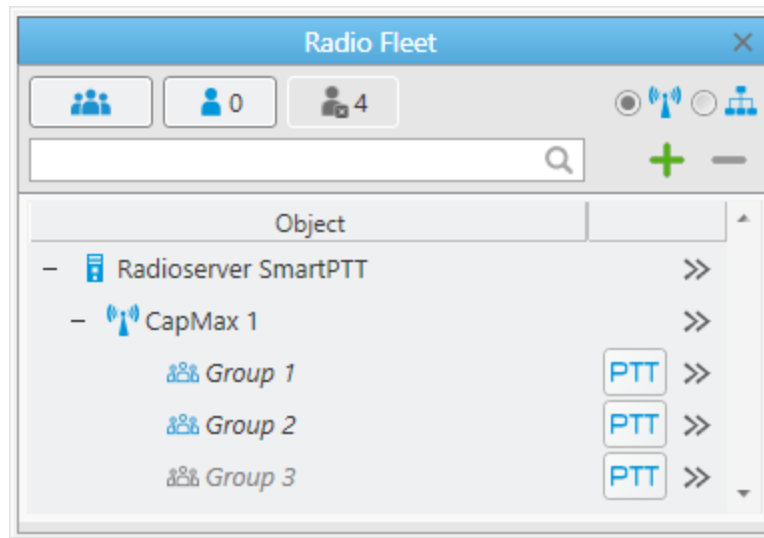
Each temporary talkgroup entry provides the following elements:

Temporary Talkgroup Icon (🔧)

Displays a temporary talkgroup and its state in the Objects Table:

- The blue color (🔧) indicates that the group is active. If the group sound is muted, the Mute (🔧) icon is displayed.

- The gray color (🔧) indicates that the group is inactive. If the group sound was muted, the Mute (🔧) icon is displayed.

Temporary Talkgroup Name

Temporary talkgroup name is displayed in italics. The name is set in the **Temporary Talkgroup** window. For details, see Temporary Talkgroup Window.

PTT Button

Initiates a call to the temporary talkgroup, and indicates call status. PTT button always appears in the panel, even if voice calls are unavailable.
For information on voice call statuses, see Color Indication of Voice Calls.

Actions (≫)

Opens the Actions menu of the temporary talkgroup.
For information on actions, see Temporary Talkgroup Actions Menu.

The temporary talkgroup Call Window provides various controls for interacting with the group and obtaining information on events connected with it. The temporary talkgroup Call Window is identical to the talkgroup Call Window. For information on the window, see Talkgroup Call Window.

3.4.5.1 Temporary Talkgroup Actions Menu

The Actions (≫) menu of the temporary talkgroup provides the ability to perform the following actions:

Action	Description
Send Message (✉)	Opens the **Send Message** window in which you can type and send messages or manage message templates. For details, see Send

Action	Description
	Message Window.
	The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Call Mode: Standard Call (📞) / Call Mode: Broadcast Call (📢)	Provides the ability to switch between **Standard Call** (a group call with hang time) and **Broadcast Call** (a group call without hang time).
Make Conference Call (👥)	Opens the **Conference Calls** window from which the conference call can be initiated. For information on the window, see Conference Calls. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Call Telephone Subscriber (📇)	Opens the **Telephone Subscribers** window, from which the call between the selected temporary talkgroup and a telephone subscriber can be initiated. **Important** The call is possible if the required settings are configured on SmartPTT Radioserver. For details, see "Connecting to SIP Server" in *SmartPTT Installation and Configuration Guide*.
Mute (🔇) / Unmute (🔊)	Mutes or unmutes the temporary talkgroup. **NOTE** Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.
Disable (⏹) / Enable (▶)	Activates or deactivates the selected temporary talkgroup. Inactive temporary talkgroup is displayed in grey and unavailable for initiating calls.
Properties (📄)	Opens the **Temporary Talkgroup** window for editing the selected talkgroup. For details, see Temporary Talkgroup Window.
Delete (➖)	Removes the selected temporary talkgroup from the system.
Clear Element (✖)	Removes the assigned talkgroup from the element.

Action	Description
	NOTE Available only for temporary talkgroups on a custom console. For details, see Assigning Temporary Talkgroups.

3.4.5.2 Temporary Talkgroup Window

The **Temporary Talkgroup** window provides the ability to create a new or edit the existing temporary talkgroup.

You can open the **Temporary Talkgroup** window in one of the following ways:

- From the Actions (≫) menu of the Capacity Max channel by selecting the **Create Temporary Talkgroup (⚎) ** option.

- From the Actions (≫) menu of the temporary talkgroup by selecting the **Properties (⚌)** option.

- By clicking an empty temporary talkgroup element on the custom console (if no temporary talkgroups were added earlier).

- From the **Temporary Talkgroups** window by clicking the **Create** button. For information on the window, see Temporary Talkgroups Window.
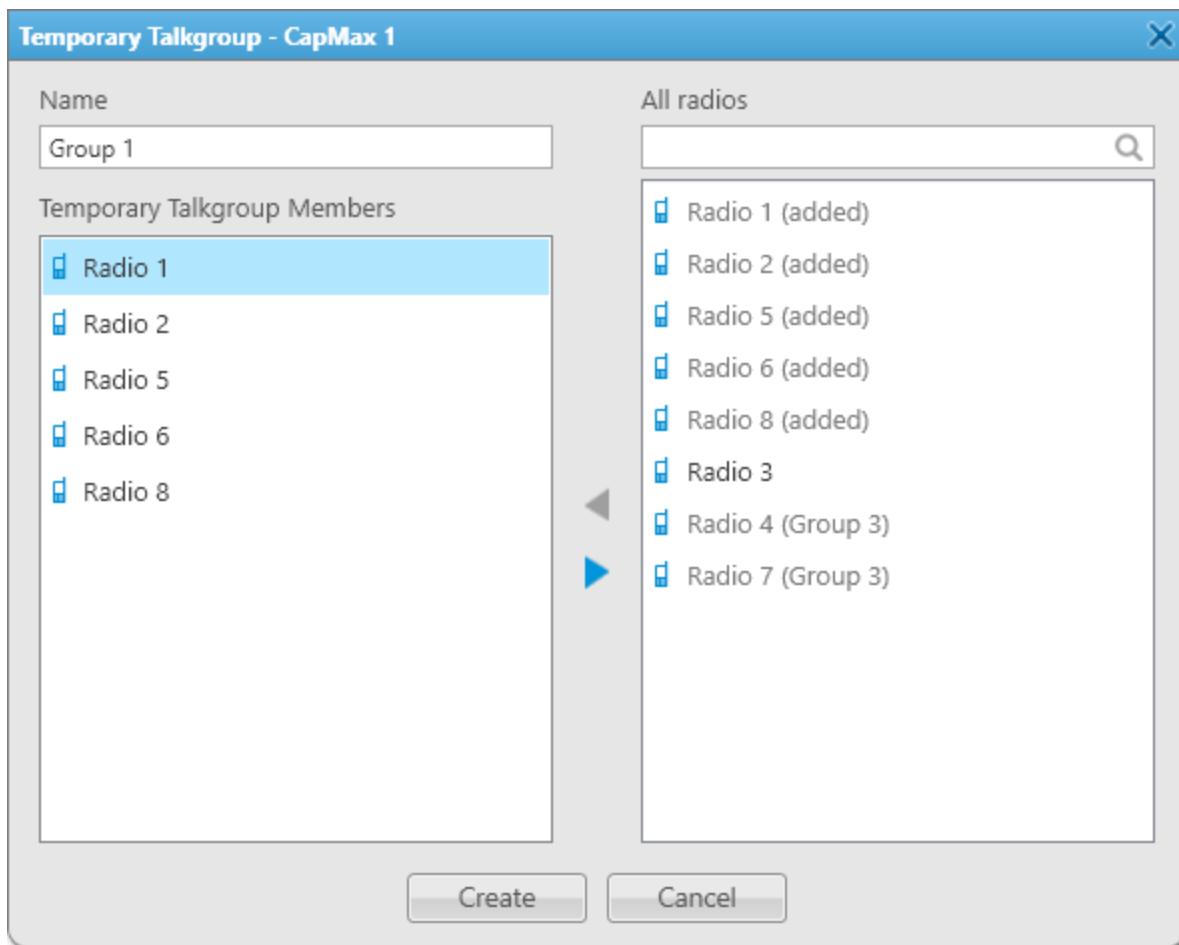
The **Temporary Talkgroup** window provides the following elements:

Name

Name of the temporary talkgroup.

Temporary Talkgroup Members

Contains a list of radios that are added to the temporary talkgroup. The group must contain at least two radios. If no radios are added, the box is empty.

Search Field

Field that provides the ability to find the desired radio by typing its name.

All radios

Contains a list of all available radios that can be added to the temporary talkgroup. When the radio is added to the temporary talkgroup, its name is displayed in gray with the *(added)* caption. When the radio is already added to another temporary talkgroup, the talkgroup name is displayed next to the radio name, and the radio cannot be added to the current temporary talkgroup.

Add (▶) / Remove (◀)

Add or remove the selected radio to or from the **Temporary Talkgroup Members** box. You can also double-click or drag the radio to the desired box.

Create/OK

Creates the temporary talkgroup and automatically makes it enabled. If you edit the existing temporary talkgroup, the button changes to **OK**.

3.4.5.3 Adding and Editing Temporary Talkgroups

Follow the procedure to add a new or edit the existing temporary talkgroup in the **Radio Fleet** panel.

Procedure:

1. In the **Radio Fleet** panel, perform the desired action:

To add a new temporary talkgroup,	open the channel Actions (≫) menu, and then select **Create Temporary Talkgroup (👥)**.
To edit an existing temporary talkgroup,	open the Actions (≫) menu of the desired group, and then select **Properties (👤)**.

   The **Temporary Talkgroup** window appears.

2. *(Optional)* In the **Temporary Talkgroup** window, in the **Name** box, type the temporary talkgroup name.

3. Edit the temporary talkgroup member list:

To add a radio to the temporary talkgroup,	select the desired radio in the **All radios** box, and then click the Add (▶) button. The selected radio appears in the **Temporary Talkgroup Members** box.

To remove a radio from the temporary talkgroup,	select the desired radio in the **Temporary Talkgroup Members** box, and then click the Remove (◀) button. The selected radio disappears from the **Temporary Talkgroup Members** box.

NOTE

You can also add or remove radios by double-clicking or dragging them to the desired box.

4. To complete configuration, click **Create/OK**.

3.4.6 Channels and Systems

Objects that visually group radios, talkgroups, All Calls, and site All Calls are access points to radio systems or radio channels.

Technically, these objects are control stations, system wide and local channels of conventional radio systems, trunked radio systems, and WAVE Server access points.
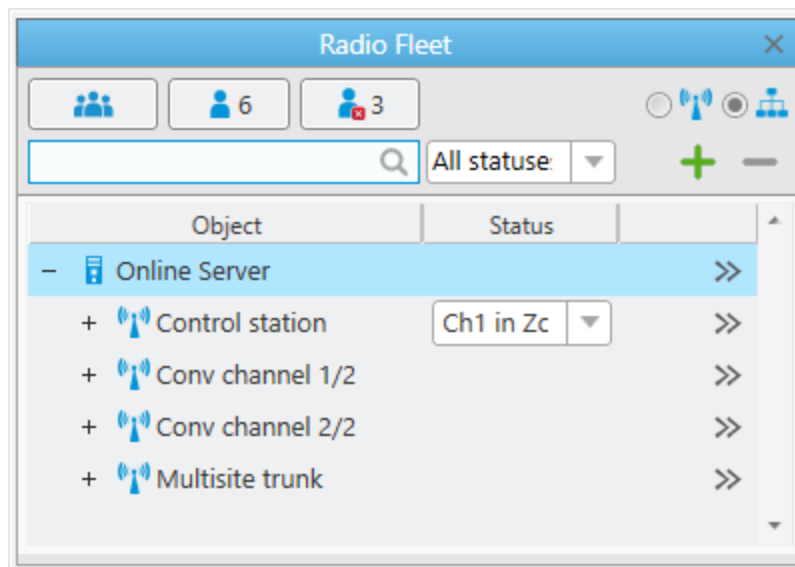
These objects are available only if you click **Filter by channel ( )** in the **Radio Fleet** panel.

Each channel entry provides the following elements:

Expand (+) / Collapse (−)

The control appears on the left of the entry and provides the dispatcher with capability to show or hide relevant radios, WAVE users, talkgroups, All Calls, and site All Calls. If the connection to the system is lost, the control disappears and all sub-entries are hidden.

Channel Icon ( )

All channels have the same icon that cannot be changed. The icon displays the state of the channel:

- The blue color ( ) indicates that the channel is active. If the channel sound is muted, the Mute ( ) icon is displayed.

- The gray color ( ) indicates that the channel is inactive (the device is turned off or out of the network coverage). If the channel sound was muted, the Mute ( ) icon is displayed.

Object Name

Object name is received from SmartPTT Radioserver and it cannot be changed. You may contact your system administrator to request the object rename.

Channel Selector (control stations only)

Provides the ability to change (select) the channel on the control station. The selector appears in the **Status** column of the Object Table.

> **NOTE**
> If no statuses added in SmartPTT Dispatcher, the **Status** column disappears from the Object Table, and the channel selection control will be available only in the custom console.

> **NOTE**
> For APX control stations, list of channels duplicates list of available groups. At some configurations, this can be used to receive group calls to the specific talkgroup only. For details, see Incoming Group Calls.

Actions button

The button opens the channel Actions menu.

For information on actions, see Channel Actions Menu.

3.4.6.1 Channel Actions Menu

The Actions (≫) menu of the channel provides the ability to perform the following actions:

Action	Description
Radio Dekey ( )	Interrupts all calls that are being made on the channel of a control station.
	Available for MOTOTRBO control stations only.
Reset Control Station ( )	Resets the control station.
	Available for MOTOTRBO control stations only.
	The action is unavailable if the operator does not have the corresponding permission.
	For information on the operator rights, see Operators.
Mute ( ) / Unmute ( )	Mutes or unmutes the channel.
	> **NOTE** > Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.
Mute Others ( )	Mutes other objects except for the channel from whose Actions menu the action was selected.

Action	Description
Create Temporary Talkgroup (👥)	Opens the **Temporary Talkgroup** window in which you can add a new temporary talkgroup. For information on the window, see Temporary Talkgroup Window. Available for Capacity Max systems only.
Selection of Audio Output Device (🔊)	Provides a list of audio output devices using which the sound of the talkgroup is played. By default, *<No>* and *Main device* values are available. For information on audio output devices configuring and assigning procedures, see Configuring Audio Output Device and Assigning Audio Output Devices to System Objects.
Properties (📇)	Opens the channel properties window. For details, see Channel Properties.
Exit Emergency Mode (📲)	Acknowledges an incoming Emergency Alarm. It turns off the Emergency Tone and the Emergency indication. **NOTE** The action is available when a radio sends an emergency alarm. Available for control stations only.

3.4.6.2 Channel Properties

The **Control Station** window provides information on the channel that is received from the radio devices used by SmartPTT Radioserver as an access point to radio systems. The information can be used for quick monitoring purposes.
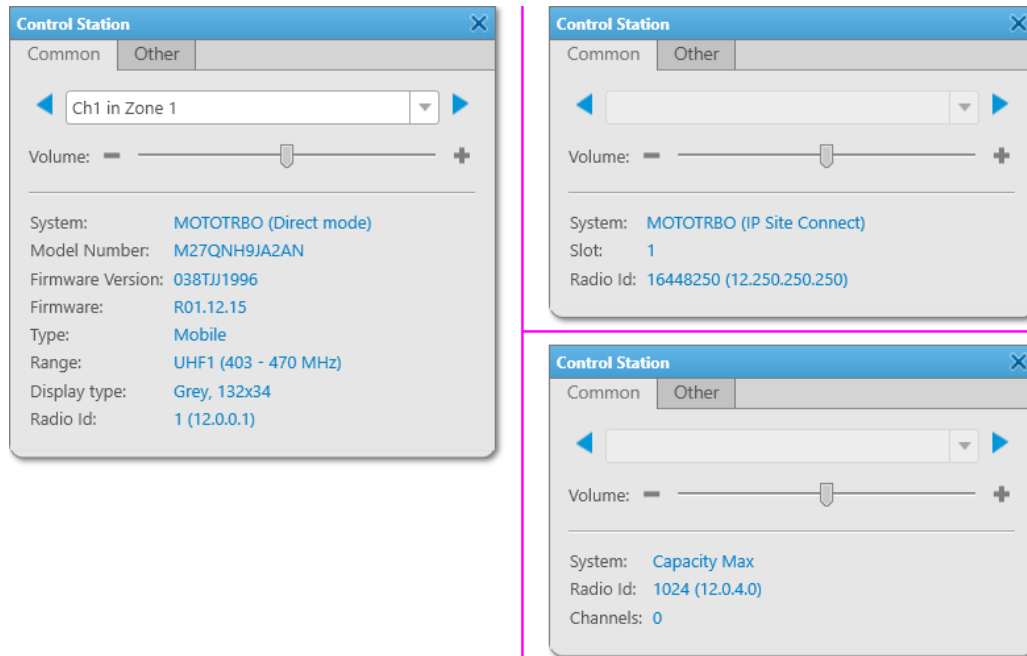
The window consists of two tabs. Primary information is presented in the **Common** tab. The **Other** tab contains user-entered information which is represented in the multiline text box.

The **Common** tab provides the following elements:

Channel Selector

The channel selection control is available only for control stations with particular connection and configuration. The control includes the list of channels and the Next (▶) and Previous (◀) buttons for selecting next or previous radio channel.

Volume

The volume slider adjusts the volume of the radio channel. It affects volume of radios and talkgroups which are associated with this channel.

Under the controls, the information about the radio device is provided. The information is different for control stations and repeater-based systems:

- **Channels** shows number of detected channels in the trunked radio system.

- **Display type** provides information on the display type and resolution of the control station.

- **Firmware** shows the firmware version of the control station.

- **Firmware version** shows the serial number of the control station.

- **Model number** shows the full model number of the control station.

- **Radio Id** provides SmartPTT Radioserver identification information used by the associated radios to call dispatchers.

- **Range** provides the frequency range of the control station.

- **Slot** shows the channel number (1 or 2) for IP Site Connect.

- **System** provides information on the MOTOTRBO radio system or connection type of the control station.

- **Type** provides the control station type (mobile or portable).

3.4.7 All Calls

In the **Radio Fleet** panel, All Call entries represent All Calls that were added on SmartPTT Radioserver.

NOTE
In multisite trunked systems, site All Calls are available. Site All Calls look identical to All Calls in SmartPTT
Dispatcher.
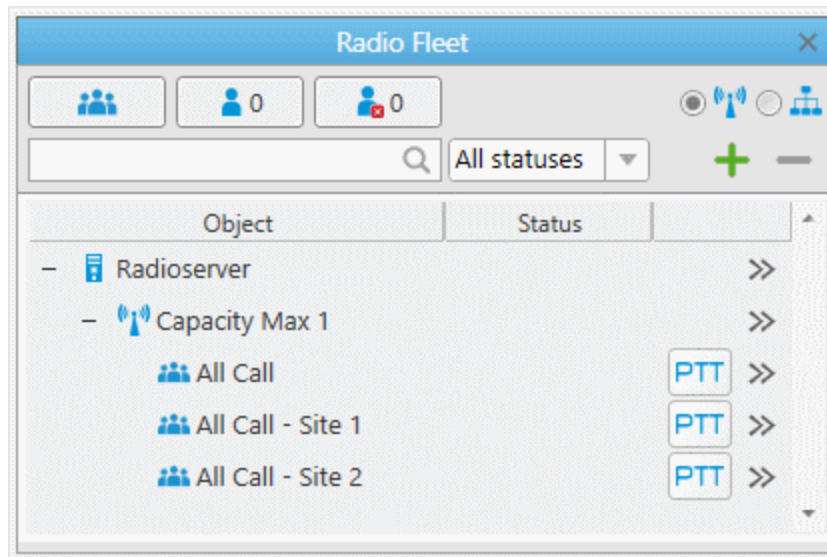
The All Call entries are displayed only when the **Filter by channel ( )** view is active.

Each All Call entry provides the following elements:

All Call Icon ( )

The icon that is used to display an All Call in the Objects Table. If the All Call sound is muted, the Mute ( ) icon is
displayed.
The same icon is used for talkgroups.
For information on talkgroups, see Talkgroups.

All Call Name

The name that is set on SmartPTT Radioserver. You cannot change the name of All Call in SmartPTT Dispatcher.

PTT Button

Initiates a call, and indicates call status. PTT button always appears in the window, even if voice calls are
unavailable.
For information on voice call statuses, see Color Indication of Voice Calls.

Actions ( )

Opens the actions list of a All Call.
For information on actions, see All Call Actions Menu.

3.4.7.1 All Call Actions Menu

The Actions (>>) menu of the All Call provides the ability to perform the following actions:

Action	Description
Mute (✕) / Unmute ( )	Mutes or unmutes the All Call. **NOTE** Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.
Selection of Audio Output Device ( )	Provides a list of audio output devices using which the sound of the All Call is played. By default, *<No>* and *Main device* values are available. For information on audio output devices configuring and assigning procedures, see Configuring Audio Output Device and Assigning Audio Output Devices to System Objects.
Properties ( )	Opens the All Call properties window. For details, see All Call Properties.

3.4.7.2 All Call Window

The All Call window provides information on a All Call, and controls for interacting with it.

Depending on the settings, the Call Window appears automatically at occurring events connected with the All Call. For details, see Call Window Settings.

If the Call Window does not appear automatically, you can open it manually in the **Radio Fleet** panel by double-clicking the desired All Call or site All Call entry.
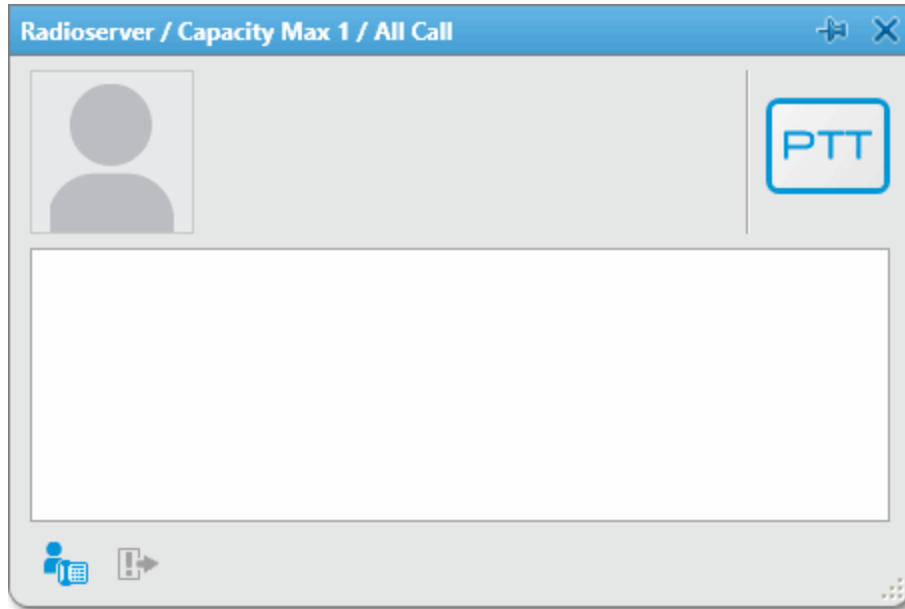
The window is identical to the site All Call. The window provides the following elements:

Pin/Unpin control (📌)

When clicked, the All Call window remains on top of other windows and panels, and does not hide itself when the timeout expires. For details, see Call Window Settings.

Avatar

Shows the default avatar image that cannot be changed.

PTT button

The button provides the standard indication of the call status. For details, see Color Indication of Voice Calls. PTT button always appears in the All Call window, even if voice calls are unavailable.

Individual Log

Provides a list events related to the object.

Call Telephone Subscriber (📞)

Opens the window with the list of telephone users and dial pad.

Exit Emergency Mode (🚪)

Confirms the reception/resolution of incoming Emergency Alarms on the channel/in the system. Confirmation turns off the Emergency Tone in SmartPTT Dispatcher and stops Emergency indication.

3.4.7.3 All Call Properties

In the properties window of All Call, you can leave comments for other users of SmartPTT Dispatcher.

You can open the window by right-clicking the desired All Call or site All Call entry or selecting the **View Properties (**
) from the Actions menu of the All Call.
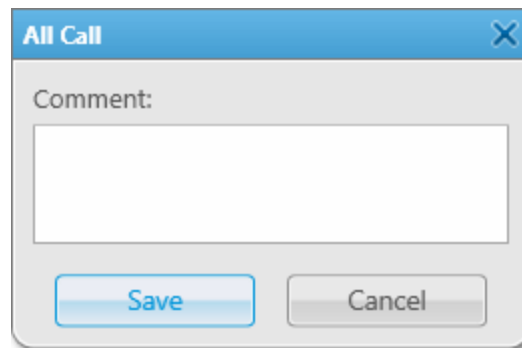
The window provides the following elements:

Comment
  A box in which you can type comments for other users of SmartPTT Dispatcher.

Save
  Saves the comment typed in the **Comment** box.

3.4.8 Categories

You can use categories to organize radios and talkgroups. The organization includes both the representation and advanced functionality.

For details, see Categories.
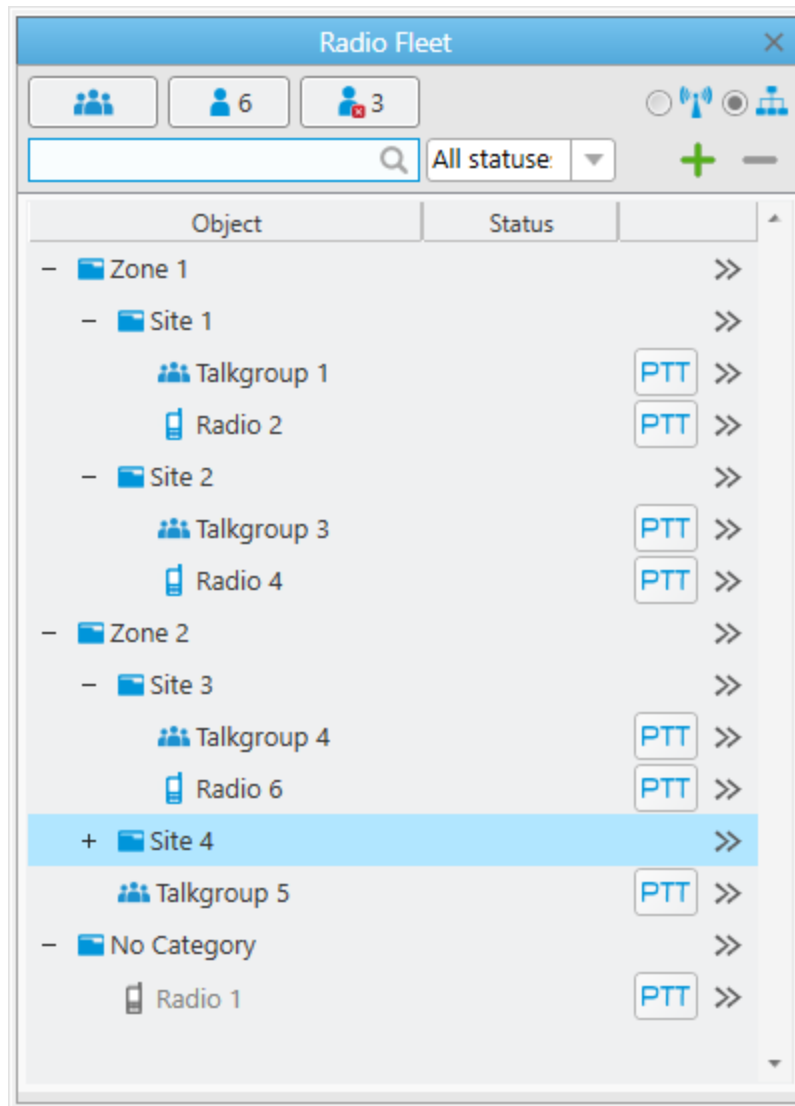
Categories appear when you click **Filter by category (📇)** in the **Radio Fleet** panel.

At this view, categories appear as folders with the Category (▣) icon and include talkgroups, radios, and other categories (sub-categories).

Categories do not include control stations, channels, trunked radio systems or SmartPTT Radioservers. Therefore, All Calls are unavailable in this view.

Any category can be expanded and collapsed. When collapsed, the Expand (+) icon appears on the left of the Category (▣) icon. When expanded, the Collapse (−) icon appears instead.

The Actions (≫) button, available for each category, opens the Actions menu for managing the category. For information on the actions, see Category Actions Menu.

3.4.8.1 Category Actions Menu

The Actions (≫) menu of the radio provides the ability to perform the following actions:

Action	Description
Send Message (✉)	Opens the **Send Message** window in which you can type and send messages or manage message templates. For details, see Send Message Window. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Find on Map (🌐)	Shows members of the category on a map. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
Remove from Map (🌐)	Hides members of the category on a map. The action is unavailable if the operator does not have the corresponding permission. For information on the operator rights, see Operators.
View Properties (🔲)	Opens the **Category** window for editing the category. For details, see Category. **NOTE** The action is unavailable for the **No Category** folder on the **Radio Fleet** panel.

3.4.9 Radio Fleet Procedures

You can perform the following actions using the **Radio Fleet** panel:

- Working with Objects Table

- Adding Radios

3.4.9.1 Working with Objects Table

Follow the procedure to perform actions with the objects in the Objects Table.

Procedure:

Perform the desired action:

- To hide or show radios, WAVE users, or talkgroups in the Objects Table, perform the following actions:

To hide or show all talkgroups,	click the **Hide talkgroups (👥)** or **Show talkgroups (👥)** button.
To hide or show online radios and WAVE users,	click the **Hide online radios (👤)** or **Show online radios (👤)** button.
To hide or show offline radios and WAVE users,	click the **Hide offline radios (👤)** or **Show offline radios (👤)** button.

- To change the view of the Object Table, perform the following actions:

To activate the channel view,	click **Filter by channel (📶)**.
To activate the category view,	click **Filter by category (🔗)**.

- To search the desired radio or WAVE user in the Objects Table by name or ID, in the search box, type the name or ID of the radio or WAVE user.
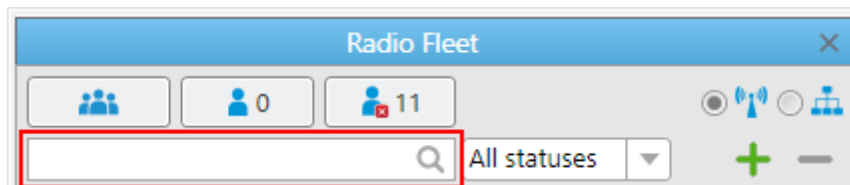
- To filter radios or WAVE Users by status, from the **Filter radios by status** list, select the desired status.
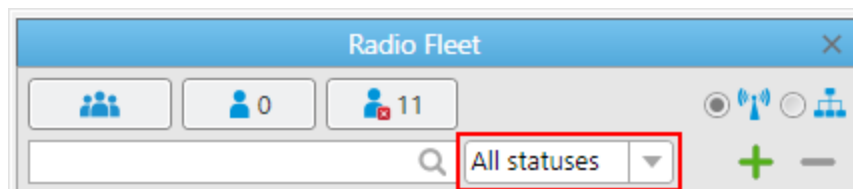
3.4.9.2 Adding Radios

Follow the procedure to add a new radio to the dispatch system manually. Use this procedure to add radios that use analog signaling (MDC-1200 or 5 Tone).

Prerequisites:

Ensure that your operator's account is assigned the **Edit radio lists** access right. For details, see Operators.

Procedure:

1. If closed, open the **Radio Fleet** panel.

2. In the **Radio Fleet** panel, click Add Radio (✚).
   The **Radio Properties** window opens.

3. In the **Radio Properties** window, select the **Common** tab.

4. In the upper left corner of the tab, click the underlined **Radio ID**.
   The **Radio ID Type** window appears.

5. Select the **Radio ID** format:

To add a DMR radio,	perform the following actions:
	1. Click the **Radio ID** in the upper-left corner of the tab to select **Radio ID**. 2. In the **CAI** filed, type the value of the radio CAI parameter.
To add an MDC radio,	click **MDC ID**, to select the format and close the window.
To add a 5 Tone radio,	click **5 Tone ID**, to select the format and close the window.
To add a P25 radio,	click **P25 ID**, to select the format and close the window.

6. In the field next to the selected ID format, enter the radio ID.

7. Configure the general radio parameters. For details, see Configuring General Radio Parameters.

8. Configure the radio location update settings. For details, see Setting Up Radio Location Update Settings.

9. Configure the custom radio properties. For details, see Configuring Custom Radio Properties.

Postrequisites:

To cancel the procedure, in the **Radio Properties** window, click **Cancel**.

3.4.9.2.1 Configuring General Radio Parameters

Follow the procedure to configure or edit the general radio settings.

Prerequisites:

Determine the following:

- Name (if no metadata is configured for the radio)

- Initial status (if required)

- Lone worker status (if required)

- Relevant telemetry actions

- Avatar

- Radio icon

Procedure:

1. Open the **Radio Properties** window. For details, see <u>Radio Properties Window</u>.

2. In the **Radio Properties** window, open the **Common** tab.

3. If no metadata is configured for the radio, in the **Name** box, type the radio name.

4. From the **Status** list, select the initial status of the radio.

5. If the Lone Worker mode must be applied to the radio, perform the following actions:

    a. Select the **Lone Worker** check box.

    b. From the **Lone Worker** list, select the required profile.

6. Set the avatar:

    a. Click **Select**.

    b. In the **Open** dialog box, select an image, and then click **Open**.

7. Set the radio icon:

    a. Next to the default icon, click Show Icons (▼).

    b. From the list of icons, select the image.

8. Associate a telemetry signal with the radio:

    a. Click **Telemetry (🔌)**.
        The **Telemetry for** window appears.

    b. In the **Telemetry for** window, in the **Select** column, select the check boxes next to the desired actions.

    c. In the **Interval, s** box, type the pin signal update interval in seconds.

    d. In the **GPIO Pin** row, select the desired check box.

9. In the **Radio Properties** window, click **Save**.

3.4.9.2.2 Setting Up Radio Location Update Settings

Follow the procedure to set up the rules of the radio position update using outdoor and indoor coordinates received from SmartPTT Radioserver.

Prerequisites:

Ensure that GPS location and beacon-based location services are configured in SmartPTT Radioserver Configurator. For details, see "Configuring GPS" and "Configuring Beacons in SmartPTT" in *SmartPTT Installation and Configuration Guide*.

Procedure:

1. Open the **Radio Properties** window. For details, see <u>Radio Properties Window</u>.

2. In the **Radio Properties** window, open the **Location** tab.

3. To update the outdoor position of the radio, perform the following actions:

    a. Select the **GPS** check box.

b. Configure the radio-specific update rules of outdoor coordinates:

To update the outdoor position of the radio with a specific time interval,	perform the following actions: 1. Select the **with time interval (sec)** check box. 2. In the field next to the **with time interval (sec)** check box, type the desired update interval.
To update the outdoor position when the radio moves too far from the current position on a map,	perform the following actions: 1. Select the **with distance interval** check box. 2. In the field next to the **with distance interval** check box, type the desired distance.
To update the outdoor position when the radio sends the telemetry signal,	select the **on GPIO pin status change** check box.
To update the outdoor position when the radio sends the Emergency Alarm or makes the Emergency Call,	select the **on emergency** check box.
To update the outdoor position when the PTT button is pressed on the radio,	select the **on pressing PTT** check box.

4. To update the indoor position of the radio, perform the following actions:

   a. Select the **Indoor tracking** check box.

   b. Select the **Update interval (sec)** check box.

   c. In the field next to the **Update interval (sec)** check box, type the update interval.

5. In the **Radio Properties** window, click **Save**.

3.4.9.2.3 Configuring Custom Radio Properties

Follow the procedure to configure the custom radio properties.

Prerequisites:

Make sure that the additional properties of a radio are created in the **Custom radio properties** window. For details, see Custom Radio Properties.

Procedure:

1. Open the **Radio Properties** window. For details, see Radio Properties Window.

2. In the **Radio Properties** window, open the **Other** tab.

3. On the **Other** tab, click Expand (⊞) on the left of property group name.
   A list of properties appears.

4. With each of required property in the group, perform the following actions:

   a. In the left column, click the property name.
      Property description appears at the bottom of the **Radio Properties** window.

   b. In the right column, perform one of the following actions:

If the field appears,	type the relevant information.
If the *Select a date* text appears,	click the Calendar Icon (🗓), and then select the date.
If the list appears,	from the list, select the desired option.

5. Repeat step 2, and then step 3 for the remaining custom groups and properties.

6. To save changes, in the **Radio Properties** window, click **Save**.

3.5 SCADA Module

SCADA (Supervisory Control And Data Acquisition) is an automation control system for monitoring and controlling parameters of remote equipment in real time.

In SmartPTT, telemetry data collection and processing is performed through AdapTel interface adapters. For details, see AdapTel on SmartPTT website.

> **WARNING**
> Access to the SCADA module functionality requires installing the SCADA license. For details, see Licenses.

You can open the **SCADA** panel by clicking **Tools → SCADA** on the menu bar.

> **WARNING**
> The **SCADA** option appears in the **Tools** menu only after the SCADA module activation in SmartPTT Dispatcher settings. For details, see Activating SCADA Module.
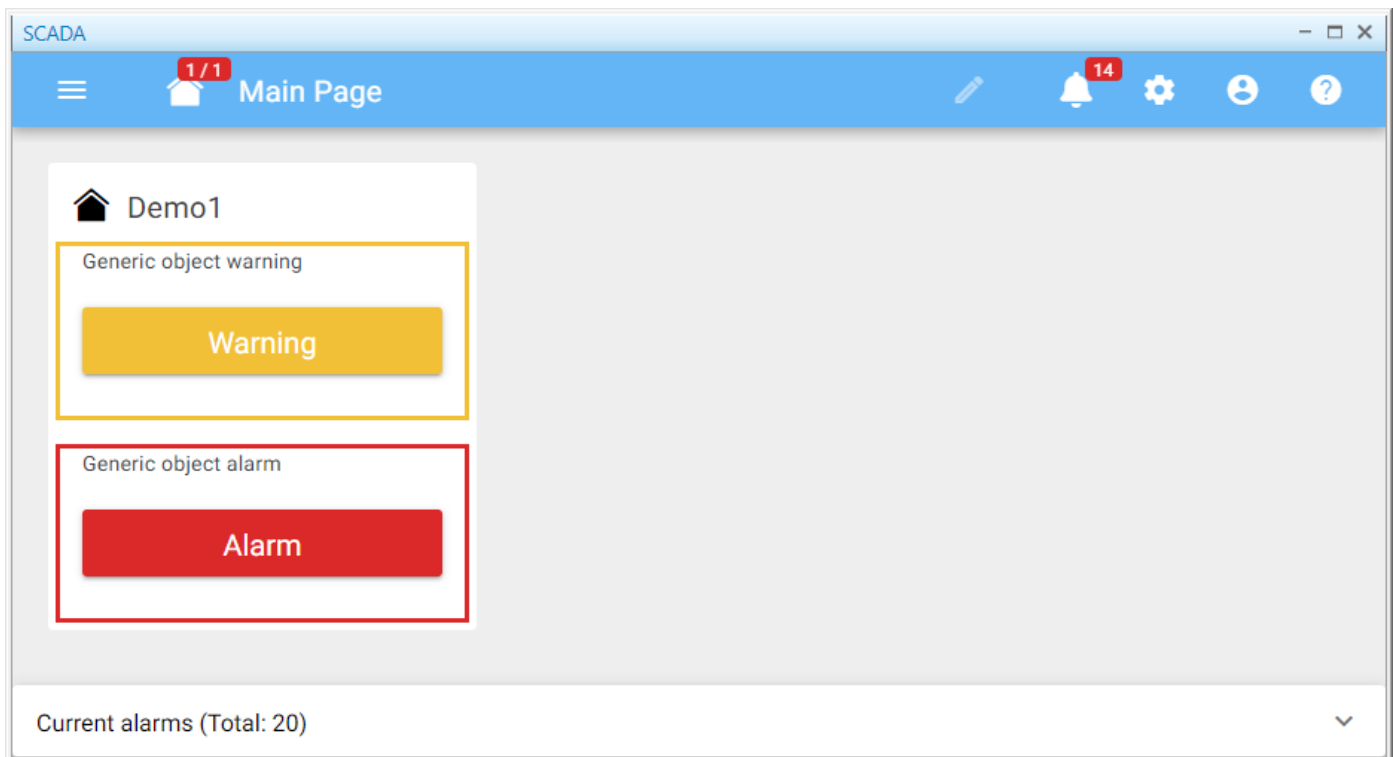
The SCADA module in SmartPTT Dispatcher provides the ability to perform the following actions:

- Monitor, gather, and process real-time telemetry data.

- Control parameters of SCADA points.

- Configure response rules for events registered in the connected SCADA system.
  For information on setting rules, see Custom Rules.

For information on the SCADA module functionality in SmartPTT Dispatcher, see the SCADA Module embedded help.

3.6 Channels

The **Channels** panel displays information and provides controls for working with the control stations and IP Site Connect channels available in the radio system.

You can perform the following actions in the **Channels** panel:

- Initiate an All Call on the desired channel. For details, see Initiating Group Voice Calls and All Calls.

- Initiate a group call on the desired channel. For details, see Initiating Group Voice Calls and All Calls.

- Open the control station or IP Site Connect channels Actions menu by clicking the Actions (≫) button on the channel element.

- Mute/Unmute the channel sound by clicking the **Mute (** 🔊 **) / Unmute (** 🔇 **)** button on the channel element.

You can open the **Channels** panel by clicking **Tools** → **Channels** on the menu bar.

Depending on the type, the **Channels** panel provides the following elements:

Font Size (A A A)

Provides the ability to change the font size of element text on the panel. You can change the size to small, medium, or large. The default font size is *Small*.

Element Width (▫ ▫ ▫)

Provides the ability to change the width of all elements on the panel. You can change the element width to narrow, medium, or wide. The default width is *Narrow*.

Show Icon (📡)

Provides the ability to show or hide channel icons on all elements on the panel.

Channel Element

The element provide the ability to interact with available control stations and IP Site Connect channels. The element provides the following information and controls:

Channel Icon (📡)

The standard icon indicating the radio object type. It is used for all the objects in the panel and cannot be changed.

Mute (🔊) / Unmute (🔇)

The **Mute (🔊)** button provides the ability to mute the channel sound. The dispatcher stops hearing the sound of the voice calls made on the muted channel. To unmute the channel, you need to click the **Unmute (🔇)** button which appears instead of **Mute (🔊)** on the element of the muted channel.

> **NOTE**
> Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.

Name

The name of the control station or repeater system channel that is set in SmartPTT Radioserver Configurator.

Channel Selector (▲ / ▼)

Available for control stations only. Provides the ability to switch the control station channels.

Call Target

The list of available All Call and group call options on the channel.

During an incoming group call, the selected group name changes to the group name to which the call is initiated.

To make All Calls or group calls, groups must be created and configured in the channel settings in SmartPTT Radioserver Configurator. For details, see "Talkgroups" in the corresponding network settings description in *SmartPTT Installation and Configuration Guide.*

NOTE

For control stations, available call options depend on the channel that is currently selected on it. You can select the desired channel in the **Radio Fleet** panel. For details, see Channels and Systems.

Actions Menu (≫)

Opens the channel Actions menu. The list of available actions depends on the channel type (control station or repeater system channel).

For information on the Actions menu, see Channel Actions Menu.

Call Initiator

Name of a current call initiator on the channel.

NOTE

If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

The element color indicates the current state of the call on the channel. For information on call statuses and their color indication, see Color Indication of Voice Calls.

If there are no active calls on the channel, the color of its element indicates its current state:

- The blue element color indicates that the channel is currently active but there are no active transmissions on it.

- The gray element color indicates that the channel is currently inactive (the device is turned off or out of the network coverage).

3.7 Radios

The **Radios** panel provides controls for monitoring and interacting with radios registered in SmartPTT Dispatcher.

The **Radios** panel provides the ability to perform the following actions with the radio objects located in it:

- Open the radio Actions menu by clicking the Actions (≫) button in the bottom right corner of the element.

- Open the radio Call Window by right-clicking the element. For details, see Radio Call Window.

- Initiate a private voice call to the radio. For details, see Initiating Private Voice Calls.

- Initiate a multiselect call to multiple radios. For details, see Multicalls.

You can open the **Radios** panel by clicking **Tools → Radios** on the menu bar.
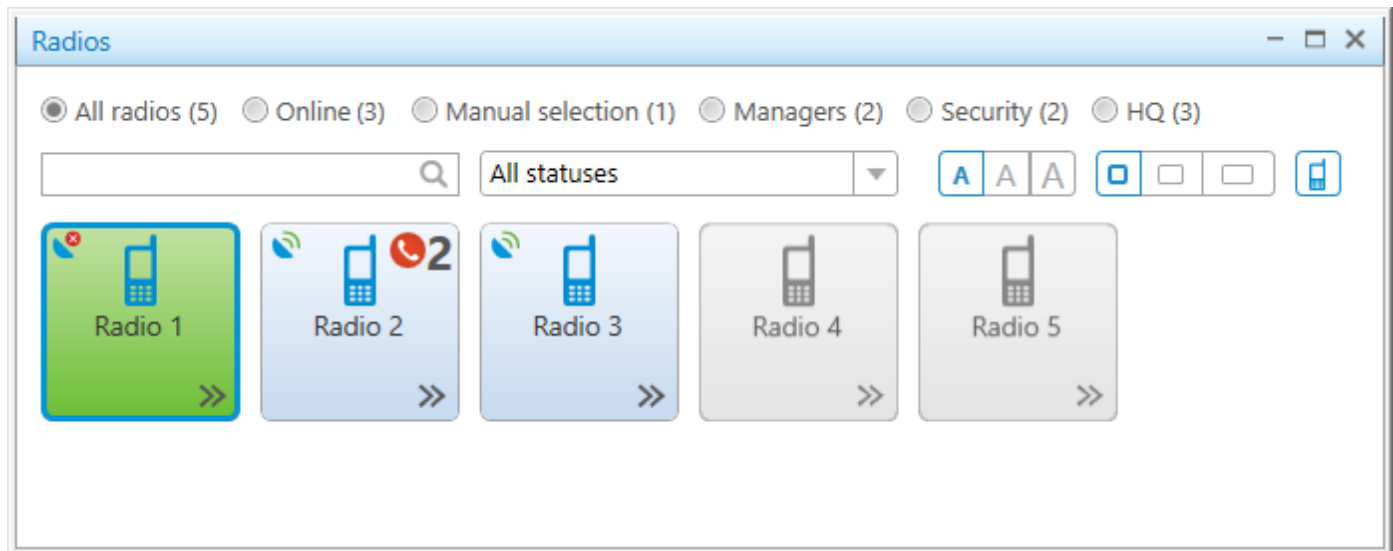
The **Radios** panel provides the following elements:

Filters

Provide the ability to filter the radios displayed in the **Radios** panel by default and customizable criteria. The following filtering options are available:

- **All Radios** displays all radios registered in SmartPTT Dispatcher (both online and offline).

- **Online** displays the radios that are currently online.

- **Manual selection** displays the radios manually added there by dragging and dropping the desired objects from the **Radio Fleet** panel. To remove the added objects from the **Radios** panel, you need to select the desired object or objects, and then press the Delete key.

- If there are radio categories configured in SmartPTT Dispatcher, controls with the names of existing categories appear next to the **Manual selection** option. By selecting a category option you can display all the radios that belong to it. For details, see Categories.

NOTE
If no categories are configured in SmartPTT Dispatcher, filtering by category is not available, and the corresponding controls are not displayed.

By default, the **All Radios** option is selected.
The number in the parentheses after the filtering option name corresponds to the number of radios that will be displayed after selecting this filtering option.

Search Box

Provides the ability to display only the radios whose name or ID contains the characters specified in the box. The search is performed only among the objects that are currently displayed in the panel after applying one or multiple filters (by default, the **All Radios** option). You can clear the search box by clicking Clear (✖) in the right part of the box.

Statuses

Provides the ability to display only the radios with the status selected from the list. For details, see Statuses.

The filtering is performed only among the objects that are currently displayed in the panel after applying one or multiple filters (by default, the **All Radios** option).

The **(empty)** option displays the radios whose status is not currently specified. By default, the **All statuses** option is selected.

> **NOTE**
>
> If no statuses are configured in SmartPTT Dispatcher, filtering by status is not available, and the corresponding controls are not displayed.

Font Size (A A A)

Provides the ability to change the font size for all element names on the panel. You can change the size to small, medium, or large. The default font size is *Small*.

Element Width (□ □ □)

Provides the ability to change the width of all elements on the panel. You can change the element width to narrow, medium, or wide. The default width is *Narrow*.

Show Icon (□)

Provides the ability to show or hide radio icons on all elements on the panel.

Radio Object Element

The element representing a radio registered in the radio system. The element provides the following information and controls:

- Name or ID of the radio object specified in the radio properties. For details, see Radio Properties Window.

> **NOTE**
>
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

- The Actions (») button opens the radio Actions menu. For details, see Radio Actions Menu.

The radio elements provide the following indication:

- The Missed Call (⬤) icon indicates that there are missed calls from the radio. Next to the icon, the number of missed calls is displayed.

- The Valid Coordinates (⬤) / Outdated Coordinates (⬤) icon. Depending on the update status of the radio location data, the icon indicates that the radio GPS coordinates are valid or outdated/missing. The icon appears only if the GPS service is activated and the coordinates update parameters are specified in the radio location settings. For details, see Radio Location Properties.

- The **Emergency** label on the element indicates that the radio activated the emergency mode. You can manage the reported emergency from the **Emergencies** panel or using the **Exit Emergency Mode** option of the radio Actions menu. For details, see Emergencies and Radio Actions Menu.

> **NOTE**
>
> The Emergency mode is unavailable to WAVE users.

- A notification about the cause of a holding, when a call can not be initiated and call attempts continue, at pointing to the element.
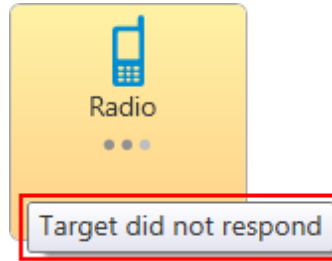
- The color of the element indicates the current status of a radio (blue color means that a radio is online, gray color means that a radio is offline). For information on color indication of voice calls to and from radios, see [Color Indication of Voice Calls](#).

3.8 Job Tickets

The **Job Tickets** panel provides controls for sending special assignments to radios and tracking their execution. You can send job tickets both to individual radios and to talkgroups.

> **Important**
> The **Job Tickets** functionality is not available in the Capacity Max systems.

> **NOTE**
> Only radios equipped with a display can receive job tickets. The radios that do not support the **Job Tickets** functionality but have a display receive job tickets as messages, for example *<JTS> Job Ticket №1 Create weekly report*. To check whether the radio supports this functionality, contact your system administrators.

You can open the **Job Tickets** panel by clicking **Job Tickets** on the **Tools** menu.

The **Job Tickets** panel consists of three areas:

- Filters

- Job Ticket Management

- Status Change Log

For information on managing job tickets, see the sections below.

3.8.1 Filters Area

In the **Filters** area, you can filter the job tickets displayed in the Job Tickets Table by one or multiple parameters. For details, see Management Area.

By default, the filters area is collapsed. You can expand it by clicking the Expand button (⊞) located in the upper-left corner of the panel, to the left of the **Filters** area name.

The **Filters** area provides the following controls for filtering the entries in the Job Tickets Table:

- The **Job Ticket** check box activates the list for selecting the job ticket name.

- The **Assignee** check box activates the list for selecting the job ticket assignee (radio or talkgroup).

- The **Status** check box activates the list for selecting the job ticket status. For information on statuses, see Management Area.

- The **Created** check box activates the boxes for setting the start and end points of the time period during which the job ticket was created.

- The **Updated** check box activates the boxes for setting the start and end points of the time period during which the job ticket was updated.

- The **Apply** button applies the selected filters.

- The **Clear** button cancels all the applied filters.

For information on applying filters, see Filtering Job Tickets.

3.8.2 Management Area

The Management area includes a list of job tickets and controls for managing them.

The following controls are available:

Show completed job tickets

If selected, displays all entries in the Job Tickets Table irrespective of their status. For details, see Management Area. If cleared, hides the job tickets with the *Complete* status from the table. If the job ticket is assigned to a talkgroup, it will be hidden if the latest radio status received from the group is *Complete*.

Add

The button opens a window for adding a new job ticket. For details, see Adding Job Tickets.

Delete

The button cancels the selected job tickets and deletes them from the Job Tickets Table. For details, see Adding Job Tickets.

If the **Send notification to radio when uncompleted job ticket was deleted by dispatcher** check box is selected in the **Job Ticket Statuses** window, the assignees of the deleted job tickets receive a text message with information on the job ticket cancellation. For details, see Job Ticket Statuses.

Resend

The button opens the **Job Ticket** window where you can edit the parameters of the job ticket before resending. You can resend it by clicking **OK**. This function can be useful in case of a delivery failure, if the assignee does not react to the job ticket for a long time, or if you want to check if a specific member of the talkgroup received it.

> **NOTE**
> Before resending a job ticket, ensure that automatic numbering is turned on and each new job ticket is assigned a unique number. Radios do not receive job tickets with the same names even though they are displayed as separate entries in the Job Tickets Table. For details, see Job Ticket Statuses.

Update Status

The button initiates update of job ticket statuses after a period of the dispatch console inactivity (for example, if the console computer was turned off or lost connection to the server). If no changes occurred during the inactivity period, a dialog box with a message indicating no registered updates appears.

Below the controls, the Job Tickets Table is located. By default, it displays all job tickets sent from the current console. If you apply filtering, the table displays only the entries that meet the filter criteria.

The Job Tickets Table consists of the following columns:

Column Name	Description
Job Ticket	Includes the number assigned to the job ticket by the automatic numbering functionality and the job ticket name that is set during the Adding Job Tickets procedure. For details, see Adding Job Tickets.
Description	The job ticket description that is set during the Adding Job Tickets procedure.
Assigned	The radio or talkgroup to which the job ticket was sent. The parameter is set during the Adding Job Tickets procedure.
Status	The status indicating the execution of the job ticket by the assignee. When the assigned radio changes the job ticket status, the status in the Job Tickets Table changes accordingly. If the job ticket is assigned to a talkgroup, the status in the table shows the latest status update and the name of the radio that updated it. All status updates

Column Name	Description
	performed by members of the talkgroup are available in the Status Change Log table. For details, see [Status Change Log Area](#).
Created	The date and time when the job ticket was created.
Expires	The date and time when the job ticket becomes invalid. The expiration time is calculated automatically and depends on the Validity Period that is set during the Adding Job Tickets procedure. The expired job tickets are not hidden when the **Show complete job tickets** check box is cleared. When the validity period expires, the status of the job ticket in the Job Tickets Table changes to *Ticket Outdated*. If the job ticket assignee is offline and the validity period expires before the assignee appears online, the job ticket will not be sent. Until the validity period expires, the assignee will receive it as soon as they appear online.
Updated	The date and time when the job ticket status was last updated by the assignee.
Delivery Status	The status indicating if the job ticket.was sent. The following delivery statuses are available both for radios and talkgroups: • **Sent** — the job ticket was sent but no information on its delivery is available. • **Not sent** — the job ticket was not sent due to issues with SmartPTT Dispatcher connection to the server. Job tickets sent to individual radios may also have the following statuses: • **No status** – the assignee is transmitting and its receiving channel is busy. As soon as the transmission finishes, the status changes to Delivered. • **Delivered** – the job ticket was received by the assignee. • **Outdated** – the job ticket validity period expired but the assignee can still update its status. The radio does not receive the job ticket if it appears online after the validity period expiration.

Column Name	Description
	SmartPTT Dispatcher does not provide information on which of the radios in the talkgroup received the job ticket. To check the job ticket delivery status for a specific radio, you can resend this ticket to the desired radio individually.

You can sort the job tickets displayed in the table by columns and arrange the entries in ascending or descending order by clicking the name of the desired column. You can sort entries only by one column, clicking the name of another column automatically discards the sorting order applied earlier.

3.8.3 Status Change Log Area

The **Status Change Log** area appears only if one of the job tickets in the Job Tickets Table is selected. For details, see Management Area. It provides information on the selected job ticket updates and displays the history of the status changes in the table format.

The **Status Change Log** Table consists of the following columns:

- The **Date/Time** column contains date and time of the selected job ticket status update.

- The **Status** column contains the status that the selected job ticket acquired after the current update.

3.8.4 Adding Job Tickets

Follow the procedure to add a new job ticket and send it to a single or multiple radios or talkgroups.

Procedure:

1. If the **Job Tickets** panel is closed, on the menu bar, click **Tools → Job Tickets**.

2. In the Management area, click the **Add** button.
   The **Job Ticket** window appears.

3. In the **Job Ticket** field, type the name of the job ticket.

4. In the **Description** field, type a short description of the job ticket. The maximum description length is 200 symbols.

5. In the **Expiration period (hr)** box, enter the amount of time (in hours) for which the job ticket will be valid. The default value is *24* hours. The minimum value is *1* hour.

> **NOTE**
> Subscriber units do not receive information about the job ticket validity period and cannot see if it has already expired. To ensure the job ticket task is not performed after its expiration time, you can delete it from the Job Tickets Table, send another job ticket indicating the cancellation or state the validity period in the **Description** box before sending it.

6. Drag and drop the desired radio or talkgroup from the **Radio Fleet** panel to the **Assignees** box.
  If you want to remove an assignee, select it in the **Assignees** box, and then press the Delete key.

7. Click **OK** to send the job ticket.

Postrequisites:

To delete a job ticket, in the Management area of the **Job Tickets** panel, click the desired job ticket, and then click the **Delete** button. In the dialog box prompting for deletion confirmation, click **OK**.

3.8.5 Filtering Job Tickets

Follow the procedure to filter the job tickets in the Job Tickets Table.
For information on Job Tickets Table, see Management Area.

Procedure:

1. If the **Job Tickets** panel is closed, on the menu bar, click **Tools → Job Tickets**.

2. In the upper-left corner of the **Job Tickets** panel, click Expand (⊞), to expand the **Filters** area.

3. To set the desired filter parameter, perform one of the following actions:

To filter job tickets by name,	in the box on the right of the **Job ticket** check box, select the desired job ticket name.
To filter job tickets by assignee,	in the box on the right of the **Assignee** check box, select the desired radio or talkgroup.
To filter job tickets by status,	in the box on the right of the **Status** check box, select the desired job ticket status.
To filter job tickets by creation date and time,	in the box on the right of the **Created** check box, set the start and end points of the desired job ticket creation time range.
To filter job tickets by update date and time,	in the box on the right of the **Updated** check box, set the start and end points of the desired job ticket update time range.

NOTE
You can select more than one check box to specify the filtering conditions.

Example

If you set the start point at 01.04.2018 00:00:00 and the end point at 07.04.2018 23:59:59 in the **Updated** filter boxes, only the job tickets that were updated no earlier than 1 April 2018 and no later than 7 April 2018 will appear in the Job Tickets Table.

4. Click **Apply** to apply selected filters.

Postrequisites:

To clear the applied filters and display all entries in the Job Tickets Table, click the **Clear** button.

3.9 Monitoring

The **Monitoring** submenu is available from the **Tools** menu on the SmartPTT Dispatcher menu bar. It provides the following tools for the radio system monitoring:

- **Air Monitoring** panel provides graphical representation of the voice and data received from MOTOTRBO repeaters.
  For details, see Air Monitoring.

- **Topology** panel provides graphical representation of the radio system configuration and the connection status of its elements.
  For details, see Topology.

- **Diagnostics** panel provides information on the current state and alarms on MOTOTRBO repeaters.
  For details, see Diagnostics.

- **Event Log** panel provides information on the current state and alarms on the radio system devices, such as repeaters, routers, and UPS.

  For details, see Event Log.

For information on these features, see the corresponding sections below.

3.9.1 Air Monitoring

The **Air Monitoring** panel graphically represents receiving data and voice from MOTOTRBO repeaters, which is necessary for monitoring current system operations.

> **NOTE**
>
> To display monitoring in SmartPTT Dispatcher, it must be activated in SmartPTT Radioserver Configurator. For information on configuring monitoring, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide*.

You can open the **Air Monitoring** panel by clicking **Tools** → **Monitoring** → **Air Monitoring** on the menu bar.
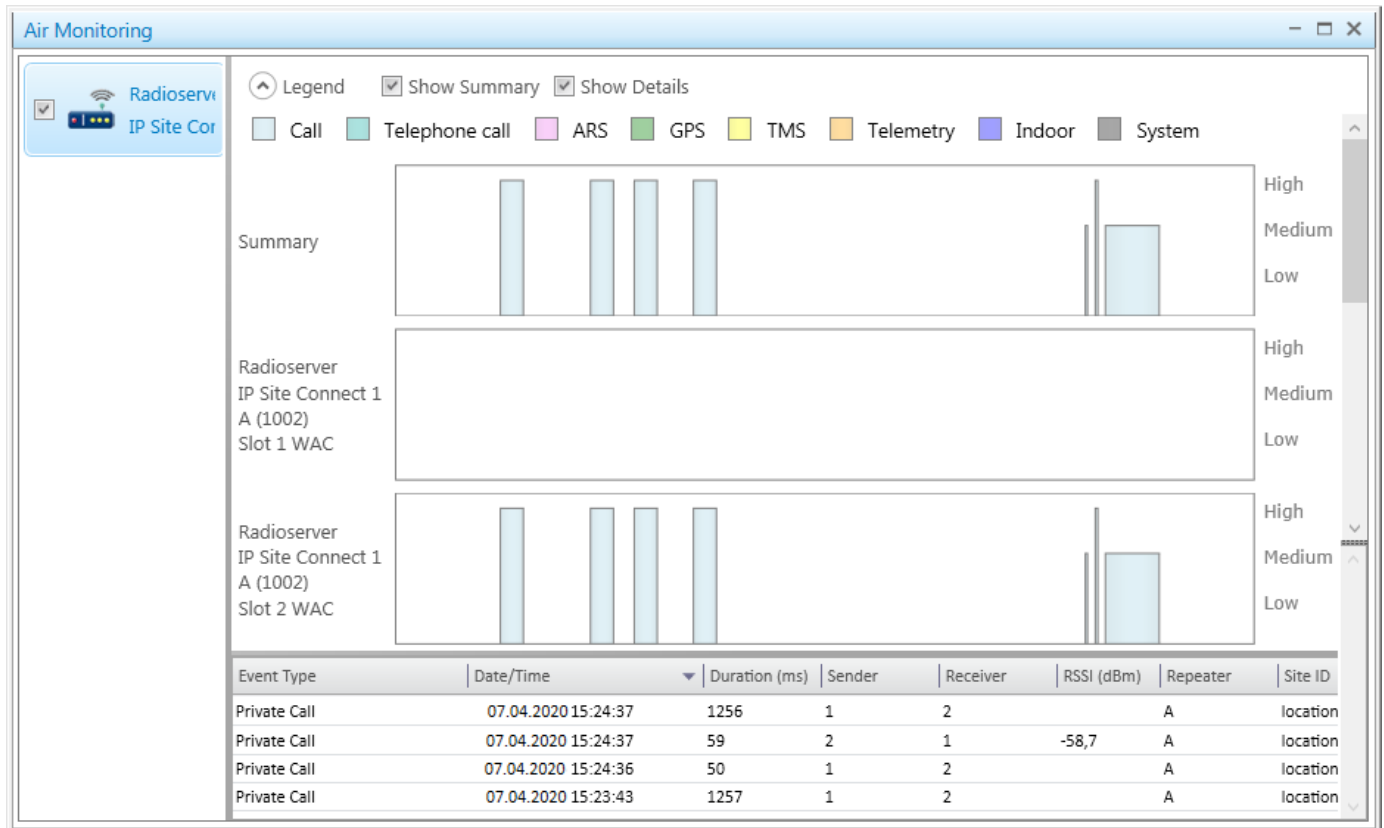
This panel provides the following elements:

List of networks

List of networks located in the left part of the panel. It contains only active networks of SmartPTT Radioserver. If the network becomes inactive, it disappears from the list. Selecting the check box near the desired network provides the ability to represent graphically data packets of the network next to which the check box is selected.

> **Important**
>
> The **Air Monitoring** feature is not available for Capacity Max and Connect Plus.

Legend

Contains a list of conventions for events displayed in the air monitoring diagram. Provides the ability to determine by color which event is currently happening on the air. The following events are available:

- **Call** — All Call, private, group and emergency calls. For details, see [Voice Calls](#).

- **Telephone call** — telephone private and telephone group calls. For details, see [Telephone Subscribers Settings](#).

- **ARS** — information about the presence/absence of a radio in the network.

- **GPS** — requesting and receiving information about the radio location that supports GPS. For details, see [Radio Actions Menu](#).

- **TMS** — receiving and sending text messages, job tickets and job ticket statuses. For details, see [Text Messages](#).

- **Telemetry** — sending and processing of telemetry signals. For details, see [Telemetry](#).

- **Indoor** — requesting and receiving information about the radio location inside buildings transmitted by beacons. For details, see [Indoor Tracking](#).

- **System** — system events from/to MOTOTRBO equipment (data confirmation, confirmation of private calls, and other system events).

Show Summary

Provides the ability to display events from different slots or networks in one block.

Show Details

Provides the ability to display events from different slots or networks in separate blocks.

Air Monitoring Diagram

Displays voice and data packets transmitted on a logical channel as colored vertical bars. The bar height corresponds to the signal level, and the bar color corresponds to the event type according to the **Legend**. Based on the height of the bar, the signal level can vary from low to high. Levels corresponding to the received signal strength indicator (RSSI) in decibels are displayed to the right of each block:

- *High* — from 80 and below.

- *Medium* — from 80 to 100.

- *Low* — from 100 and higher.

To the left of the monitoring diagram the server name, network name, slot name and repeater name are displayed. For the summary diagram the *Summary* value is displayed.

Air Monitoring Table

Displays additional information on network events. It consists of the following columns:

- **Event Type** — type of transmitted data.

- **Date/Time** — date and time of the event.

- **Duration (ms)** — duration of the event.

- **Sender** — event initiator ID.

- **Receiver** — event receiver ID.

- **RSSI (dBm)** — RSSI level in decibels.

- **Repeater** — name of a repeater.

- **Site ID** — site identifier (applied only for Linked Capacity Plus networks).

- **Network** — name of the network.

You can sort the column by clicking on its header.

3.9.1.1 Configuring Air Monitoring

Follow the procedure to configure displaying of air monitoring.

Prerequisites:

Ensure that **Monitoring** feature is activated in SmartPTT Radioserver Configurator. For details, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide*.

Procedure:

1. On the menu bar, click **Tools → Monitoring → Air Monitoring**.
   The **Air Monitoring** panel appears.

2. Select the check box next to the name of the desired network.

3. Configure air monitoring diagrams:

To display events from different slots or networks in one block,	select the **Show Summary** check box.
To display events from different slots or networks in separated blocks,	select the **Show Details** check box.
To display all three blocks simultaneously,	select both **Show Summary** and **Show Details** check boxes.

3.9.2 Topology

The **Topology** panel is a schematic representation of active networks connected to SmartPTT Radioserver.

To display the **Topology** panel, on the menu bar, click **Tools → Monitoring → Topology**.
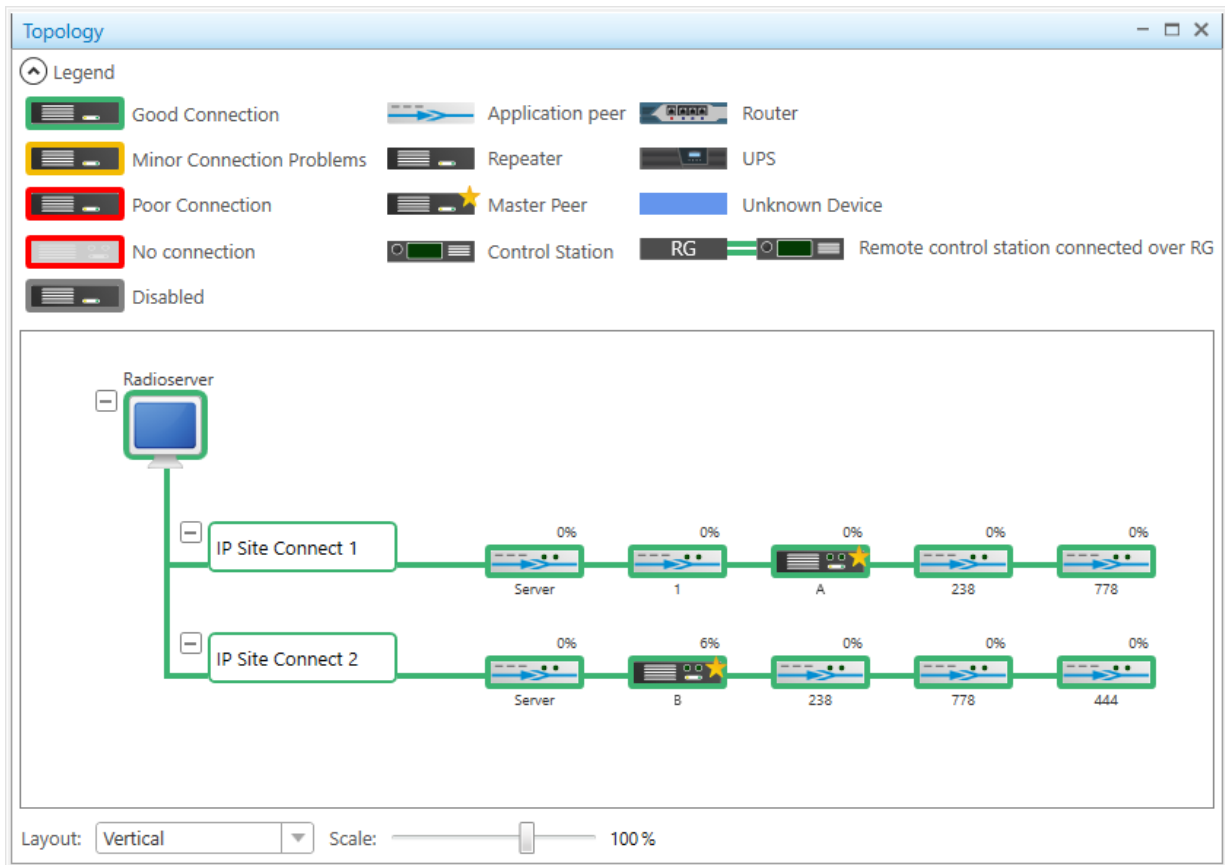
A topology diagram can be built in two ways:

- Using the data specified during network configuration. For details, see "Network Monitoring" in *SmartPTT Installation and Configuration Guide.*

- Automatically, based on the information received from the available network repeaters. In this case, the diagram will not display supplemental network devices (power supplies, routers, etc.).

> **NOTE**
> In order to see SmartPTT Radioserver and its networks on the **Topology** panel, ensure that the **Monitoring** service is enabled for this radioserver in SmartPTT Radioserver Configurator. For details, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide*.

> **Important**
> Topology diagram building is unavailable for Capacity Max.

> **Important**
> To correctly display repeaters of a backhaul chain on the **Topology** panel, you should first update topology in SmartPTT Radioserver Configurator. For details, see "Updating Topology" in *SmartPTT Installation and Configuration Guide.*

The **Topology** panel provides the following elements:

Legend

Contains a list of conventions used in the network topology diagram with an explanation of their meaning.

Layout

Provides the ability to place topology objects on the diagram vertically (*Vertical*) or horizontally (*Horizontal*).

Scale
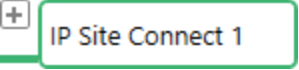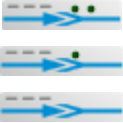
Set the size of the icons and the font size in the network topology diagram.

Network Topology Diagram

The main area of the panel that displays objects of a network depending on their type and condition, and indicates links between them.

Topology Elements

The following elements may appear in a network topology diagram:

Topology Object	Description
	SmartPTT Radioserver. For details, see [Radioserver Information](#) and [Server Control](#).
	Network in a folded state
	Slave hardware repeater. For details, see [Repeater](#).
	Master hardware repeater
	Connect Plus Master Peer
	Virtual repeater (SmartPTT Radioserver or MNIS)
	Master virtual repeater
	Location
	Uninterruptible Power Supply (UPS). For details, see [Uninterruptible Power Supply Information](#).

Topology Object	**Description**
	Router. For details, see Router Information.
	Control station. For details, see Control Station Information.
	Remote control station connected over RG. For details, see Radio Gateway Information.
	Unknown device (any other device). For details, see Unknown Device Information.

At right-clicking topology element, the following options can be available:

Unfold

Available for SmartPTT Radioserver, networks, and locations:

- For SmartPTT Radioserver, it unfolds SmartPTT Radioserver and all its nodes.
  To unfold a single radioserver node, click Unfold (⊞) next to the desired node.

- For networks, it unfolds the desired network.

- For locations, it displays which devices, repeaters, and routers are used in this location:
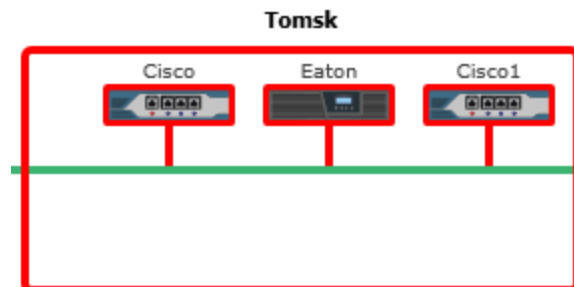
Fold

Available for SmartPTT Radioserver, networks, and locations:

- For SmartPTT Radioserver, it folds SmartPTT Radioserver and all its nodes.
  To fold a single radioserver node, click Fold (⊟) next to the desired node.

- For networks, it folds the desired network.

- For locations, it displays a location as an image inside a box:

Select new image

The option is available only for locations and provides the ability to upload your own image of a location.

Set default image

The option is available only for locations and provides the ability to return the default image of a location.
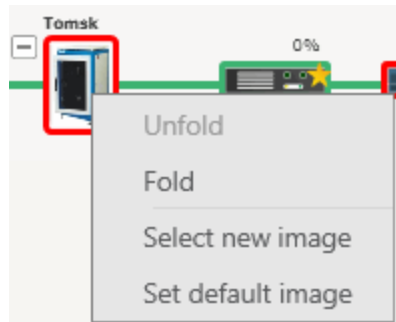
Information

Provides the ability to view parameters and statistics of the desired object.

In the event of an alarm on a device (except for routers and UPS), the **Alarm** area appears in the device information window. It contains information about the cause and time of the alarm.

The option is unavailable for networks and locations.

Control

Provides the ability to operate the desired object remotely.

The option is available only for SmartPTT Radioserver and hardware repeaters connected to SmartPTT Radioserver. For details, see Server Control and Repeater Control.

Reset Control Station

Sends the command for the control station to turn off and then turn on automatically.

The option is available for the MOTOTRBO control stations only.

> **Important**
> The option is unavailable if the operator does not have the corresponding permission. For details, see Operators.

Link Types and Statuses

To indicate the connection of objects in a topology diagram, the following elements are used:

Link Type	Description	Visual Element	Example
Wireline connection	Connection to the repeater is wireline	Solid line	
Wireless connection	Connection to the repeater is wireless	Dashed line	
Control station connection to a radio gateway	Control station (MOTOTRBO, APX or I/O) connection over the RG-1000e gateway	Double line	
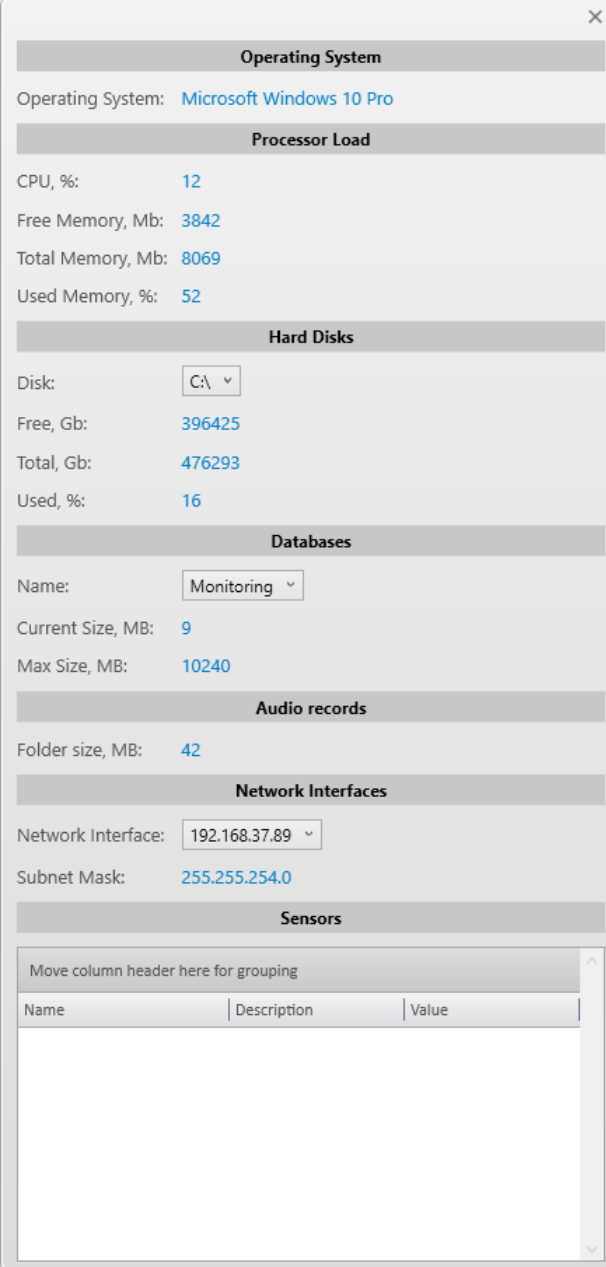
To characterize the connection, the following color coding is used:

Link Status	Description	Visual Element	Example
Normal link (no alarms)	Device is connected and no alarms registered on a device	Green line	
Minor alarms	Minor alarm is registered on a device or there are more than 5 packets lost or corrupted	Yellow line	
Major alarms	Major alarm on a device or no connection	Red line	
Dead link	Repeater is turned off using IPMI	Gray line	

3.9.2.1 Radioserver Information

The radioserver information window displays radioserver computer parameters and ongoing performance information.

To open the window, right-click the radioserver element, and then select **Information**.

The radioserver information window consists of the following areas:

Operating System

Provides information on the version and edition of the operating system used on the radioserver computer.

Processor Load

Displays current load of the volatile components of the radioserver host. This section contains the following parameters:

- **CPU** — cumulative load of all central processor cores (in percent).

- **Free Memory** — amount of free computer RAM (in megabytes).

- **Total Memory** — amount of RAM installed in the computer (in megabytes).

- **Used Memory** — share of RAM used by computing (in percent).

Hard Disks

Provides information on all available hard disks of the computer and their characteristics. This section contains the following parameters:

- **Disk** — list of logical partitions of physical drives connected to the computer.

- **Free** — amount of free space on the drive (in gigabytes).

- **Total** — total drive size (in gigabytes).

- **Used** — share of the drive used by data (in percent).

Databases

Provides information on available databases. This area contains the following parameters:

- **Name** — list of the available monitoring, metadata, and event log databases.

- **Current Size** — amount of space on the drive used by the database (in megabytes).

- **Max Size** — database drive space limit (in megabytes).

Audio records

In this area, the **Folder size** parameter is available, which provides information on size of the folder with audio records on the server computer.

Network Interfaces

Provides information on the network interfaces of the computer. This area contains the following parameters:

- **Network Interface** — list of IPv4 and IPv6 addresses of computer network interfaces.

- **Subnet Mask** — subnet mask that corresponds to the selected address.

Sensors

Displays information from various hardware detectors and regulators installed on the computer (temperature of the central processor, rotational speed of radiator fans, etc.). Information is provided in the form of a table consisting of the following columns:

- **Name** — detector name.

- **Description** — detector description.

- **Value** — current value of the measured parameter.

3.9.2.2 Server Control

The **Server Control** window provides the ability to operate the SmartPTT Radioserver computer remotely using IPMI. To be able to control the computer remotely, make sure that IPMI parameters are set in the settings of SmartPTT Radioserver. For details, see Radioserver IPMI Tab and Configuring IPMI Settings.

To open the window, right-click the radioserver element and select **Control**.
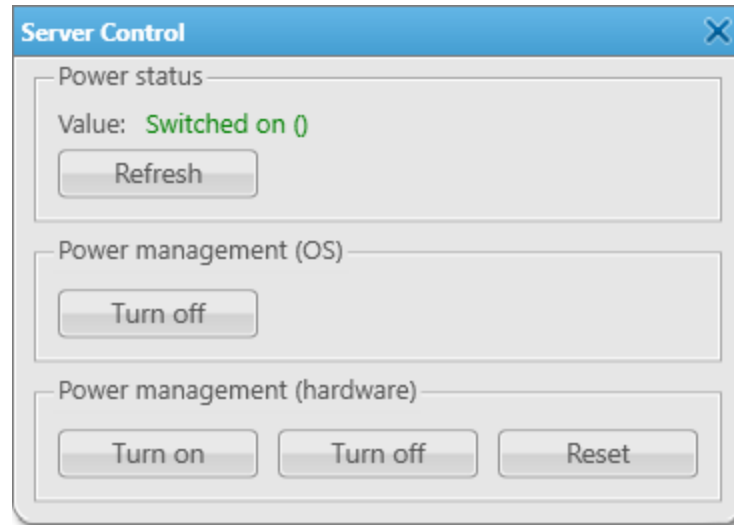
> **NOTE**
> If IPMI is configured incorrectly, the **Information** window with the *Radio server IPMI settings are not active* message appears.

The **Server Control** window contains the following areas:

Power status

Provides information on the power status of the radioserver computer. The area provides the following elements:

- **Value** — displays the current power status (*Switched on*, *Switched off*, *N/A Unknown*).

> **Important**
> If the power status is detected as *N/A Unknown*, check that IPMI settings are correct.

- **Refresh** — sends a request to update the power status.

Power management (OS)

Contains the **Turn off** button. At clicking the button, a shutdown signal is sent to the computer operating system.

> **NOTE**
> If the radioserver computer is blocked, the shutdown signal will be ignored.

Power management (hardware)

Allows to send signals to the computer motherboard bypassing the operating system. The area provides the following elements:

- **Turn on** — sends a signal to turn on the computer.

- **Turn off** — sends a signal to turn off the computer.

NOTE

If the radioserver computer is blocked, you can turn it off only at the hardware level.

- **Reset** — sends a signal to immediately reboot the computer.

WARNING

Turning off and/or rebooting the computer can cause irreversible damage and/or data loss.

3.9.2.2.1 Radioserver Remote Controlling

Follow the procedure to control the SmartPTT Radioserver computer remotely.

Prerequisites:

- Add and configure the desired radioserver. For details, see Managing Radioservers.

- Ensure that the **Monitoring** service is enabled for the desired radioserver in SmartPTT Radioserver Configurator. For details, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide*.

- Configure the radioserver IPMI settings. For details, see Configuring IPMI Settings.

- Ensure that the **Topology** panel is open. For details, see Topology.

Procedure:

1. On the **Topology** panel, right-click the desired radioserver element and select **Control**.
   The **Server Control** window appears.

NOTE

If the **Information** window appears instead of the **Server Control** window, reconfigure IPMI.

2. In the **Server Control** window, perform one or more of the following actions:

To update the power status,	click **Refresh**.
	Important
	If the power status is detected as *N/A Unknown*, check that IPMI settings are correct.
To turn on the radioserver computer,	in the **Power management (hardware)** area, click **Turn on**.
To reboot the radioserver computer,	in the **Power management (hardware)** area, click **Reset**.
	WARNING
	Rebooting the computer can cause irreversible damage and/or data loss.
To turn off the radioserver computer,	perform one of the following actions:
	• In the **Power management (OS)** area, click **Turn off**.

- In the **Power management (hardware)** area, click **Turn off**.

> **WARNING**
>
> Turning off the computer can cause irreversible damage and/or data loss.

> **NOTE**
>
> If the radioserver computer is blocked, you can turn it off only in the **Power management (hardware)** area.

3. Click Close (✕).

3.9.2.3 Repeater

Repeaters are displayed in the topology diagram as follows:
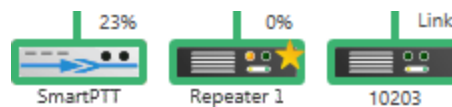
Next to the repeater element, the following information is displayed:

Name

Repeater name that is set in SmartPTT Radioserver Configurator on the **Network Configuration** tab. For details, see "Adding and Configuring Repeaters" in *SmartPTT Installation and Configuration Guide*.

If a name is not set, the topology diagram displays the peer repeater identifier specified in SmartPTT Radioserver Configurator (**Peer ID**), or the repeater name specified in the configuration file.

Loading

Repeater loading on a radio channel for a minute (in percent).

If you use a repeater to link one site to another site in a backhaul chain, the **Link** or **Drop** text (depending on the repeater role) appears instead of the load percentage.

Loading grows steadily, not sharply, until the maximum value. When both logical channels are used or in ERDM, the maximum value is 100%. When only one logical channel is used, the maximum value is 50%.

EXAMPLE

If the repeater loading in the IP Site Connect radio system is 50%, the following variations are possible:

- A voice call is in progress on one of the logical channels.

- On both logical channels, a voice call ended about 30 seconds ago.

If the repeater loading is 25%, a voice call lasting more than 30 seconds ended approximately 30 seconds ago on one of the repeater logical channels.

Depending on the presence/absence of a connection to the repeater, the repeater element may look like this:

Connection Status	Description
	Connection to the repeater is present.
	Connection to the repeater is absent.

Repeaters, which are added but not active, are marked red. When the repeater is not added to the network topology, and the connection with the repeater is lost, it disappears from the network topology.

A busy channel is represented by a yellow LED on the repeater.

3.9.2.3.1 Repeater Information

The repeater information window displays repeater parameters and summary information about the reception and/or transmission of data.

To open the window, right-click the repeater element, and then select **Information**.

The repeater information window consists of the following areas:

Properties

Displays information on the repeater parameters. The parameters displayed in this area depend on the repeater model and type.

For information on parameters available in this area, see Properties.

Statistics

Provides information on various parameters related to the reception and/or transmission of data in the last 60 seconds (1 min).

For information on parameters available in this area, see Statistics.

NOTE

This area is absent from the information window of Connect Plus Master Peer.

3.9.2.3.2 Repeater Control

The **Repeater Control** window provides the ability to control the repeater remotely.

To open the window, right-click the repeater element and select **Control**.
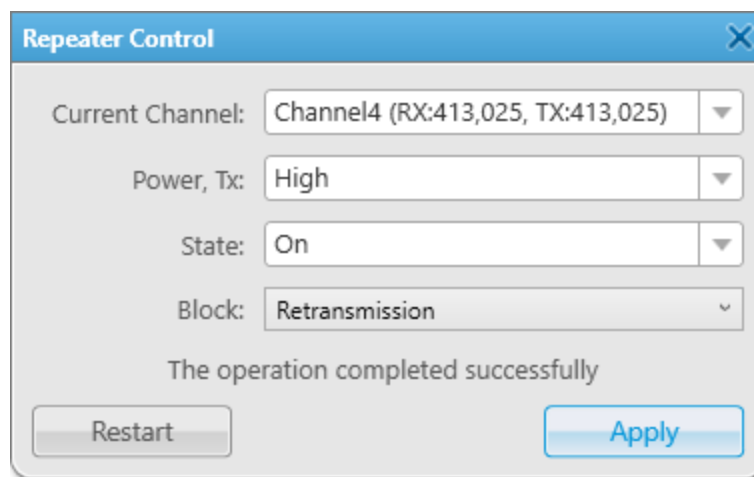
NOTE

You cannot operate virtual repeaters and Connect Plus Master Peers remotely.

The **Server Control** window provides the following elements:

Current Channel

List of duplex channels that can be used in a repeater. Channels are set in the repeater configuration file. Each list item contains the following attributes:

- **RX** — receiving radio frequency (in MHz).

- **TX** — transmitting radio frequency (in MHz).

Power, TX

List of modes that provide the ability to adjust the transmitter power of a repeater. Bands for the modes are specified in the repeater configuration file. In the list, the following options are available:

- **High** — high power mode specified in the repeater configuration file.

- **Low** — low power mode specified in the repeater configuration file.

State

List of repeater operation modes. In the list, the following options are available:

- **On** — repeater receiver and transmitter are active.

- **Off** — repeater receiver and transmitter are inactive.

Block

List of repeater path modes.

NOTE

The element becomes available if an analog channel is selected from the **Current Channel** list.

In the list, the following options are available:

- **Block** — disables the repeat functionality of a repeater.
  If selected, a dispatch console or an external device controls when the repeater keys-up, hence turning the repeater into a control station. It allows an operator to decide when to key-up the repeater's transmitter and, therefore, fully control the repeater's outbound traffic.

NOTE

If the **Block** option is applied, the repeater operation mode is displayed in the **State** list as **Off**. The **On** mode will be unavailable for applying.

- **Retransmission** — enables the repeat functionality of a repeater.

Restart

Provides the ability to restart a repeater remotely.

Apply

Provides the ability to apply settings specified in the **Repeater Control** window.

After clicking **Restart** or **Apply**, one of the following operation statuses appears in the window:

Status	Restart	Apply
Waiting for response	The Restart command is sent to the repeater, a response signal has not yet been received.	The Change Settings command is sent to the repeater, a response signal has not yet been received.
The operation completed successfully	The repeater is restarted.	Configuration changes are applied.
The operation completed with errors	The repeater can not be restarted (for example, if the repeater is unavailable).	Configuration changes can not be applied (for example, if SmartPTT Radioserver is inactive).
Timeout was exceeded	A response signal is not received from the repeater within 10 seconds, the repeater is not restarted.	A response signal is not received from a repeater within 10 seconds, settings changes are not applied.
No data changed	N/A	No changes were made to the settings available in the window.

3.9.2.3.3 Repeater Remote Controlling

Follow the procedure to remotely control the hardware repeater connected to SmartPTT Radioserver.

Prerequisites:

- Ensure that the **Topology** panel is open. For details, see Topology.

- Ensure that the status of connection to the desired repeater is displayed in green or yellow in the network topology diagram.

Procedure:

1. On the **Topology** panel, right-click the desired repeater element and select **Control**.
   The **Repeater Control** window appears.
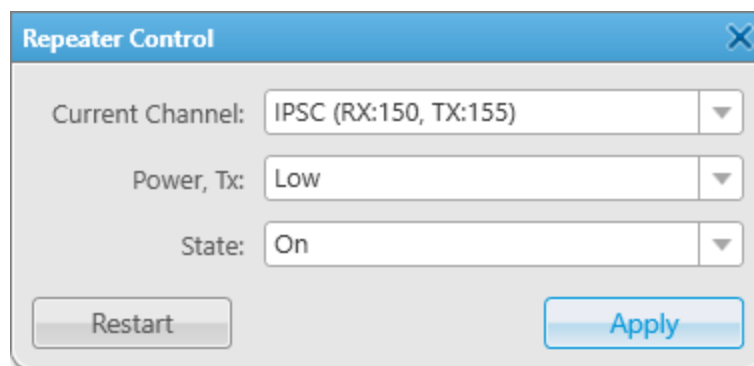
> **NOTE**
>
> If the **Warning** window with the *No connection* message appears instead of the **Repeater Control** window, check connection to the repeater.
>
> If the **Warning** window with the *Application peer control is not supported* message appears instead of the **Repeater Control** window, it means that you try to control a virtual repeater. You cannot operate virtual repeaters remotely.

2. In the **Repeater Control** window, perform one of the following actions:

To restart a repeater,	click **Restart**.
To configure a repeater,	perform the following actions: 1. Perform one or more of the following actions: • From the **Current Channel** list, select the desired duplex channel used for the reception and transmission of data.

> **NOTE**
>
> If the **Current Channel** list contains no items, ensure that you do not try to control a Connect Plus Master Peer. You cannot operate Connect Plus Master Peers remotely.

  • From the **Power, Tx** list, select the desired transmitter power mode of a repeater, bands for which are specified in the repeater configuration file.

  • From the **State** list, select the activity or inactivity mode of the repeater receiver and transmitter.

  • *(Optional)* If the **Block** list is available in the window, select the desired repeater path mode from it.

2. Click **Apply**.

3. Wait until the *Waiting for response* status changes.
    View the operation status:

If the *The operation completed successfully* status is displayed,	perform one of the following actions: • If the repeater is restarted, perform <u>step 5</u>. • If you selected an analog channel instead of a digital channel from the **Current Channel** list in step 2, perform <u>step 4</u>. • If other configuration changes are applied, perform <u>step 5</u>.
If the *Timeout was exceeded* status is displayed,	perform the following actions: 1. Check connection to the repeater.

2.   Repeat step 2.

| If the *The operation completed with errors* status is displayed, | perform the following actions:

1.   Check connection to the repeater and SmartPTT Radioserver.

2.   Repeat step 2. |

4.   *(Optional)* If you selected an analog channel instead of a digital channel from the **Current Channel** list in step 2, perform the following actions:

   a.   Click Close (✕).

   b.   Reopen the **Repeater Control** window by right-clicking the desired repeater element and selecting **Control**.

   c.   From the **Block** list, select the desired repeater path mode.

   d.   Click **Apply**.

   e.   Repeat step 3.

5.   Click Close (✕).

3.9.2.4 Uninterruptible Power Supply Information

The uninterruptible power supply (UPS) information window displays parameters and status information of a UPS. For information on adding a UPS and configuring its monitoring, see "Adding and Configuring Devices" in *SmartPTT Installation and Configuration Guide*.

To open the window, right-click the UPS element, and then select **Information**.

The UPS information window consists of the following areas:

Identification

Displays the UPS identification parameters. This area contains the following parameters:

Name	Description
Model number	UPS model number specified by the manufacturer
Serial number	Device serial number specified by the manufacturer
Firmware	Version of firmware used in a UPS
IP address	Device IP address
Network mask	Subnet mask that corresponds to the IP address

State

Provides information on the UPS power status. This area contains the following parameters:

Name	Description
Signaling State Description	Informs about issues in UPS operation. Includes the expandable list with issue details.
Input Power Source	Source of device input power
Output Power Source	Source of device output power
Date of Last Battery Replacement	Date and time when battery was replaced last time

Parameters

Provides information on the UPS energy indicators. This area contains the following parameters:

Name	Description
Input Voltage	Input voltage level (in volts)
Input Frequency	Input frequency level (in hertz)
Output Voltage	Output voltage level (in volts)

Name	Description
Output Frequency	Output frequency level (in hertz)
Output Current	Output current level (in amperes)
Output Power	Output power level (in watts)
Load	UPS loading (in percent)
Battery Charge	Battery charge left in percent
Battery Usage Timeout	Battery charge left in hours and minutes

3.9.2.5 Router Information

The router information window displays parameters and other information of the router. For information on adding a router and configuring its monitoring, see "Adding and Configuring Devices" in *SmartPTT Installation and Configuration Guide*.

To open the window, right-click the router element, and then select **Information**.

The router information window consists of the following areas:

Identification

Displays the router identification parameters. This section contains the following parameters:

- **Model number** — router model number specified by the manufacturer.

- **Serial number** — device serial number specified by the manufacturer.

Interfaces

Provides information on the router interfaces. This area contains the following parameters:

Name	Description
Interface	List of available physical connectors in the router
Index	Unique identifying number associated with a router interface
Status	Physical state of the interface
Address	IP address of the router interface
Subnet Mask	Subnet mask that corresponds to the router interface address
Input Rate	Interface data download rate (in kilobits per second)
Output Rate	Interface data upload rate (in kilobits per second)

CPU

Provides information on the router central processing unit. This area contains the following parameters:

- **Load Percent** — router CPU usage (in percent).

- **Temperature** — router CPU temperature (in degrees Celsius).
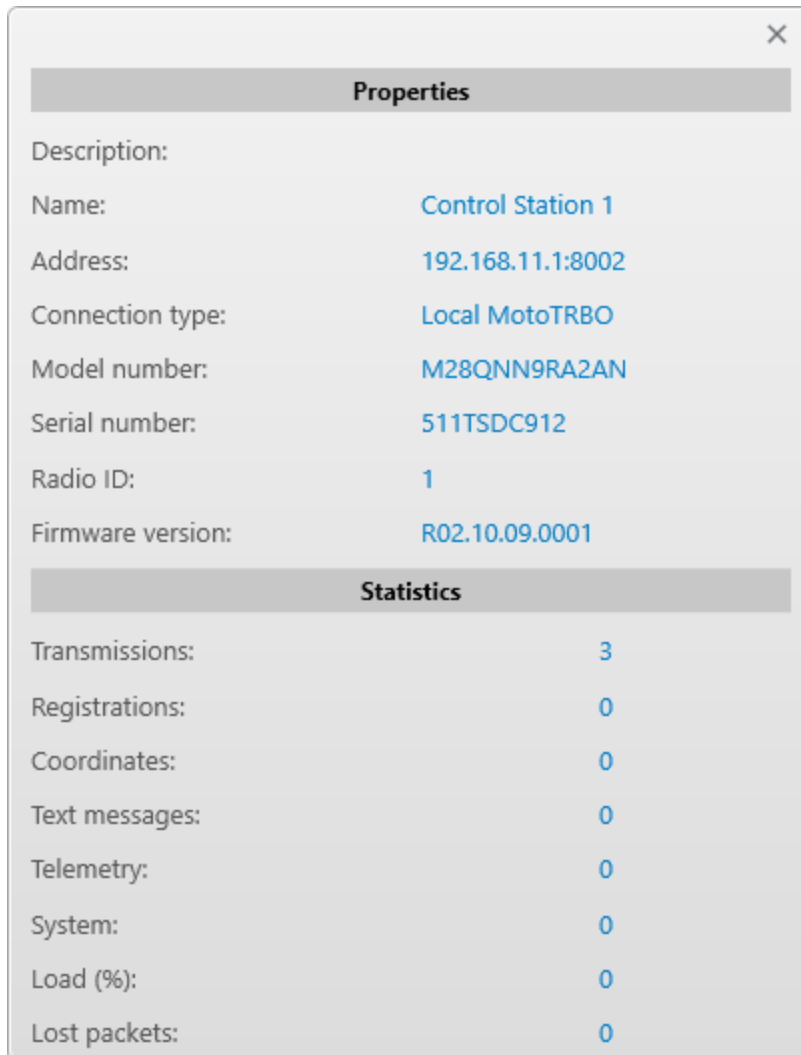
Alarms

Gives information about issues in the router operation. Includes the expandable list with issue details.

3.9.2.6 Control Station Information

The control station information window displays control station statistics and properties.

To open the window, right-click the control station element, and then select **Information**.

The control station information window consists of the following areas:

Properties

Provides information on the control station parameters. The parameters displayed in this area depend on the control station model.

For information on MOTOTRBO control stations, see "MOTOTRBO Control Stations" in *SmartPTT Installation and Configuration Guide*.

For information on P25 radio systems control stations, see "P25 Radio Systems" in *SmartPTT Installation and Configuration Guide*.

This area contains the following parameters:

Name	Description
Description	Supplemental information on the control station that is set in SmartPTT Radioserver Configurator on the **Network Configuration** tab. For details, see "Configuring Local Stations Monitoring" and "Configuring Remote Control Stations Monitoring" in *SmartPTT Installation and Configuration Guide*.
Name	Name of the control station
Address	IP address of the control station
Connection type	Type of the control station connection to SmartPTT Radioserver
Model number	Control station model number specified by the manufacturer, or *SoftwarePeer* if the control station is connected over the gateway
Serial number	Control station serial number specified by the manufacturer, or *0000000000* if the control station is connected over the gateway
Radio ID	ID of the control station in the radio system
Firmware version	Version of the software used on the control station

Statistics

Provides information on the control station operation. This area contains the following parameters:

Name	Description
Transmissions	Number of transmissions processed by the control station
Registrations	Number of transmitted registration packets
Coordinates	Number of transmitted location data packets
Text messages	Number of transmitted text messages
Telemetry	Number of transmitted telemetry packets

Name	Description
System	Number of system events registered on the control station
Load	Amount of the control station uptime during which it was busy with data transmit (in percent)
Lost packets	Number of packets lost during the audio data transmit

3.9.2.7 Radio Gateway Information

The radio gateway information window displays RG-1000e parameters on SmartPTT Radioserver.

NOTE
The RG element appears if the control station (MOTOTRBO, APX or I/O) is connected over the RG-1000e gateway.
For details, see "Configuring Remote Gateway Monitoring" in *SmartPTT Installation and Configuration Guide.*

To open the window, right-click the gateway element, and then select **Information**.
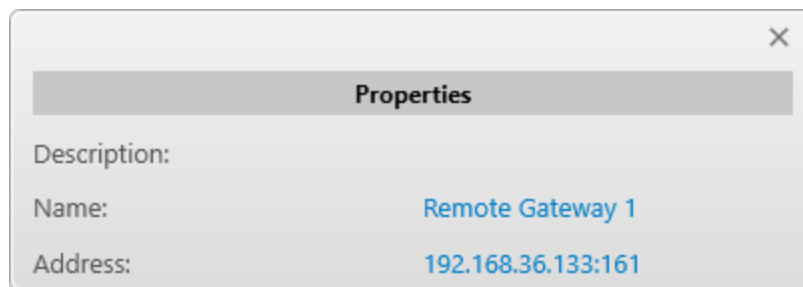
The radio gateway information window contains the **Properties** area, in which the following parameters are available:

- **Description** — supplemental information on the gateway that is set in SmartPTT Radioserver Configurator on the **Network Configuration** tab.

- **Name** — name of the gateway.

- **Address** — IP address of the gateway.

3.9.2.8 Unknown Device Information

The unknown device information window displays parameters of any kind of device other than those in the list of devices in SmartPTT Radioserver Configurator. For details, see "Adding and Configuring Devices" in *SmartPTT Installation and Configuration Guide.*

To open the window, right-click the device element, and then select **Information**.
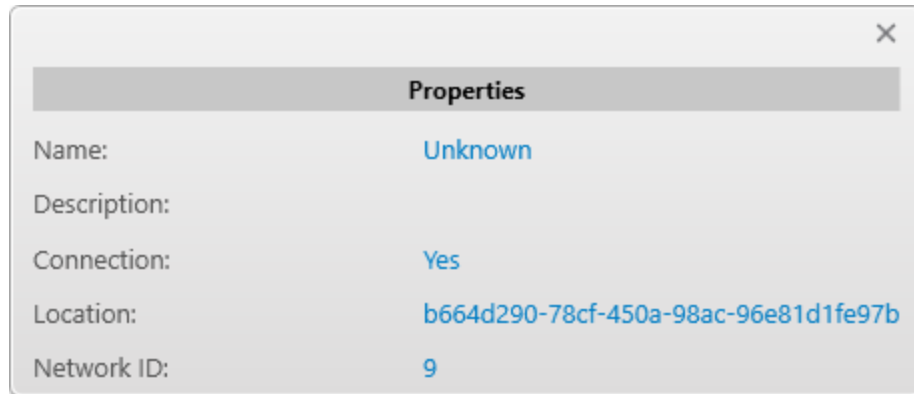
The unknown device information window contains the **Properties** area, in which the following parameters are available:

Name	Description
Name	Name of the device
Description	Supplemental information on the device that is set in SmartPTT Radioserver Configurator on the **Network Configuration** tab
Connection	Presence/absence of a connection to the device
Location	ID of the location to which the device is added
Network ID	Unique radio network ID in the SmartPTT Radioserver database

3.9.3 Diagnostics

The **Diagnostics** panel provides a list of devices to which SmartPTT Radioserver is connected and detailed information about their current status.

The panel provides the following elements:

Table with a list of devices

Contains information about all devices connected to SmartPTT Radioserver. For information on this table, see Diagnostics Table.

The table view can be changed as follows:

- Columns in the table can be hidden and displayed.

- The order of the columns in the table can be changed.

- The list of devices can be sorted by the desired column.

- The list of devices can be grouped by the desired column. Device grouping can be multi-level.

> **NOTE**
> The table view of the **Diagnostics** panel changes in a similar way to the Event Log table. For details, see Managing Event Log Elements.

> **NOTE**
> Right-clicking on those columns of the table that are directly related to repeaters opens the **Control** button, which opens the **Repeater Control** window for managing a repeater.

Alarms

List in the right part of the panel contains current alarms on a device, in case of any. For details, see Alarms.

Diagnostics

List in the right part of the panel contains technical information about the device state. In the expanded list the **Refresh** button is displayed. Clicking this button displays updated information about the current device or current information about the newly selected device.

> **NOTE**
> The **Diagnostics** list is displayed only for definite types of devices.

Statistics

List in the right part of the panel provides information on various parameters related to the reception or transmission of data. For details, see Statistics.

Properties

List in the right part of the panel provides various information on the selected device. For details, see Properties.

Supported alarms

List in the right part of the panel contains alarms that are monitored for the selected device.

3.9.3.1 Diagnostics Table

Diagnostics table contains information about all devices connected to SmartPTT Radioserver. It contains the following columns:

Column name	Description
Name	Device name set in SmartPTT Radioserver Configurator
Peer ID	Device identifier
Device Type	Type of the supported device
Address	IP address and port number used for connection to the supported device
Alarm	List of current alarms on a device including the alarm severity indicator. For details, see Alarms.
Description	Device description set in SmartPTT Radioserver Configurator
Model number	Device model number > **NOTE** > For SmartPTT Radioserver, the *SoftwarePeer* value is displayed in the column.
Firmware version	Current version of software used on a device
Codeplug version	Current version of codeplug used on a device > **NOTE** > For SmartPTT Radioserver, the *00.00.00* value is displayed in the column.
Serial number	Device serial number specified by the manufacturer > **NOTE** > For SmartPTT Radioserver, the *0000000000* value is displayed in the column.

Signaling mode	Channel type used by a device: *DigitalOnly*, *Analog*, *LinkedCapacity* and *Capacity*.
Status	Physical state of a device. *Off* or *On*.
Lock	Repeat functionality of a repeater. The repeater path mode can be changed in the **Repeater Control** window. For details, see Repeater Control.
	NOTE The value in the column is displayed only for hardware-connected repeaters.
Power level	Transmitter power mode of a repeater. It can be changed in the **Repeater Control** window. For details, see Repeater Control.
	NOTE The value in the column is displayed only for hardware-connected repeaters.
Channel Name	Name of the channel that can be used on a device
	NOTE For SmartPTT Radioserver, the *SoftwarePeer* value is displayed in the column.
Rx Frequency	Transmitting frequency of a device (in megahertz)
	NOTE For SmartPTT Radioserver, the *0.0000* value is displayed in the column.
Tx Frequency	Receiving radio frequency of a device (in megahertz)
	NOTE For SmartPTT Radioserver, the *0.0000* value is displayed in the column.
Online	Indicator for displaying a device on the network
Master	Indicator for displaying the name of the main repeater
Controller	Indicator for displaying SmartPTT Radioserver
Application peer	Indicator for displaying a program peer
Voice calls	Indicator for displaying voice transmission
Data	Indicator for displaying data transmission
Slot-1 WAC	Slot operation mode: *Local* or *Wide*
Slot-2 WAC	Slot operation mode: *Local* or *Wide*
Role in backhaul chain	Indicator for displaying the repeater role on the site of the backhaul chain: • *Link repeater* (to communicate with other sites).

- *Drop repeater* (to control radio transmissions in the backhaul chain).

- *Proxy repeater* (to ensure connection of SmartPTT to the IP Site Connect network).

- *Normal* (if the backhaul chain is not connected).

Proxy relay	Indicator for displaying the name of the proxy repeater in the backhaul chain.

Columns whose values are represented as check boxes have three different states:

- The check box is colored with solid gray (■) — no information about a device.

- The check box is selected (☑) — corresponds to the value *Yes*.

- The check box is cleared (☐) — corresponds to the value *No*.

3.9.3.2 Alarms

The **Alarm** list is available in the right part of the **Diagnostics** panel. It provides information on current alarms on a device.
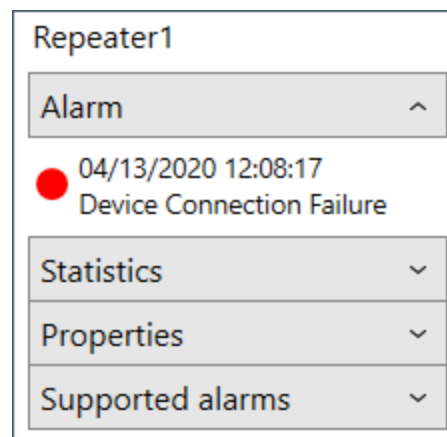
The notification about each alarm consists of the following elements:

Severity indicator

Color indicator of the alarm severity. The following indicators are available:

- Red (🔴) — indicator of a critical alarm on a device.

- Yellow (🟡) — indicator of a non-critical alarm on a device.

- Blue (🔵) — indicator of a noises on a device.

Date and time

Date and time of the alarm registration in the format specified in the operating system settings.

Name

Name of the alarm. Full list of alarms is available on the **Network Configuration** tab of SmartPTT Radioserver Configurator.

3.9.3.3 Statistics

The **Statistics** list is available in the right part of the **Diagnostics** panel. It provides information on various parameters related to the reception and/or transmission of data over the past 60 seconds (1 min). For each parameter, two values are provided, they correspond to receiving/transmitting of data on the repeater time slots.

> **NOTE**
> These parameters are also available in the repeater information window and control station information window on the **Topology** panel. For details, see Repeater Information and Control Station Information.

The following parameters are displayed in the list:

Name	Description
Transmissions	Number of times the PTT button was pressed
Registrations	Number of registration packets transmitted
Coordinates	Number of GPS coordinates transmitted
Text messages	Number of text messages transmitted
Telemetry	Number of telemetry packets transmitted
System	Number of requests and/or radio commands processed by a repeater
Load (%)	Channel load of a repeater
Broken packets (RX)	Number of packets (Rx) with errors received
Max. number of consecutive broken packets (RX)	Maximum number of broken packets (Rx) in a row
Lost packets	Number of packets lost in the process of voice receiving and transmitting
Packet collisions (TX)	Number of not transmitted packets due to collisions on the channel

3.9.3.4 Properties

The **Properties** list is available in the right part of the **Diagnostics** panel. It provides various information about the selected device.

The following parameters are available not only in the **Properties** list, but also in the repeater information window, control station information window, radio gateway information window, unknown device information window and in the table with a list of devices. For details, see Repeater Information, Control Station Information, Radio Gateway Information, Unknown Device Information and Diagnostics Table.

The following parameters are displayed in the list:

Name	Description
Description	Supplemental information on a device
Name	Name of a device set in SmartPTT Radioserver Configurator.
Address	Device IP address and UDP port to which SmartPTT Radioserver is connected
Connection	Presence/absence of a connection to a device
Connection type	Type of a control station connection to SmartPTT Radioserver: *Local* or *Remote*
Location	ID of the location to which a device is added
Voice calls	Ability to transmit voice (*Yes/No*)
Data	Ability to transmit data (*Yes/No*)
On	Activity of the repeater receiver and transmitter (*Yes/No*)
Model number	Device model number set by the manufacturer
Serial number	Device serial number set by the manufacturer
Radio ID	Device identifier
Network ID	Unique radio network ID in the SmartPTT Radioserver database
Firmware version	Version of the software used on a device
Role in backhaul chain	Repeater role on the site of the backhaul chain.

3.9.4 Event Log

The **Event Log** panel provides an operator with information on the state of device connection to SmartPTT Radioserver.

This panel provides the following elements:

Show Current Events

Provides the ability to display the events on the current moment.

Show Logged Events

Provides the ability to display logged events for a specified period of time. For this, in the calendar next to this parameter, the start and end dates of the desired period must be set.

Radioserver

Provides the ability to select the desired radioserver or *All radioservers* from the list to display the devices connected to.

Apply

Provides the ability to apply the above mentioned settings to display events for a specified period in the event table.

Event Log Table

Displays information about events on the current moment or for a specified period. It consists of the following columns:

- **Radioserver** — name of SmartPTT Radioserver where the event is registered.

- **Network** — name of the network where the event is registered.

> **Important**
> The **Monitoring** feature is not available for Capacity Max.

- **Site** — site identifier (only for the Linked Capacity Plus network).

- **Event Time** — date and time of the event.

- **Device Type** — type of connected to SmartPTT Radioserver device.

- **Repeater** — repeater identifier.

- **Device Name** — name of a device.

- **Device Address** — IP address of a device.

- **Alarm Severity** — degree of alarm severity, such as *Critical*, *Major*, *Minor*.
  Depending on the device alarm severity the entry in the table is colored in red, pink, or yellow respectively.

- **Description** — information about device state.

3.9.4.1 Configuring Event Log Displaying

Follow the procedure to configure displaying of the event log.

Prerequisites:

Ensure that the **Monitoring** feature is activated in SmartPTT Radioserver Configurator. For details, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide*.

Procedure:

1. On the menu bar, click **Tools → Monitoring → Event Log**.
   The **Event Log** panel appears.

2. Configure event displaying:

To display events in the monitoring log at the current moment,	select the **Show Current Events** parameter.
To display events in the monitoring log for a specified period,	perform the following actions: 1. Select the **Show Logged Events** parameter. 2. In the calendar next to the parameter select the desired period.

3. Set SmartPTT Radioserver for displaying of events:

To display connected devices on the desired radioserver,	from the **Radioserver** list select the desired radioserver.
To display connected devices on all radioservers,	from the **Radioserver** list select *All radioservers*.

4. Click the **Apply** button.

3.10 Lone Workers

The **Lone Workers** panel displays the list of radios and <u>WAVE users</u> which are in the **Lone Worker** mode and their current status. This was designed for a better supervision over lone workers.

To open the **Lone Workers** panel, expand the **Tools** menu on the menu bar of the SmartPTT Dispatcher window, and click **Lone Workers**. The following window appears:
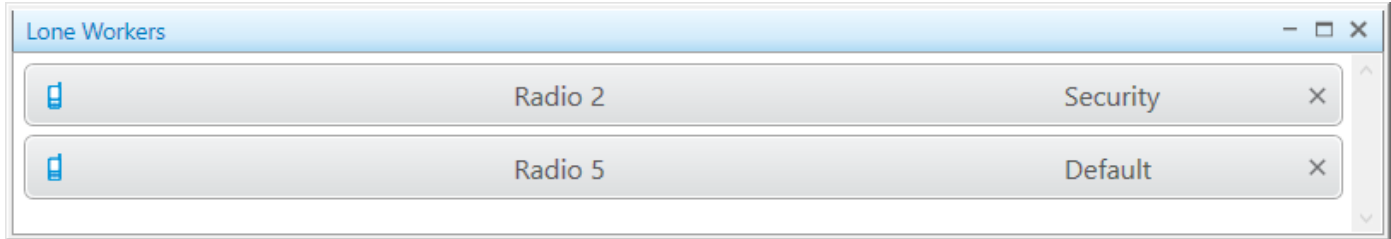
The **Lone Workers** panel shows radios and WAVE users working in the **Lone Worker** mode marked with specific color. The color shows if the radio or the WAVE user meets the requirements set for the lone worker profile the radio or the WAVE user belongs to:

- **Light gray** — lone worker does not violate the rule.

- **Yellow** — rule violation: event triggered the rule.Timer which is set in the **Actions Delay** field starts. For information on configuring **Actions Delay**, see <u>Lone Worker Rules</u>.

- **Red** — lone worker did not react in a specified way after **Actions Delay** expired. For information on configuring **Actions Delay**, see <u>Lone Worker Rules</u>.

For more information how to set rules for lone workers, see <u>Lone Worker Rules</u>.

To turn off the **Lone Worker** mode, click the cross button.

> **NOTE**
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

3.11 Recent Incoming Calls

The **Recent Incoming Calls** panel shows the latest radios which made a call in the radio network. It also provides quick access to the call window of the radios.

To display the panel, on the **Tools** menu click **Recent Incoming Calls**.

To set the number of radios in the panel, change the recent incoming calls settings. For details, see Recent Incoming Calls.

An incoming call radio notification contains the following information and elements:

- Icon set in Radio Properties. For details, see Common Radio Properties.

- Name of the radio.

> **NOTE**
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

- Date and time of the last incoming call displayed at hovering the mouse cursor over the notification.

> **NOTE**
> The first radio to display on the panel is the radio made the most recent call.

- The Delete (✖) button to delete the radio notification.

Clicking a radio opens the radio Call Window. For information on the Call Window, see Radio Call Window.

3.12 Notifications

The **Notifications** panel displays alerts configured for the following rules:

- Custom rules. For details, see Custom Rules.

- Positioning rules. For details, see Positioning Rules.

- Lone Worker rules. For details, see Lone Worker Rules.

The **Notifications** panel opens in the following cases:

- When the rule, for which the alert is configured, is triggered.

- When you select **Notifications** from the **Tools** menu on the menu bar.
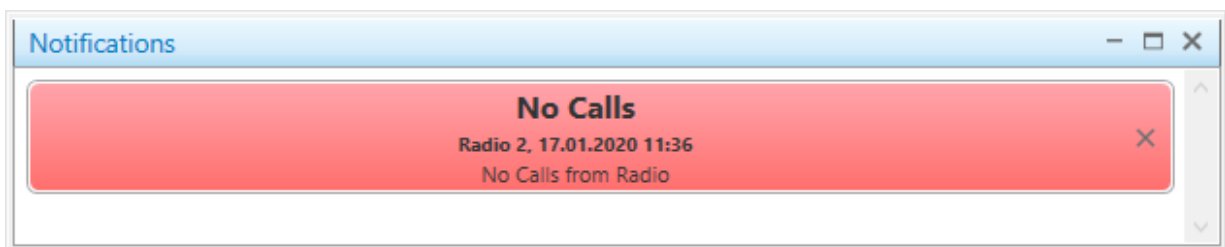
When an alert notification appears, it starts blinking in red for a while. After you click the message, it stops blinking and changes its background color to gray.

An alert notification contains the following information and elements:

- Alert caption.

- Radio name, date and time of the alarm.

> **NOTE**
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

- Alert text.

- The Delete (✖) button to delete the alert notification.

3.13 Emergencies

The **Emergencies** panel appears in SmartPTT Dispatcher when a radio sends an emergency alarm.

To make the **Emergencies** panel appear automatically upon receipt of an incoming alarm signal from the radio, enable the emergency situation processing. For details, see Configuring Emergency Situation Processing.

When an emergency notification appears, it starts blinking in red for a while. After the emergency mode is turned off on the radio, the notification stops blinking and changes its background color to gray.

An emergency notification contains the following information and elements:

- Time of receiving an incoming alarm signal.

NOTE
All emergency notifications are automatically logged in the Event Log. For details, see Event Log.

- Radio name.

- The PTT button to make a call to the radio talkgroup.
For information on color indication of the PTT button, see Color Indication of Voice Calls.
For information on the call initiation settings, see Pointing Devices.

- The **Turn off sound alert (🔇)** button to mute an emergency alarm.

NOTE
The **Turn off sound alert** button is inactive, if a sound notification at the emergency situation is not activated. For details, see Configuring Emergency Situation Processing.

- The **Resolve emergency (↪)** button to confirm the emergency situation resolution and close the notification.
If the **Emergencies** panel displays only one notification, clicking the button closes the panel.

3.14 System Messages

The **System Messages** panel displays event messages related to the radio network functionality. The messages provide information on the status of radio network and its components, status of connection to the server, and database status.

The **System Messages** panel opens in the following cases:

- When events selected in the **Notifications Panels** window occur.
  For details, see System Messages.

- When you select **System Messages** from the **Tools** menu on the menu bar.
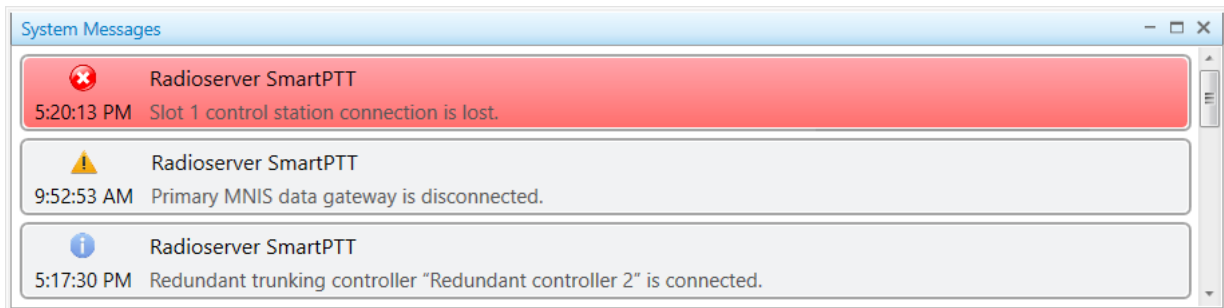
You can see three types of system messages:

- Error messages ( ) indicating major functionality failures, which can lead to the system breakdown.

> **NOTE**
> When an error message appears, it starts blinking in red for a while. After you click the message, it stops blinking and changes its background color to gray.

- Warning messages ( ) indicating minor functionality failures, which are not critical for the current system operation.

- Information messages ( ) indicating functionality restoration after its failure.

A system message contains the following information and elements:

- Icon which specifies the system message type

- Time when the event was registered

> **NOTE**
> At hovering the mouse cursor over the message, the date and time of the event registration are displayed.

- Name or type of the event source (a server, a database, or a radio network and its components)

- Commentary on the event

3.15 Server Tasks

The **Server Tasks** window shows the list of commands from the dispatch application the radioserver is processing at a given moment of time.

For now, only a few commands are displayed in the **Server Tasks** window, for example, the command to create the radioserver event log.
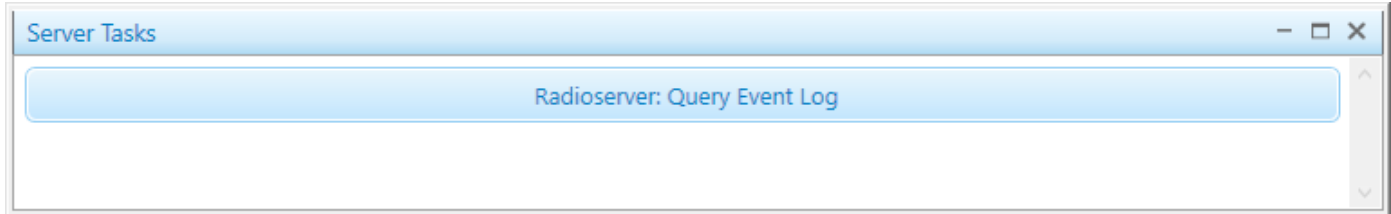
3.16 Custom Consoles

Custom consoles are fully customizable SmartPTT Dispatcher panels that provide access to the objects and functionality available in the dispatched radio system.
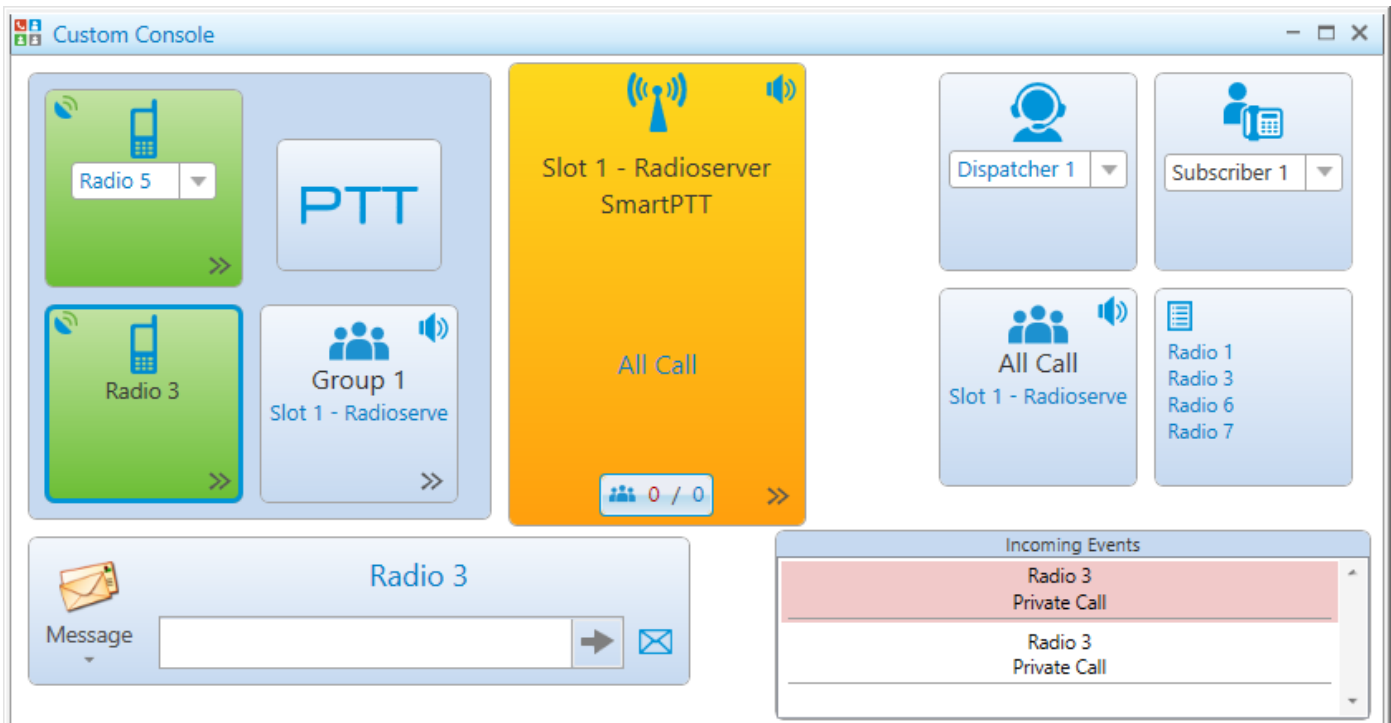
Most of the console elements are interactive and provide controls for working with the radio object or functionality that they represent.

> **NOTE**
> Access to some of the elements may require the corresponding operator permission and/or license. For details, see description of the desired element below.

Custom consoles must be created and configured in SmartPTT Dispatcher settings. For details, see Custom Consoles.

You can open the configured custom console by clicking **Tools → <name of the custom console>** on the menu bar. If no custom console is created, the option is unavailable.

You can work with more than one custom console at the same time.

SmartPTT Dispatcher provides the following custom console elements (listed in alphabetical order):

- Broadcast Call

- Channel Selector

- Channels

- Cross Patches

- Dispatchers

- Image

- Incoming Events

- Incoming Telemetry

- Multiselect

- Outgoing Telemetry

- Panel

- PTT

- Radios

- SCADA Points

- Talkgroups

- Telephone Subscribers

- TMS

- Voice Notifications

3.16.1 Broadcast Call

The Broadcast Call element provides the ability to initiate a group call or an All Call on all available channels of the dispatched radio system at the same time. The element is unavailable in the analog radio systems.

> **NOTE**
> To make broadcast calls, talkgroups must be configured in the radio system settings in SmartPTT Radioserver Configurator. For details, see "Adding and Editing Talkgroups" in the corresponding network settings description in *SmartPTT Installation and Configuration Guide.*

The Broadcast Call element provides the following information and controls:

Broadcast Call Icon

Default icon indicating the element type.

Broadcast Call Name

Name of the Broadcast Call element (if it is set in the element settings in the Properties area).

Active Channels

Counter that provides information on how many channels SmartPTT Dispatcher is currently broadcasting and how many channels are available in total. For example, *2 out of 3* means that SmartPTT Dispatcher is currently broadcasting on two out of three available channels. Detailed information on the initiated calls is available in SmartPTT Dispatcher Event Log. For details, see <u>SmartPTT Dispatcher Event Log</u>.

You can initiate a call to the talkgroups configured for the element using the preferred method of the call initiation. For information on the call initiation settings, see <u>Pointing Devices</u>.

You can obtain information on which talkgroups are configured for the element from your system administrator.

3.16.2 Channel Selector

The Channel Selector elements provide the ability to switch between the channels of the connected control station. Each element corresponds to one control station channel.
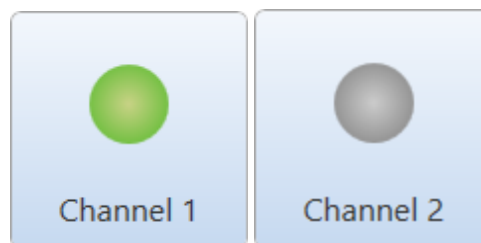
The Channel Selector element provides the following information and controls:

Indicator of the Control Station Channel Status

Depending on the color of the indicator, the Channel Selector element may exist in two states:

• Gray color indicates inactive channels.

• Green color indicates active channels.

Channel Name

The channel name that is set in SmartPTT Radioserver Configurator.

Color Indication

The color of the Channel Selector element indicates the current status of a control station (blue color means that a control station is online, gray color means that a control station is offline).

You can switch between the channels by clicking the desired element on the custom console.

3.16.3 Channels

The Channel element provides the ability to work with the control stations and IP Site Connect channels available in the radio system.
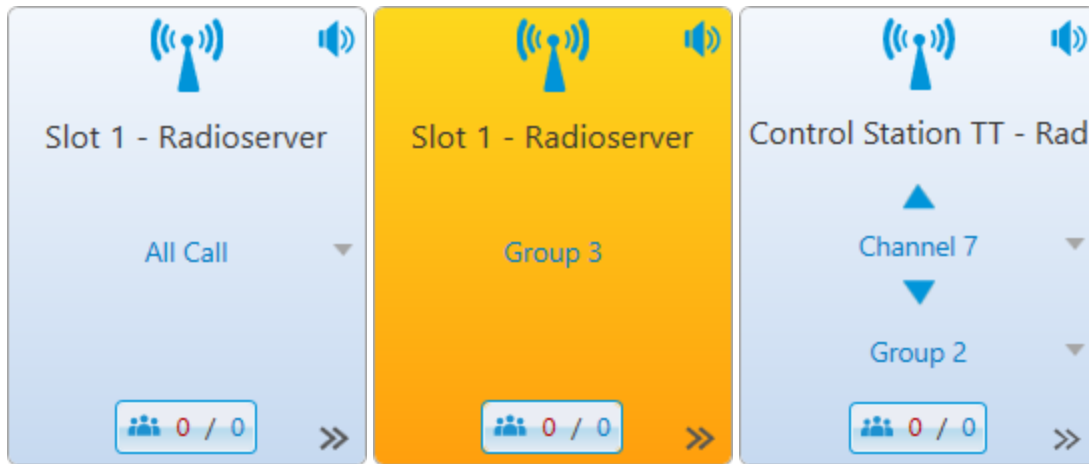
The Channel element provides the following information and controls:

Channel Icon

Default channel icon indicating the element type.

Channel Name

Name of the channel that is set in SmartPTT Radioserver Configurator and, if configured, the radio server name.

Mute ( ) / Unmute ( )

Button that provides the ability to mute/unmute the channel sound.

> **NOTE**
> Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.

Channel Selector (▲ / ▼)

Available for control stations only. Provides the ability to switch the control station channels.

Missed Calls (0 / 2)

Counter that appears if the corresponding check box is selected in the custom console settings. The counter provides information on the number of missed private calls (the figure in red) and the total number of missed calls on the channel (the number in blue). The call is treated as missed until the operator calls back the radio, talkgroup, or WAVE user that initiated the call. You can view detailed information on all missed calls on the channel in the **Missed Calls** window by clicking the Missed Calls (0 / 2) button. For details, see Missed Calls Window.

Call Target

Talkgroup or All Call that is currently selected on the channel. During an incoming group call, the selected group name changes to the group name to which the call is initiated.

You can select the desired call target by clicking the name of the currently selected option and selecting the desired option from the list. You can initiate a call using the preferred method of the call initiation. For information on on the PTT button configuration, see Control Devices.

To make an All Call or a group call, groups must be created and configured in the channel settings in SmartPTT Radioserver Configurator. For details, see "Adding and Editing Talkgroups" in the corresponding network settings description in *SmartPTT Installation and Configuration Guide*.

> **NOTE**
> For control stations, available call options depend on the channel that is currently selected on it. You can select the desired channel in the **Radio Fleet** panel. For details, see Channels and Systems.

Actions (≫)

Button that opens the channel Actions menu. The list of available actions depends on the channel type (control station or repeater system channel).

For information on the Actions menu, see Channel Actions Menu.

Color Indication

Color of the call entry in the Active Calls box that indicates the call current status. For information on call statuses and their color indication, see Color Indication of Voice Calls.

The main color of the Channel element corresponds to the status color of the earliest active call on the channel.

You can initiate a call to the channel configured for the element using the preferred method of the call initiation. For information on the call initiation settings, see Pointing Devices.

If there are no active calls on the channel, the color of the element indicates the channel current state:

- The blue color indicates that the channel is currently active but there are no active transmissions on it.

- The gray color indicates that the channel is currently inactive (the device is turned off or out of the network coverage).

3.16.3.1 Missed Calls Window

The **Missed Calls** window provides detailed information on missed private and group calls on the channel.

You can open the **Missed Calls** window by clicking the Missed Calls ( ) button on the custom console element representing the desired channel. For information on the Channel element, see Channels.

The **Missed Calls** window provides the following elements:

Filters

You can filter the calls displayed in the window by selecting one of the following options in the top part of the window:

• The **Missed (Dispatcher)** option displays only private missed calls.

• The **Missed (All)** option displays both private and group missed calls.

• The **All** option clears the applied filter (if any) and displays the list of all available radios, WAVE users, and talkgroups and their individual missed calls counters.

Clear All

Resets the call statistics, after which both individual and general call counts start from zero.

Individual Missed Calls Counter

Information on missed calls for all available radios, WAVE users and talkgroups. Each entry in the table provides the following information:

• Name or ID of the radio object.

• Call counter that shows one (talkgroups) or two (radios and WAVE users) figures. For talkgroups, the figure indicates the number of missed group calls. For radios and WAVE users, the figure in red indicates the number of missed private calls, the figure in blue indicates the total number of missed calls (private and group calls).

• The **Clear call statistics ( )** button resets the individual missed calls counter of the radio object.

• The **PTT** button initiates a call to the radio object (radio, WAVE user or talkgroup).

3.16.4 Cross Patches

The Cross Patch element provides the ability to interact with cross patches. For details, see Cross Patches in the "Tools" section.

New Cross Patch elements contain only the default Cross Patch icon indicating the element type.

You can assign the desired cross patch to the element in the **Cross Patches** window by clicking the new Cross Patch element on the custom console. For information on the window, see Cross Patches Window.

If a cross patch is assigned to the element, the following information and controls appear on the Cross Patch element:

Cross Patch Icon

The default cross patch icon in the upper-left corner of the element. The default icon cannot be changed.

Cross Patch Name

Name of the cross patch which is set in the **Cross Patch** window. For details, see Cross Patch Window.

Mute ( ) / Unmute ( )

Button that provides the ability to mute/unmute the cross patch sound.

> **NOTE**
> Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.

Cross Patch Members

Names of the cross patch members.

Actions (≫)

Button that opens the cross patch Actions menu.

For information on actions, see Cross Patch Actions Menu.
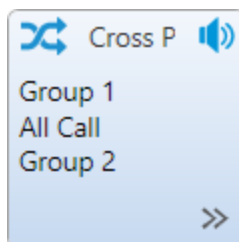
Color Indication

Color of the Cross Patch element indicates the current status of the cross patch. For information on call statuses and their color indication, see Color Indication of Voice Calls.

A call to a cross patch can be initiated by the preferred method of the call initiation. For information on the call initiation settings, see Pointing Devices.

If there are no active calls in a cross patch, the color of the element indicates the cross patch current state:

- The blue color indicates that the cross patch is active.

- The gray color indicates that the cross patch is inactive (the cross patch is deactivated, or the radioserver is offline).

3.16.4.1 Cross Patches Window

The **Cross Patches** window provides the ability to assign the existing cross patch to the element or create a new cross patch and assign it to the element.

You can open the window by clicking an empty cross patch element on the custom console in operation mode.
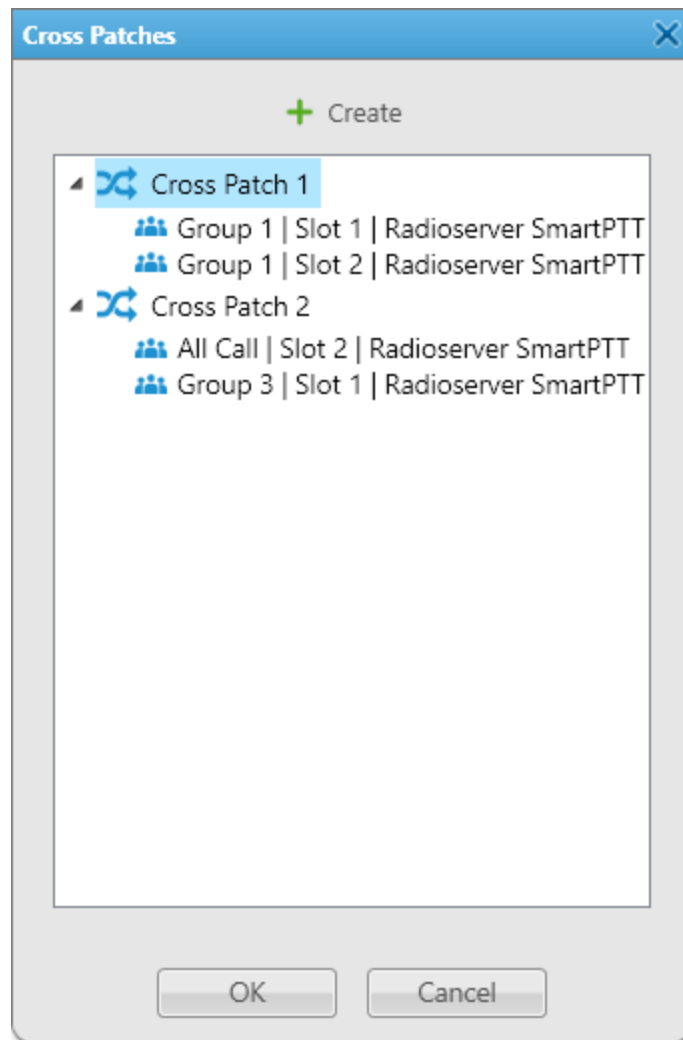
The **Cross Patches** window provides the following elements:

Create

Opens the **Cross Patch** window for creating a new cross patch and assigning it to the element. For details, see Cross Patch Window.

Cross Patch List

Provides a list of existing cross patches which you can assign to the selected element. For information on assigning cross patches, see Assigning Cross Patches.

3.16.4.2 Adding and Editing Cross Patch Elements

Follow the procedure to add a new or edit an existing cross patch element on the custom console.

Prerequisites:

Ensure that the cross patch element is added to the custom console.
For information on the custom consoles configuration, see Custom Consoles.

Procedure:

1.   On the custom console, perform one of the following actions:

To add a new cross patch that will be assigned to the element,	perform the following actions: 1. Click the desired empty element. The **Cross Patches** window appears. 2. In the **Cross Patches** window, click the **Create** button.
To edit the existing cross patch assigned to the element,	open the Actions (≫) menu of the desired element, and then click **Properties (🔲)**.

The **Cross Patch** window appears.

2.   *(Optional)* In the **Cross Patch** window, in the **Name** field, type the cross patch name.

3.   Edit the cross patch member list:

To add a group to the cross patch,	select the desired group in the **Radio Fleet** box, and then click the Add (▶) button. The selected group appears in the **Cross Patch Objects** box.
To remove a group from the cross patch,	select the desired group in the **Cross Patch Objects** box, and then click the Remove (◀) button. The selected radio disappears from the **Cross Patch Objects** box.

> **NOTE**
> You can also add or remove groups by double-clicking or dragging them to the desired box.

4. To complete configuration, click **Create/OK**.

3.16.4.3 Assigning Cross Patches

Follow the procedure to assign the cross patch to the element on the custom console.

Prerequisites:

- Ensure that the Cross Patch element is added to the custom console.
  For information on the custom consoles configuration, see Custom Consoles.

- Ensure you have at least one created cross patch.
  For details, see Adding and Editing Cross Patch Elements or Creating Cross Patches.

Procedure:

1. Click the desired empty element.
    The **Cross Patches** window appears.

2. In the **Cross Patches** window, select the desired cross patch from the list, and then click **OK**.
    The selected cross patch is assigned to the element.

Postrequisites:

To clear the element, in the Actions (≫) menu of the cross patch, click **Clear Element (✖)**.
The selected element becomes empty.

3.16.5 Dispatchers

The Dispatcher element provides the ability to interact with other SmartPTT dispatchers.
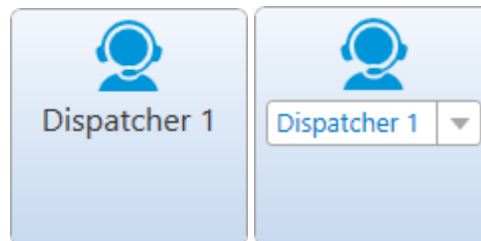
The Dispatcher element provides the following information and controls:

- Avatar that is set in the dispatcher settings. If no custom avatar is set, the default icon is used. For details, see Dispatcher Window.

- Name of the dispatcher. Depending on the element settings, it may be a fixed dispatcher or the dispatcher currently selected from the expandable list that you can open by clicking the box with the dispatchers's name.

You can initiate a call to the assigned dispatcher by double-clicking the corresponding element on the custom console. After that, the **Dispatchers** window appears and the call starts automatically. For information on the window, see Dispatchers Window.

> **Important**
> To interact with other dispatchers, you need to have the **Connect with external dispatchers** operator permission. For details, see Operators.

The color of the element indicates the current status of the assigned dispatcher (blue color means that the dispatcher is available for communication, gray color means that the dispatcher is unavailable).

3.16.6 Image

The Image element is a non-interactive element that contains an image that can be set in the custom console settings.

If no image is assigned to the element, it is displayed as a blank element of the default color.

3.16.7 Incoming Events

The Incoming Events element provides information on incoming events in SmartPTT Dispatcher, such as missed private calls, private and group messages, and call alert commands received during the current operation session.
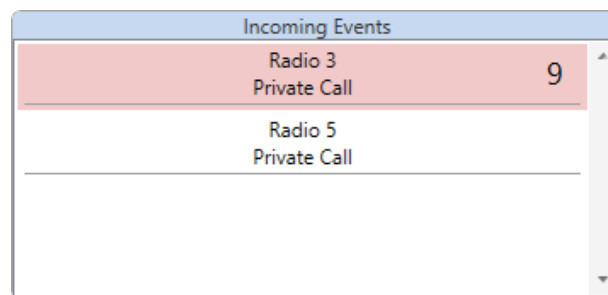
Each entry in the Incoming Events element contains the following information on the event:

- Event initiator (name of the radio or WAVE user).

- Event type (call alert command or private call). For messages, instead of the event type, the text of the message is displayed.

- If more than one event of the same type was missed by the radio or WAVE user, in the right part of the event entry, the number of the missed event occurrences is displayed.

When a new missed event is registered in SmartPTT Dispatcher, its entry in the Incoming Events element appears with the red background. The event is considered as new until you click its entry. After that, the event entry regains its default color.

You can open the radio or WAVE user Call Window by double-clicking the event entry on the element. For details, see Radio Call Window and Talkgroup Call Window.

3.16.8 Incoming Telemetry

The Incoming Telemetry element provides the ability to monitor the current telemetry status of the radios in the dispatched radio system. For information on the current telemetry settings, contact the administrator of your radio system.

The Incoming Telemetry element provides the following information and controls:

Name

Name or ID of the radio on which the telemetry sensor is installed.

Update Status ( )

Button that sends a request for the radio telemetry status update.

> **NOTE**
> On clicking the **Update status ( )** button on the element, the status will be automatically updated for all telemetry sensors installed on the radio.

Last Update Time

Time of the last telemetry status update. The status can be updated manually using the **Update Status ( )** button or automatically with the interval that is set in the radio settings. The last update time appears on the element after the first update received from the radio. For details, see Telemetry.

Status Indicator

Square indicator filled with the color assigned to the current telemetry status in the element settings. If telemetry actions of the High Level and Low Level types are assigned to the same radio sensor, next to the square indicator, the text description of the current status is displayed.

Color Indication

The color of the element indicates the current status of a radio on which the telemetry sensor is installed (blue color means that a radio is online, gray color means that a radio is offline).

3.16.9 Multiselect

The Multiselect element provides the ability to create multiselect groups consisting of radios, WAVE users, and/or talkgroups.

Multiselect groups can be used for the following purposes:

- Making calls to multiple radio objects at the same time (multiselect calls). All participants of a multiselect call can hear the operator and cannot hear other members of their multiselect group.

- Sending messages to multiple radio objects at the same time using the TMS element. For details, see Sending Messages.

- Performing other actions available for multiple radio objects using the hot keys assigned in SmartPTT Dispatcher settings. For details, see Keys.

New Multiselect elements contain only the default Multiselect icon indicating the element type.

You can configure the list of desired members of the multiselect group in the **Multiselect** window by clicking the new Multiselect element on the custom console. For details, see Multiselect Window.

After adding members to the multiselect group, the default icon disappears and the following information and controls appear on the Multiselect element:

Multiselect Group Name

Name of the multiselect group (if specified).

Multiselect Group Member

Names of the multiselect group members.

Actions (≫)

Button that opens the multiselect group Actions menu.
For information on actions, see Multiselect Group Actions Menu.
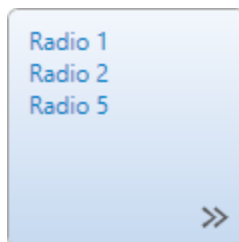
Color Indication

Color of the Multiselect element indicates the current status of the multiselect group. For information on call statuses and their color indication, see Color Indication of Voice Calls.

A call to the multiselect group members can be initiated by the preferred method of the call initiation. For information on the call initiation settings, see Pointing Devices.

For information on configuration of the multiselect group, see the sections below.

3.16.9.1 Multiselect Group Actions Menu

The Actions (≫) menu of the multiselect group provides the ability to perform the following actions:

Action	Description
Properties (🔲)	Opens the **Multiselect** window for editing the multiselect group members. For details, see Multiselect Window.
Clear Element (✖)	Clears the element and also removes the multiselect group from SmartPTT Dispatcher.

3.16.9.2 Multiselect Window

The **Multiselect** window provides the ability to configure the list of the multiselect group members using the Multiselect element on the custom console. For information on the element, see Multiselect.

Depending on the current group state, you can open the **Multiselect** window in one of the following ways:

- For new multiselect groups (without any members added to it), by clicking any part of the Multiselect element.

- For existing multiselect groups (with at least one member added to it), by clicking **Properties (🔲)** in the Actions (≫) menu.
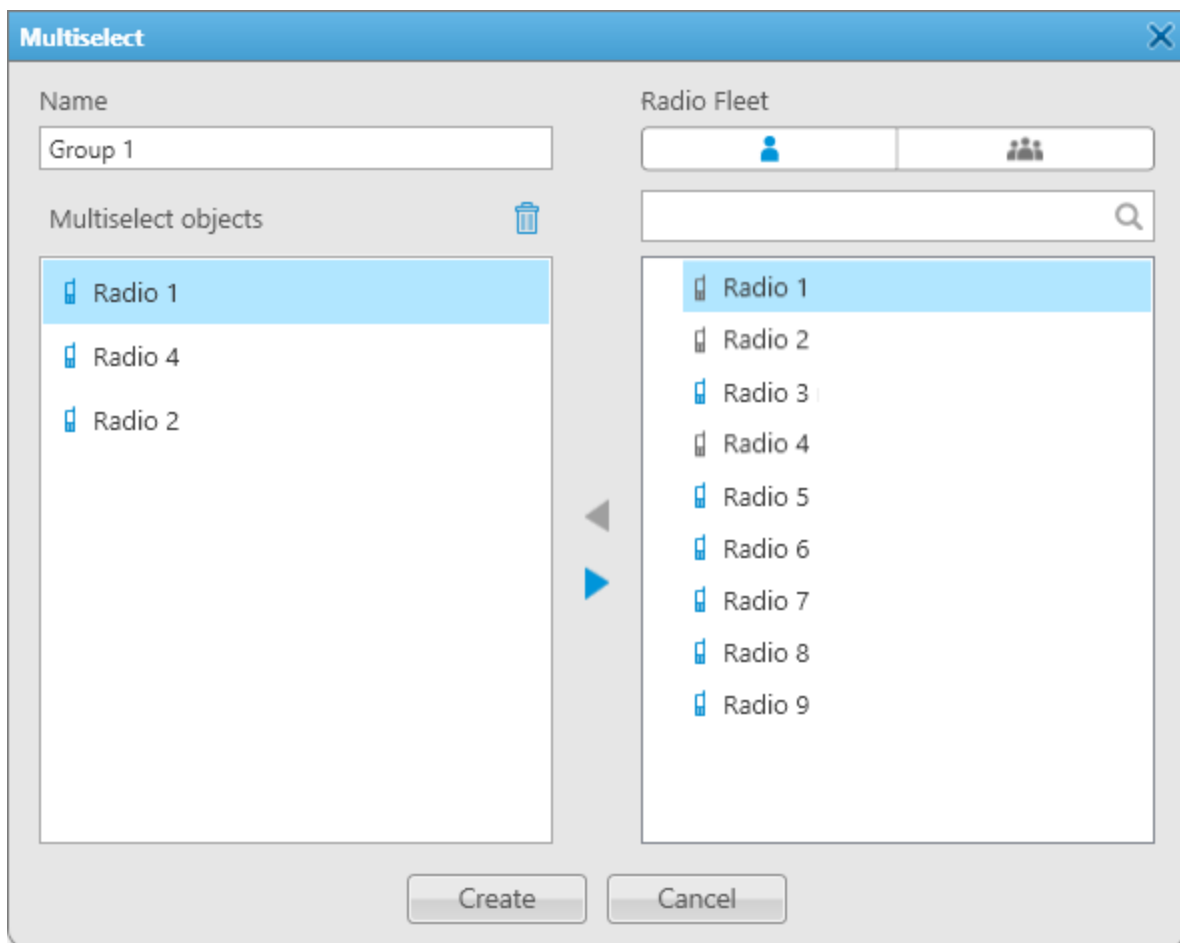
The **Multiselect** window provides the following elements:

Name

Contains the name of the multiselect group. You can leave the field empty, or type the desired name.

Clear All (🗑)

Removes all members from the multiselect group.

Multiselect objects

The list that contains the radio objects added to the multiselect group.

Radio Fleet

The box provides two tabs that contain all available objects in the dispatched radio system:

- The **Radios (👤)** tab contains all available radios and WAVE users.

- The **Talkgroups (👥)** tab contains all available talkgroups.

The icons of the objects that are already added to the multiselect group change their color from blue to gray.

Search Field

Field that provides the ability to find the desired object by typing its name.

Add (▶)

Adds the radio, WAVE user or talkgroup that is currently selected in the **Radio Fleet** list to the **Multiselect objects** list. The button becomes active only if an object that has not been added to the multiselect group is selected in the **Radio Fleet** list.

Remove (◀)

Removes the radio, WAVE user or talkgroup that is currently selected in the **Multiselect objects** list from the multiselect group members. The button becomes active only if an object is selected in the **Multiselect objects** list.

Create/OK

Creates the multiselect group. If you edit a multiselect group, the button is replaced by the **OK** button

For information on adding and removing members of the multiselect group, see the section below.

3.16.9.3 Configuring Multiselect Group

Follow the procedure to add, edit, or remove a radio, WAVE user, or talkgroup to a multiselect group using the Multiselect element on the custom console.
For information on the element, see Multiselect.

Prerequisites:

Ensure that the Multiselect element is added to the custom console.
For information on the custom consoles configuration, see Custom Consoles.

Procedure:

1. Open the **Multiselect** window by clicking the multiselect group icon (🗒) on the element.
   The **Multiselect** window appears.

2. *(Optional)* In the **Multiselect** window, type the multiselect group name.

3. In **Radio Fleet** box, select the **Radios (👤)** or **Talkgroups (👥)** tab to show the desired objects.

4. Perform the desired action:

To add a new member to the multiselect group,	perform one of the following actions: • Select the desired radio object in the **Radio Fleet** box, and then click the Add (▶) button. • Double-click the desired radio object in the **Radio Fleet** box. • Drag the desired radio object from the **Radio Fleet** box to the **Multiselect objects** box. The selected object appears in the **Multiselect objects** box.
To remove a member from the multiselect group,	perform one of the following actions: • Select the desired radio object in the **Multiselect objects** box, and then click the Remove (◀) button. • Double-click the desired radio object in the **Multiselect objects** box. • Drag the desired radio object from the **Multiselect objects** box to the **Radio Fleet** box. The selected object disappears from the **Multiselect objects** box.

5. Click **OK/Create** to save changes.

3.16.10 Outgoing Telemetry

The Outgoing Telemetry element provides the ability to send preconfigured telemetry commands and monitor the telemetry status of the radios in the dispatched radio system. For information on the current telemetry settings, contact the administrator of your radio system.

The Outgoing Telemetry element provides the following information and controls:

Name

Name or ID of the radio on which the telemetry sensor is installed.

Update Status ( )

Button that sends a request for the radio telemetry status update.

> **NOTE**
>
> On clicking the **Update status ( )** button on the element, the status will be automatically updated for all telemetry sensors installed on the radio.

Last Update Time

Time of the last telemetry status update. The status can be updated manually using the **Update status ( )** button or automatically with the interval that is set in the radio properties. The last update time appears on the element after the first update received from the radio. For details, see Telemetry.

Status Indicator

Square indicator filled with the color assigned to the current telemetry status in the element settings.

Telemetry Command

Button that sends the preconfigured telemetry command to the radio. For details, see Telemetry.

Color Indication

The color of the element indicates the current status of a radio on which the telemetry sensor is installed (blue color means that a radio is online, gray color means that a radio is offline).

3.16.11 Panel

The Panel element provides the ability to interact with multiple custom console elements at the same time. Panels may hold all types of custom console elements except another Panel element.
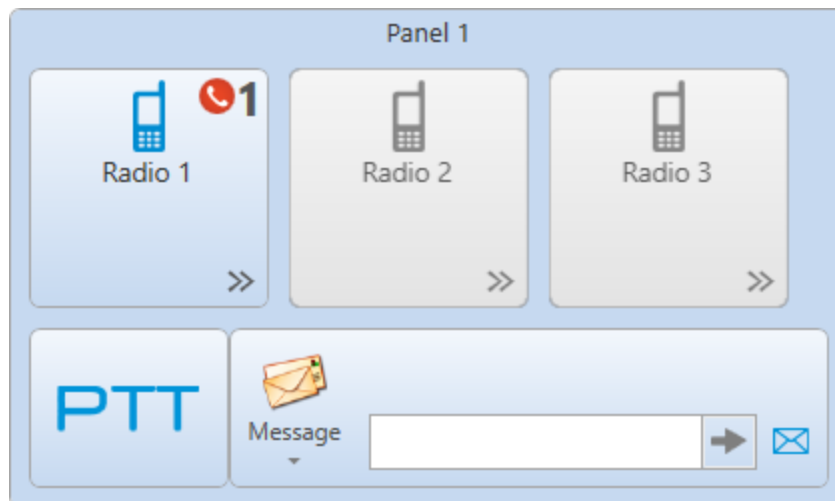
Actions applied using functional elements, such as the PTT, TMS and Voice Notification elements, will be applied to all available elements located within the same Panel element. The elements located on the border of the panel are treated as located outside of it and will not be affected by the actions applied to it.

3.16.12 PTT

The PTT element provides the ability to initiate a call to all available radios, WAVE users, and talkgroups that are located within the same Panel element as PTT.

If the PTT element is located outside any panel, or if there are no available radio objects added to it, the element becomes inactive.

You can initiate a call to the radio object added to the Panel element using the preferred method of the call initiation. For information on the call initiation settings, see Pointing Devices.

3.16.13 Radios

The Radio element provides the ability to interact with radios and WAVE users added to the SmartPTT Dispatcher list of radios. Using the element, you can perform the following actions:

- Initiate a private voice call to the radio or WAVE user using the preferred method of the call initiation. For information on the PTT button configuration, see Control Devices.

- Initiate a group call to multiple radios /or WAVE users by clicking the desired radios and/or WAVE users while pressing and holding the Ctrl key, and then using the preferred method of the call initiation. For information on the PTT button configuration, see Control Devices.

- Open the radio or WAVE user Actions menu by clicking the Actions (≫) button on the element.

- Open the radio or WAVE user Call Window by right-clicking the element. For details, see Radio Call Window.

There are two types of the Radio element in custom consoles:

- Element assigned to a specific (fixed or reassignable) radio or a WAVE user.

- Element with a number pad for calling radios and WAVE users by entering their ID or selecting them from the SmartPTT Dispatcher list of radios.
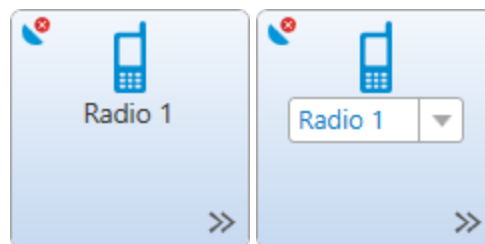
The assigned type of the Radio element provides the following information and controls:

Radio Icon
     Icon that is set in the radio or WAVE user settings. For details, see Common Radio Properties.

Radio Name

Name or ID of the radio or WAVE user. Depending on the settings, it may be a fixed subscriber or a subscriber currently selected from the expandable list of radios that you can open by clicking the box with the radio or WAVE user's name.

> **NOTE**
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

Actions (≫)

Button that opens the radio or WAVE user's Actions menu.

For information on the Actions menu, see Radio Actions Menu.

The Radio element with a number pad may exist in two states: default (no radio or WAVE user is selected) and active (a radio or WAVE user is selected).

In the default state, this type of the Radio element provides the following information and controls:

Radio Icon

Default radio or WAVE user's icon.

Actions (≫)

Button that opens the radio or WAVE user Actions menu. The button becomes available when you enter the ID or select from the list a radio or WAVE user added to SmartPTT Dispatcher list of radios.

Search Box

Box that provides the ability to find the desired radio by entering its ID on the keyboard or the number pad below. You can clear the box by clicking the Delete (✕) button in the right part of the box that appears after you type at least one digit in the box.

Number Pad

Panel that provides controls for entering the desired radio or WAVE user ID. Instead of the number pad, you can use a keyboard.

Number Pad (⊞)

Button that switches the element to the manual dialing mode by opening the number pad.

List of Radios (📻)

Button that switches the element to the selection mode by opening the SmartPTT Dispatcher list of radios.

You can switch between the number pad and selection modes by clicking the corresponding controls.

After you select the desired radio or WAVE user, the Radio element switches to the active mode. In this mode, the top part of the element functions as the assigned type of the Radio element and provides the same information, controls, and indication options.

The Radio element provides the following indication options:

Missed Calls (🔴)

Icon that indicates that there are missed calls from the radio or WAVE user. The number of missed calls is displayed next to the icon.

Location Indicator

The Valid Coordinates (🟢) / Outdated Coordinates (🔴) icon. Depending on the update status of the radio or WAVE user's location data, the icon indicates that the radio or WAVE user's GPS coordinates are valid or outdated/missing. The icon appears only if the GPS service is activated and the coordinates update parameters are specified in the radio location settings. For details, see Radio Location Properties.

Emergency Mode

The **Emergency** label that indicates that the radio activated the emergency mode. You can manage the reported emergency from the **Emergencies** panel or using the **Exit Emergency Mode** option of the Actions menu. For details, see Emergencies and Radio Actions Menu.

> **NOTE**
> The Emergency mode is unavailable to WAVE users.

Color Indication

Color of the element that indicates the current status of the radio or WAVE user. For information on the color indication applied to the radio and WAVE user elements, see Color Indication of Voice Calls.
If there is no active call to or from a radio, the color of the element indicates the radio current state (blue color means that a radio is online, gray color means that a radio is offline).

You can initiate a call to the selected radio using the preferred method of the call initiation. For information on the call initiation settings, see Pointing Devices.

> **NOTE**
> When a call can not be initiated and call attempts continue, the cause of a holding can be displayed at pointing to the element.

3.16.14 SCADA Points

The SCADA point element provides information on the SCADA point parameters in the real time and can be used for quick access to the SCADA point dashboard in SmartPTT Dispatcher SCADA panel.

> **NOTE**
> The SCADA point element is available only if the SCADA module is activated in SmartPTT Dispatcher settings. For details, see Activating SCADA Module.

The SCADA element contains the icon and the name of the SCADA point that are set in the SCADA system and cannot be changed in SmartPTT Dispatcher.

When you point to the SCADA point element, a tooltip with all its parameters appears. Alternatively, you can view them in the SCADA point dashboard by double-clicking the desired element. For details, see "SCADA Module" in *SCADA Module Setup and User Guide*.

The SCADA point element provides the following indication:

- Gray color of the element background indicates that either the SCADA point is currently not available, or the SCADA module is deactivated in SmartPTT Dispatcher settings. For details, see Activating SCADA Module.

- Flashing red frame around the element indicates the alarm state of one of the SCADA point parameters.

- Red frame around the element indicates that one of the SCADA point parameters reported an alarm that was acknowledged by one of the dispatchers but the problem is not yet resolved.

> **NOTE**
> If a point is deleted from the SCADA system, it is not automatically deleted from SmartPTT Dispatcher. The name of the deleted SCADA point is displayed in gray color. The rules that affect the point are not deleted, and the point settings remain editable.

3.16.15 Talkgroups

The Talkgroups element provides the ability to interact with talkgroups and temporary talkgroups and initiate All Calls.

The custom console provides three types of the Talkgroup element:

- Element for interacting with talkgroups

- Element for initiating All Calls on the preconfigured channel

- Element for creating temporary talkgroups and interacting with them

> **Important**
> Temporary talkgroups are available in Capacity Max systems only, and must be preconfigured in SmartPTT Radioserver Configurator. For details, see "Adding and Editing Temporary Talkgroups" in *SmartPTT Installation and Configuration Guide*.

Depending on the type, the element may provide the following information and controls:

Talkgroup Icon

Default icon indicating the element type. The talkgroup and All Call icons (👥) differ from the temporary talkgroup icon (👥).

Name

Name the of All Call, or talkgroup, or temporary talkgroup. The All Call and talkgroup name is set in SmartPTT Radioserver Configurator. The temporary talkgroup name is set in SmartPTT Dispatcher and displayed in italics. When you add a new temporary talkgroup element, it is not assigned to any group, and does not contain any name. You need to assign the desired temporary group to the element by clicking it. For details, see Assigning Temporary Talkgroups.

Channel Name

Name of the channel that corresponds to the network or slot name. The network and slot names are set in SmartPTT Radioserver Configurator.

Radioserver Name

Name of SmartPTT Radioserver that is set in the radioserver settings in SmartPTT Dispatcher.

Mute (🔊) / Unmute (🔇)

Button that provides the ability to mute/unmute the group sound.

> **NOTE**
> Some SmartPTT Dispatcher settings may prevent complete sound muting. For information on the sound settings, see Other Settings.

Actions (»)

The button opens the element Actions menu.

For information on actions, see Talkgroup Actions Menu, Temporary Talkgroup Actions Menu, and All Call Actions Menu.

The Talkgroup element provides the following indication options:

- Color of the element indicates the current status of the talkgroup. For information on the color indication applied to the talkgroup, see Color Indication of Voice Calls.
  If there are no active calls in a talkgroup, the color of the element indicates the group current state (blue color means that a group is active, gray color means that a group is inactive).

- The **Emergency** label on the element indicates that one of the group or channel participants activated the emergency mode. You can manage the reported emergency from the **Emergencies** panel or using the **Exit Emergency Mode** option of the Actions menu. For details, see Emergencies and Radio Actions Menu.

You can initiate a call to the selected group using the preferred method of the call initiation. For information on the call initiation settings, see Pointing Devices.

When you click an empty temporary talkgroup element, the **Temporary Talkgroups** window appears in which you can assign to the element the existing group or create a new temporary talkgroup. For information on the window, see Temporary Talkgroups Window.

3.16.15.1 Temporary Talkgroups Window

The **Temporary Talkgroups** window provides the ability to assign the existing temporary talkgroup to the element or create a new temporary talkgroup and assign it to the element.
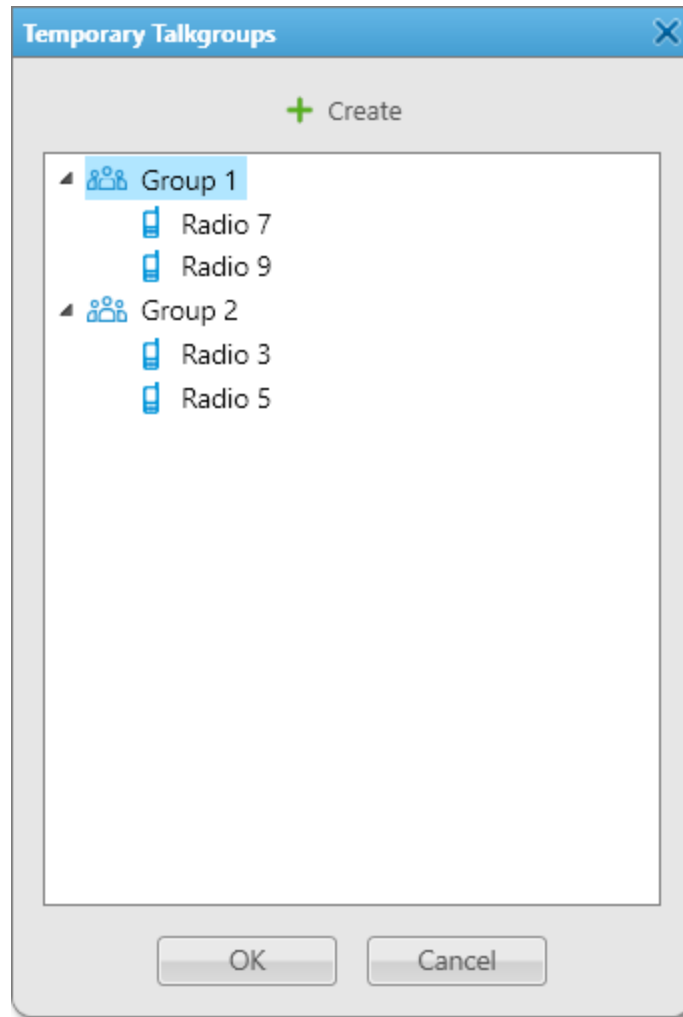
You can open the window by clicking an empty temporary talkgroup element on the custom console in operation mode. If there are no any created temporary talkgroups in SmartPTT Dispatcher, the **Temporary Talkgroup** window for creating a new temporary talkgroup appears. For details, see Temporary Talkgroup Window.

The **Temporary Talkgroups** window provides the following elements:

Create

Opens the **Temporary Talkgroup** window for creating a new temporary talkgroup and assigning it to the element. For details, see Adding and Editing Temporary Talkgroups.

Temporary Talkgroup List

Provides a list of existing temporary talkgroups which you can assign to the selected element. For information on assigning talkgroups, see Assigning Temporary Talkgroups.

3.16.15.2 Adding and Editing Temporary Talkgroup Element

Follow the procedure to add a new or edit an existing temporary talkgroup element on the custom console.

Prerequisites:

Ensure that the Temporary Talkgroup element is added to the custom console.

For information on the custom consoles configuration, see Custom Consoles.

Procedure:

1. On the custom console, perform one of the following actions:

To add a new temporary talkgroup assigned to the element,	perform the following actions: 1. Click the desired empty element. The **Temporary Talkgroups** window appears. 2. In the **Temporary Talkgroups** window, click the **Create** button.
To edit the existing temporary talkgroup assigned to the element,	open the Actions (≫) menu of the desired element, and then click **Properties (🔵)**.

   The **Temporary Talkgroup** window appears.

2. *(Optional)* In the **Temporary Talkgroup** window, in the **Name** box, type the temporary talkgroup name.

3. Edit the temporary talkgroup member list:

To add a radio to the temporary talkgroup,	select the desired radio in the **All radios** box, and then click the Add (▶) button. The selected radio appears in the **Temporary Talkgroup Members** box.
To remove a radio from the temporary talkgroup,	select the desired radio in the **Temporary Talkgroup Members** box, and then click the Remove (◀) button. The selected radio disappears from the **Temporary Talkgroup Members** box.

   NOTE
   You can also add or remove radios by double-clicking or dragging them to the desired box.

4. To complete configuration, click **Create/OK**.

3.16.15.3 Assigning Temporary Talkgroups

Follow the procedure to assign the existing temporary talkgroup to the element on the custom console.

Prerequisites:

- Ensure that the Temporary Talkgroup element is added to the custom console.
  For information on the custom consoles configuration, see Custom Consoles.

- Ensure you have at least one created temporary talkgroup.
  For details, see Adding and Editing Temporary Talkgroup Element or Adding and Editing Temporary Talkgroups.

Procedure:

1. Click the desired empty element.
   The **Temporary Talkgroups** window appears.

2. In the **Temporary Talkgroups** window, select the desired group from the list, and then click **OK**.
   The selected temporary talkgroup is assigned to the element.

Postrequisites:

To clear the element, in the Actions (≫) menu of the talkgroup, click **Clear Element (✖)**.
The selected element becomes empty.

3.16.16 Telephone Subscribers

The Telephone Subscriber element provides the ability to interact with telephone subscribers added to SmartPTT Dispatcher.

> **WARNING**
> The Telephone Subscriber element is available only if the Telephone Interconnect license is installed and the operator's profile is assigned the **Make phone calls** permission. For details, see Licenses and Operators.
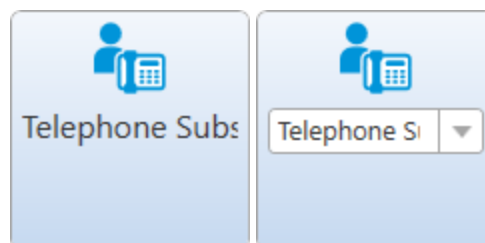
The Telephone Subscriber element provides the following information and controls:

- Avatar that is set in the telephone subscriber's settings. If no custom avatar is set, the default icon is used. For details, see Telephone Subscriber Window.

- Name of the telephone subscriber.

If the ability to select the desired telephone subscriber from the element is configured, instead of the telephone subscriber's name, the name of the currently selected subscriber is displayed. You can change the subscriber by clicking the box with the subscriber's name and selecting the desired subscriber from the list.

You can initiate a call to the assigned telephone subscriber by double-clicking the corresponding element on the custom console. After that, the **Telephone Subscribers** window appears and the call starts automatically. For information on the window, see Telephone Subscribers Window.

3.16.17 TMS

The TMS element provides the ability to send text messages to a single or multiple radios and/or talkgroups in the dispatched radio system.

Using the TMS element, you can perform the following actions:

- Send a custom message or a message template.

- Send a custom message or a message template by opening the **Send Message** window that provides extended functionality for sending messages. For details, see Send Message Window.
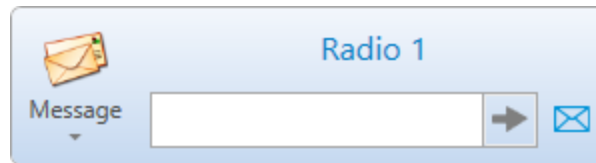
The TMS element provides the following information and controls:

Message ( )

   Button that expands the list of preconfigured message templates. For information on message templates, see Managing Message Templates.

Text Box

   Box for typing the text of the message.

Send ( )

   Button that sends the message from the text box.

Send Message ( )

   Button that opens the **Send Message** window. For details, see Send Message Window.

Selected Object Name

   If the operator selects a Radio or a Talkgroup element in the custom console, the name of the selected object is displayed at the top of the element. If more than one radio object is selected, instead of the object name, the *Selected* heading is displayed.

Location of the TMS element affects the way the messages are sent in the following way:

- If the TMS element is located within a Panel element, the message will be sent to all the radios and talkgroups located within the same Panel element. For details, see Panel.

- If the TMS element is located outside any Panel element, the message will be sent to the radios and/or talkgroups that you select in the custom console.

For information on sending messages using the TMS element, see the section below.

3.16.17.1 Sending Messages

Follow the procedure to to send a text message to a single or multiple radios and/or talkgroups using the TMS element.

Prerequisites:

Ensure that the TMS element and the desired radios and talkgroups are added to the custom console. For information on the Custom Consoles configuration, see Custom Consoles.

Procedure:

1. Select one or multiple radios and/or talkgroups to which you want to send the message.

> **NOTE**
> If the TMS element is located within a Panel element, you do not need to select the addressee. The message will be sent to all the radios and talkgroups located within the same Panel element.

2. Depending on the type of the message that you want to send, perform one of the following actions:

To type a new message and send it from the TMS element,	in the text box, type your message, and then click the **Send ( ) button.**
To send a message template from the TMS element,	to the left of the text box, click the **Message ( )** button, and then, from the Templates list, select the name of the desired template.
To type a new message or edit a message template before sending it from the **Message** window,	perform the following actions: 1. Click the **Message ( )** button to the right of the text box. The **Message** window appears. 2. In the **Message** window, type your message in the text box or use a message template, and then click **Send**. For information on working with the **Message** window, see Send Message Window.

The message is sent. The information on it appears in the radio and/or talkgroup Call Window and in SmartPTT Dispatcher Event Log.
For details, see Radio Call Window, Talkgroup Call Window, and Dispatcher Event Log Table.

3.16.18 Voice Notifications

The Voice Notification element provides the ability to play a preconfigured voice notification for a selected talkgroup or channel.

For information on voice notifications, see Voice Notifications.
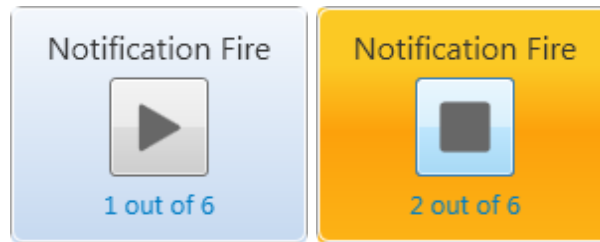
The Voice Notification element provides the following information and controls:

Notification Name

The voice notification name that is set in SmartPTT Radioserver Configurator.

Play (▶) / Stop (■)

The button that starts or stops the voice notification playback.

Playbacks

The counter which shows the number of successful voice notification playbacks.

Color Indication

Color of the element that indicates the current status of the notification:

• The blue color indicates the possibility to interact with the Voice Notification element.

• The orange color indicates that the voice notification playback is started.

• The gray color indicates that the voice notification is inactive (for example, if the corresponding notification was deleted or the Voice Notifications feature is disabled in SmartPTT Radioserver Configurator).

4 Maps

SmartPTT supports different maps, like Google Maps, OpenStreetMap, Baidu Maps, raster maps, maps in Polish format, and vector maps in various formats.

Together with many useful tools like showing and animating a track, defining points of interest, maps provide the dispatcher with a better control over radios. You can also open the Call Window by double-clicking on a radio displayed on the map, or open the Actions menu by clicking with the right mouse button.

You can open maps from the **Map** menu on the menu bar of SmartPTT Dispatcher. You can configure types of maps to display on the menu. For details, see Map Settings.

The **Map** menu also provides the following elements:

- **Indoor Tracking** option provides the ability to create a building plan or to open an existing plan.
  For details, see Indoor Tracking.

- **Map Settings** option provides access to the **Map Settings** window.
  For details, see Map Settings.

- **Coverage map** option provides the abilities to build, to clean, and to set a coverage map.
  For details, see Coverage Map.

> **NOTE**
> Map selection and the **Indoor Tracking** option are unavailable in the **Maps** menu if the layout is locked.
> For details, see Locking Layout.

Maps also provide the ability to set camera markers and SCADA point coordinates, display them on a map and monitor SCADA point alarm states in real time.

> **NOTE**
> To interact with cameras and SCADA points, you must instal the corresponding licenses. For details, see Licenses.
> For SCADA points the SCADA module in SmartPTT Dispatcher settings must be activated.

For information on configuring different maps, see the sections below.

4.1 Map Settings

The **Map Settings** window provides the ability to add the desired maps to the **Map** menu, and to configure some settings of showing radios or WAVE users on a map.

You can open the **Map Settings** window by clicking **Map → Map Settings** on the menu bar.
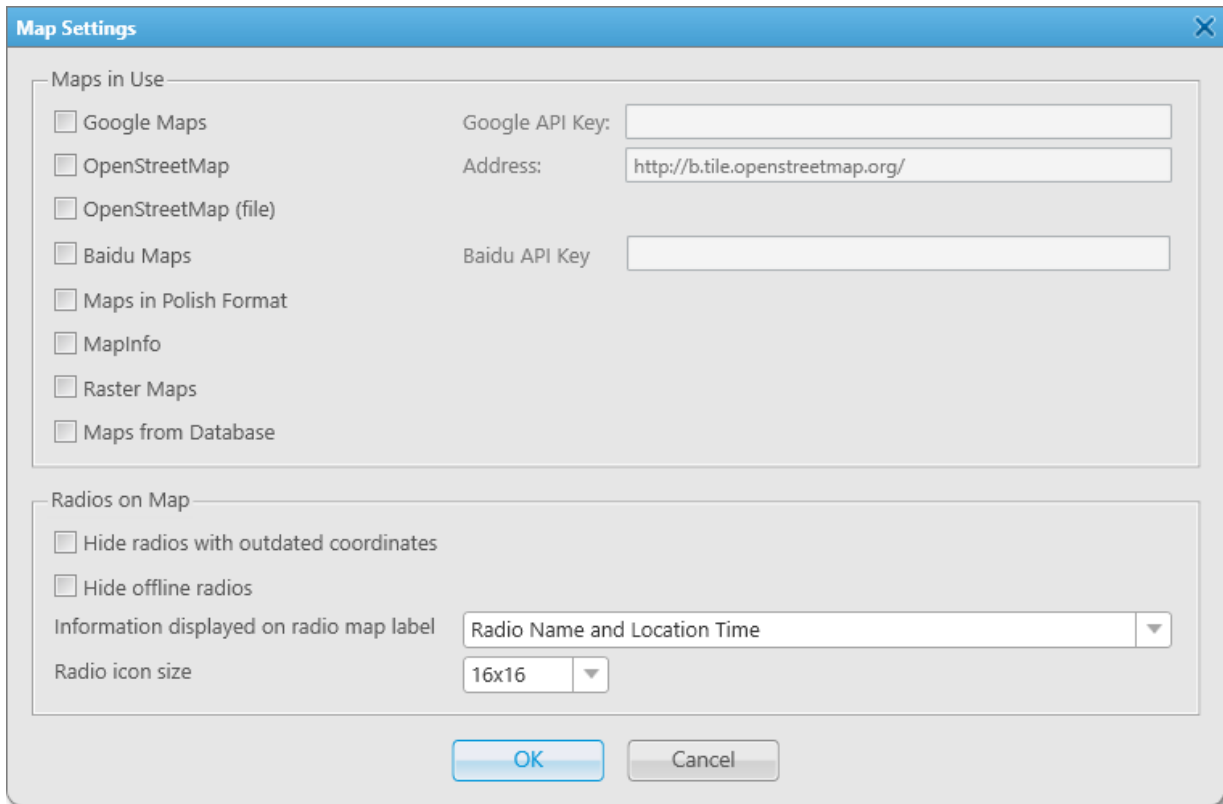
The **Map Settings** window consists of two areas:

*   The **Maps in Use** area

*   The **Radios on Map** area

The **Maps in Use** area provides the ability to add the desired maps to the **Map** menu. The area provides the following elements:

Google Maps

Allows to use Google Maps. The check box activates the **Google API Key** field for typing Google API key to permit usage of Google maps. To obtain the key, contact your system administrator. When you select the check box and type the key, the **Google Maps** option will appear on the **Map** menu.

OpenStreetMap

Allows to use OpenStreetMap maps at a set URL address. The check box activates the **Address** field for typing the server address. The default server address is *http://b.tile.openstreetmap.org/*. If needed, you can set additional attributes in the *?<attribute 1>=<value 1>&<attribute 2>=<value 2>* format in the server address field. When you select the check box, the **OpenStreetMap** option will appear on the **Map** menu.

Important
SmartPTT does not support HTTP basic authentication, therefore, it must be disabled on a server.

NOTE

You can restore the default address by clearing the **Address** field, and then clicking **OK**.

OpenStreetMap (file)

Allows to use OpenStreetMap maps from files in formats OSM or TILESURL. When you select the check box, the **OpenStreetMap (file)** option will appear on the **Map** menu.

NOTE

When you click **OpenStreetMap (file)** on the **Map** menu, an explorer window for setting the path for a file with a map appears.

Baidu Maps

Allows to use Baidu Maps. The check box activates the **API Key** field for typing Baidu API key to permit usage of Baidu maps. To obtain the key, contact your system administrator. When you select the check box and type the key, the **Baidu Maps** option will appear on the **Map** menu.

Map in Polish Format

Allows to use maps from a file in MP format (polish format). When you select the check box, the **Map in Polish Format** option will appear on the **Map** menu.

NOTE

When you click **Map in Polish Format** on the **Map** menu, an explorer window for setting the path for a file with a map appears.

MapInfo

Allows to use MapInfo maps. When you select the check box, the **MapInfo** option will appear on the **Map** menu. For details, see MapInfo.

Raster Maps

Allows to use raster maps. When you select the check box, the **Raster Map** option will appear on the **Map** menu where you can create a new or open an existing map. For details, see Raster Maps.

Raster Maps from Database

Allows to use large raster offline maps from databases. When you select the check box, the **Raster Maps from Database** option will appear on the **Map** menu where you can create a new database for a map. For details, see Raster Maps From Database.

The **Radios on Map** area provides the ability to configure radios or WAVE users that are displayed on maps. The area provides the following elements:

Hide radios with outdated coordinates

Enables the mode that hides radios and WAVE users with outdated GPS coordinates. For information on outdated coordinates, see the section Positioning Systems.

Hide offline radios

Enables the mode that hides offline radios and WAVE users.

Information displayed on radio map label

Provides the ability to select the information which is displayed on radio or WAVE user labels:

- *Radio Name and Location Time* — displays radio names and time of receiving of their coordinates on a map.

- *Radio Name* — displays only radio names on a map.

- *None* — displays only radio icons on a map without any information.

> **NOTE**
>
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

Radio icon size

Provides the ability to change size of radio or WAVE user icons on a map. You can select *16x16* pixels and *24x24* pixels.

4.2 Configuring Maps in Use

Follow the procedure to configure maps in use and add the desired maps to the **Map** menu.

Prerequisites:

- Obtain a valid API key for Google or Baidu maps for using Google or Baidu maps. To obtain the key, contact your system administrator.

- Obtain URL address with OpenStreetMap maps for using OpenStreetMap maps. To obtain the address, contact your system administrator.

Procedure:

1. On the menu bar, click **Map** → **Map Settings**.
   The **Map Settings** window appears.

   In the **Maps in Use** area, select the desired maps:

To allow using of Google maps,	perform the following actions: 1. Select the **Google Maps** check box. 2. In the **Google API Key** field, type the API key for Google maps.
To allow using of OpenStreetMap maps located on a server,	perform the following actions: 1. Select the **OpenStreetMap** check box. 2. In the **Address** field, type the map server address.
To allow using of OpenStreetMap from files,	select the **OpenStreetMap (file)** check box.
To allow using of Baidu maps,	perform the following actions: 1. Select the **Baidu Maps** check box. 2. In the **Baidu API Key** field, type the API key for Baidu maps.
To allow using of maps in polish format,	select the **Maps in Polish Format** check box.

To allow using of MapInfo maps,	select the **MapInfo** check box.
To allow using of raster maps,	select the **Raster Maps** check box.
To allow using of maps from databases,	select the **Maps from Database** check box.

2. Click **OK** to save changes and close the window.

4.3 Configuring Map Settings

Follow the procedure to configure the settings of showing radios or WAVE users on a map.

Procedure:

1. On the menu bar, click **Map → Map Settings**.
    The **Map Settings** window appears.

    In the **Radios on Map** field, set the desired settings of showing radios:

| To hide radios with outdated coordinates, | select the **Hide radios with outdated coordinates** check box. |
| To hide offline radios, | select the **Hide offline radios** check box. |

2. From the **Information displayed on Radio Map Label** list, select the information that is displayed on the radio label:

To display radio name and time of received coordinates,	select *Radio Name and Location Time*.
To display only radio name,	select *Radio Name*.
To display only radio icons,	select *None*.

3. From the **Radio icon size** list, select the desired size for radio icons on a map:

| To set the icon size to 16x16 pixels, | select *16x16*. |
| To set the icon size to 24x24 pixels, | select *24x24*. |

4. Click **OK** to save changes and close the window.

4.4 MapInfo

To set a MapInfo map for SmartPTT Dispatcher, expand the **Map** menu on the menu bar and click **MapInfo → New Map**.

> **NOTE**
> Map must be activated in the settings. For details, see Map Settings.

In the **Map Settings** window click **Add** and in the window that appears select a map layer – a file in the TAB format.You can add multiple TAB files and determine the drawing order of the layers using the arrows on the right. To delete a layer, select the TAB file and click **Delete**.
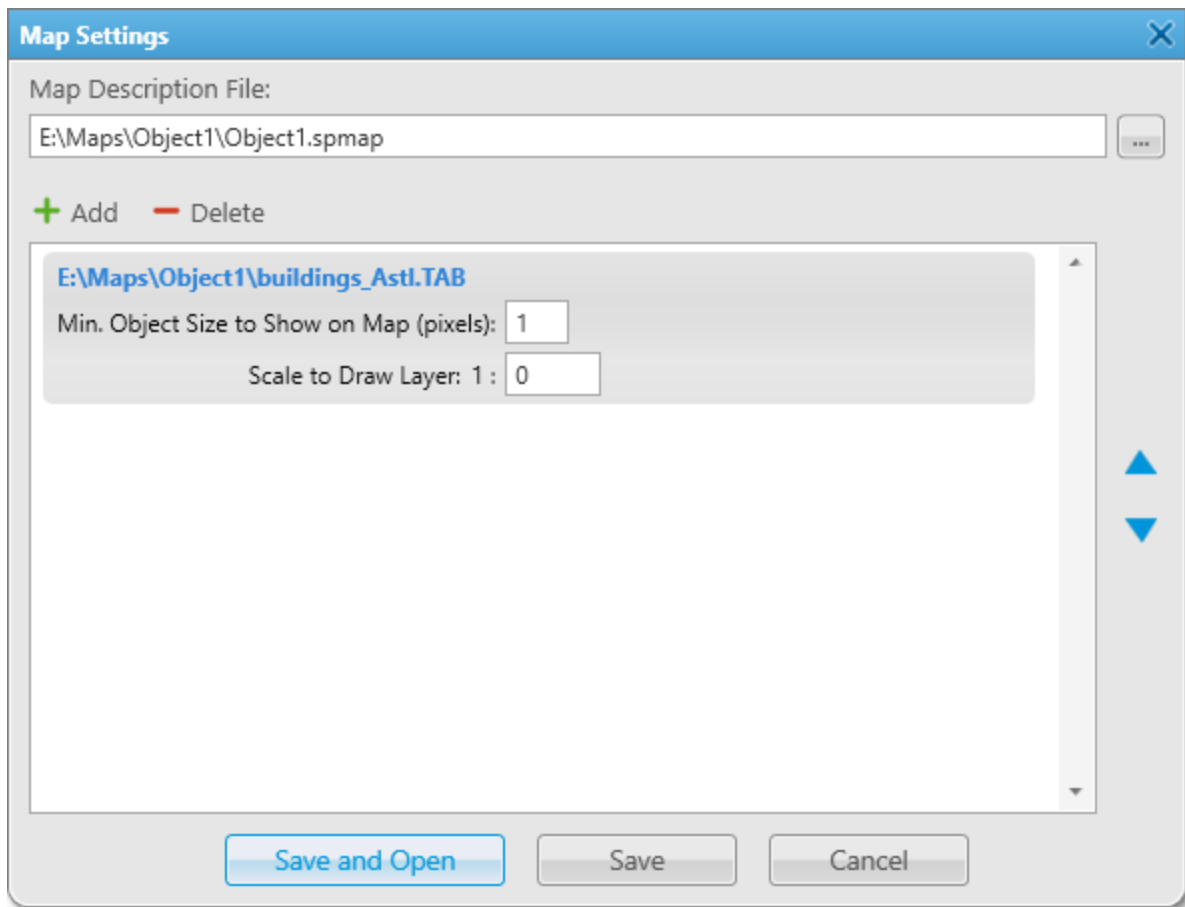
Map Description File

A path to the map file.

Min. Object Size to Show on Map (pixels)

Minimum size of the object displayed on a map in pixels. Affects the detail level of the displayed map.

Scale to Draw Layer: 1

Scale factor for a layer. The layer objects will not appear on the map when you are zoomed in or out beyond the specified scale.

Save

Saves changes. The file will be saved in the .spmap format.

Save and Open

Saves changes and open the map.

To open a MapInfo map, expand the **Map** menu on the menu bar and click **MapInfo → Open Map**. In the window that appears select a file in the .spmap or .ttkgp format. You can create a map in the .ttkgp format using the TatukGIS Viewer free version (http://www.tatukgis.com/Products/EditorViewer/Editions/Viewer.aspx).

4.5 Raster Map

To open a raster map, expand the **Map** menu on the menu bar of SmartPTT Dispatcher and click **Raster maps →
Open map**. In the window that appears select the file in the .map format.

To configure raster map settings, expand the **Map** menu on the menu bar of the SmartPTT Dispatcher window and
click **Raster Map → New Map**. The configuration window is displayed for creating geographic raster maps based on
an image.

> **NOTE**
>
> Map must be activated in the settings. For details, see Map Settings.

To create a map, select the map image using the browse button (⋯).

On the selected map image mark reference points (crossroads, places of interest, etc.) with the help of Google Earth
and calculate their coordinates. Coordinates are calculated in the following way:

*Longitude and Latitude = Degree + ((Minute * 60) + Second) / 3600* (this is a conversion from degrees, minutes and
seconds into normal values), where X and Y are corresponding coordinates (in pixels) on the image.

The longitude corresponds to the horizontal coordinate (X) and the latitude corresponds to the vertical coordinate
(Y). The longitude value can range from -180 degrees (the most distant longitude to the west from the Greenwich

Meridian set to 0) to +180 degrees (the most distant longitude to the east from the Greenwich Meridian). In fact - 180 degrees and +180 degrees are the same longitude. The latitude value can range from -90 degrees (the South Pole) to +90 degrees (the North Pole).

Longitude and Latitude coordinates, already converted into normal values and corresponding to the radio or WAVE user current locations, are also shown in the radio or the WAVE user Call Window.

You need four points. Point selection criteria are:

- Point 1 is located as close as possible to the top left image corner

- Point 2 is located as close as possible to the top right image corner

- Point 3 is located as close as possible to the bottom left image corner

- Point 4 is located as close as possible to the bottom right image corner
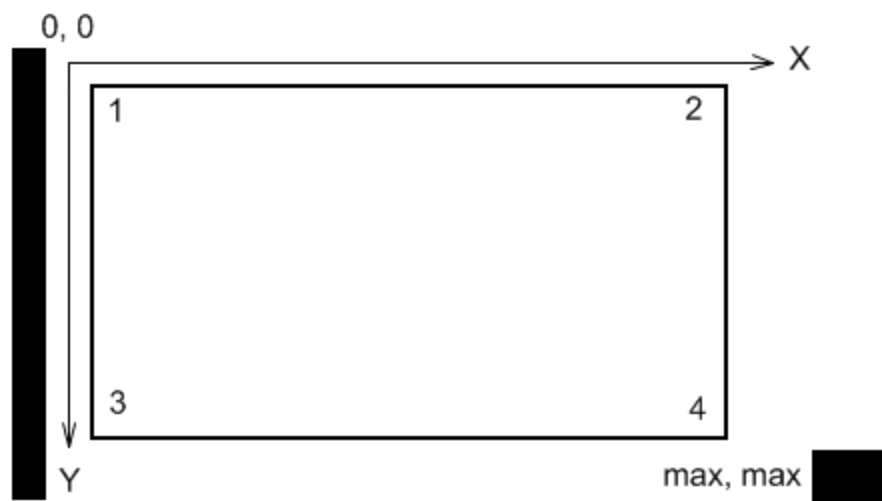
After all coordinates are entered, click **Finish**. In the window that appears set the raster map name and click **Save**.

To edit or check object locations in the created raster map, click **Open**. Locate the raster map in the window which is displayed.

> **NOTE**
> The created raster map files and the image map file must be in the same folder.

4.6 Raster Maps From Database

SmartPTT Dispatcher allows you to work with large raster offline maps with a size of more than 5000x5000 pixels. The functionality is used for displaying SmartPTT system objects located at a long distance from each other. This is achieved by dividing the original raster image into pieces and storing them in the database.

To create a raster map database, send your query to our technical support service and attach the raster map image in the .jpeg format with the list of geographical positions on the map (e.g., in the .txt or .map format).

Geographical positions are necessary to anchor image points to the geographical coordinates. The list of geographical positions must contain four points at the corners of the map. In response to your request our technical support specialist will provide you the database backup of the map in the .bak format.

> **NOTE**
>
> If the attachment(s) size exceeds the limit of 50 MB, split the file to several small files using the archiver or file manager, or upload it to the file hosting service. In the latter case include a link to the file in your query message.

Then restore the database from the received backup. For details, see Restore Dispatcher Settings.

After the database is restored, expand the **Map** menu on the menu bar and click **Raster Map From Database** → **Settings**.

> **NOTE**
>
> Map must be activated in the settings. For details, see Map Settings.

Click **Scan Databases** in the window that appears, and you will see a list of all available maps stored in the databases of the selected server. For details, see Database.
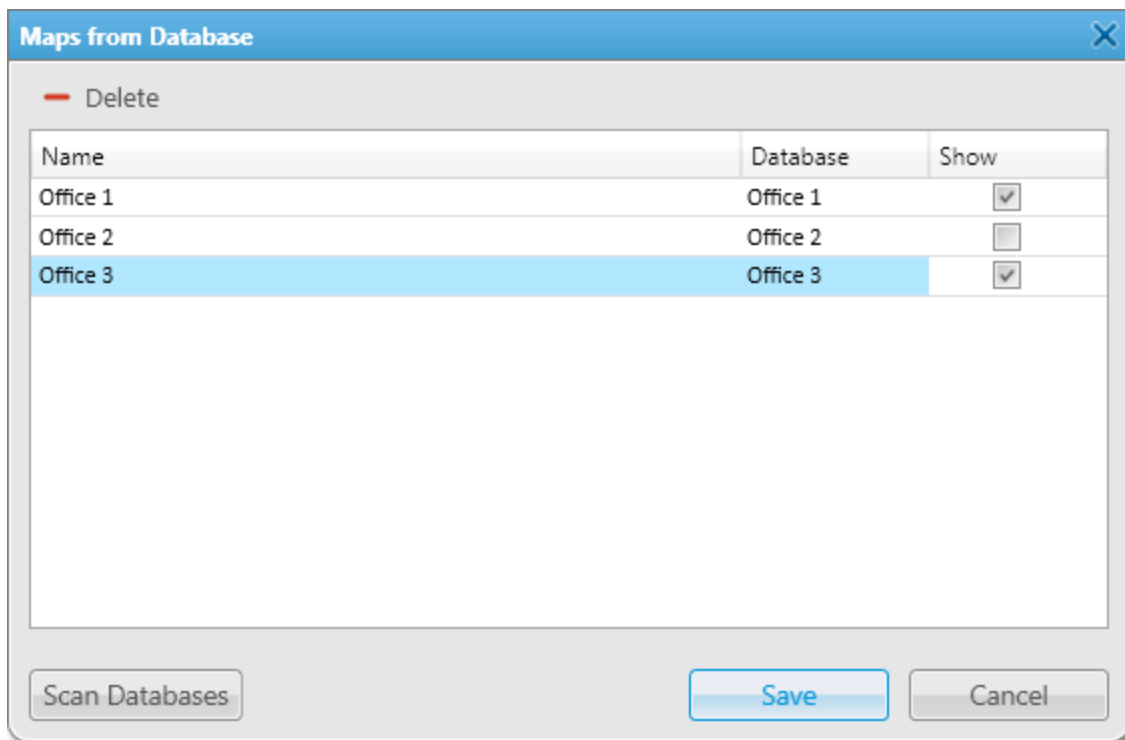
Name

Name of the map stored in the database. To change the name of the map, double-click the name and type a new name.

Database

Name of the database.

Show

If the check box is selected, the map is available in the **Map** menu. To open the map, expand the **Map** menu and select the desired map under **Maps From Database**.

To remove the map from the list, select the map and click **Delete**. To save your changes, click **Save**. If you want to undo the last changes, click **Cancel**.

4.7 Indoor Tracking

Big organizations with huge premises require constant control over their employees' displacement inside buildings. For this purpose Indoor Tracking system was implemented. Indoor Tracking system allows getting data from special beacons and transmitting it to SmartPTT Dispatcher or any other client application using API. Contact our technical support (http://support.smartptt.com/hc/en-us) for SmartPTT Client API documentation.

Currently, SmartPTT system supports the following technologies and products:

- **iBeacon technology:** With the use of MOTOTRBO radios with the firmware version 2.6 and above and the beacons that support iBeacon technology

- **Blufi option boards (RF800):** With special beacons (Connect-RTLS RF800)

- **Kilchherr option boards (K-TERM 44):** With special beacons (K-TERM 70IC Beacon Transmitter)

> **NOTE**
>
> The **Indoor Tracking** feature is available only for MOTOTRBO radios with the firmware version 2.6 and above or for radios with special option boards (see above). Also, it is necessary to configure special settings in SmartPTT Radioserver Configurator and SmartPTT Dispatcher. The desired settings for SmartPTT Radioserver are described in the **Indoor Tracking** section of the SmartPTT Radioserver Configurator help file.

> **NOTE**
>
> If the user authorization service is activated, the name of the currently authorized user is displayed next to the radio name in the parentheses. For details, see General Settings.

To enable Indoor support for a radio in SmartPTT Dispatcher, open the Properties window of the radio and in the **Location** tab select **Indoor Tracking**. For details, see Radio Location Properties.
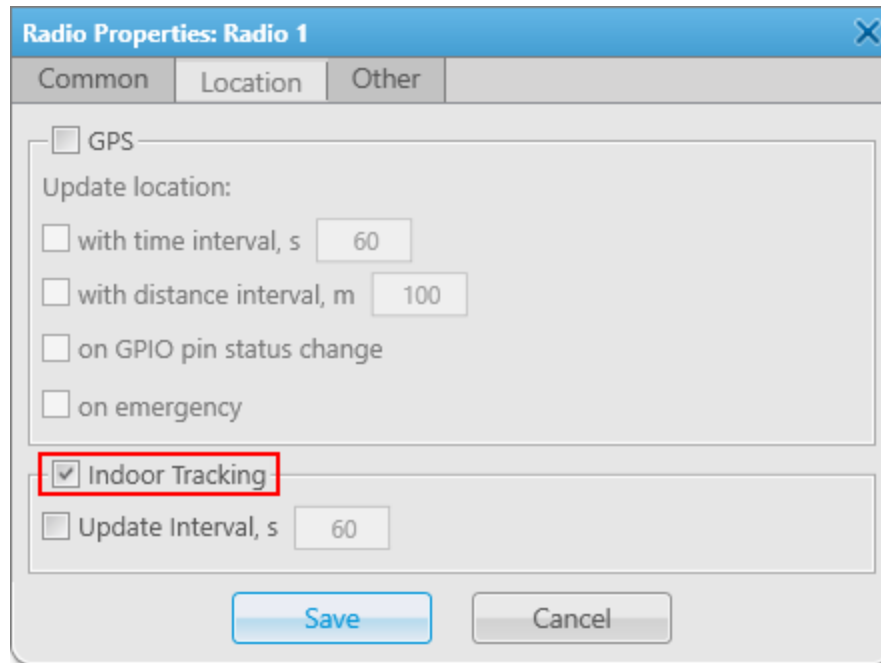
> **NOTE**
> If you use the *Motorola* source (iBeacon technology), the **Update Interval** check box must be selected and specified together with the **Indoor Tracking** check box for enabling Indoor support for a radio.

To create a building plan, expand the **Map** menu on the menu bar of the SmartPTT Dispatcher window and click **Indoor Tracking → New Building Map**. In the **Floor Plan** window you can create a plan of the building floor or of a multi-store building.
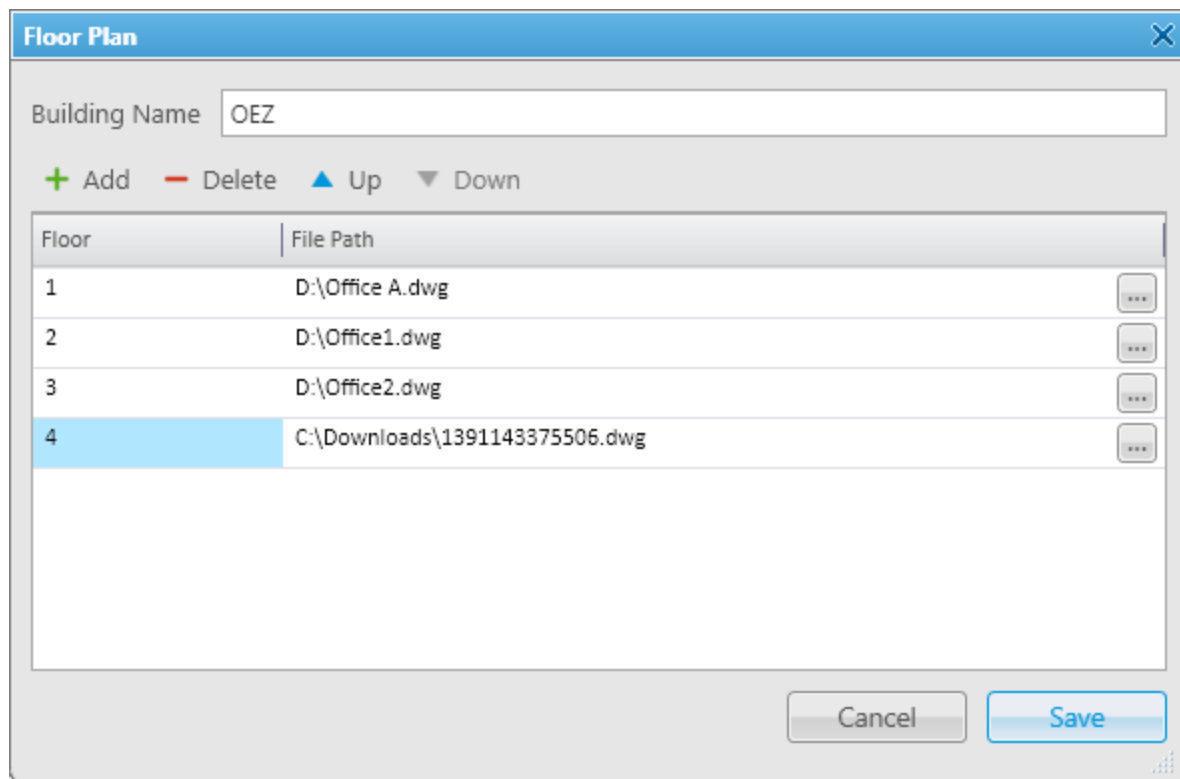
Building Name

A name of the building plan.

To add a floor of a building, click the **Add** button. To remove a floor of a building, select it from the list and click **Delete**. To change the floor order inside the building, use the **Up** and **Down** buttons.

Floor

A name or an ordinal number of a floor in a building. To change the name of the floor, click the old name in the **Floor** field and type a new value.

File Path

A path to the floor plan file. You can use a floor plan in the .dwg format or a raster image. To attach a plan to the floor, click the ⋯ button and select the desired file.

> **NOTE**
> .dwg (drawing) is a binary file format used for storing two and three dimensional design data and metadata. It is the native format for several CAD packages including nanoCAD, AutoCAD, IntelliCAD.

Save

You can save the floor or the building plan changes to the .splanx (archive) format.

To open a building plan, expand the **Map** menu on the menu bar of the SmartPTT Dispatcher window and click **Indoor Tracking → Open Indoor Map**. To control more than one building at the same time in SmartPTT Dispatcher, you can open several **Indoor Tracking** panels.

Building Floor Plan

Save

You can save the building plan changes to a .splanx file.

Save As

You can save a copy of the building plan with another name.

View Mode (2D or 3D)

A mapping of the building plan in a two- or three-dimensional form. This feature is available only for floor plans in the .dwg format.

Add Beacon

You can add a beacon to the building plan.

For that, in the **Beacon Settings** window specify the beacon number and name in the corresponding fields and click **OK**. The beacon icon (📶) appears instead of the mouse cursor. Place it on the map where the beacon is located and left click. If you use the *Motorola* source, specify the number of the beacon in the **Beacon Number** field in the *Major.Minor* format, where the *Major* value is separated from the *Minor* value by a dot. *Major* stands for the group number of the beacons and *Minor* stands for the individual number of the beacon in the group.

If you use the *BluFi* or *Kilchherr* source, specify the **Beacon ID**s in the **Beacon Number** field. If the beacon name is not specified in the **Beacon Name** field, the value from the **Beacon Number** field will be displayed as the beacon name on the building plan. To remove the beacon from the plan, double-click the beacon and in the window that appears click **Delete**.

Geofences

Allows you to unite the existing beacons to control the radios moving about the building. These geofences are used in Indoor positioning rules.

Routes

Allows you to create routes for radios. These routes are used in Indoor positioning rules.

Edit Plan

Opens the **Floor Plan** window that allows you to change the floor name, the floor order inside the building, or the floor plan file.

Grid Size

The grid size of the building plan. For building plans based on raster images, the **Grid Size** option is not available.

Label Size

The size of the radio and beacon labels displayed on the building plan.

Beacons

Select a color for a beacon label.

Radios

Select a color for a radio label.

Radios on Plan

A list of radios which support the Indoor Tracking feature. Select the check box, to display the radio labels on the building plan.

When the alarm is registered, the radio, that sent the alarm, will center on the building plan, and a red frame will appear around it (if Indoor-positioning support is enabled). Other radios in the alarm zone and radios added to the category for emergency will be displayed on the plan too. Radios not in the alarm zone will be hidden. After resolving the emergency situation, the radios hidden during the alarm will not be automatically displayed.

For information on the category for emergency, see Emergencies.

Radio Tracks

Here you can record tracks of radios and watch them in real time, or check old records. To watch the radio move about the building, click **Add Track**. In the window that appears specify the following parameters:

Source

The radioserver whose data will be used for building a track. If the list is empty, check that Event Log is activated in SmartPTT Radioserver Configurator.

Radio

Radio ID or name.

User

User name.

Color

The color of the future radio track.

Start Date

Start time and date of the track record.

End Date

End time and date of the track record. To watch the radio moving in real time, select **Update in real time**.

Show All

Shows tracks of all the radios from the **Radios on Plan** list. You can see details of each track. To open **Track details**, click **Track details (ⓘ)**:
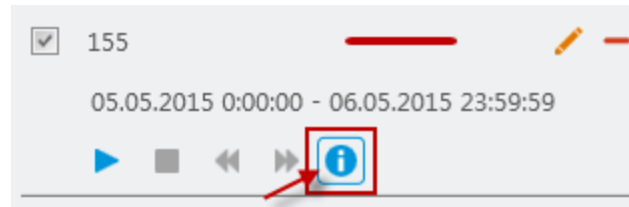
Clear All

Removes all the track records displayed at the moment.

The following buttons allow to control the way the building plan is displayed:

 Zooming up the marked area of the building plan. Click the button, then left-click the building plan and mark the necessary area.

 Zooming up or zooming out the entire building plan. To zoom in, click the button and withholding the button pressed move the mouse pointer up. To zoom out – move the mouse pointer down. Also, use the wheel button to change the scale of the building plan.

 Moving the building plan. Click the button and withholding the button pressed relocate the plan.

 Fits the scale of the building plan to the size of the **Indoor Tracking Overview Map** panel.

The following object is available for three-dimensional building plans only. It allows to change an angle of the displayed building plan.

4.8 Coverage Map

Coverage maps give you information about signal strength (RSSI) of a particular radio in a particular place.

> **Important**
>
> A coverage map is available to the Administrator, or to operators with the corresponding permission. For details, see Operators.

To build a coverage map for a radio, make sure that it has GPS enabled, and there is GPS data in the database. For details, see Radio Location Properties.

> **Important**
>
> A radio that uses the LIP protocol to transmit location data on the current channel can not be used as a source of information about RSSI when building a coverage map. For information on protocol types, see "Location" in *SmartPTT Installation and Configuration Guide.*

To build a coverage map, click **Map → Coverage map → Show**.
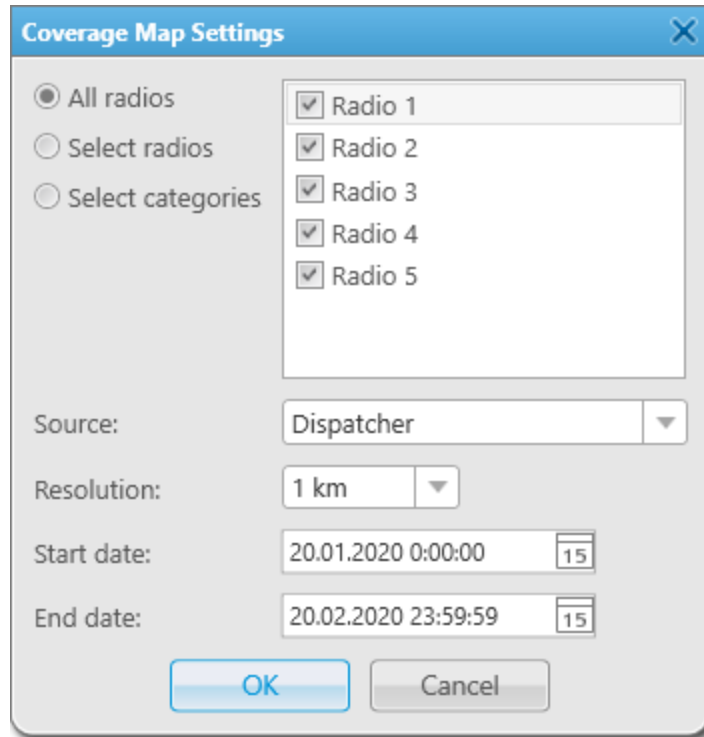
All Radios

Select this option to build a coverage map for all the radios on the list.

Select radios

Select this option to build a coverage map for the selected radios only.

Select categories

Select this option to build a coverage map for all the radios of the selected category.

Source

Defines the source, whose database will be used for drawing the track. If *Dispatcher* is selected, the data is taken from the local database. If a radioserver is selected, the data is taken from the database of the chosen radioserver.

Resolution

Defines a radius for checking signal strength. The system of units selected in **Settings (⚙) → Positioning systems → System of Units** will be applied to this parameter.

Example of Coverage Map with Different Resolutions
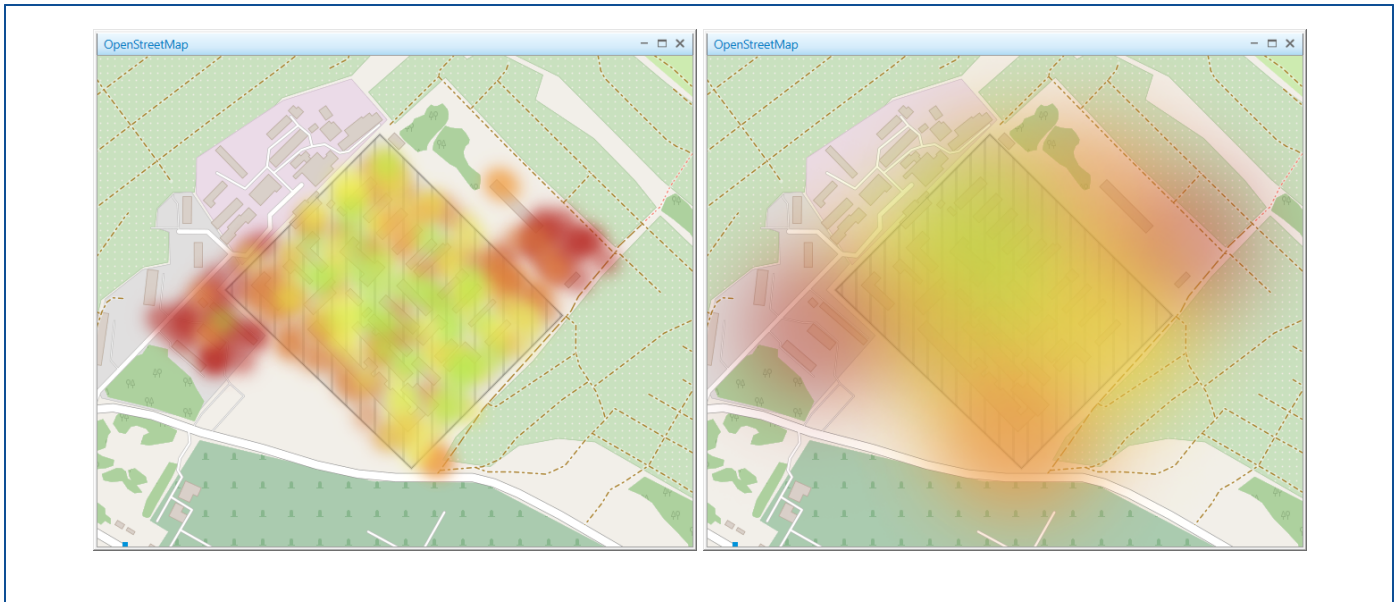
Start date/End date

Determines over which period the data will be used for a map.

Example
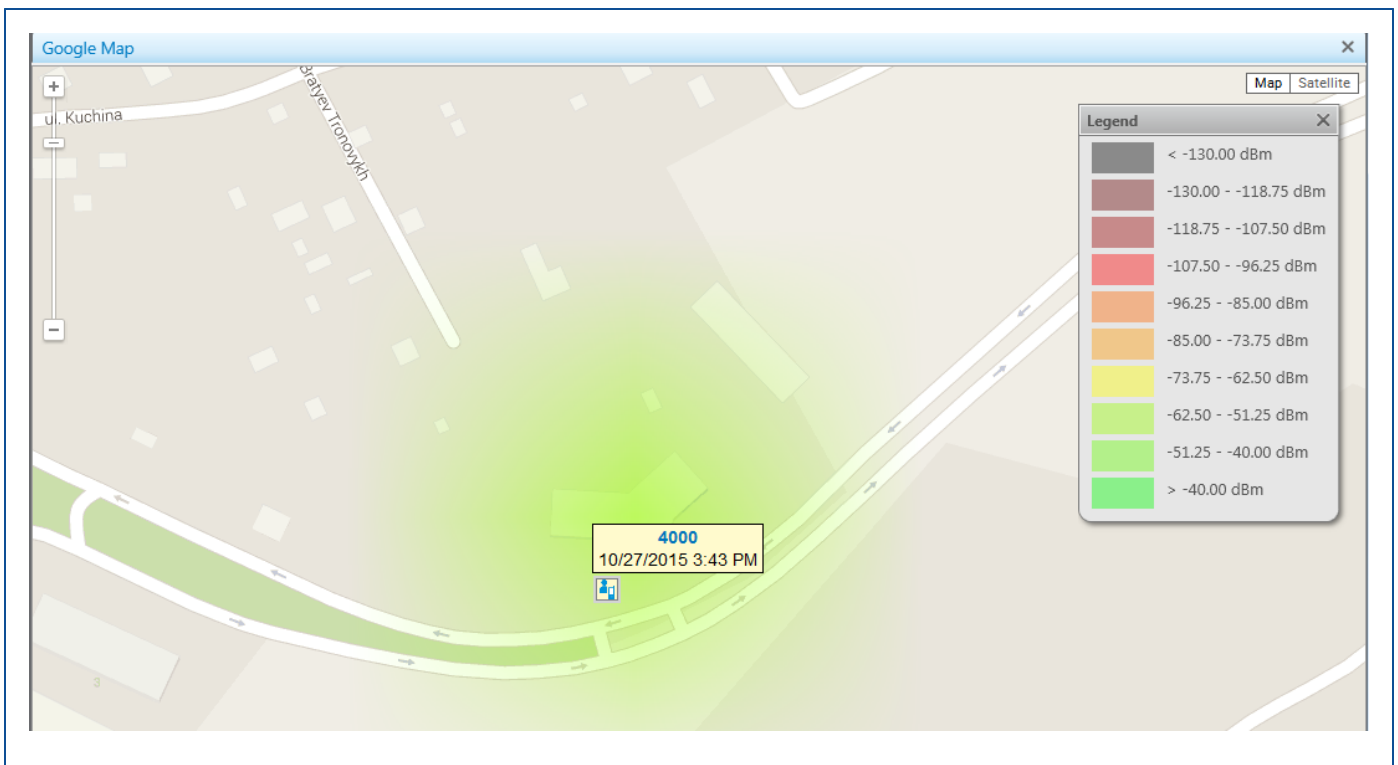
Coverage Map Settings

Window identifies the colors used for different RSSI ranges in a coverage map.

You can adjust the legend on your own, change colors for different RSSI ranges, add and delete RSSI ranges. To do it, click **Map → Coverage map → RSSI ranges**.
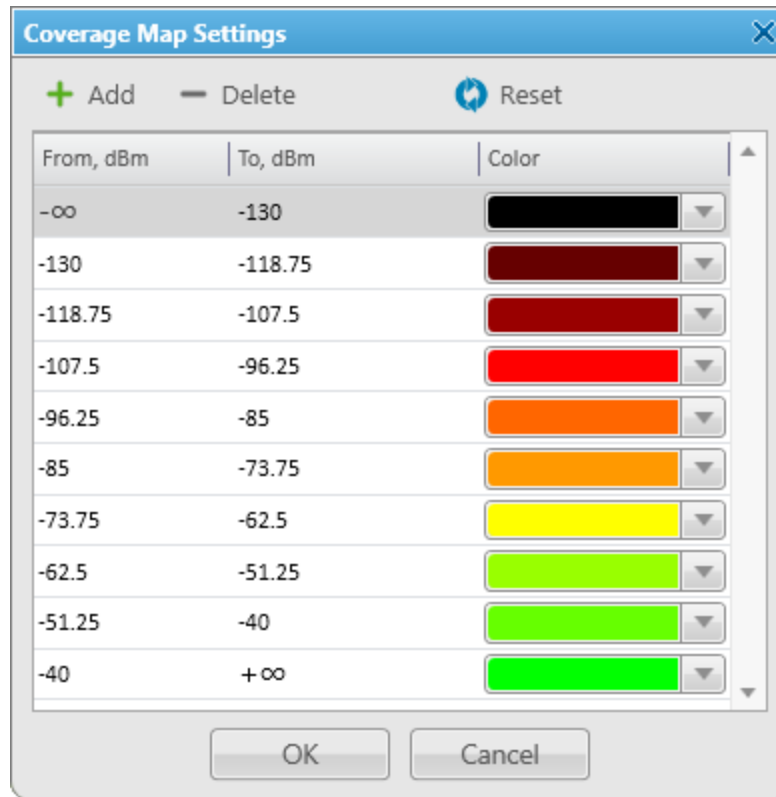
To clean a map, select **Map → Coverage map → Hide**.

4.9 Map Control Panel

On a map in SmartPTT Dispatcher you can see the control panel in the right part of the screen. The panel provides features to manage displaying of radios, WAVE users, and other objects on maps. For details, see Radios. On the panel users can perform the following actions:

- Configure displaying of radios and WAVE users on a map.

- Display information on radios and WAVE users movements on a map for a period of time by using tracks.

- Animate tracks of radios and WAVE users.

- Display important objects on a map by adding points of interest.

- Display location of SCADA points and monitor their state.

- Display location of cameras and watch live video.

- Configure geofences for radios.

- Configure routes for radios.

Radios are displayed on map as markers. Markers consists of the following elements:

- Radio icon — icon image that is set in the radio settings. For details, see Common Radio Properties.

> **NOTE**
> If a status is assigned to a radio, a frame of status color appears around the radio icon. For information on radio statuses, see <u>Statuses</u>.

- Radio label — contains radio name and/or time of receiving its coordinates. Radio labels with valid coordinates are colored on a map in yellow. Radio labels with outdated coordinates are colored on a map in gray. Radio label can be hidden. For information on displaying radio labels, see <u>Map Settings</u>.
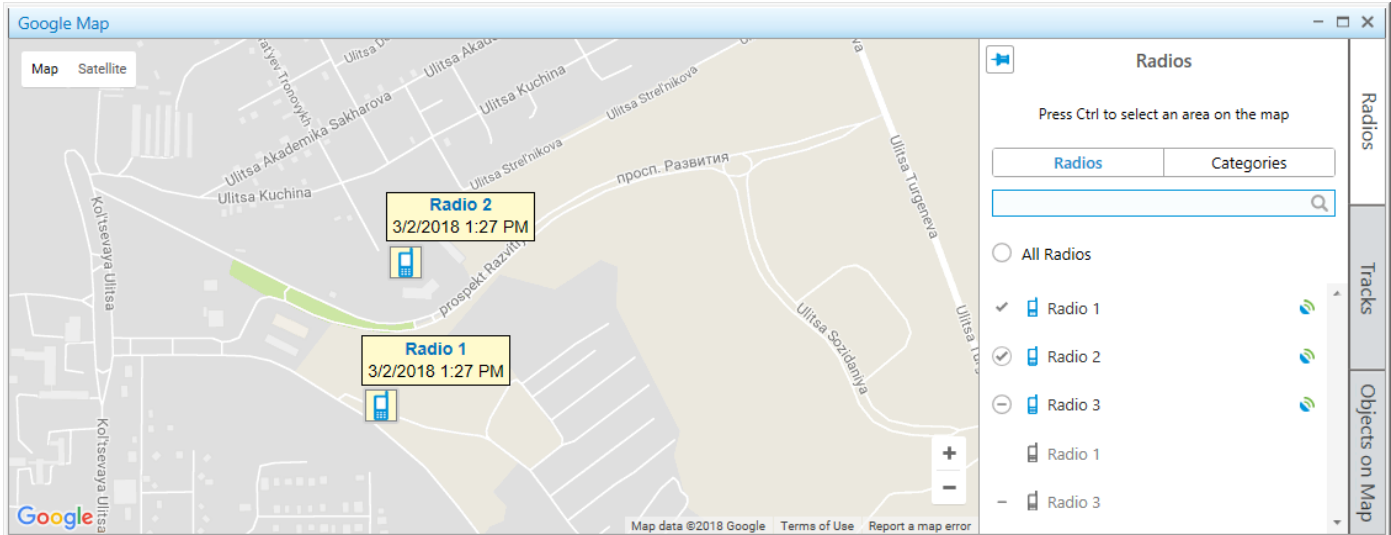
By default, the expanded control panel is not pinned, and it automatically collapses by clicking on a map. The Pin ( ) button pins the expanded panel, and in this state you can collapse it only by clicking **Radios**, **Tracks**, or **Objects on Map** buttons.

For information on using the control panel, see the sections below.

4.9.1 Radios on Map

The **Radios** panel displays the list of mobile and portable radios that provide their coordinates to the SmartPTT dispatch system. The user of the dispatch console may operate with the limited amount of radios.

You can open the panel by clicking **Radios** in the right part of the open map.
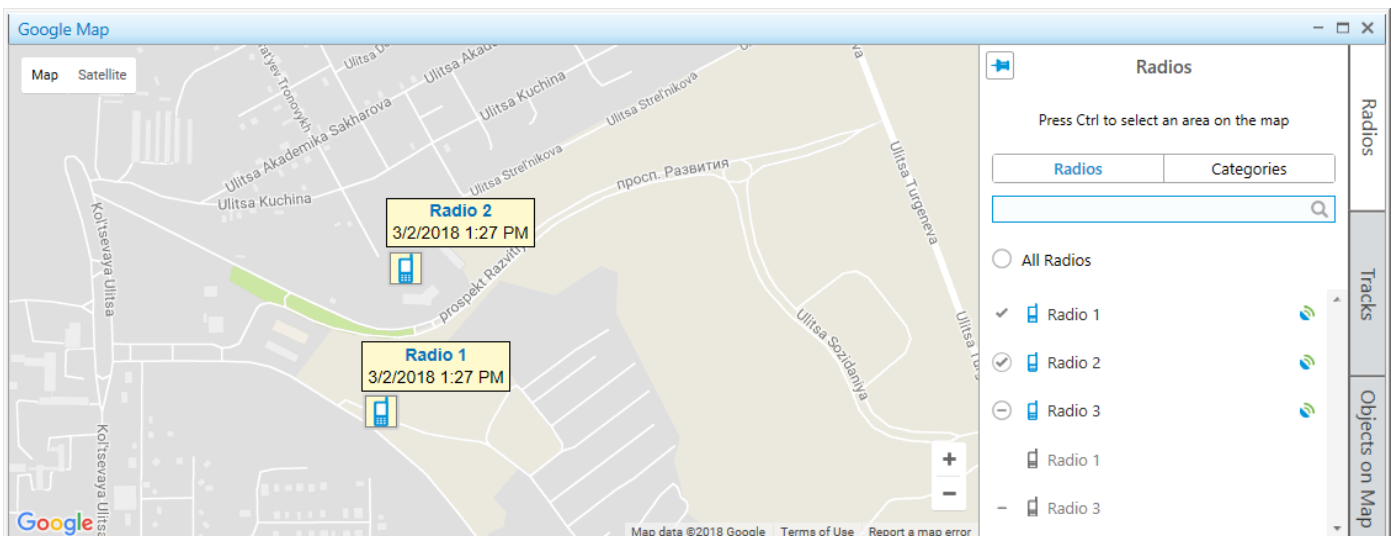
The **Radios** panel consists of two tabs:

- **Radios** displays a list of radios

- **Categories** displays a list of radio categories and list of radios for every category

Both tabs have the following elements:

Search field

You can search a radio in the list of radios by typing its name or ID.

All Radios

You can use the element to control displaying of all radios on a map.

Radio

Shows the name of the radio that either provides its GNSS coordinates to SmartPTT or which location is set by the dispatch console user. Radios can be in one of two states:

- Online ( )

- Offline ( )

Valid coordinates ( )

Indicates that GPS coordinates of a radio are valid. You can see it to the right of the radio name.

Outdated coordinates ( )

Indicates that GPS coordinates of a radio are outdated or missing. You can see it to the right of the radio name.

> **NOTE**
> Validity period of GPS coordinates is determined by the **Validity of GPS coordinates** parameter in Positioning Systems. For details, see Positioning Systems.

Indicators of radio state

Indicators determine radio displaying on a map. You can use indicators to change displaying of certain radios, radio categories (in the **Categories** tab), or all radios (the **All Radios** element).

In the **Radios** panel, indicators have the following states:

Fixed on map ( )

A radio (or a radio category) is fixed on a map and it does not hide even if the radio goes offline or its coordinates become outdated.

Hidden on map ( )

A radio (or a radio category) is hidden on a map and does not appear on it even if the radio becomes online or sends its valid coordinates.

On map ( )

A radio is displayed on a map, but is hidden when the radio goes offline or its coordinates become outdated. The indicator can be set by right-clicking when the following conditions are met:

- Radio is online, and the **Hide offline radios** check box is cleared in the **Map Settings** window. For details, see Map Settings.

- Database has up-to-date location of the radio, and the **Hide radios with outdated coordinates** check box is cleared in the **Map Settings** window.

Not on map (➖)

A radio is hidden on a map because its coordinates outdated or it is offline. When the radio becomes online or sends its valid coordinates, it appears on a map.

The indicator can be set by right-clicking when the following conditions are met:

- Radio is offline, and the **Hide offline radios** check box is selected in the **Map Settings** window.

- Database has only outdated location of the radio, and the **Hide radios with outdated coordinates** check box is selected in the **Map Settings** window.

Mixed state (◯)

The indicator appears in the following conditions:

- After right-clicking the **All Radios** element to restore all radios to the states (*on map* or *not on map*) they were in before clicking the indicators.

- Next to the radio categories names when radios in the categories are in mixed states.

On any open map, users can select an area by pressing Ctrl and left mouse button to find radios in the area. The **Radios** panel with radios in the selected area opens. You can cancel the selection, by clicking the **Cancel Selection** button.

For details, see Displaying Radios in Area.

4.9.2 Displaying Radios

Follow the procedure to configure displaying radios on a map.

Prerequisites:

Determine the radios to display or hide on a map.

> **NOTE**
> For information on all radio state indicators and other elements of the **Radios** panel, see Radios on Map.

Procedure:

1. In the right part of the open map, click **Radios**.
   The **Radios** panel opens.

2. *(Optional)* Click Pin (📌) to pin the panel.

3. On the **Radios** panel, select the **Radios** tab.

4. Configure radios displaying on a map:

To display or hide all radios,	click the indicator next to **All Radios**, until the desired state appears.
To display or hide the radio,	click the indicator next to the radio name, until the desired state appears.
To cancel the changes of displaying the radio,	right-click the indicator next to the radio name.

To cancel the changes of displaying all radios,	right-click the indicator next to **All Radios**. The indicator changes to **Mixed State (○)**.

> **NOTE**
> Radios are hidden or displayed on a map depending on the map settings. For details, see Map Settings.

4.9.3 Displaying Radio Categories

Follow the procedure to configure displaying radio categories on a map.

Prerequisites:

Determine the radio categories to display or hide on a map.

> **NOTE**
> For information on all radio state indicators and other elements of the **Radios** panel, see Radios on Map.

Procedure:

1. In the right part of the open map, click **Radios**.
   The **Radios** panel opens.

2. *(Optional)* Click Pin (⚑) to pin the panel.

3. On the **Radios** panel, select the **Categories** tab.

4. Configure radio categories displaying on a map:

To display or hide all radios and all categories,	click the indicator next to **All Radios**, until the desired state appears.
To display or hide radios of the category,	click the indicator next to the category name, until the desired state appears.
To display or hide the radio in the desired category,	select the desired category, and then click the indicator next to the radio name, until the desired state appears.
To cancel the changes of displaying the radio,	right-click the indicator next to the radio name.
To cancel the changes of displaying all radios,	right-click the indicator next to **All Radios**. The indicator changes to **Mixed State (○)**.

> **NOTE**
> Radios are hidden or displayed on a map depending on the map settings. For details, see Map Settings.

4.9.4 Displaying Radios in Area

Follow the procedure to display the list of radios located on the selected area of a map.

Prerequisites:

Determine the desired area on a map, where you want to see radios.

Procedure:

Press and hold Ctrl and with the left button of mouse select the desired area.
In the **Radios** panel, the list of radios which are in the selected area appears.

Postrequisites:

To cancel the selection and display all radios in the list, click the **Cancel selection** button.

4.9.5 Setting Radio Location

Follow the procedure to set the radio location on a map.

Prerequisites:

Determine the radio for which you want to set the location.

Procedure:

1. Open the **Set Location** panel in one of the following ways:

   • If the desired map is open, in the **Radios** panel in the right part of the screen, right-click the desired radio, and then select **Set Locations**.

   • If the desired map is closed, in the Actions Menu or Call Window of the radio, click **Set Locations** and select the map.
     The **Set Location** panel opens.
     For information on the Actions or Call Window of a radio, see Radio Actions Menu and Radio Call Window.

2. Set the radio location in one of the following ways:

   • Click the desired place on a map.

   • In the **Set Location** panel, in the **Latitude** and **Longitude** fields, type the desired coordinates.

3. Click **Save** to save changes.
   The radio appears on a map.

Postrequisites:

To remove the radio from a map, in the Actions Menu or Call window of a radio, click **Remove from Map**.

4.9.6 Tracks

In the **Tracks** panel you can manage radios tracks, display them, and track radio movements on a map.

> **Important**
> To manage tracks, an operator needs to have the corresponding permission. For details, see Operators.

You can open the panel by clicking **Tracks** in the right part of the open map.

When you start working with a map, the following controls are available in the panel:

Add Track

Opens the **Track** panel for adding a new track on the map.

For details, see Track.

Clear Tracks

Deletes all tracks from the current map.

When at least one track is added in the **Tracks** panel, the track entry appears on the panel. A track entry contains the following elements and controls:

Radio name

Displays a name of a radio for which the track is shown.

Date and time of a track

Displays a period of a track, set in the **Track** panel when the track is added.

Color and thickness of a track

Displays a color and thickness of a track line, which are set in the **Track** panel when the track is added.

Track Details (🛈)

Opens the **Track Details** panel for the track animating.

For details, see Track Details.

Edit (✏)

Opens the **Track** panel for the track editing.

NOTE

If you edit a track with **30 minutes**, **1 hour** or **Today** period, the track will be changed for the set period according to the moment the editing is finished.

Delete (➖)

Deletes the track from a map and from the **Tracks** panel.

4.9.6.1 Track

In the **Track** panel you set parameters for showing a radio track on the current map.

You can open the panel by clicking the **Add Track** button in the **Tracks** panel. For details, see Tracks.
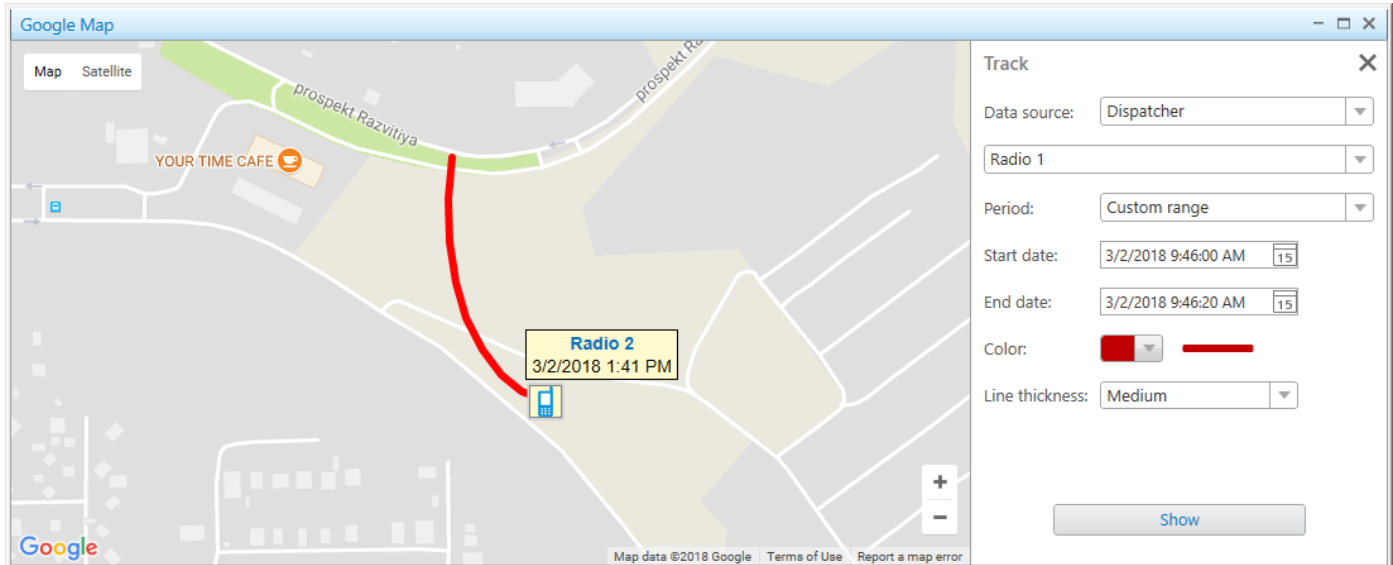
NOTE

For information on displaying a track on a map, see Displaying Tracks.

The **Track** panel provides the following elements:

Data source

Contains a list of available SmartPTT Dispatcher or radioserver databases to show a track of the selected radio.

Radios

A list that contains available radios to show a track. If the track is added from the Actions Menu of a radio, in the list of radios, the radio is selected automatically.

For information on radio Actions Menu, see Radio Actions Menu.

Period

In the list you can select a period of radio moving to show a track:

- The **30 minutes** period shows radio movement for the last 30 minutes.

- The **1 hour** period shows radio movement for the last hour.

- The **Several hours** period shows radio movement for the last several hours.

- The **Today** period shows radio movement for today, starting from 00:00:00 hours of the current day until the moment the track is shown.

- The **Custom range** period shows radio movement for the desired time period.

Start date and **End Date**

The fields appear when from the **Period** list the **Custom range** value is selected. You should enter the start and end dates of radio movement period. When you click ⬚, the calendar opens. In these fields you also may enter the desired time manually in the *hh:mm:ss* format.

Hours

The field appears when from the **Period** list the **Several hours** value is selected. You should enter the amount of hours.

Color

Provides a palette with track line colors. The example of the line with the selected color appears on the right.

Line thickness

Provides parameters of a track line thickness. The example of the line with the desired thickness appears above the list.
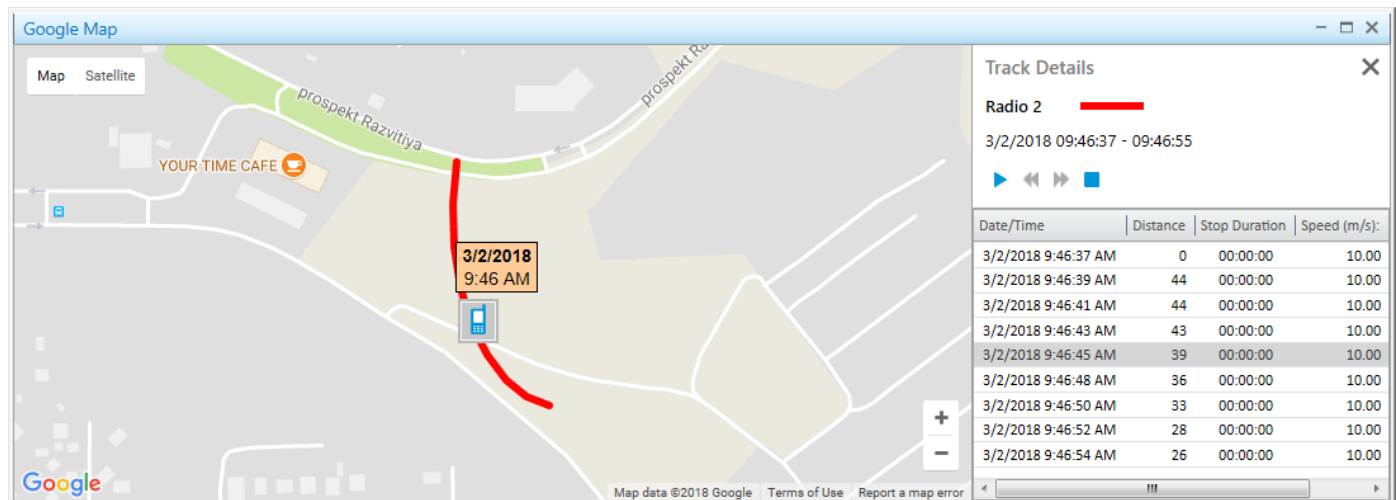
Show

Shows the track on the current map, and adds the track entry to the **Tracks** panel.

4.9.6.2 Track Details

In the **Track Details** panel you can get information on a track and animate it.

You can open the **Track Details** panel by clicking **Track Details (ⓘ)** of the track entry in the **Tracks** panel. For details, see Tracks.

NOTE
For information on track animating, see Animating Tracks.

The **Track Details** panel contains the following elements and controls:

Track name

Corresponds to the name of a radio for which the track is shown.

Track line color and thickness

Displays the track line color and thickness set in the **Track** panel when the track is added.

Date and time

Displays a track period set in the **Track** panel when the track is added.

Track playback controls

Controls that are used to playback track animation:

- **Start Playback (▶)** — starts the track animation.

- **Pause Playback (❚❚)** — pauses the track animation.

- **Stop Playback (■)** — stops the track animation.

- **Decrease speed (◀◀)** — decreases the track animation speed.

- **Increase speed (▶▶)** — increases the track animation speed.

> **NOTE**
> The system remembers the last track animation speed and uses it during next track animation.

Track details table

Contains the following columns:

- **Date and time** — displays date and time for each track point.

- **Distance** — displays the distance between the track points.

- **Stop duration** — displays the duration when the radio stops moving.

- **Speed** — displays the radio movement speed in the each track point.

- **Precision** — displays the coordinates precision.

You can double-click a table line to show a track on the map in the desired moment of time.

4.9.6.3 Displaying Tracks

Follow the procedure to display a radio track on a map.

Prerequisites:

- Ensure the operator has rights to manage tracks. For details, see Operators.

- Ensure that saving GPS locations in databases is turned on in the Positioning Systems.

> **NOTE**
> Track can be shown on map when the radio has a least one coordinate.

Procedure:

1. In the right part of the open map, click **Tracks**.
   The **Tracks** panel opens.

2. *(Optional)* Click Pin (⚑) to pin the panel.

3. On the **Tracks** panel, click **Add Track**.
   The **Track** panel opens.

4. From the **Data Source** list in the **Track** panel, select the database which is used for creating the track.

5.   From the **Radios** list, select the radio whose track is displayed.

6.   From the **Period** list, select the time period of the track.

  •   If from the **Period** list the *Several hours* value is selected, in the **Hours** field, enter the desired amount of
       hours.

  •   If from the **Period** list the *Custom range* is selected, in the **Start Date** and **End Date** fields, set the desired
       date and time.

7.   From the **Color** palette, select the track line color on a map.

8.   From the **Line Thickness** list, select the desired thickness of the track line.

9.   Click **Show** to display the track on a map.
     The track appears on the map, and the track entry appears in the **Tracks** panel.

Postrequisites:

  •   To edit the track, in the **Tracks** panel, select the desired track in the list, and click **Edit (✎)**.

  •   To remove a track, in the **Tracks** panel, select the desired track in the list, and click **Delete (━)**.

  •   To delete all tracks on the current map, in the **Tracks** panel, click **Clear Tracks**.

4.9.6.4 Animating Tracks

Follow the procedure to animate a radio track on a map.

Prerequisites:

Ensure the desired radio track is in the list of tracks.

Procedure:

1.   In the right part of the open map, click **Tracks**.
     The **Tracks** panel opens.

2.   *(Optional)* Click Pin (⚑) to pin the panel.

3.   Select from the tracks list the desired track, and click **Track Details (ⓘ)**.
     The **Track Details** panel opens.

4.   In the **Track Details** panel, click **Start Playback (▶)**.
     The track starts animating on a map. The button **Start Playback (▶)** changes to **Pause Playback (▋▋)**.

> **NOTE**
> You can control the animation speed of the track with the corresponding controls. For details, see Track Details.

5.   *(Optional)* To display the radio position at certain time, double-click the desired entry in the track details table.

Postrequisites:

To stop the track animation, click **Stop Playback (■)**.

4.9.7 Objects on Map

In the **Objects on Map** panel you can add the following elements to a map:

- Points of interest to mark important objects.

- Geofences to select areas.

- Routes to connect key points.

- Cameras that are used to provide the ability at any time from any location to watch what is happening on the object.

- SCADA points to display and monitor state of the points configured in the SCADA system.

> **NOTE**
> To interact with cameras and SCADA points, you must instal the corresponding licenses. For details, see Licenses. For SCADA points the SCADA module in SmartPTT Dispatcher settings must be activated.

You can open the panel by clicking **Objects on Map** in the right part of the open map.
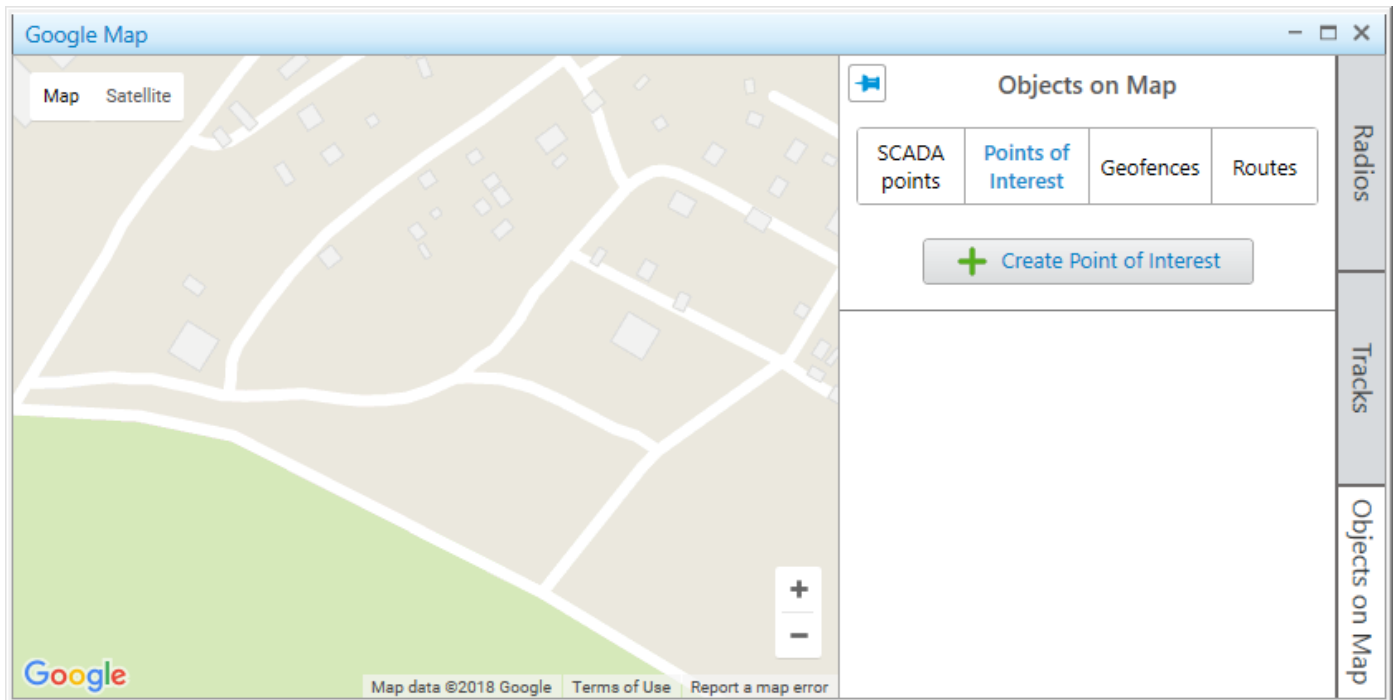
You can manage objects on maps in the corresponding tabs.

For details, see Points of Interest, Geofences, Routes, Cameras, and SCADA Points.

> **NOTE**
> The tabs with added points of interest, geofences, routes, cameras and SCADA points are the same for all maps.

4.9.7.1 Cameras

On the **Cameras** tab, you can add new or edit and delete existing camera markers.

To add a camera marker on a map, it must first be added and configured in the Avigilon video monitoring system. For details, see "Avigilon" in *SmartPTT Installation and Configuration Guide*.
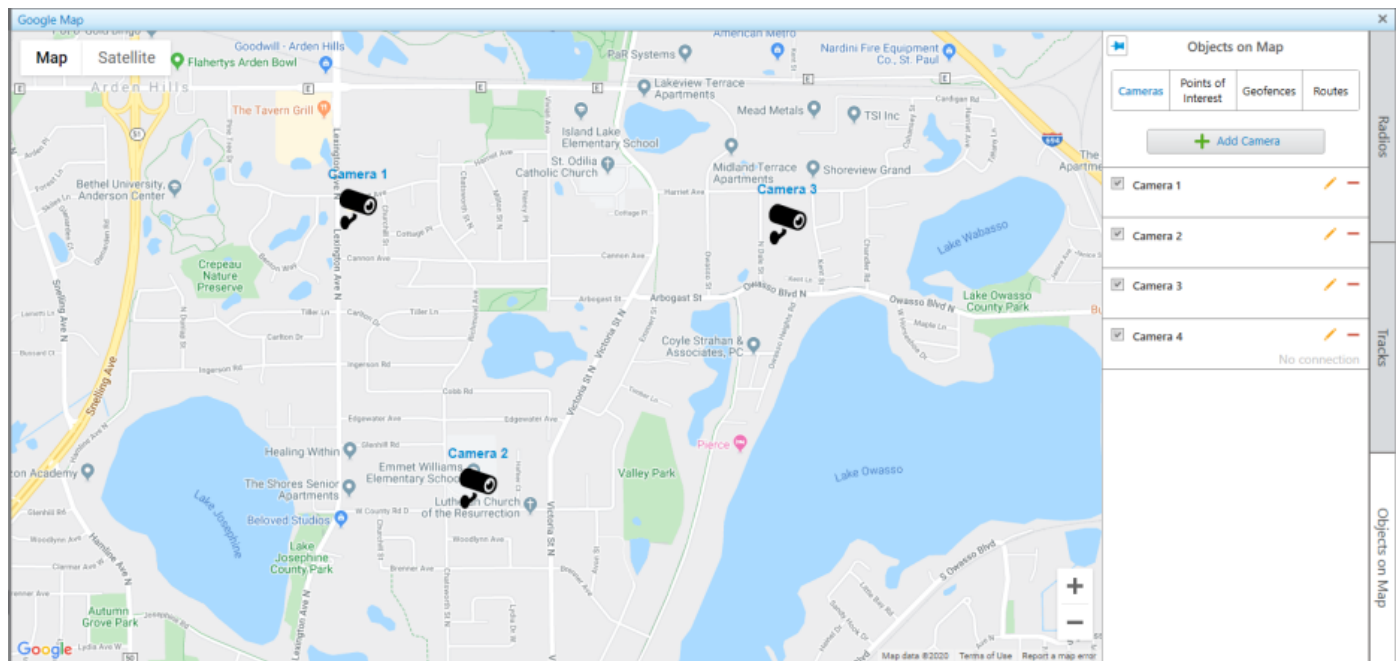
When you first start working with a map, only one control is available on the tab:

Add camera

Opens the **Camera** panel for adding a new camera marker on a map. For details, see Camera.

When at least one point has been added to the list of camera markers, the following elements and controls appear in the panel:

Show on Map

The check box responsible for showing or hiding the camera marker on a map.

> **NOTE**
> The window with live video is opened when clicking the desired camera marker on a map.

Camera Name

Camera name that is displayed on a map if the **Show name on map** check box is selected in the **Camera** panel. When clicking the camera name, a map is centered on the camera.

Edit (✏)

Opens the **Camera** panel where you can edit the camera marker settings.

Delete (➖)

Removes a camera from the list of cameras and from all maps in SmartPTT Dispatcher.

> **Important**
> The **Edit** and **Delete** buttons are displayed only if an operator has the **Manage cameras** right. For details, see Operator Window.

Status

   Displays the current status of a camera. In SmartPTT, two statuses are available for cameras:

   •   *Camera removed* (a camera is deleted in the Avigilon system).

   •   *No connection*:

      •   No connection between SmartPTT Dispatcher and SmartPTT Radioserver.

      •   No connection between SmartPTT Radioserver and the Avigilon server.

      •   No connection between the Avigilon server and a camera.

> **Important**
> When connection is established, no status will appear.

> **NOTE**
> When removing a camera from the Avigilon system, its name in SmartPTT is highlighted in pale gray. The **Edit (✎)** button becomes unavailable.

4.9.7.1.1 Camera

In the **Camera** panel, you can add and configure a new camera marker, or edit an existing one.

The panel appears when you add or edit camera markers.
For details, see Adding Cameras, Editing Objects Using Map, and Editing Objects Using Panel.
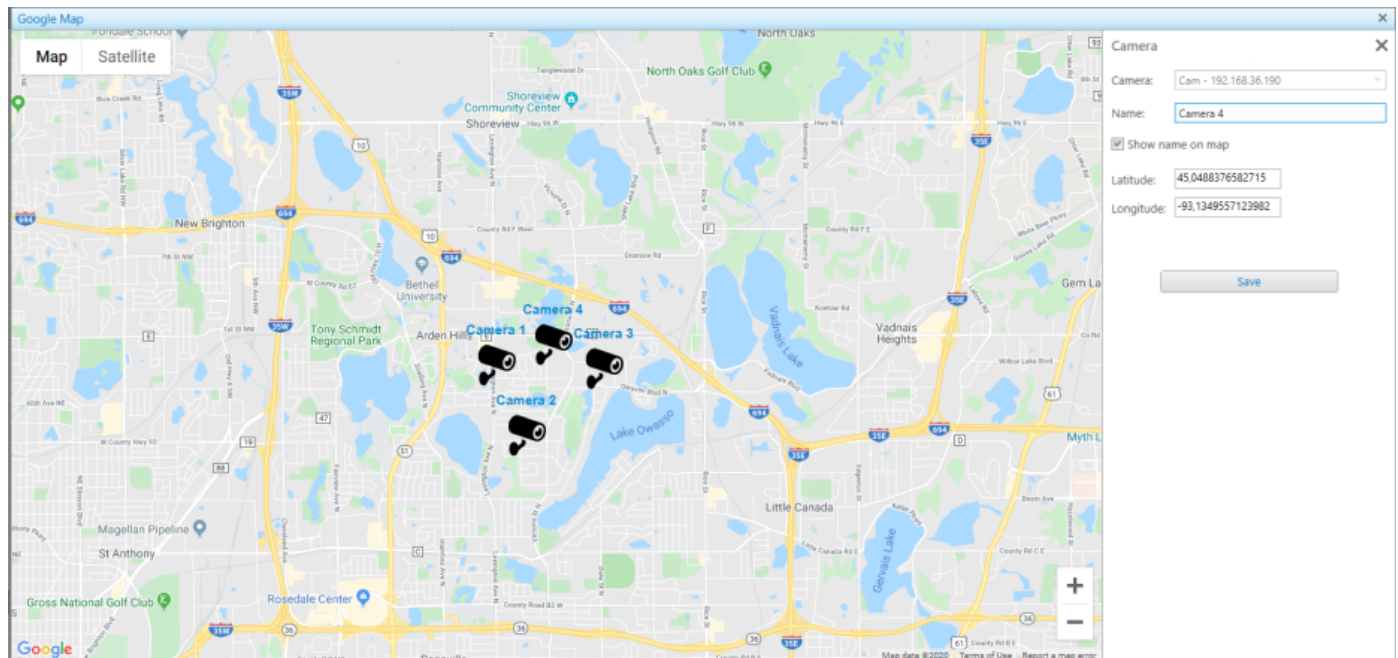
The **Camera** panel contains the following controls and elements:

Camera

   List of cameras whose markers can be displayed on a map. The list of cameras is duplicated from the Avigilon video monitoring system server. Cameras in the list are displayed in the same order as in the Avigilon system.

> **NOTE**
> If SmartPTT is connected to two SmartPTT Radioservers, each of which is connected to its own Avigilon system, cameras in this list are displayed in the following order: cameras of one system, then cameras of the second system. If no connection is established, the list with cameras will be empty.

Name

The camera name.

Show name on map

This check box provides the ability to display the camera name over its marker on a map.

Latitude and Longitude

The coordinates of the camera marker in the format that is set in SmartPTT Dispatcher settings. By default, the *Decimal Degrees* format is used.

Alternatively, you can set the camera marker location by clicking the desired position on a map.

Save

Adds a new camera marker on a map or saves changes in the settings of the existing one.

4.9.7.1.2 Adding Cameras

Follow the procedure to add a camera marker on a map.

Prerequisites:

Ensure the desired camera was added and configured in the Avigilon system.

Procedure:

1. In the right part of the desired map, click **Objects on Map**.
   The **Objects on Map** panel appears.

2. *(Optional)* Click Pin ( ) to pin the panel.

3. In the **Objects on Map** panel, click the **Cameras** tab.

4. On the **Cameras** tab, click **Add Camera**.
   The **Camera** panel appears.

5. From the **Camera** list, select the desired camera.

6. In the **Name** field, type the desired camera name.

7. *(Optional)* To show the name of the camera marker on a map, select the **Show name on map** check box.

8. Specify the camera marker location on a map in one of the following ways:

To specify the camera marker location on a map with a mouse,	click the desired location on a map. The camera marker appears in the specified location on a map.
To specify the camera marker location in the other way,	in the **Latitude** and **Longitude** fields, type the desired coordinates.

> The camera marker appears in the specified location on a map.

9. Click **Save** to save the camera marker.

   The added camera marker appears in the list on the **Cameras** tab of the **Object on Map** panel.

Postrequisites:

- To edit the camera marker, see Editing Objects Using Panel or Editing Objects Using Map.

- To delete the camera marker, see Deleting Objects.

4.9.7.1.3 Watching Live Video

SmartPTT with the integrated Avigilon video monitoring system, provides operators with the ability to monitor what's happening on the object at any given time.

Live video from a camera is carried out in a separate window, which appears when you click the marker of the desired camera on a map.
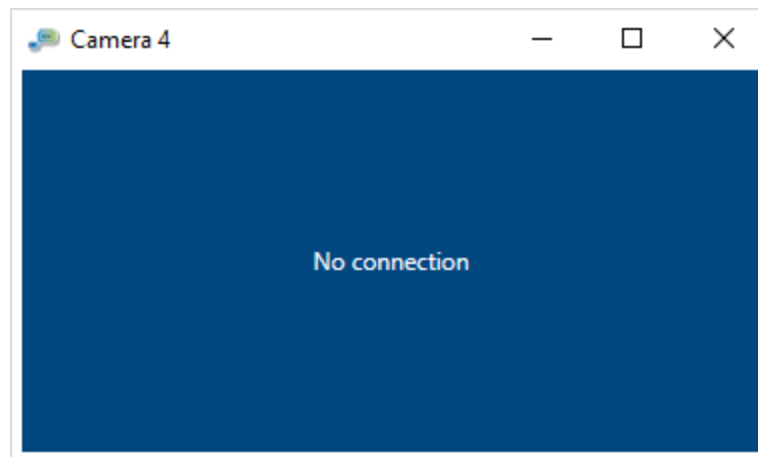
Only one window with live video can be opened at a time. If you open the window and try to open another one, then a previously opened window will automatically be closed.

If the live video is minimized together with SmartPTT Dispatcher, then when SmartPTT Dispatcher opens, the window with live video will restore its previous location on the operator's monitor screen. If the window with live video is closed together with SmartPTT Dispatcher, then the next time SmartPTT Dispatcher opens, the window with live video will not be restored.

4.9.7.2 Points of Interest

On the **Points of Interest** tab you can go to the panel for managing the existing points of interest on maps, or adding new points of interest.

> **Important**
> To manage points of interest, an operator needs to have the corresponding permission. For details, see Operators.
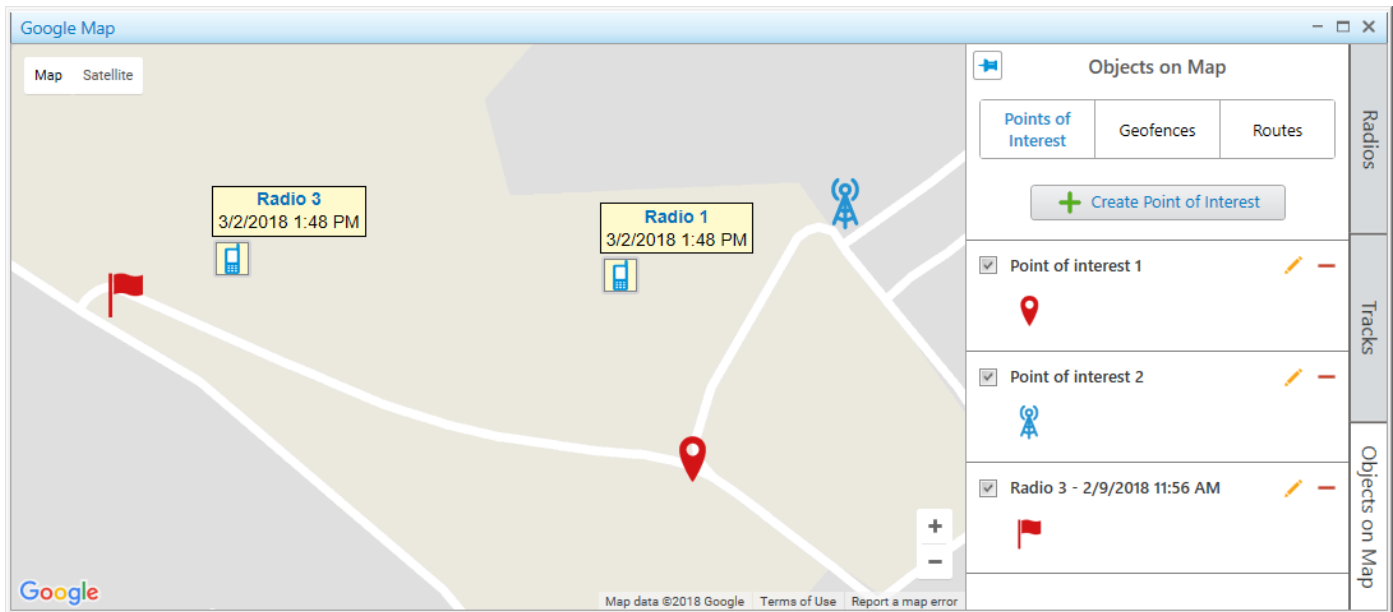
> **NOTE**
> For information on adding a point of interest on a map, see Adding Points of Interest.

When you start working with a map, only one control is available on the tab:

Create Point of Interest

Opens the **Point of Interest** panel for adding a new point of interest on a map.

When at least one object is added in the **Points of Interest** tab, the following elements and controls are available:

Show on Map

You can select or clear the check box to display or hide a point of interest on a map.

Point of Interest Name

Displays a point of interest name which is set in the **Point of Interest** panel when the object is added. When you click the point of interest name, the map is centered on it.

Point of Interest Marker

Marker image of a point of interest which is selected in the **Point of Interest** panel when the point of interest is added. When you click the point of interest marker, the map is centered on the point.

Edit ( )

Opens the **Point of Interest** panel, where you can edit a point of interest parameters.

Delete ( )

Removes a point of interest from the **Points of Interest** tab and from all maps.

4.9.7.2.1 Point of Interest

In the **Point of Interest** panel you can configure parameters of a new point of interest, or edit an existing point of interest.

The panel opens when you create a new or edit an existing point of interest.
For details, see Adding Points of Interest, Editing Objects Using Map, and Editing Objects Using Panel.
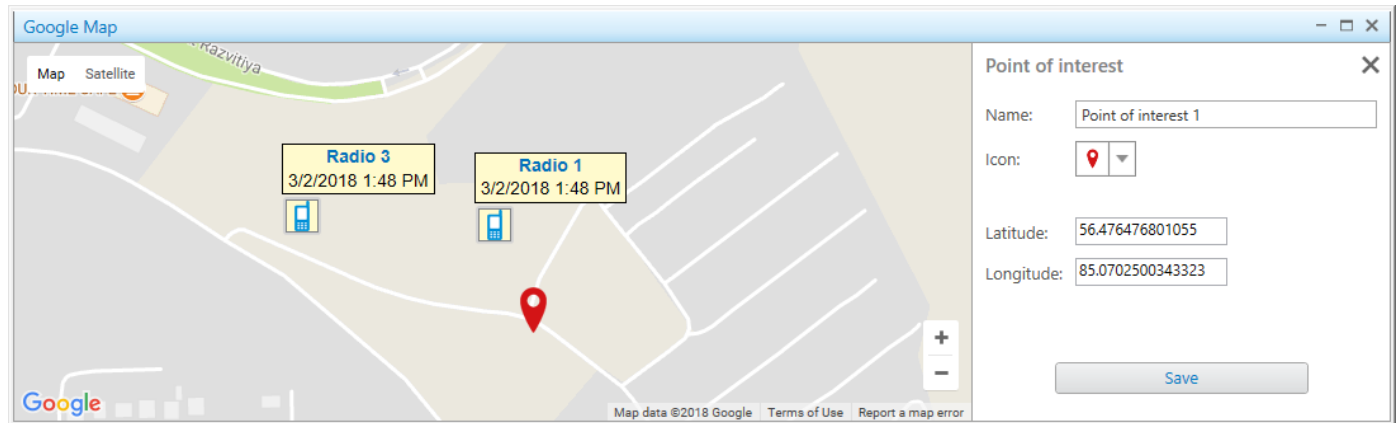
The **Point of Interest** panel contains the following controls and elements:

Name

In the field, a name of a point of interest is typed. The name appears when you hover the mouse cursor over the point of interest on a map.

Icon

You can select the icon from the list or load the desired image that is used as the point of interest marker. The image size must not exceed 5 MB.

Latitude and Longitude

You should enter coordinates of a point of interest. An alternative way of adding a point of interest is to click the desired location on a map.

Save

Adds the point of interest to the points of interest list which is available on all maps.

4.9.7.2.2 Adding Points of Interest

Follow the procedure to add a point of interest on a map.

Prerequisites:

Ensure an operator has the rights to configure points of interest. For details, see Operators.

Procedure:

1. In the right part of the open map, click **Objects on Map**.
   The **Objects on Map** panel opens.

2. *(Optional)* Click Pin (🏳) to pin the panel.

3. In the **Objects on Map** panel, open the **Points of Interest** tab.

4. On the **Points of Interest** tab, click **Create Point of Interest**.
The **Point of Interest** panel opens.

5. In the **Name** field of the **Point of Interest** panel, type the name of the point of interest.

6. *(Optional)* From the **Icon** list, select an image for the point on a map.

> **NOTE**
> You can download the image by clicking the button (⋯). Images of large size are cropped to 48×48.

7. Set the point location on the map in one of the following ways:

   • Click the desired location on a map.

   • In the **Latitude** and **Longitude** fields, type the desired coordinates.

8. Click **Save** to save the point of interest.
The added point appears on a map, and in the list of the **Points of Interest** tab of the **Object on Map** panel. For details, see Points of Interest.

Postrequisites:

• To display or hide the point of interest on a map, in the points list, next to the desired point name select or clear the **Show on Map** check box.

• To edit the point of interest, see Editing Objects Using Map.

• To remove the point of interest, see Deleting Objects.

4.9.7.3 Geofences

On the **Geofences** tab you can go to the panel for managing the existing geofences on maps, or adding new geofences.

> **Important**
> To manage geofences, an operator needs to have the corresponding permission. For details, see Operators.
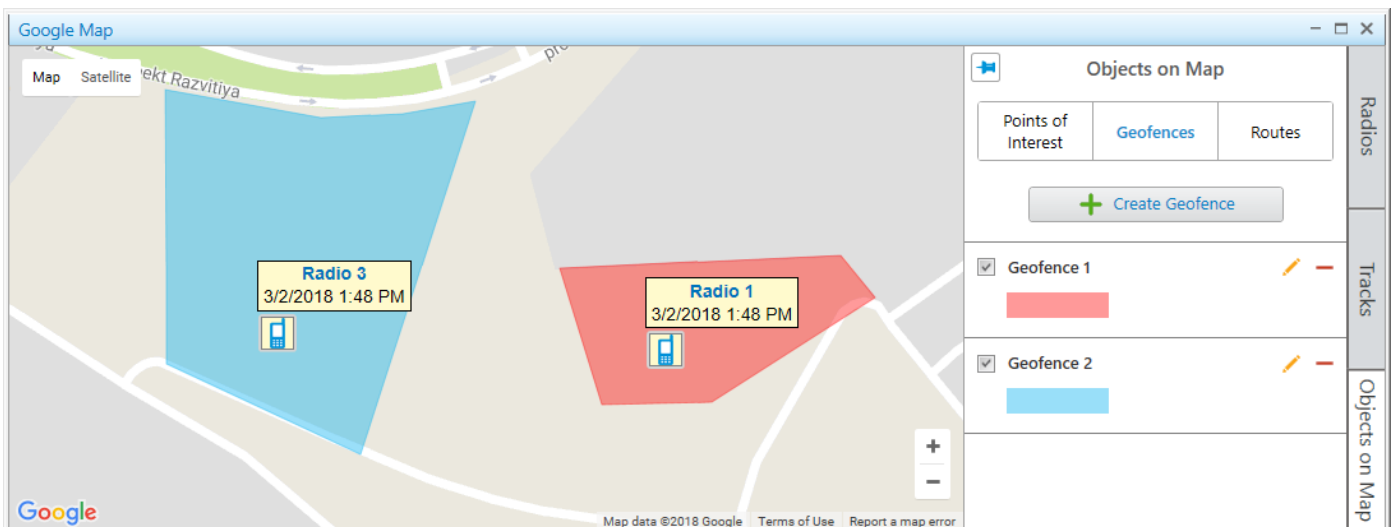
> **NOTE**
> For information on adding a geofence on a map, see Adding Geofences Using Map.

When you start working with a map, only one control is available on the tab:

Create Geofence

Opens the **Geofence** panel for adding a new geofence on a map.

When at least one geofence is added in the **Geofences** tab, the following elements and controls are available:

Show on Map

You can select or clear the check box to display or hide a geofence on a map.

Geofence Name

Displays a geofence name which is set in the **Geofence** panel when the object is added. When you click the geofence name, the map is centered on it.

Geofence Color

Displays color of a geofence, set in the **Geofence** panel, when the object is added. When you click the geofence line, the map is centered on it.

Edit (✏)

Opens the **Geofence** panel, where you can edit a geofence parameters.

Delete (➖)

Removes a geofence from the **Geofences** tab and from all maps.

Geofences can be used in positioning rules to track radios in the area.

For details, see Positioning Rules.

4.9.7.3.1 Geofence

In the **Geofence** panel you can configure parameters of a new geofence, or edit the existing geofences.

The panel opens when you create a new geofence, or edit the existing.
For details, see Adding Geofences Using Map, Adding Geofences Using Table, Editing Objects Using Map, and Editing Objects Using Panel.
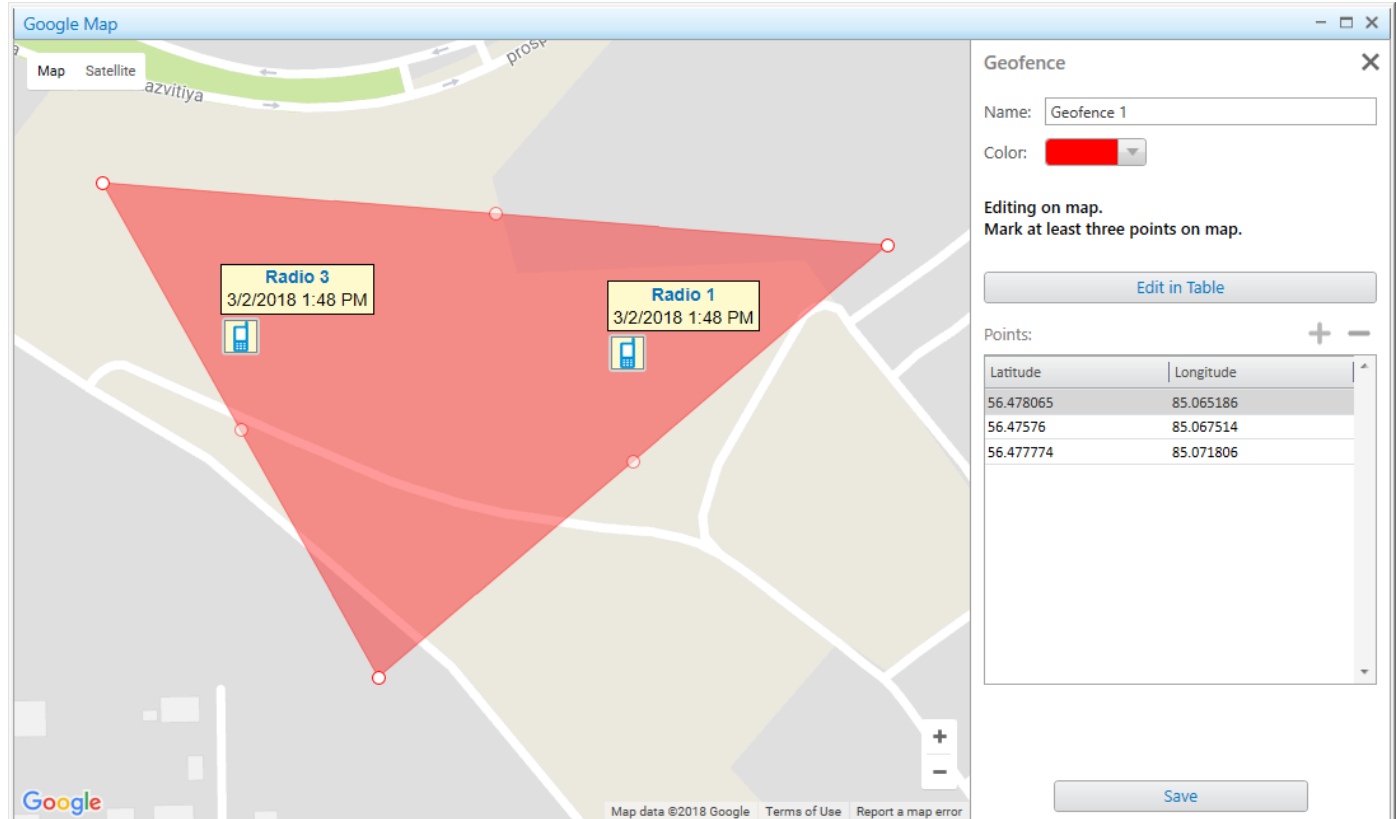
The **Geofence** panel contains the following controls and elements:

Name

In the field, a name of a geofence is typed.

Geofence Color

Displays color of geofence, set in the **Geofence** panel, when the geofence is added.

Edit in Table

Activates adding or editing the existing geofence points using the **Points** table. When you click the button, its name changes to **Edit on Map**.

Points Table

You can activate the table by clicking **Edit in Table**. You can add coordinates by clicking the **Add coordinate (+)** button. The order of the geofence points in the table corresponds to the points sequence on a map.

Edit on Map

Activates adding or editing the existing geofence points on a map. To add a geofence, click at least three points on the desired locations of a map.

Save

> Adds the geofence to the geofence list which is available on all maps.

4.9.7.3.2 Adding Geofences Using Map

Follow the procedure to add a geofence on a map.

Prerequisites:

Ensure the operator has the rights to configure geofences. For details, see Operators.

Procedure:

1. In the right part of the open map, click **Objects on Map**.
   The **Objects on Map** panel opens.

2. *(Optional)* Click Pin ( ) to pin the panel.

3. In the **Objects on Map** panel, open the **Geofences** tab.

4. On the **Geofences** tab, click **Create Geofence**.
   The **Geofence** panel opens.

5. In the **Name** field of the **Geofence** panel, type the name of the geofence.

6. From the **Color** palette, select the color for the geofence on a map.

7. Set the geofence location on a map by clicking at least three desired points on a map. Double-click the last point to finish drawing.

8. Click **Save** to save the geofence.
   The added geofence appears on a map, and in the list in the **Geofences** tab of the **Objects on Map** panel.

Postrequisites:

- To show or hide the geofence, in the **Geofences**, select or clear the **Show on map** check box.

- To edit the geofence, see Editing Objects Using Panel or Editing Objects Using Map.

- To remove the geofence, see Deleting Objects.

4.9.7.3.3 Adding Geofences Using Table

Follow the procedure to add a geofence on a map.

Prerequisites:

Ensure an operator has the rights to configure geofences.
For details, see Operators.

Procedure:

1. In the right part of the open map, click **Objects on Map**.
   The **Objects on Map** panel opens.

2. *(Optional)* Click Pin ( ) to pin the panel.

3. In the **Objects on Map** panel, open the **Geofences** tab.

4. On the **Geofences** tab, click **Create Geofence**.
   The **Geofence** panel opens.

5. In the **Name** field of the **Geofence** panel, type the name of the geofence.

6. From the **Color** palette, select the color for the geofence on a map.

7. Click the **Edit in Table** button.
   The **Points** table becomes active.

8. Add at least three points by clicking the **Add coordinate (+)** button.
   The lines for adding coordinates appear in the table.

9. In the table, perform the following actions:

   a. In the **Latitude** column, type the desired latitude of points.

   b. In the **Longitude** column, type the desired longitude of points.

10. Click the **Save** button.
    The current panel changes to the **Objects on Map** panel.

Postrequisites:

- To delete a point from the table, select the desired line with coordinates and click **Delete coordinate (−)**.

- To show or hide the geofence, in the **Geofences**, select or clear the **Show on map** check box.

- To edit the geofence, see Editing Objects Using Panel or Editing Objects Using Map.

- To remove the geofence, see Deleting Objects.

4.9.7.4 Routes

On the **Routes** tab you can go to the panel for managing the existing routes on maps, or adding new routes.

> **Important**
> To manage routes, an operator needs to have the corresponding permission. For details, see Operators.

> **NOTE**
> For information on adding a route on a map, see Adding Routes Using Map.

When you start working with a map, only one control is available on the tab:

Create Route

Opens the **Route** panel for adding a new route on a map.

When at least one route is added in the **Routes** tab, the following elements and controls are available:

Show on Map

You can select or clear the check box to display or hide a route on a map.

Route Name

Displays a route name which is set in the **Route** panel when the object is added. When you click the route name, the map is centered on it.

Color and thickness of a route line

Displays color and thickness of a route line, which are set in the **Route** panel. When you click the route line, the map is centered on it.

For details, see Route.

Edit (✏)

Opens the **Route** panel, where you can edit a route parameters.

Delete (➖)

Removes a route from the **Routes** tab and from all maps.

Routes can be used in positioning rules to track that radios follow the desired route.

For details, see Positioning Rules.

4.9.7.4.1 Route

In the **Route** panel you can configure parameters of a new route, or edit the existing routes.

The panel opens when you create a new route, or edit the existing.
For details, see Adding Routes Using Map, Adding Routes Using Table, Editing Objects Using Map, and Editing Objects Using Panel.
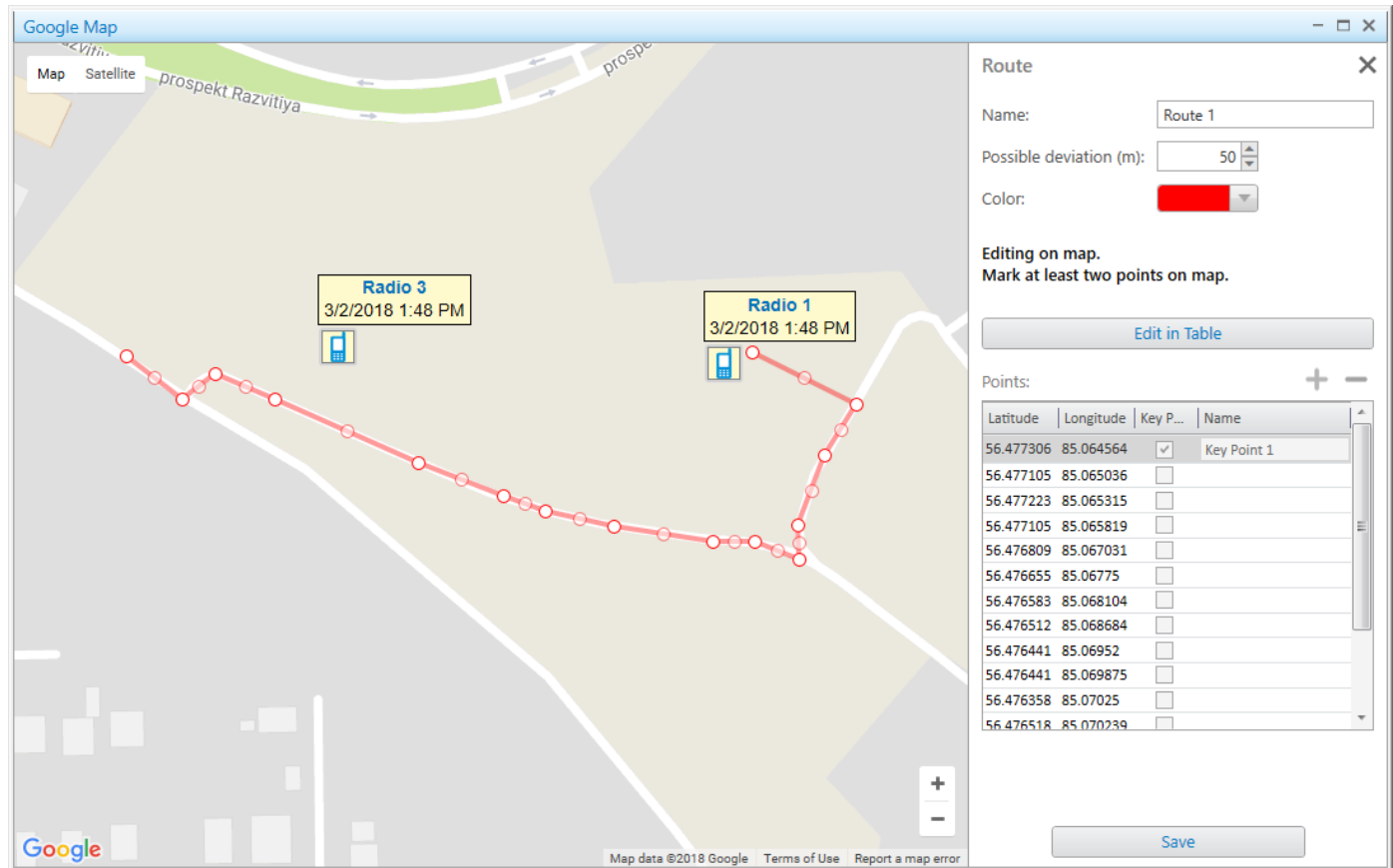
The **Routes** panel contains the following controls and elements:

Name

In the field, a name of a route is typed.

Possible deviation (m)

You can set a possible distance the radio can deviate from the route line. The maximum value is 999 m.

Color

Contains a palette with colors for a route line.

Edit in Table

Activates adding or editing the existing route points in the **Points** table. When you click the button, its name changes to **Edit on Map**.

Points Table

You can activate the table by clicking **Edit in Table**. You can add coordinates by clicking the **Add coordinate (+)** button. The order of the route points in the table corresponds to the points sequence on a map. A point of a route can become a **Key point** with its **Name**. Key points are used for creating Radio Location reports. For details, see Radio Locations.

> **NOTE**
> A key point appears on a route line as a circle after clicking the **Save** button. At hovering the mouse cursor over
> the point on a map, the key point name set in the **Name** column appears.

Edit on Map

Activates adding or editing the existing route points on a map. To add a route, click at least two points on the
desired locations of a map.

Save

Adds the route to the route list which is available on all maps.

4.9.7.4.2 Adding Routes Using Map

Follow the procedure to add a route on a map.

Prerequisites:

Ensure an operator has the rights to configure routes. For details, see Operators.

Procedure:

1. In the right part of the open map, click **Objects on Map**.
    The **Objects on Map** panel opens.

2. *(Optional)* Click Pin (⊨) to pin the panel.

3. In the **Objects on Map** panel, open the **Routes** tab.

4. On the **Routes** tab, click **Create Route**.
    The **Route** panel opens.

5. In the **Name** field of the **Route** panel, type the name of the route.

6. In the **Possible deviation (m)** field, enter the possible deviation from the route.

7. From the **Color** palette, select the color for the route on a map.

8. Set the route location on a map by clicking at least two desired points on a map. Double-click the last point to
    finish drawing.

9. Click **Save** to save the route.
    The current panel changes to the **Objects on Map** panel.

Postrequisites:

•   To show or hide a route, on the **Routes** tab, select or clear the **Show on map** check box.

•   To edit a route, see Editing Objects Using Panel or Editing Objects Using Map.

•   To remove a route, see Deleting Objects.

4.9.7.4.3 Adding Routes Using Table

Follow the procedure to add a route on a map.

Prerequisites:

Ensure an operator has the rights to configure routes. For details, see Operators.

Procedure:

1. In the right part of the open map, click **Objects on Map**.
   The **Objects on Map** panel opens.

2. *(Optional)* Click Pin (📌) to pin the panel.

3. In the **Objects on Map** panel, open the **Routes** tab.

4. On the **Routes** tab, click **Create Route**.
   The **Route** panel opens.

5. In the **Name** field of the **Route** panel, type the name of the route.

6. In the **Possible deviation** field, enter the distance the radio can deviate from the route line.

7. From the **Color** palette, select the color for the route on a map.

8. Click the **Edit in Table** button.
   The **Points** table becomes active.

9. Add at least two points by clicking the **Add coordinate (➕)** button.
   The lines for adding coordinates appear in the table.

10. In the table, perform the following actions:

    a. In the **Latitude** column, type the desired latitude of points.

    b. In the **Longitude** column, type the desired longitude of points.

    c. *(Optional)* In the **Key point** column, select the check box.

> **NOTE**
> Key points can be displayed in the Radio Locations report. For details, see Radio Locations.

    d. *(Optional)* In the **Name** column, in the entry, type the key point name.

11. Click the **Save** button.
    The current panel changes to the **Objects on Map** panel.

Postrequisites:

- To remove a point from the table, select the desired line with coordinates and click **Delete coordinate (➖)**.

- To remove a key point from the route, in the **Points** table, clear the **Key point** check box next to the desired point.

- To show or hide a route, on the **Routes** tab, select or clear the **Show on map** check box.

- To edit a route, see Editing Objects Using Panel or Editing Objects Using Map.

- To remove a route, see Deleting Objects.

4.9.7.5 SCADA Points

On the **SCADA points** tab, you can add new or edit and delete existing SCADA points.

To add a SCADA point on a map, it must first be created and configured in the SCADA system. For details, see "Connection to AdapTel Server and Database" in *SCADA Module Setup and User Guide*.
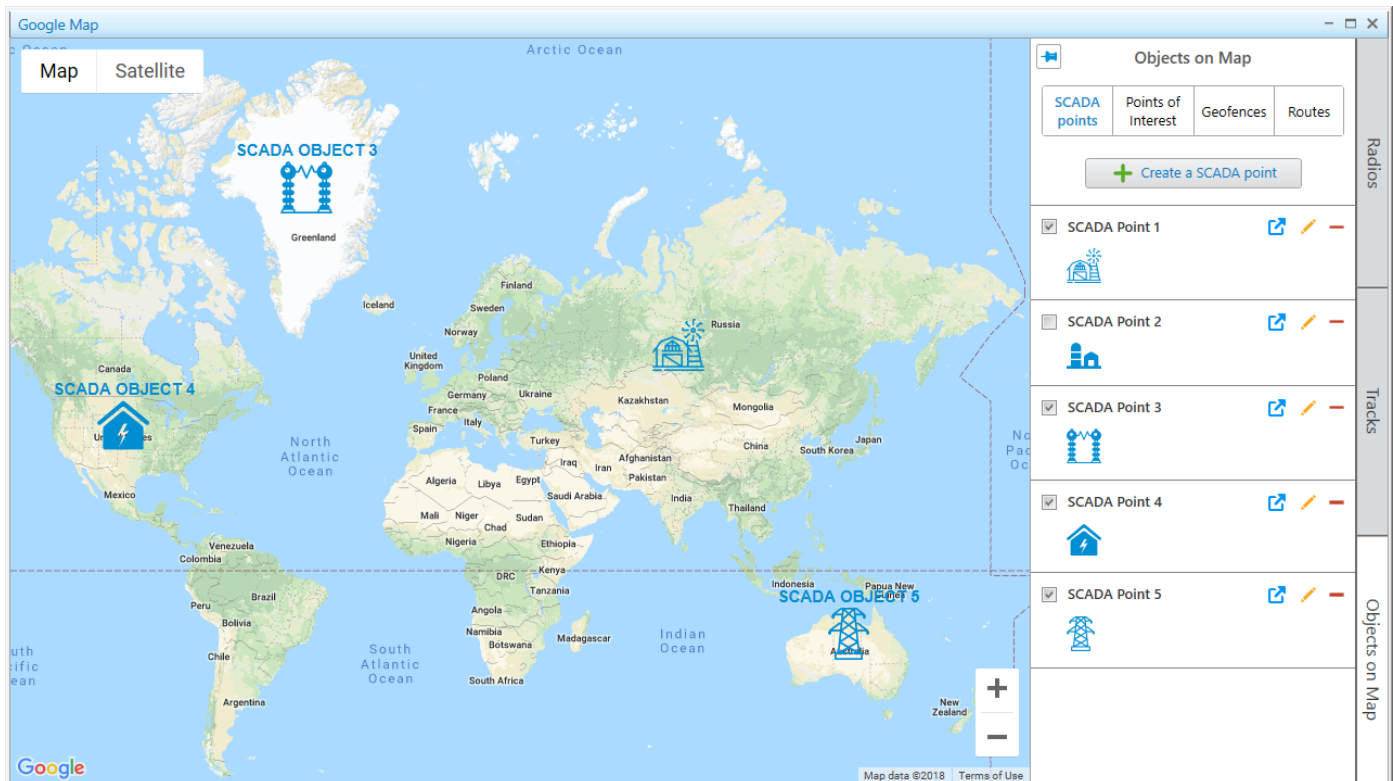
When you first start working with a map, only one control is available on the tab:

Create a SCADA point

Opens the **SCADA point** panel for adding a new SCADA point on a map.

When at least one point has been added to the list of SCADA points, the following elements and controls appear in the panel:

SCADA Point Tooltip

Tooltip with information on all parameters of the SCADA point that appears when you point to the point entry in the panel.

Alternatively, all parameters of the point can be viewed on its dashboard in the **SCADA** panel. For details, see "SCADA Module" in *SCADA Module Setup and User Guide*.

Show on Map

You can show or hide the SCADA point on a map by selecting or clearing this check box.

SCADA point Name

Name of the SCADA point that is displayed on a map if the **Name** check box is selected in the **SCADA point** panel. When you click the name of the point on the **SCADA points** tab, the map automatically centers on it even if it is not displayed on a map.

SCADA point Marker

Icon of the SCADA point that is displayed on a map if the **Show on Map** check box is selected. When you click the marker of the point on the **SCADA points** tab, the map automatically centers on it even if it is not displayed on a map.

Open in SCADA ( )

Opens the SCADA module with the SCADA point dashboard where all parameters of this point are displayed.

For information on SCADA point dashboards, see "SCADA Module" in *SCADA Module Setup and User Guide*.

Edit ( )

Opens the **SCADA point** panel where you can edit the SCADA point settings.

Delete ( )

Removes the SCADA point from the list and from all maps in SmartPTT Dispatcher.

NOTE
If a point is deleted from the SCADA system, it is not automatically deleted from SmartPTT Dispatcher. The name of the deleted SCADA point is displayed in gray color. The rules that affect the point are not deleted, and the point settings remain editable.

If one of the point parameters reports the alarm state, it is displayed in the **Map** panel with the indication corresponding to its current state. For details, see SCADA Point Indication.

4.9.7.5.1 SCADA Point

In the **SCADA point** panel, you can add and configure a new SCADA point, or edit an existing one. The changes in the SCADA point settings made from the **SCADA point** panel are applied to it in all SmartPTT Dispatcher features .

The panel appears when you create or edit a SCADA point.
For details, see Adding SCADA Points, Editing Objects Using Map, and Editing Objects Using Panel.
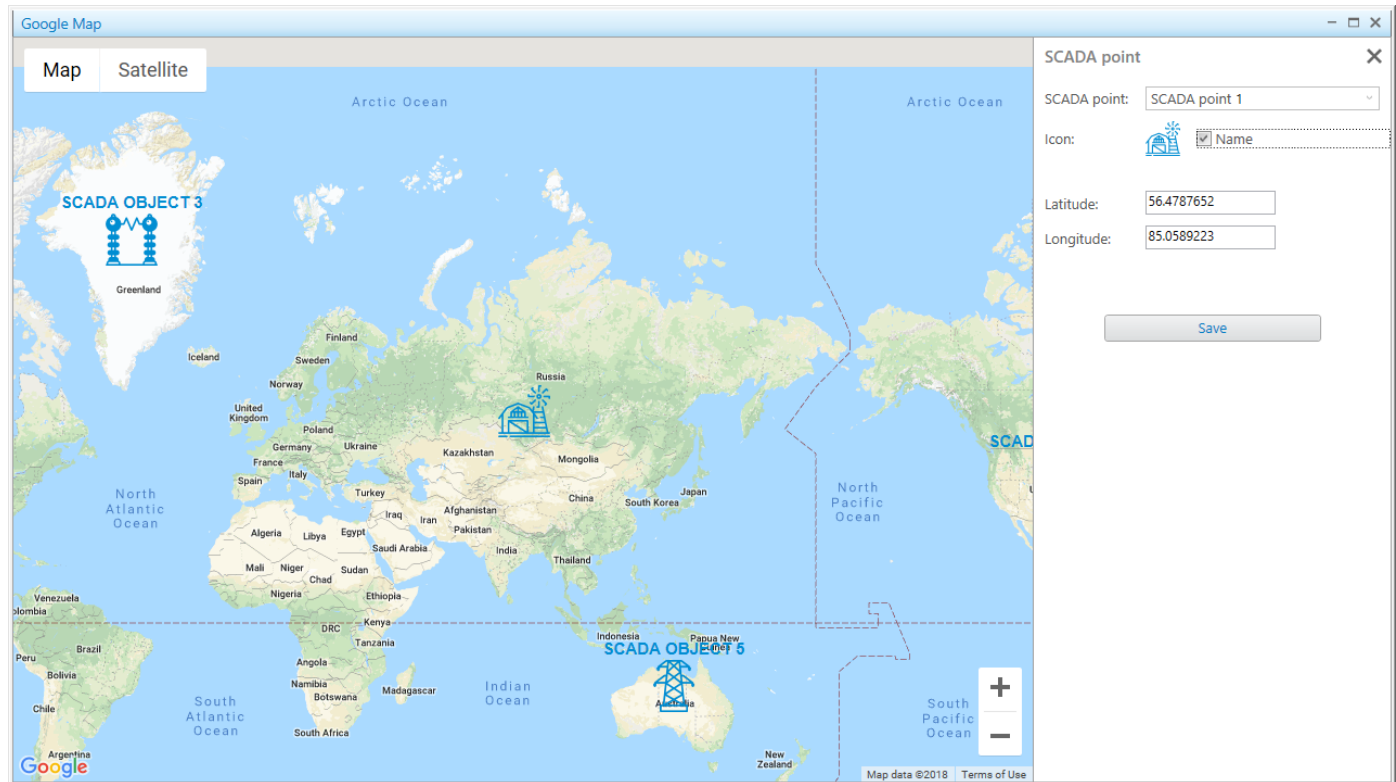
The **SCADA point** panel contains the following controls and elements:

SCADA point

List of SCADA points from which you must select the desired point. SCADA points are created and configured in the SCADA system.

Icon

The marker of the SCADA point that is displayed on a map. Icons are set in the SCADA system and cannot be changed in SmartPTT Dispatcher.

Latitude and Longitude

The coordinates of the SCADA point in the format that is set in SmartPTT Dispatcher settings. By default, the *Decimal Degrees* format is used.
Alternatively, you can set the SCADA point location by clicking the desired position on a map.

Save

Adds the new SCADA point on a map or saves changes in the settings of the existing point.

4.9.7.5.2 SCADA Point Indication

To notify operators of emergencies on SCADA points, SmartPTT Dispatcher provides a number of indication options, including color indication and animation.

When one of the SCADA points reports the alarm state, the following actions take place in SmartPTT Dispatcher to attract the operator's attention to the emergency:

- If the **Map** panel is open, the map automatically centers on the point that reported the alarm state.

- If the point was hidden from the map, it appears on it with the marker indicating the alarm state.

- If the side panel is collapsed, it opens on the **SCADA points** tab.

- If the side panel is expanded but another tab is active, the panel switches to the **SCADA points** tab.

- The SCADA points list scrolls down to the point that reported the alarm state.

- If the **Map** panel is open but another panel is active at the time of emergency, the tab of the **Map** panel starts flashing red.

Depending on the parameter values and the operator actions in regard to the emergency, SCADA points may exist in several states. The following table provides information on the SCADA point states and their indication in the **Map** panel.

State	Description	Indication
Operating	All the point parameters are within the normal range, or the emergency was acknowledged and eliminated (became outdated).	Standard colors, no animation.
Alarm	One or more parameters reported the alarm state.	Red flashing background layer under the point.
Acknowledged	One of the SmartPTT Dispatcher operators acknowledged the alarm and is taking action to eliminate it.	Red background layer that appears after one of the point parameters reports the alarm state, stops flashing but does not disappear.
Outdated unacknowledged	The emergency on the point was eliminated before any of the operators acknowledged it in SmartPTT Dispatcher.	Red frame around the point. Red background layer that appears after one of the point parameters reports the alarm state disappears.

State	Description	Indication
No connection	The connection to the point was lost, the point was deleted from the SCADA system, or the SCADA module was deactivated in SmartPTT Dispatcher.	The point icon and name are displayed in gray color. If the point was deleted from the SCADA system, on the entry of the deleted point in the list of SCADA points, the status message appears: *The Point was deleted from SCADA*.

4.9.7.5.3 Adding SCADA Points

Follow the procedure to add a SCADA point on a map.

Prerequisites:

Ensure the desired SCADA point was created and configured in the SCADA system. For details, see "Connection to AdapTel Server and Database" in *SCADA Module Setup and User Guide*.

Procedure:

1. In the right part of the desired map, click **Objects on Map**.
   The **Objects on Map** panel appears.

2. *(Optional)* Click Pin (📍) to pin the panel.

3. In the **Objects on Map** panel, click the **SCADA points** tab.

4. On the **SCADA points** tab, click **Create a SCADA point**.
   The **SCADA point** panel appears.

5. From the **SCADA point** list, select the desired SCADA point.
   The icon of the selected point appears below.

6. *(Optional)* To show the name of the point on a map, select the **Name** check box.

7. Specify the point location on a map in one of the following ways:

   • Click the desired location on a map.

   • In the **Latitude** and **Longitude** fields, type the desired coordinates.

   The point icon appears in the specified location on a map.

8. Click **Save** to save the SCADA point.
   The added point appears in the list on the **SCADA points** tab of the **Object on Map** panel.

Postrequisites:

• To display or hide the SCADA point on a map, on the **SCADA points** tab, select or clear the **Show on Map** check box.

• To edit the SCADA point, see Editing Objects Using Panel or Editing Objects Using Map.

• To delete the SCADA point, see Deleting Objects.

4.9.8 Editing Objects Using Map

Follow the procedure to edit a point of interest, geofence, route, camera marker or SCADA point on a map.

> **NOTE**
> You can also edit objects on the corresponding panel. For details, see Editing Objects Using Map.

Prerequisites:

Ensure at least one desired object is added on a map.

Procedure:

1. In the right part of the open map, click **Objects on Map**.
   The **Objects on Map** panel opens.

2. *(Optional)* Click Pin (▣) to pin the panel.

3. In the **Objects on Map** panel, select the desired tab.

4. On the selected tab, in the the desired object entry, click **Edit (✎)**.
   The panel with the object parameters opens.

5. In the open panel perform one of the following actions:

   • To edit a point of interest, camera marker or a SCADA point, click the desired place on a map.

   • To edit a geofence or a route, drag the object points to the desired position.

6. *(Optional)* To cancel changes, perform one of the following actions:

   • *For Google maps:* To cancel the last action on a map, click (↩).

   • To cancel changes and close the panel, in the upper-right corner of the panel, click (⊠).
     The panel changes to the **Objects on Map** panel.

7. If the **Camera**, **Point of interest**, **Geofence**, **Route**, or **SCADA point** panel is open, click **Save**.
   The panel changes to the **Objects on Map** panel.

4.9.9 Editing Objects Using Panel

Follow the procedure to edit a point of interest, geofence, route, camera marker or SCADA point in the **Objects on Map** panel.

> **NOTE**
> You can also edit objects on a map. For details, see Editing Objects Using Map.

Prerequisites:

Ensure that at least one desired object exists in the list.

Procedure:

1. In the right part of the open map, click **Objects on Map**.
   The **Objects on Map** panel opens.

2. In the **Objects on Map** panel, select the desired tab.

3. *(Optional)* Click Pin (⊞) to pin the panel.

4. Select the tab with the desired object in the **Objects on Map** panel.

5. On the selected tab, in the the desired object entry, click **Edit (✏)**.
    The panel with the object parameters opens.

6. In the open panel, perform the desired changes.

7. Click the **Save** button.
    The current panel changes to the **Objects on Map** panel.

4.9.10 Deleting Objects

Follow the procedure to remove a point of interest, geofence, route, camera marker or SCADA point in the **Objects on Map** panel.

Prerequisites:

Ensure that at least one desired object is on the list.

Procedure:

1. In the right part of the open map, click **Objects on Map**.
    The **Objects on Map** panel opens.

2. In the **Objects on Map** panel, select the desired tab.

3. *(Optional)* Click Pin (⊞) to pin the panel.

4. In the **Objects on Map** panel, select the tab with the desired object.

5. On the selected tab, in the the desired object entry, click **Delete (➖)**.
    The object disappears from the map and from the selected tab.

5 Event Log

SmartPTT Dispatcher provides the ability to log events from the following sources:

- Current SmartPTT Dispatcher database. For details, see SmartPTT Dispatcher Event Log.

- All dispatch systems connected to the radioserver. For details, see SmartPTT Radioserver Event Log.

The **Event Log** menu provides access to the SmartPTT Dispatcher Event Log elements:

- **All Events** option provides access to the Event Log panel that displays all events of SmartPTT Dispatcher.
  For details, see Displaying All Events.

- **Events for Period** option provides access to the **Period** window that provides the ability to set the period to show events of SmartPTT Dispatcher.
  For details, see Displaying Events for Period.

- **Unread Messages** option provides access to the **Event Log: messages not read** panel that provides the ability to view unread messages in the SmartPTT Dispatcher Event Log.
  For details, see Viewing Unread Messages.

- **Event Log Settings** option provides access to the **Event Log Settings** window that provides the abilities to enable and to configure event logging for SmartPTT Dispatcher.
  For details, see Configuring Event Logging for SmartPTT Dispatcher.

- **Clear Event Log** option provides access to the **Clear Event Log** window that provides the ability to remove all event log entries added before the specific date in the SmartPTT Dispatcher Event Log.
  For details, see Clearing Event Log.

NOTE
The **Clear Event Log** option is available in the **Event Log** menu only to the Administrator.

For information on the Event Log functionality, see the sections below.

5.1 SmartPTT Dispatcher Event Log

The SmartPTT Dispatcher Event Log provides information on all events registered in the SmartPTT Dispatcher database.

To display events in the Event Log, you should activate it.
For information on activating the event log, see Configuring Event Logging for SmartPTT Dispatcher.

You can open the Dispatcher Event Log by clicking **Event Log → All Events** on the menu bar.

The Event Log provides the following elements:

Event Log Table

Contains information on all events registered in the database.
For information on the table, see Dispatcher Event Log Table.

> **NOTE**
> You can activate recording of incoming and outgoing calls in SmartPTT Dispatcher. For details, see Records.

Brief Event Description

Located in the lower part of the Event Log panel, and contains the same information on the selected event as the Event Log Table.
For information on event types, see Event Types.

Note

Contains notes a dispatcher can type for event log entries. The text from the box is also shown in the **Note** column of the Event Log Table.

The Event Log entries can be selected in the following ways:

• Clicking a single entry selects only one entry.

• Clicking multiple entries with the Ctrl or Shift key held down selects multiple entries.

For events of the *Call* type, the following actions are available in the Event Log panel and in the **Play Records** window:

- Downloading call records to a folder. If a single call record is downloaded, you can also change the name of the downloaded audio file.

> **NOTE**
> By default, the records are downloaded in the OGG format.
> For information on setting the format of downloaded audio files, see Records.

- Playing call records.

- Opening call records location.

These actions can be performed from the shortcut menu that appears at right-clicking one or multiple selected entries of the incoming and outgoing calls.

> **WARNING**
> Playing, downloading and opening location of the call records is unavailable for the calls made before activating the incoming and outgoing calls recording functionality.

- For information on the **Downloading audio files** window, see Window of Call Records Downloading.

- For information on the **Play records** window, see Play Records Window.

- For information on the call records downloading procedure, see Downloading Call Records.

- For information on the call records playback procedure, see Playing Call Records.

- For information on the call records location opening procedure, see Opening Call Records Location.

5.1.1 Dispatcher Event Log Table

The Event Log Table of SmartPTT Dispatcher contains the following columns with the corresponding filters:

Column Name	Description	Filter
Direction	Shows whether the event is incoming (➡), or outgoing (⬅).	Can be filtered by *Incoming* or *Outgoing* direction.

Column Name	Description	Filter

Event Type	Shows the type of the event:
	
	• Alarm ([!])
	
	• Block radio:
	   • Block (🔒)
	   • Unblock (🔓)
	
	• Call (📞)
	
	• Job Ticket (📋)
	
	• Lone Worker (🔴)
	
	• Message (✉)
	
	• Radio Check (📻)
	
	• Radio Kill (🔒)
	
	• Registration:
	   • Online (👤)
	   • Offline (👤)
	   • Power down (👤)
	
	• SCADA Alarm
	
	• Status (🔄)
	
	• Telemetry (📈)
	
	• Temporary Talkgroup (👥)
	
	• User Authorization:
	   • Sign In (➡)
	   • Sign Out (➡)
		Can be filtered by event types.

Date/Time	Shows the date and time of the event.	Can be filtered by date and time.
Not Read	Shows whether the message was read.	Can be filtered by read or unread status.
Additional Information	Contains the specific information depending on the event type. For details, see Additional Information Column.	Can be filtered by values containing in the column.
Operator	Shows the operator who registered the event.	Can be filtered by operator names.
Radioserver	Shows the radioserver on which the event was registered.	Can be filtered by radioserver names.

Column Name	Description	Filter
Channel	Shows the channel on which the event was registered.	Can be filtered by channel names.
Radio	Shows the radio or WAVE user that can be a source or target of the event. For details, see Radios. Also shows all radios and WAVE users that participated in a group call.	Can be filtered by radio or WAVE user names.
User	Shows the radio user which can be a source or target of the event.	Can be filtered by radio user names.
Source	Shows the name or ID of an event initiator.	Can be filtered by event initiators.
Talkgroup	Shows the talkgroup which participated in the event.	Can be filtered by talkgroup names.
Status	Shows the event status. For information on possible event statuses, see Status Column.	Can be filtered by statuses.
Duration	Shows the event duration in seconds.	Can be filtered by call duration.
Connection Type	Shows the connection type of the event.	Can be filtered by *IP*, *PBX*, or *Radio* connection type.
Destination	Shows the recipient ID or name.	Can be filtered by event recipients.
Record	Shows whether the call was recorded. All event types except for **Call** always have *No* value.	*Yes* or *No* filters can be used.
Lone Worker	Shows whether a lone worker profile is assigned to a radio or WAVE user.	*Yes* or *No* filters can be used.
Note	Contains the text of a note attached to the event log entry by dispatcher.	Can be filtered by the text typed in the **Note** box.

If the user authorization service is activated, in the **Source**, **Destination** and **Additional Information** columns the name of the user authorized on the radio is displayed next to the radio name in brackets.

For information on the check box, see General Settings.

5.1.1.1 Additional Information Column

Depending on the event type, the **Additional information** column contains the following information:

Event Type	Information in the column
Alarm	Date and time of the alarm acknowledgment, and the operator name who acknowledged it. For SCADA points, the parameter that reported the alarm state.
Block radio	Empty column.
Call	Identifiers of call initiators, or operator name, or cause of a call denial.
Job Ticket	Job ticket number, name, and its description.
Lone Worker	Empty column at activating/deactivating lone worker profile. The column is filled when the profile changes.
Message	Message text.
Radio Check	Empty column.
Radio Kill	Empty column.
Registration	Empty column.
Status	Changing of radio status. For information on radio statuses, see Statuses.
Telemetry	Description of telemetry action set in telemetry settings. For details, see Telemetry.
Temporary Talkgroup	Information on operator actions related to a temporary talkgroup.
User Authorization	Empty column.

5.1.1.2 Status Column

Depending on the event type, the following statuses are available in the **Status** column:

Event Type	Information in the column
Alarm	• *<empty>* until the alarm is not acknowledged. • Emergency accepted

Event Type	Information in the column
	NOTE For alarms on SCADA points, the *Emergency accepted* status appears only when the emergency is eliminated on the point . Acknowledging SCADA alarms does not affect the alarm status, and the column is left empty until the parameter regains a normal value.
Block radio	• Unblocked • Blocked • Block failed • Unblock failed • Undelivered • Target did not respond
Call	• Group Call • Private Call • All Call • Call Alert • Monitoring • Emergency Call • Call Alert not delivered
Job Ticket	• Status change • Delivered • Not delivered • Sent • Not sent
Lone Worker	• Profile changed • On • Off
Message	• Message delivered • Message not delivered • Message accepted • Message sent • Message not sent

Event Type	Information in the column
Radio Check	• Radio is available • Radio is unavailable • Target did not respond
Radio Kill	• Delivered • Not delivered
Registration	• Offline • Online • Power down
Status	*<radio status>* For details, see Statuses
Telemetry	• Outgoing telemetry • Incoming telemetry
Temporary Talkgroup	• Radio Added • Radio Removed • Enabled • Disabled • Rejected
User Authorization	• User Authorization Sign Out • User Authorization Sign In

5.1.1.3 Event Types

SmartPTT Dispatcher displays the following types of events that the system can register:

Event Type	Description
Alarm	Includes events concerning sending radio alarm signals to the radio network and alarm signals from SCADA points.
Block Radio	Includes events concerning sending blocking or unblocking radio commands to radios.
Call	Includes events concerning all types of calls including radio transmission initiated by the Monitoring command. For details, see Voice Calls.

Event Type	Description
Job Ticket	Includes events concerning sending special assignments to radios or talkgroups. For details, see Job Tickets.
Lone Worker	Includes events related to the assignment of Lone Worker profiles to a radio or WAVE user. For details, see Lone Worker Rules.
Message	Includes events concerning sending and receiving text messages in the SmartPTT system. For details, see Text Messages.
Radio Check	Includes events concerning sending the Radio Check command. For details, see Radio Check.
Radio Kill	Includes events concerning sending the Radio Kill command. For details, see Radio Kill.
Registration	Includes events concerning radio availability in the radio system (offline, online, power down).
Status	Includes events concerning changing radio statuses in the SmartPTT system. For details, see Statuses.
Telemetry	Includes events concerning incoming or outgoing telemetry in the SmartPTT system. For details, see Telemetry.
Temporary Talkgroup	Includes events concerning temporary talkgroups in the SmartPTT system. For details, see Temporary Talkgroups.
User Authorization	Includes events concerning user registration or unregistration on a radio.

5.2 SmartPTT Radioserver Event Log

The Radioserver Event Log panel provides information on events from all dispatch systems connected to the radioserver.

The Radioserver Event Log can be activated and configured in SmartPTT Radioserver Configurator.
For information on configuring radioserver event log, see "Configuring Event Log Database Connection" in *SmartPTT Installation and Configuration Guide*.

> **Important**
> The Radioserver Event Log is available to the Administrator, or to operators with the corresponding permission.
> For details, see Operators.

For information on opening the radioserver Event Log, see Displaying SmartPTT Radioserver Event Log.

The Radioserver Event Log provides the following elements::

Radioserver Event Log Table

Contains the columns with all information about events.

For information on the table, see Radioserver Event Log Table.

Brief Event Description

Located in the lower part of the Radioserver Event Log panel, and contains the same details of the event as the Radioserver Event Log Table.

Note

Contains notes a dispatcher can type for event log entries. The text from the box is also shown in the **Note** column of the Radioserver Event Log Table.

The Event Log entries can be selected in the following ways:

• Clicking a single entry selects only one entry.

• Clicking multiple entries with the Ctrl or Shift key held down selects multiple entries.

For events of the *Call* type, the following actions are available in the Event Log panel and in the **Play Records** window:

• Downloading call records to a folder. If a single call record is downloaded, you can also change the name of the downloaded audio file.

> **NOTE**
> By default, the records are downloaded in the OGG format.
> For information on setting the format of downloaded audio files, see Records.

> **NOTE**
> You can activate call recording in SmartPTT Radioserver Configurator. For details, see «Configuring Centralized Voice Logging» in *SmartPTT Installation and Configuration Guide*.

- Playing call records.

- For information on the **Downloading audio files** window, see <u>Window of Call Records Downloading</u>.

- For information on the **Play records** window, see <u>Play Records Window</u>.

- For information on the call records downloading procedure, see <u>Downloading Call Records</u>.

- For information on the call records playback procedure, see <u>Playing Call Records</u>.

5.2.1 Radioserver Event Log Table

The Radioserver Event Log table contains the following columns with the corresponding filters:

Column Name	Description	Filter
Direction	Shows whether the event is incoming (➡), or outgoing (⬅).	Can be filtered by *Incoming* or *Outgoing* direction.

Event Type	Shows the type of the event:
	
	• Alarm ([!])
	
	• Block radio:
	  • Block (🔒)
	  • Unblock (🔓)
	• Call (📞)
	• Job Ticket (📋)
	• Lone Worker (🔄)
	• Message (✉)
	• Radio Check (📻✓)
	• Radio Kill (🔒)
	• Registration:
	  • Online (👤)
	  • Offline (👤)
	  • Power down (👤)
	• SCADA Alarm
	• Status (🔄)
	• Telemetry (📊)
	• Temporary Talkgroup (👥)
	• User Authorization:
	  • Sign In (➡)
	  • Sign Out (➡)
		Can be filtered by event types.

Date/Time	Shows the date and time of the event.	Can be filtered by date and time.

Column Name	Description	Filter
Channel	Shows the channel on which the event was registered.	Can be filtered by channel names.
Talkgroup	Shows the talkgroup which participated in the event.	Can be filtered by talkgroup names.
Source	Shows the name or ID of an event initiator.	Can be filtered by event initiators.
Dispatcher	Shows the operator who participated in the event.	Can be filtered by operator names.
Status	Shows the event status. For information on possible event statuses, see Status Column.	Can be filtered by statuses.
Duration	Shows the event duration in seconds.	Can be filtered by call duration.
Additional Information	Contains the specific information depending on the event type. For details, see Additional Information Column.	Can be filtered by values containing in the column.
Record	Shows whether the call was recorded. All event types except for **Call** always have *No* value.	*Yes* or *No* filters can be used.
Destination	Shows the recipient ID or name.	Can be filtered by event recipients.
Note	Contains the text of a note attached to the event log entry by dispatcher.	Can be filtered by the text typed in the **Note** box.
User	Shows the radio user which can be a source or target of the event.	Can be filtered by radio user names.

If the user authorization service is activated, in the **Source**, **Destination** and **Additional Information** columns the name of the user authorized on the radio is displayed next to the radio name in brackets.
For information on the check box, see General Settings.

5.2.2 Displaying SmartPTT Radioserver Event Log

Follow the procedure to open the Radioserver Event Log panel.

Prerequisites:

Ensure the radioserver event log is activated in SmartPTT Radioserver Configurator. For details, see "Configuring Event Log Database Connection" in *SmartPTT Installation and Configuration Guide*.

Procedure:

1. In the **Radio Fleet**, in the right part of the radioserver entry, click the Actions button (≫), and then select **Show Radioserver Event Log** (🗒).
   The **Period** window appears.
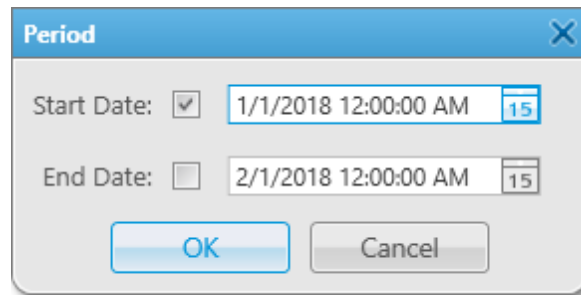
2. In the open **Period** window, set the period of events to be shown in the Radioserver Event Log:

To show events starting from the specified date only,	select the **Start Date** check box.
To show events before the specified date only,	select the **End Date** check box.
To show events for a certain period of time only,	select the **Start Date** and the **End Date** check boxes.
To show all events from the dispatcher database,	clear the **Start Date** and the **End Date** check boxes.

3. Click the Date (🗓) button, and select the desired start and end dates, or enter the dates manually.

4. *(Optional)* In the boxes with the dates, type the start and end time.

5. Click **OK** to apply changes, and display the Dispatcher Event Log.
   If events for the specified period exist in the database, they are displayed in the open Dispatcher Event Log.

5.3 Managing Event Log

Managing of the SmartPTT Dispatcher Event Log provides the following abilities:

- Enabling event logging. For details, see Configuring Event Logging for SmartPTT Dispatcher.

- Viewing unread messages. For details, see Viewing Unread Messages.

- Managing event log entries. For details, see Managing Event Log Entries.

Managing of Event Log elements (sorting, grouping, filtering, etc.) is applicable both to Dispatcher and Radioserver Event Log. For details, see Managing Event Log Elements.

5.3.1 Configuring Event Logging for SmartPTT Dispatcher

Follow the procedure to enable event logging for SmartPTT Dispatcher.

Procedure:

1. On the menu bar, click **Event Log → Event Log Settings**.
   The **Event Log Settings** window appears.
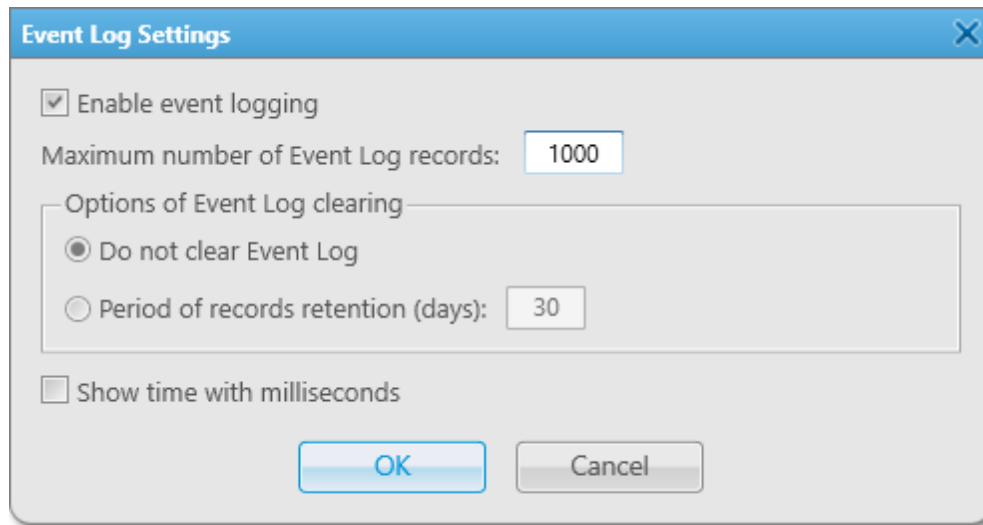
2. In the **Event Log Settings** window, select the **Enable event logging** check box to record events to the SmartPTT Dispatcher database.

3. *(Optional)* In the **Maximum number of Event Log records** box, type the desired value. The maximum value is *9999*.

4. In the **Options of Event Log clearing** area, click the desired option button:

   - Click **Do not clear Event Log** to record new events to the database until the hard drive is full.

   - Click **Period of records retention (days)** to delete records made a specified amount of days ago.

5. *(Optional)* If **Period of records retention (days)** is selected, type the desired amount of days to keep records. The maximum value is *999*. The default value is *30* days.

6. *(Optional)* Select the **Show time with milliseconds** check box to display milliseconds in the **Data/Time** column of the event log.

7. Click **OK** to apply changes and close the window.

5.3.2 Viewing Unread Messages

Follow the procedure to view unread messages in the SmartPTT Dispatcher Event Log.

Procedure:

View unread messages in one of the following ways:

- Click **Event Log → Unread Messages** on the menu bar.

- Click **Unread messages: <number>** if it is displayed in the lower-left corner of SmartPTT Dispatcher.

The **Event Log: messages not read** panel appears.
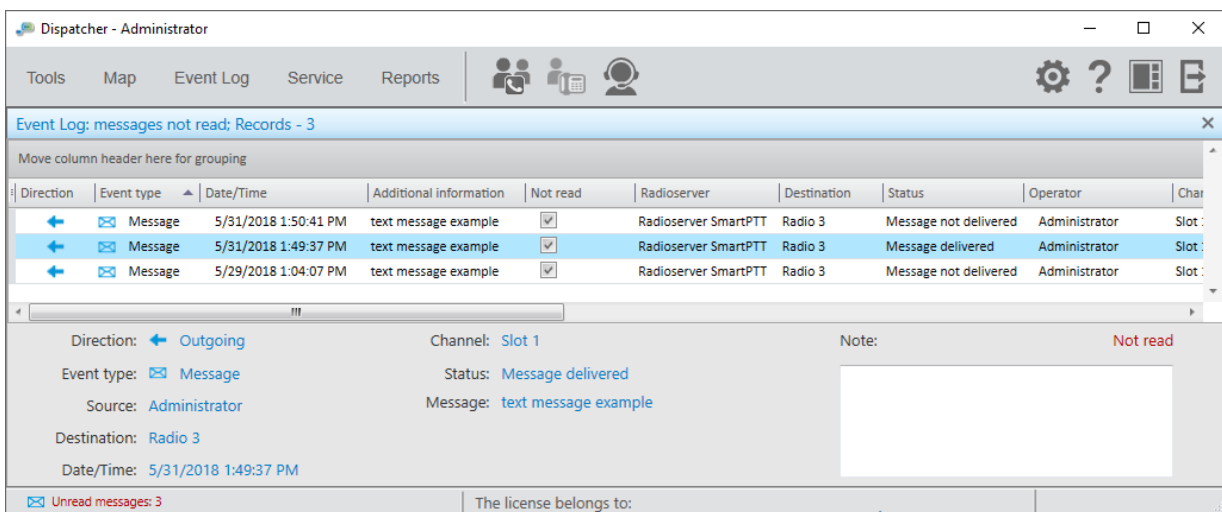
5.3.3 Managing Event Log Entries

Managing Event entries of SmartPTT Dispatcher provides the following abilities:

- Displaying all events. For details, see Displaying All Events.

- Displaying events for a certain period. For details, see Displaying Events for Period.

- Removing all event log entries added before the specific date. For details, see Clearing Event Log.

5.3.3.1 Displaying All Events

Follow the procedure to display all events of SmartPTT Dispatcher.

Procedure:

On the menu bar, click **Event Log → All Events**.
The Dispatcher Event Log panel with all events appears.

> **NOTE**
> Alerts and events initiated in the emergency mode are displayed in the Event Log in red.

5.3.3.2 Displaying Events for Period

Follow the procedure to display events of SmartPTT Dispatcher for a certain period.

Procedure:

1. On the menu bar, click **Event Log → Events for Period**.
    The **Period** window appears.
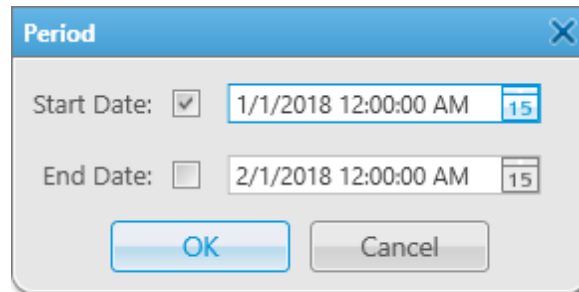
2. In the open **Period** window, set the period to show events:

To show events starting from the specified date only,	select the **Start Date** check box.
To show events before the specified date only,	select the **End Date** check box.
To show events for a certain period of time only,	select the **Start Date** and the **End Date** check boxes.
To show all events from the dispatcher database,	clear the **Start Date** and the **End Date** check boxes.

3. Click the Date (⊞) button, and select the desired start and end dates, or enter the dates manually.

4. *(Optional)* In the boxes with the dates, type the start and end time.

5. Click **OK** to apply changes, and display the Radioserver Event Log.
    If events for the specified period exist in the database, they are displayed in the open Radioserver Event Log.

5.3.3.3 Clearing Event Log

Follow the procedure to remove all event log entries added before the specific date in the SmartPTT Dispatcher Event Log.

Procedure:

1. On the menu bar, click **Event Log → Clear Event Log**.
    The **Clear Event Log** window appears.

2. In the open **Clear Event Log** window, set the desired date manually, or click the Date (🗓) button.
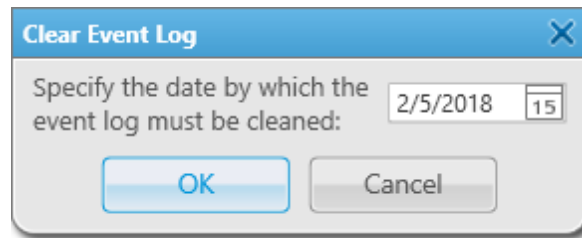
3. Click **OK** to remove event log entries.

All event log entries added before the set date disappear from the Dispatcher Event Log.

5.3.4 Managing Event Log Elements

The procedures below are applicable both to Dispatcher and Radioserver Event Log.

You can perform the following actions for managing the Event Log elements:

- Sort event entries. For details, see Sorting Events.

- Group log entries by columns. For details, see Grouping Events.

- Filter column contents by specific values. For details, see Filtering Events.

- Hide, show, or change the order of columns. For details, see Displaying Columns and Moving Columns.

- Keep the columns position independently of scrolling. For details, see Keeping Column Positions.

5.3.4.1 Sorting Events

Follow the procedure to sort events.

Procedure:

Sort entries of the desired column in one of the following ways:

- To sort the entries in ascending order, click the column header until the Up (▲) icon appears.

- To sort the entries in descending order, click the column header until the Down (▼) icon appears.

Postrequisites:

To cancel entries sorting, click the column header until the sorting icon disappears.

5.3.4.2 Grouping Events

Follow the procedure to group log entries by columns.

Procedure:

1. Click the column header, and drag it to the **Move column header here for grouping** area.

2. *(Optional)* Repeat step 1 to group entries in several columns.
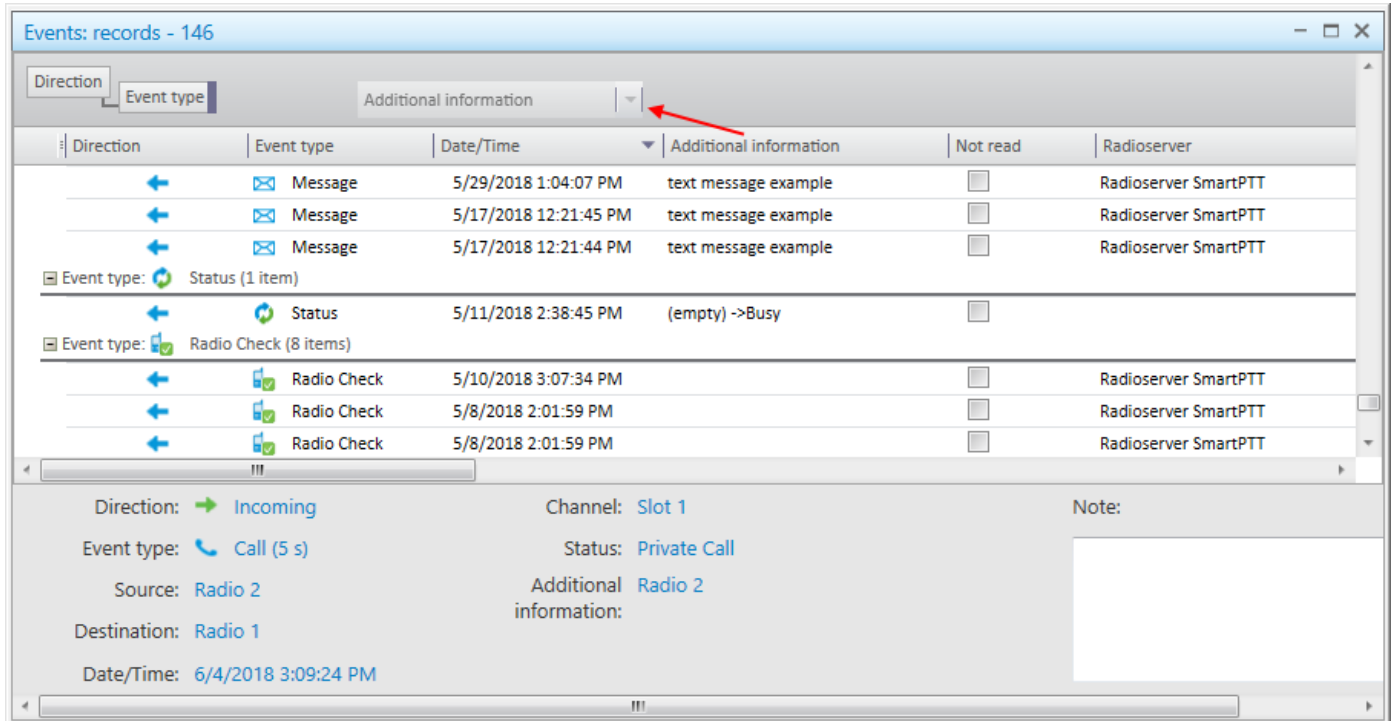
Postrequisites:

To cancel grouping, drag the header from the **Move column header here for grouping** area, and drop it when the cross icon (✕) appears.

5.3.4.3 Filtering Events

Follow the procedure to filter column contents by specific values.

Procedure:

1. Point to the desired column header, and then click the appeared icon (▾).

2. From the list, select the desired check boxes, or click the **Select All** button.
   Next to the filtered column header the filter icon (▾) appears.

Postrequisites:

To cancel filtering, click the filter icon, and then click the **Clear Filter** button.

5.3.4.4 Displaying Columns

Follow the procedure to hide or show columns.

Procedure:

Right-click any column header, and select the desired titles from the list.

NOTE
By default, all the columns are displayed in the event log.

5.3.4.5 Moving Columns

Follow the procedure to change the order of columns.

Procedure:

Drag the desired column header to the left or right of any other column.

5.3.4.6 Keeping Column Positions

Follow the procedure to keep the desired columns position independently of scrolling.

Procedure:

In the column headers, drag the element (⊩) to the right of the column you want to keep the position.
All columns to the left of the element are fixed.

5.4 Call Records

The Call Records functionality is available from both Dispatcher and Radioserver Event Log. Using this functionality you can perform the following actions:

- Play call records. For details, see Playing Call Records.

- Download call records. For details, see Downloading Call Records.

- Open call records location. For details, see Opening Call Records Location.

5.4.1 Play Records Window

In the **Play Records** window you can play call records, download them, or open their location.

NOTE

The opening of call records location is unavailable for SmartPTT Radioserver Event Log.

The window opens when one or multiple call records are played.

For information on playing, see Opening Call Records Location.
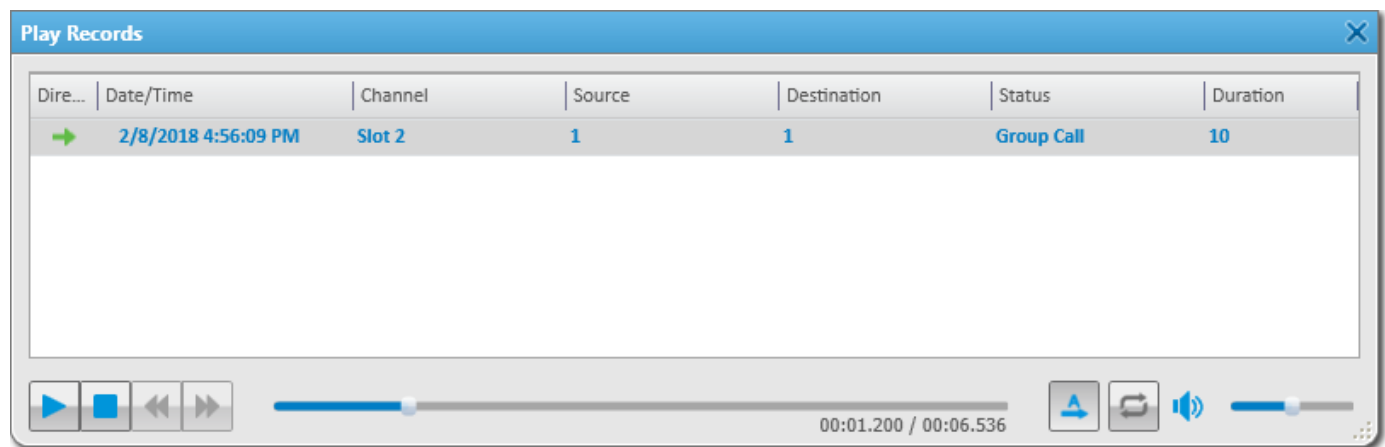
The **Play Records** window provides the following elements:

Call Record Table

Contains records of calls selected in the Event Log Table. Consists of columns identical to the columns of the Event Log Table. For details, see Dispatcher Event Log Table or Radioserver Event Log Table.

Start Playback (▶) / Pause Playback (❙❙)

Plays the selected record or pauses the currently played.

Stop Playback (■)

Stops playback of the current record.

Return to Previous Record (◀◀)

Plays the previous record.

Go to Next Record (▶▶)

Plays the next record.

Play All Records (⏏)

Activates the mode to play all the records one by one. The mode is active by default.

Replay (⟳)

Activates the mode to replay the current record.

If more than one record is in the call record table and the **Play All Records** button is pressed, the records in the table are replayed one by one.

Volume Slider

Adjusts the volume of the audio records playback.

5.4.2 Window of Call Records Downloading

The process of call records downloading is displayed in the **Downloading audio file** window (if a single call record is downloaded) or in the **Downloading audio files** window (if multiple call records are downloaded).
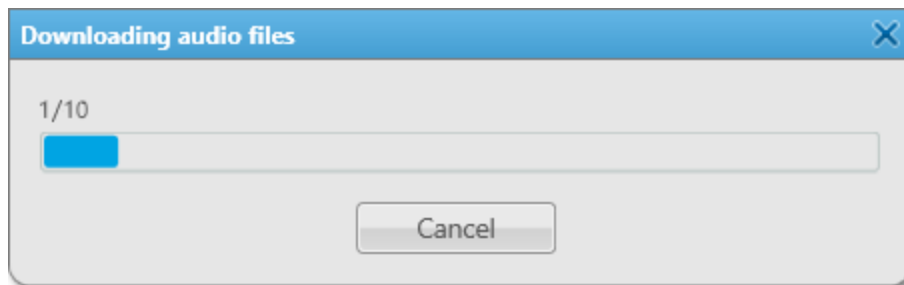
The window is open when you start a single or more call records downloading.

For information on the procedure of call records downloading, see Downloading Call Records.

If a call or call records are downloaded successfully, the *Complete* message appears, and the **Cancel** button changes to the **Open folder** and **Close** buttons.

Using these buttons, you can open the destination folder of downloaded call records or close the window.
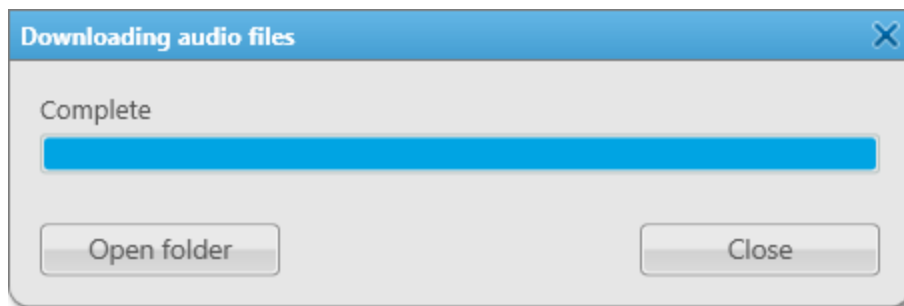
When multiple call records are downloaded and the destination folder contains audio files with the same names as the downloaded call records, the corresponding error occurs. The **Cancel** button changes to the **Replace** and **Skip** buttons.

Using these buttons, you can replace the audio file or skip it and resume download.
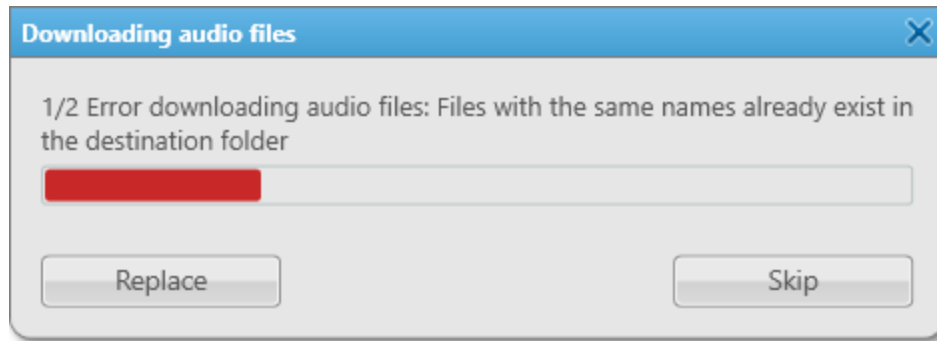
When other errors occur, the corresponding message with an error type appears and the **Cancel** button changes to the **Try again** and **Skip** buttons.

Using these buttons, you can try to repeat to download the call record again or skip it and resume download.
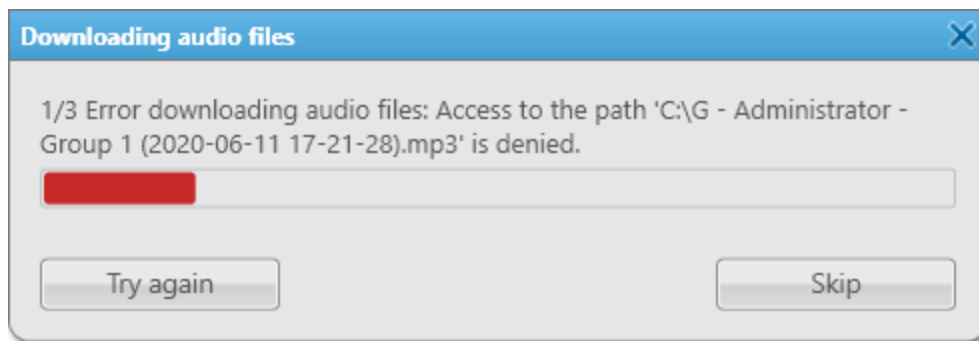
5.4.3 Playing Call Records

Follow the procedure to play call records from the SmartPTT Dispatcher or SmartPTT Radioserver Event Log.

Procedure:

1. Depending on the amount of desired records, play them in one of the following ways:

To play a single call record,	right-click the desired call record, and then click **Play audio file**.
To play multiple call records,	perform the following actions: 1. Select the desired records. 2. Right-click any of the selected records, and then click **Play selected records**.

   The **Play Records** window appears and the playback of the selected records starts.

2. *(Optional)* In the **Play Records** window, configure the playback options:

   - Click **Play all records ( )** to play all selected records one by one.

   - Click **Replay ( )** to activate the call records replay.

Postrequisites:

- To put the playback on pause, click **Pause Playback ( )**.

- To stop the playback, click **Stop Playback ( )**.

5.4.4 Downloading Call Records

Follow the procedure to download call records from the SmartPTT Dispatcher or SmartPTT Radioserver Event Log, or from the **Play Records** window.

Procedure:

Depending on the amount of desired records, download them in one of the following ways:

To download a single call record,	perform the following actions:
	1. Right-click the desired call record, and then click **Download audio file**.
	2. In the window that appears, specify the folder for saving the audio file and the file name, and then click **Save**. The **Downloading audio file** window appears displaying information on the download progress.
To download multiple call records,	perform the following actions:
	1. Select the desired records.
	2. Right-click any of the selected records, and then click **Download audio files**.
	3. In the window that appears, specify the existing folder or create a new one for saving the audio files, and then click **Save**. The **Downloading audio files** window appears displaying information on the download progress.

Postrequisites:

- To open the folder with the downloaded call records, click **Open in File Explorer**.

- If an error occurred during the download, see Window of Call Records Downloading.

5.4.5 Opening Call Records Location

Follow the procedure to open the call records location from the SmartPTT Dispatcher Event Log.

> **NOTE**
> This function is unavailable for the SmartPTT Radioserver Event Log.

Procedure:

Depending on the amount of desired records, open their location in one of the following ways:

To open the location of a single call record,	right-click the desired call record, and then click **Open in File Explorer**. The folder containing the selected call record opens in a new window.
To open the location of multiple call records,	perform the following actions: 1. Select the desired records. 2. Right-click any of the selected records, and then click **Open in File Explorer**. The folder or folders containing the selected records open in a new window.

6 Service

The **Service** menu provides access to a range of SmartPTT Dispatcher features that extend its main functionality. It provides the following options:

- Sending the Radio Check command for identifying the current radio status.

  For details, see Radio Check.

- Increasing default call priority or increasing priority of specific calls.

  For details, see Calls Priority.

> **NOTE**
> The **Calls Priority** option is available in the **Service** menu only to the Administrator.

- Sending audio messages to talkgroups.

  For details, see Voice Notifications.

- Sending audio and text messages to offline radios automatically on their appearance in the network.

  For details, see Deferred Actions.

> **NOTE**
> The **Deferred Actions** option is unavailable in the **Service** menu if the operator does not have the corresponding permission.
> For information on the operator rights, see Operators.

- Managing files received by SmartPTT Radioserver via SmartPTT File Transfer.

  For details, see Received Files.

- Blocking radios with the possibility of restoring them only in the Motorola service center.

  For details, see Radio Kill.

> **NOTE**
> The **Radio Kill** option is unavailable in the **Service** menu if the operator does not have the corresponding permission.

- Viewing system information related to SmartPTT Dispatcher operation.

  For details, see Statistics.

- Exporting the list of registered radios to files in the XML, XLS, or CSV format.

  For details, see Export Radio List.

- Importing the list of registered radios from files in the XML, XLS, or CSV format.

  For details, see Import Radio List.

- Exporting current radio coordinates to KML files.

  For details, see Upload to KML.

- Saving current SmartPTT Dispatcher settings, layout, and database.
  For details, see Save Dispatcher Settings.

- Importing SmartPTT Dispatcher settings, layout and database from the previously created files.
  For details, see Restore Dispatcher Settings.

NOTE
The **Restore Dispatcher Settings** and **Save Dispatcher Settings** options are unavailable in the **Service** menu if SmartPTT Dispatcher is connected to a remote database.

NOTE
The **Restore Dispatcher Settings** and **Save Dispatcher Settings** options are available only to the Administrator.

6.1 Radio Check

Radio Check is a signaling feature that provides the ability to check whether a radio is currently available in the radio system. This feature can be useful in several cases:

- If the radio does not respond due to some reasons. For example, the radio is participating in a call or it is offline.

- If you want to check radio availability manually before the radio inactivity timeout expires. For information on inactivity timeout, see "Registration of Radios" in *SmartPTT Installation and Configuration Guide*.

When the radio receives a Radio Check command, it automatically sends the acknowledgment, no user involvement is required. The only indication available to the user of the checked radio is the Busy LED on it.

You can send the Radio Check command to all MOTOTRBO radios in the dispatched radio systems. No special license or configuration is required.

NOTE
The Radio Check feature is not supported by radios with MDC and 5 Tone IDs.

The following statuses are available for the checked radios:

- The *Radio is available* status means that the checked radio is available and it is online.

- The *Radio is unavailable* status means that the checked radio is busy at the moment (for example, participates in a call) or is offline.

NOTE
If the checked radio is offline, and its inactivity timeout has not expired yet, the radio is displayed as online in SmartPTT Dispatcher until inactivity timeout expiration.

You can send the Radio Check command in one of the following ways:

- Using the controls provided by SmartPTT Dispatcher panels or radio Call Window. For details, see Sending Radio Check from Dispatcher Panels.

- Using the ID of the target radio. This method is recommended in the following cases:

  - If the target radio is not displayed in SmartPTT Dispatcher.

  - If each radio in the dispatched radio systems has a unique ID.

> **NOTE**
> If more than one radio with the same radio ID operate in the dispatched radio system, it is recommended that you use the controls provided by SmartPTT Dispatcher panels or radio Call Window for sending the Radio Check command.

For information on sending the Radio Check command, see the sections below.

6.1.1 Sending Radio Check from Dispatcher Panels

Follow the procedure to send the Radio Check command to the radio displayed in one of the SmartPTT Dispatcher panels.

Procedure:

Send the Radio Check command in one of the following ways:

To send the Radio Check command from the **Radio Fleet** panel,	click the Actions (≫) button on the desired radio, and then click **Send Message ( )**.
To send the Radio Check command from the **Radios** panel,	click the Actions (≫) button on the desired radio element, and then click **Send Message ( )**.
To send the Radio Check command from the **Maps** panel,	on the map or in the expandable **Radios** panel, right-click the desired radio, and then click **Send Message ( )**.
To send the Radio Check command from the radio **Call Window**,	in the **Call Window** of the desired radio, click **Message ( )**. For information on Call Windows, see Radio Call Window.

The target radio status is displayed in the **Event Log** and the log box of the target radio Call Window. For details, see Dispatcher Event Log Table and Radio Call Window.

6.1.2 Sending Radio Check Using Radio ID

Follow the procedure to send the Radio Check command using the target radio ID.

Prerequisites:

Obtain the ID of the desired radio.

Procedure:

1. On the menu bar, click **Service → Radio Check**.
   The **Radio Check** window appears.

2.   In the **Radio ID** box, type the radio ID.

3.   Click **Send** to send the Radio Check command to the radio.

The radio status appears in the **Status** column of the **Event Log** and in the Call Window of the target radio. For
details, see Dispatcher Event Log Table and Radio Call Window.

> **NOTE**
> If the target radio is not displayed in SmartPTT Dispatcher, its status appears only in the **Event Log**. In this case,
> the **Call Window** does not appear.

4.   To close the **Radio Check** window, click **Cancel**.

6.2 Call Priority

The Call Priority feature provides the ability to initiate high priority calls by default or increase the priority of the
desired call in SmartPTT Dispatcher.

> **NOTE**
> The feature is available only in the Capacity Max radio systems.

Call priority is available in SmartPTT Dispatcher, regardless of whether authentication of desktop clients is enabled in
SmartPTT Radioserver Configurator. If client authentication is enabled, then in the client account settings for the
Capacity Max network the **High priority calls (Capacity Max)** or the **Increase outgoing call priority (Capacity
Max)** check box must be selected. For more information about clients and their authentication, see the "Client
Connections" in *SmartPTT Installation and Configuration Guide*.

Depending on which check box is selected in the client account settings, the Call Priority feature affects dispatcher
calls in the following ways:

- If the **High priority calls (Capacity Max)** is selected, calls interrupts normal priority calls by default.

- If the **Increase outgoing call priority (Capacity Max)** is selected, you can increase priority of a call from
  normal to high by clicking **Services → Increase call priority** before initiating it.

> **NOTE**
> The **Increase call priority** parameter on the **Service** menu is hidden if the **High priority calls (Capacity Max)** is
> selected in the client account settings.

> **NOTE**
> High priority calls, Emergency Calls, and All Calls cannot be interrupted.

For information on initiating high priority calls, see the section below.

6.2.1 Increasing Call Priority

Follow the procedure to increase call priority or initiate a high priority call.

Prerequisites:

Ensure **Increase call priority** is available in the **Service** menu.

Procedure:

1. To initiate a call with high priority, select the object or objects to which you want to initiate a high priority call.

2. On the menu bar, click **Service → Increase call priority**.

3. Initiate a call to the selected object.
   If the normal priority call is being made on the channel, it will be interrupted.

> **NOTE**
> Other high priority calls, Emergency Calls, and All Calls are not interrupted.

Postrequisites:

If the call initiating is unsuccessful, repeat step 2 in a while.

6.3 Voice Notifications

The Voice Notifications feature provides the ability to send audio files configured on SmartPTT Radioserver to SmartPTT Dispatcher talkgroups.

Using this feature, you can play a voice notification in selected talkgroups to inform them of emergencies or deliver other important information in the audio message format.

Voice notifications are created and configured in SmartPTT Radioserver Configurator. For details, see "Voice Notifications" in *SmartPTT Installation and Configuration Guide*.

If the radio channel is busy when a voice notification is sent, the notification may interrupt the active transmission. The voice notification priority depends on the system settings. For information on the voice notifications priority in the dispatched radio systems, contact your system administrator.

> **NOTE**
> SmartPTT Dispatcher does not provide voice notification details. To obtain information on the selected audio file, channels, and playback parameters, contact your system administrator.

Voice notifications can be played in one of the following ways:

- From the **Voice Notifications** window. For details, see Playing Voice Notifications.

- From the **Voice Notification** element in Custom Consoles. For details, see Voice Notifications.

- Automatically, when triggered by a rule configured in SmartPTT Radioserver Configurator. For details, see "Rules" in *SmartPTT Installation and Configuration Guide*.

During the voice notification playback, the playback details are available in the **Voice Notifications** window even if the notification is played from a custom console or is triggered by an event configured in the rule in SmartPTT Radioserver Configurator.
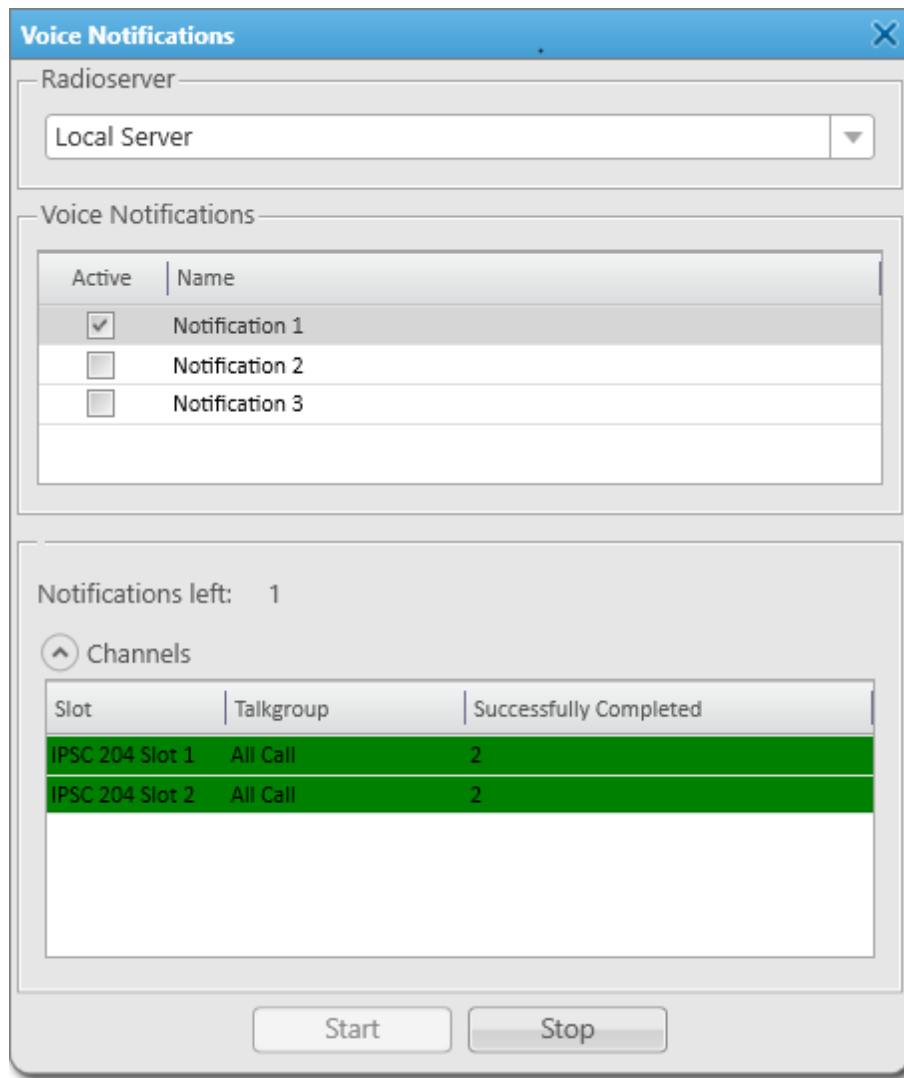
The **Voice Notifications** window provides the following elements:

Radioserver

Contains the list of available servers that are currently active and registered in SmartPTT Dispatcher.

Voice Notifications

Contains the table of the voice notifications configured in SmartPTT Radioserver Configurator.
The table consists of the following columns:

- The **Active** column contains the check box indicating the status of the voice notification. The selected check box indicates that the voice notification is currently playing or is being sent.

- The **Name** column contains the name of the voice notification.

You can sort the voice notifications in the table by columns and arrange the entries in ascending or descending order by clicking the name of the desired column. You can sort entries only by one column, clicking the name of another column automatically discards the sorting order applied earlier.

Notifications left

    Shows how many playbacks of the voice notification are left.

    For information on the voice notification parameters, see "Voice Notifications" in *SmartPTT Installation and Configuration Guide*.

Collapse (⌃)/Expand (⌄)

    Hide and show the **Channels** table.

Channels

    Contains the table with information on the currently playing voice notification.
    The table consists of the following columns:

- The **Slot** column displays the channel on which the voice notification is or has been played.

- The **Talkgroup** column shows the name of the talkgroup for which the voice notification is or has been played.

- The **Successfully Completed** column shows the number of successful voice notification playbacks.

    The color of the **Channels** table entries indicates the voice notification playback status for each of the channels. The following color indicators are available:

- The yellow entry color indicates that the voice notification is currently playing.

- The green entry color indicates that the voice notification has been successfully played.

- The red entry color indicates that the voice notification was not played due to connection, audio file, or hardware problems.

Start

    Initiates playback of the selected voice notification.

Stop

    Terminates the voice notification playback. The playback cannot be resumed from the point where it was stopped.

For information on playing voice notifications, see the section below.

6.3.1 Playing Voice Notifications

Follow the procedure to send a voice notification from the **Voice Notification** window.

Procedure:

1. On the menu bar, click **Service → Voice Notifications**.
   The **Voice Notifications** window appears.

2. In the **Radioserver** area, select the desired server from the list.

> **NOTE**
> Only the servers that are currently active and registered in SmartPTT Dispatcher are displayed in the **Radioserver** list.

3.   In the **Voice Notifications** area, in the table, click the voice notification that you want to send.

The information on the selected voice notification playback appears in the **Channels** table in the bottom part of the window.

4.   In the bottom part of the window, click **Start** to start the voice notification playback.

Postrequisites:

To stop the voice notification playback, click **Stop**.

> **NOTE**
> If you click the **Stop** button, you will not be able to resume the current voice notification playback.

6.4 Deferred Actions

Deferred actions feature provides the ability to create and deliver various messages to offline and online radios. Offline radios receive the sent messages after becoming online, and online radios receive them right after sending.

In SmartPTT Dispatcher the following types of deferred actions are possible:

- Actions with voice messages

- Actions with text messages

- Actions with combined messages (both voice and text)

> **Important**
> Deferred Actions can be created by the Administrator, or operators with the corresponding rights.
> For information on the operator rights, see Operators.

For information on using deferred actions, see the sections below.

6.4.1 Deferred Actions Window

In the **Deferred Actions** window, you can manage existing deferred actions.

You can open the window in one of the following ways:

- By clicking **Service → Deferred Actions** on the menu bar.

- By clicking **View Deferred Actions** in the **Create Deferred Actions** window.
  For details, see Create Deferred Action Window.
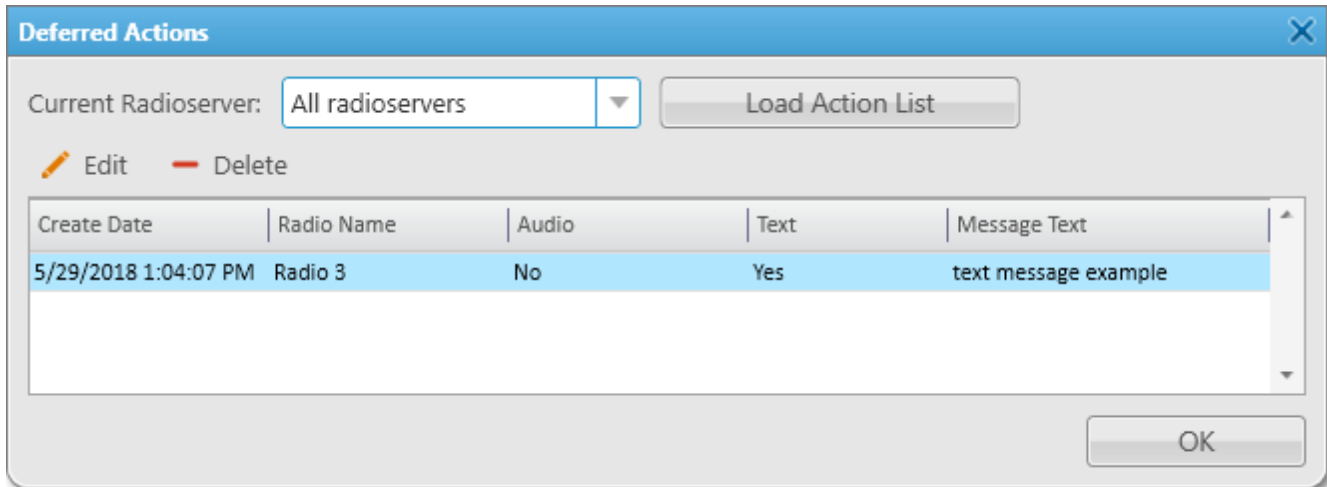
The **Deferred Actions** window provides the following elements:

Current Radioserver

Provides a list of radioservers from which you can load existing actions to the Deferred Actions Table located below.

> **NOTE**
> If the desired radioserver is not in the list, it may be inactive.
> For information on radioservers, see Radioservers.

Load Actions List

Loads new deferred actions from the active radioserver or all active radioservers, or refreshes the Deferred Actions Table if no new actions were added.

You can load only incomplete actions. When the action is complete, it disappears from the Deferred Actions Table.

Edit

Opens the **Create Deferred Action** window in which you can edit the deferred action.
For information on the window, see Create Deferred Action Window.

Delete

Deletes the selected deferred action.

Deferred Actions Table

Displays all existing incomplete actions.

The table consists of the following columns:

- The **Create Date** column contains the date and time when the action was created.

- The **Radio Name** column contains the action receiver name specified in the radio properties.

- The **Audio** column contains information on whether the action has a voice message attached.

- The **Text** column contains information on whether the action has a text message attached.

- The **Message Text** column contains the text of the attached message.

6.4.2 Create Deferred Action Window

In the **Create Deferred Action** window, you can create voice and text messages (or both) that are sent to radios when they become online.
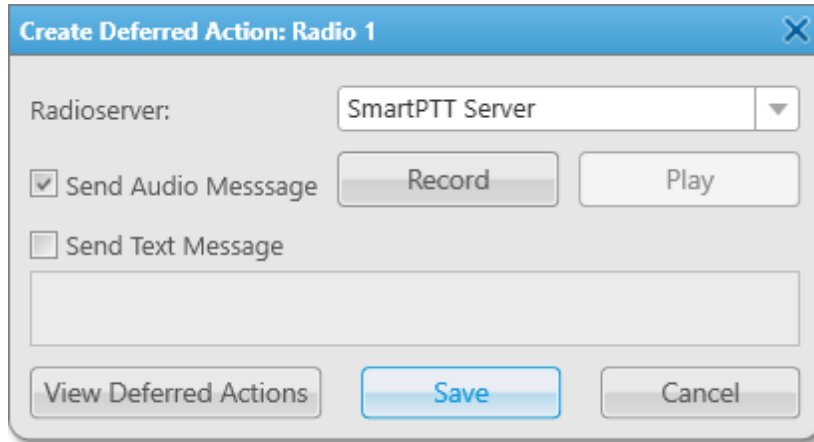
You can open the window in one of the following ways:

- By clicking **Create Deferred Action ( )** in the Actions Menu of the desired radio.
  For information on the Actions Menu, see <u>Radio Actions Menu</u>.

- By clicking **Create Deferred Action ( )** in the Call Window of the desired radio.
  For information on the Call Window, see <u>Radio Call Window</u>.

The **Create Deferred Action** window provides the following elements:

Radioserver

Provides the list of active radioservers to which the radio belongs.

Send Audio Message

Unblocks the **Record** and **Play** buttons:

- The **Record** button starts voice message recording. When clicked, changes to the **Stop** button.

- The **Play** button plays the recorded voice message. When clicked, changes to the **Stop** button.

Send Text Message

Unblocks the box below for typing a text message. If you clear the **Send Text Message** after typing, the text will be kept in the unavailable box, and will not be included into the action when you save it.

> **NOTE**
> You can create deferred combined actions that include both audio and text messages.

View Deferred Actions

Closes the **Create Deferred Action** window without saving, and opens the **Deferred Actions** window.

For information on the **Deferred Actions** window, see Deferred Actions Window.

Save

Creates the action and sends the message to the radioserver. Information on the action creating appears above the **Save** button.

After the radio receives the deferred action, its entry appears in the event log and in the radioserver event log. If only a text message is sent, its entry appears also in the log box of the radio Call Window.

6.4.3 Deferred Actions Procedures

You can use the Deferred Actions feature to perform the following actions:

- Create audio, text and combined deferred messages. For details, see Creating Deferred Audio Messages, Creating Deferred Text Messages and Creating Deferred Combined Messages.

- Edit and delete deferred actions. For details, see Managing Deferred Actions.

6.4.3.1 Creating Deferred Audio Messages

Follow the procedure to create a deferred audio message.

Prerequisites:

Ensure the recording device is connected to the computer, and is active.

Procedure:

1. Open the **Create Deferred Action** window in one of the following ways:

To open the window from the **Radio Fleet** panel,	click the radio Actions (≫) button, and then click **Create Deferred Action (🔄)**.
To open the window from the **Radios** panel,	click the radio Actions (≫) button, and then click **Create Deferred Action (🔄)**.
To open the window from the **Maps** panel,	on the map or in the expandable **Radios** panel, right-click the desired radio, and then click **Create Deferred Action (🔄)**.
To open the window from the radio Call Window,	in the radio Call Window, click **Create Deferred Action (🔄)**. For information on on Call Windows, see Radio Call Window.

2. In the **Create Deferred Action** window, from the **Radioserver** list, select the desired radioserver.

3. Select the **Send Audio Message** check box.
   The **Record** button becomes available.

4.   Click the **Record** button.

The button changes to the **Stop** button; other elements become unavailable.

5.   Speak into the microphone.

6.   Click the **Stop** button after you finished speaking.

The **Stop** button changes to the **Record** button; the **Play** button becomes available.

7.   *(Optional)* Click **Play** to listen to the recorded message.

8.   Click the **Save** button.

If the action creating is successful, the *The action was successfully saved* message appears.

Postrequisites:

To re-record the deferred audio message, repeat steps 4–7.

If the re-recording is successful, the *Changes were successfully saved* message appears.

6.4.3.2 Creating Deferred Text Messages

Follow the procedure to create a deferred text message.

Procedure:

1.   Open the **Create Deferred Action** window in one of the following ways:

To open the window from the **Radio Fleet** panel,	click the radio Actions (≫) button, and then click **Create Deferred Action ( ).**
To open the window from the **Radios** panel or the **Custom Console** panel,	click the radio Actions (≫) button, and then click **Create Deferred Action ( ).**
To open the window from the **Maps** panel,	on the map or in the expandable **Radios** panel, right-click the desired radio, and then click **Create Deferred Action ( ).**
To open the window from the radio Call Window,	in the radio Call Window, click **Create Deferred Action ( ).** For information on on Call Windows, see Radio Call Window.

2.   In the **Create Deferred Action** window, from the **Radioserver** list, select the desired radioserver.

3.   Clear the **Send Audio Message** check box.

The **Record** button becomes unavailable.

4.   Select the **Send Text Message** check box.

The box for typing message below becomes available.

5.   Type the desired message in the box.

6.   Click the **Save** button.

If the action creating is successful, the *The action was successfully saved* message appears.

Postrequisites:

To change the message text, delete the text from the box, and then type a new text.

6.4.3.3 Creating Deferred Combined Messages

Follow the procedure to create a deferred combined message that includes both audio and text messages.

Prerequisites:

Ensure the recording device is connected to the computer, and is active.

Procedure:

1. Open the **Create Deferred Action** window in one of the following ways:

To open the window from the **Radio Fleet** panel,	click the radio Actions (≫) button, and then click **Create Deferred Action ( ).**
To open the window from the **Radios** panel or the **Custom Console** panel,	click the radio Actions (≫) button, and then click **Create Deferred Action ( ).**
To open the window from the **Maps** panel,	on the map or in the expandable **Radios** panel, right-click the desired radio, and then click **Create Deferred Action ( ).**
To open the window from the radio Call Window,	in the radio Call Window, click **Create Deferred Action ( ).** For information on on Call Windows, see Radio Call Window.

2. In the **Create Deferred Action** window, record the sound message.

   For details, see steps 3–7 of the Creating Deferred Audio Messages procedure.

3. In the **Create Deferred Action** window, type the text message.

   For details, see steps 4–5 of the Creating Deferred Text Messages procedure.

4. Click the **Save** button.

   If the action creating is successful, the *The action was successfully saved* message appears.

6.4.3.4 Managing Deferred Actions

Follow the procedure to manage an existing deferred action.

Prerequisites:

Ensure the radioserver whose deferred actions you want to manage is online.

Procedure:

1. Open the **Deferred Actions** window:

To open the window from the **Create Deferred Action** window,	click the **View Deferred Actions** button.
To open the window from the menu bar,	click **Service → Deferred Actions**.

2. In the **Deferred Actions** window, from the **Current Radioserver** list, select the radioserver whose actions you want to manage.

3. Click the **Load Action List** button.
   Existing deferred actions appear in the Deferred Actions Table below.

4. In the Deferred Actions Table, select the desired deferred action.

5. Perform the desired operation:

To edit the deferred action,	perform the following actions: 1. Click **Edit**. The **Create Deferred Action** window appears. 2. In the **Create Deferred Action** window, perform the desired changes. 3. Click the **Save** button. If the action changing is successful, the *Changes were successfully saved* message appears.
To delete the deferred action,	click **Delete**. The selected deferred action disappears from the Deferred Actions Table.

6.5 Received Files

SmartPTT Dispatcher provides the ability to view files that were sent from radios using the SmartPTT File Transfer application.

For information on SmartPTT File Transfer, see "SmartPTT File Transfer" in *SmartPTT Installation and Configuration Guide* and *SmartPTT File Transfer User Guide*.

You can load a list of received files in the **Received Files** window. To open the window, on the menu bar, click **Service → Received Files**.

For information on procedure of the received files viewing, see Managing Received Files.
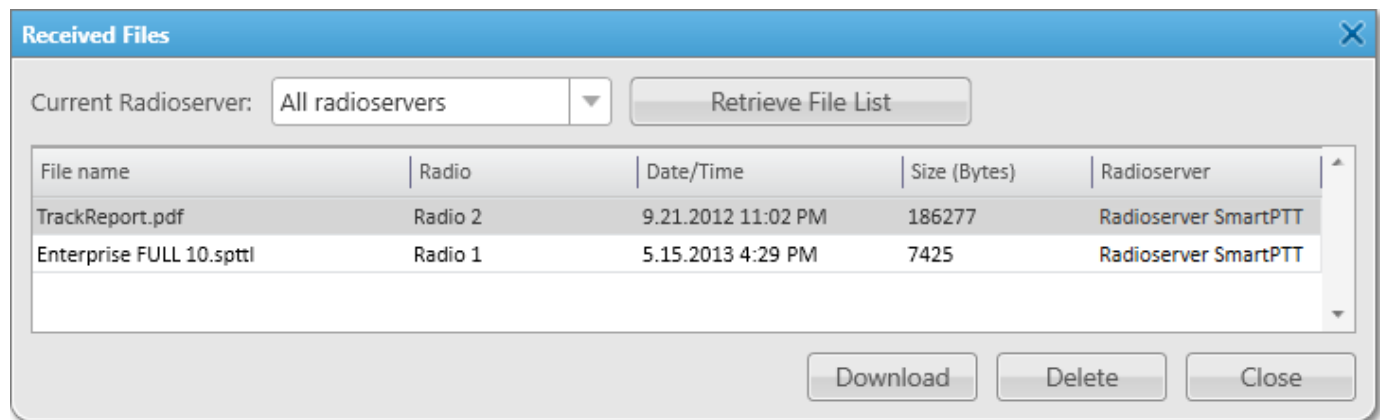
The **Received Files** window provides the following elements:

Current Radioserver

Provides a list of radioservers from which you can load received files to the Received Files Table located below.

Retrieve File List

Loads received files of the selected radioserver.

Received Files Table

Displays all received files. The table consists of the following columns:

- The **File name** column contains the received file name.

- The **Radio** column contains the radio name which is a source of the file.

- The **Date/Time** column contains the date and time when the file was received.

- The **Size (Bytes)** column contains information on the file size.

- The **Radioserver** column contains the radioserver name from which the file was loaded.

You can sort the received files in the table by columns and arrange the entries in ascending or descending order by clicking the name of the desired column. You can sort entries only by one column, clicking the name of another column automatically discards the sorting order applied earlier.

Download

Opens the window for saving the selected file. You can also open this window by double-clicking the selected file.

Delete

Deletes the selected file from the list.

For information on managing received files, see the section below.

6.5.1 Managing Received Files

Follow the procedure to view, download received files, or delete them from the list.

Procedure:

1. On the menu bar, click **Service → Received Files**.
   The **Received Files** window appears.

2. In the **Received Files** window, from the **Current Radioserver** list, select the desired radioserver.

3. Click the **Retrieve File List** button.
   A list of received files appears in the Received Files Table.

4. Perform the desired action:

To download the file,	perform the following actions: 1. Select the desired file, and then click **Download** or double-click the file. The window for downloading appears. 2. In the open window, specify a folder to save the file, and then click **Save**.
To delete the file,	select the file, and then click the **Delete** button.

5. Click **Close** to close the window.

6.6 Radio Kill

Radio Kill is a signaling feature that provides the ability to irreversibly disable the radio. This function can be useful if the radio is reported to be lost or stolen to avoid its usage for unauthorized access to the radio system. The Radio Kill command affects the radio physical integrity. As a result, the radio becomes inoperable and irresponsive.

> **Important**
> The only way to restore the radio after sending the Radio Kill command is to send it to the Motorola service center. Therefore, this feature must only be used if other options are inapplicable.

The Radio Kill feature is available only in Capacity Max radio systems. No special license is required.

> **Important**
> The Radio Kill command can be performed by the Administrator and operators that were granted the corresponding permission. For details, see Operators.

The Radio Kill window contains the single **Radio ID** field where you need to type the ID of the target radio. If your SmartPTT Dispatcher is configured to use the *IP address* radio ID input format, you need to contact your system administrator to request the target radio ID. Alternatively, you can convert it from the radio IP address. For details, see Converting Radio IP Address to Radio ID.

The Radio Kill command can only be sent to the radios that are currently online and registered in the dispatched radio system, i.e. they are displayed in the **Radio Fleet**, **Radios**, **Maps**, or Custom Console panels in SmartPTT Dispatcher. If you send the Radio Kill command to the radio that is not allowed to your profile or SmartPTT Radioserver, an error message indicating the command failure appears.
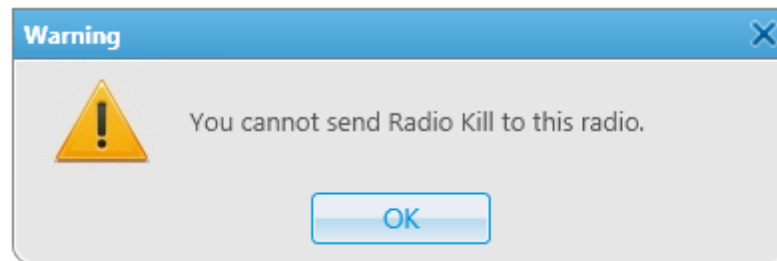
For information on sending the Radio Kill command, see the sections below.

6.6.1 Sending Radio Kill

Follow the procedure to send the Radio Kill command to the radio.

> **Important**
> The only way to restore the radio after sending the Radio Kill command is to send it to the Motorola service center. Therefore, this feature must only be used if other options are inapplicable.

Prerequisites:

- Obtain the desired radio ID. For details, see Converting Radio IP Address to Radio ID, or contact your system administrator.

- Ensure that the desired radio is displayed in one of the SmartPTT Dispatcher panels (**Radio Fleet**, **Radios**, **Maps**, or Custom Console).

- Ensure that the desired radio is online.

Procedure:

1. On the menu bar, click **Service → Administration → Radio Kill**.
   The **Radio Kill** window appears.

2. In the **Radio ID** field, type the desired radio ID.

    To the right of the **Radio ID** field, the name assigned to the radio in the SmartPTT Dispatcher database appears.

3. Check the displayed information, and then click **OK**.

4. In the **Enter Password** window, in the **Operator password** box, type the password that you use to log in to SmartPTT Dispatcher, and then click **OK**.

    To cancel sending the Radio Kill command, click **Cancel**.

> **NOTE**
> If the **Warning** window appears, some of the required conditions have not been fulfilled. Unless all required conditions are met, sending the Radio Kill command to the specified radio is impossible.

6.6.2 Converting Radio IP Address to Radio ID

Follow the procedure to convert the radio identifier in IPv4 format to the decimal Radio ID format.

> **NOTE**
> The radio IP address in the IPv4 format consists of four decimal numbers (called octets) separated by dots.

Prerequisites:

Obtain the desired radio IPv4 address from the **Radio Properties** window. For details, see Radio Properties Window.

Procedure:

1. Multiply the third octet of the IP address by 256.

2. Multiply the second octet of the IP address by 65,536.

3. Add the fourth octet of the IP address to the values obtained in steps 1 and 2.

    The resulting number is the target Radio ID.

Example

> If the radio IP address is *82.200.101.162*, its ID is calculated in the following way:
>
> 1. 101 × 256 = 25,856
>
> 2. 200 × 65,536 = 13,107,200
>
> 3. 162 + 25,856 + 13,107,200 = 13,133,218
>
> *13133218* is the Radio ID.

6.7 Statistics

The **Statistics** window provides the summary of information stored in the SmartPTT Dispatcher database.
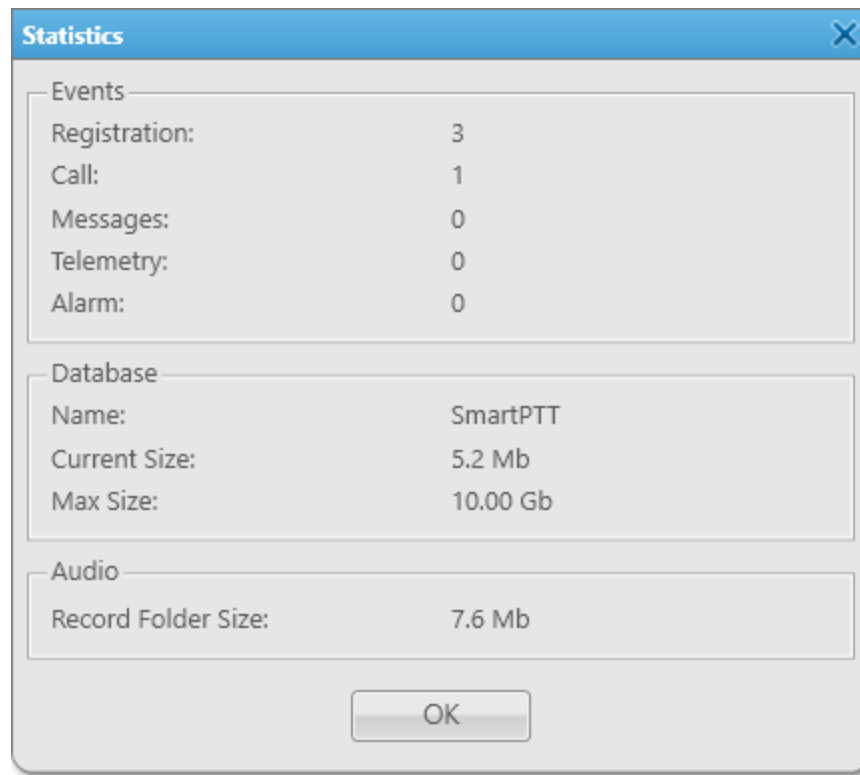
The **Statistics** window contains the following areas:

Events

Contains the summary of system events logged in the selected SmartPTT program. You can see the event log summary for each of the following event types:

- **Registration** — the number of subscribers' registrations.

- **Call** — the number of the logged incoming and outgoing calls.

- **Messages** — the number of the logged incoming and outgoing text messages.

- **Telemetry** — the number of the sent telemetry commands and received telemetry data messages.

- **Alarm** — the number of the logged system alarms.

Database

Contains information on SmartPTT Dispatcher database:

- **File Name** — the name of the database.

- **Current Size** — the current size of the database.

- **Max Size** — the size limit for the database.

NOTE
The maximum database size is set during the SQL Server configuration and depends on the SQL Server version and edition.

When the database reaches 90% of its maximum size, a warning message prompting to perform the automatic database cleanup appears. It also indicates the percentage of the hard drive space it currently occupies relative to the **Max Size** value.

When the database size reaches its Max Size value, another warning message appears. It indicates that new records cannot be added to the database until it is cleaned up.

Warning messages appear at every start of the SmartPTT program whose database is approaching or reached its maximum size. Warning messages appear every 30 min until you clean up the relevant database.

Audio

Provides information on the size of the folder where SmartPTT Dispatcher stores audio records. For information on the folder, see Records.

6.8 Export Radio List

The **Export Radio List** feature provides the ability to export current properties and settings of the radios and WAVE users from the SmartPTT Dispatcher database to a separate file.

The exported files can be used for the following purposes:

- Transfer of the exported radio list to another SmartPTT Dispatcher.

- Adding new radios and WAVE users to the radio list.

- Updating properties and settings of the exported radios and WAVE users.

- Performing the radio system analysis.

- Generating reports.

For information on options of the radio list import in SmartPTT Dispatcher, see Import Radio List.

You can export the radio list in one of the following formats:

- Microsoft Excel 97-2003 (XLS)

- XML

- CSV

The choice of the export format depends on the export purposes and does not affect its informational content.

The exported file provides information in the form of a table whose columns correspond to radio and WAVE user properties in SmartPTT Dispatcher.

XLS file example

Export Radio List																			
ID	Radio IP address	Network ID	Radio ID	Name	GPS	MDC ID	Icon	Show on map	Lone Worker	Select 5 ID	Indoor Support	Indoor Request	Indoor Update Interval	GPS update with time interval	Time Interval	GPS update with distance interval	Distance Interval	GPS on GPIO pin status change	GPS on emergency
50331660	12.0.0.3	12	3	Radio 1	True			True	False		True	False	60	True	60	True	100	True	True
67108876	12.0.0.4	12	4	Radio 2	True			True	False		True	True	60	True	60	False	100	True	True
83886092	12.0.0.5	12	5	Radio 3	False			False	False		False	False	60	False	60	False	100	False	False

The exported table consists of the following columns:

Column Name	Description
ID	Automatically generated radio or WAVE user ID.
Radio IP Address	Radio or WAVE user IP address.
Network ID	Radio or WAVE user network ID that is set in MOTOTRBO CPS (the CAI Network parameter).
Radio ID	Unique radio or WAVE user identifier.
Name	Radio or WAVE user name in SmartPTT Dispatcher.
GPS	Indicates whether SmartPTT Dispatcher processes the radio or WAVE user GPS coordinates.
MDC ID	Identifier of the radio from an analog radio system in MDC-1200 format.
Icon	Path to the the icon that is set for the radio or WAVE user in SmartPTT Dispatcher. If the default icon is used, the cell is left empty.
Show on map	Indicates whether the radio or WAVE user is displayed on the map in SmartPTT Dispatcher.
Lone Worker	Indicates whether the radio or WAVE user is in the Lone Worker mode.
Select 5 ID	Identifier of the radio from an analog radio system in the Select 5 format.
Indoor Support	Indicates whether the radio location relative to the beacons is displayed on the building layout in the **Indoor Tracking** feature.
Indoor Request	Indicates whether the a time interval for sending location data requests to the radio is set.

Column Name	Description
Indoor Update Interval	Time interval in seconds after which location data requests are sent to the radio.
GPS update with time interval	Indicates whether a time interval for sending GPS coordinates requests to the radio or WAVE user is set.
Time Interval	Time interval in seconds after which GPS coordinate requests are sent to the radio or WAVE user.
GPS update with distance interval	Indicates whether the radio or WAVE user Update location with distance interval parameter for the GPS feature is set.
Distance Interval	Distance in meters or feet after which the GPS coordinates request to the radio or WAVE user is sent.
GPS on GPIO pin status change	Indicates whether the GPS coordinates request is sent to the radio when the status of the GPIO pin changes.
GPS on emergency	Indicates whether the GPS coordinates request is sent to the radio when it sends an emergency alarm.

NOTE

Some properties have only two possible values: *true* and *false*. For these properties, the *True / False* values in XLS and CSV files correspond to the *Yes / No* values in XML files.

If a property is not applicable to the radio or WAVE user, the cell in the corresponding column is left empty.

For information on radio and WAVE user properties and settings, see Radio Properties Window.

For information on exporting the radio list, see the section below.

6.8.1 Exporting Radio List

Follow the procedure to export the list of radios and WAVE users to a file.

Prerequisites:

Ensure that you have access rights to the desired export destination folder.

Procedure:

1. On the menu bar, click **Service → Export Radio List**.
   The **Export Radio List** window appears.
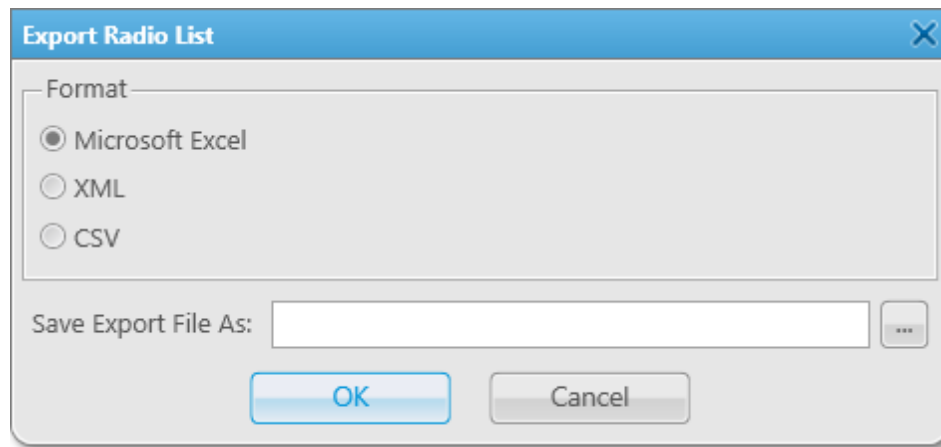
2. In the **Format** area, select the desired export format.

3. To the right of the **Save Export File As** field, click Browse (⋯).

4. In the **Specify File Name** window, specify the path to the desired folder, and then perform one of the following actions:

To export the radio list to a new file,	in the **File name** field, type the name for the exported file, and then click **Save**.
To export the radio list to an existing file,	select the file that you want to replace, and then click **Save**.

   In the **Save Export File As** field the path to the file and its name appear.

5. In the window indicating successful radio list export, click **OK**.

6.9 Import Radio List

The **Import Radio List** feature provides the ability to import a list of radios and WAVE users with their properties and settings to SmartPTT Dispatcher.

This feature can be used for the following purposes:

- Transfer of the radio list from another SmartPTT Dispatcher.

- Adding new radios and WAVE users to the SmartPTT Dispatcher radio list.

- Updating current properties and settings of radios and WAVE users in the SmartPTT Dispatcher radio list.

For information on the radio list export options in SmartPTT Dispatcher, see Export Radio List.

You can import the radio list from a file in one of the following formats:

- Microsoft Excel 97-2003 (XLS)

- XML

- CSV

For information on radio and WAVE user properties, see Radio Properties Window.

For information on importing the radio list, see the section below.

6.9.1 Importing Radio List

Follow the procedure to import the list of radios and WAVE users from a file.

Prerequisites:

Obtain the format of the file that you want to import. For details, see Import Radio List.

Procedure:

1. On the menu bar, click **Service → Import Radio List**.
   The **Import Radio List** window appears.
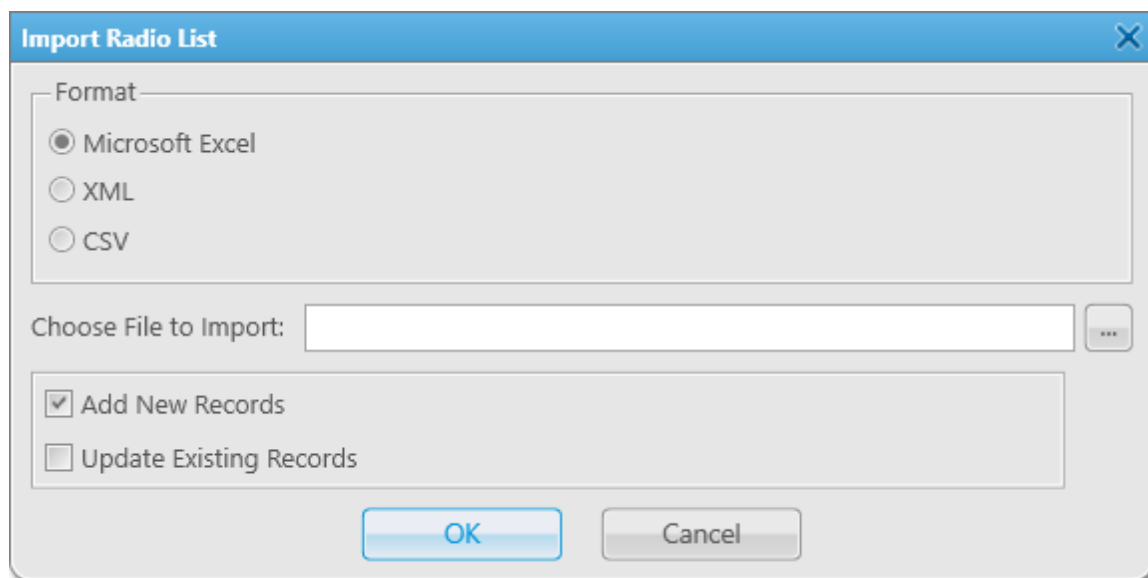
2. In the **Format** area, select the format of the file that you want to import.

3. To the right of the **Choose File to Import** field, click Browse (⋯).

4. In the **Specify File Name** window, specify the file that you want to import, and then click **Open**.

   NOTE
   Only files in the format selected in step 2 are displayed in the **Specify File Name** window.

5. In the bottom part of the **Import Radio List** window, select the desired option:

To add new radios and WAVE users from the imported file,	select **Add New Records**.
To update properties and settings of existing radios and WAVE users,	select **Update Existing Records**.
To add new and update the existing radios and WAVE users,	select **Add New Records** and **Update Existing Records**.

6. In the **Import Radio List** window, click **OK**.
   To cancel the radio list import, click **Cancel**.

7. In the window indicating successful radio list import, click **OK**.

8. Restart SmartPTT Dispatcher to complete the radio list import.

NOTE
If the imported file contains no changes that can be uploaded to the current radio list, a window indicating the absence of changes appears.

6.10 Upload to KML

The **Upload to KML** feature provides the ability to export radio and WAVE user coordinates from SmartPTT Dispatcher to a separate KML file.

The exported KML file contains location information only on those radios and WAVE users that are currently displayed on the map in SmartPTT Dispatcher.
For information on location tracking settings of radio and WAVE users, see Radio Location Properties.

NOTE
If the **Validity of GPS coordinates** period for a radio or WAVE user has expired, they will not be displayed on the map.
For information on **Positioning Systems** settings, see Positioning Systems.

You can export the location data to a local file or to a file on an FTP server.

Depending on the settings, the location information in the exported file may be fixed or receive regular updates. If the relevant check box is selected in the export settings, the exported file will be updated at a defined interval to reflect the location changes in the dispatched radio system.

Exported files can be viewed on web in a browser or in desktop applications. The KML file format is used in Google Maps, Google Earth, and other services based on Google maps.

For information on exporting location data to a local KML file or to a KML file on an FTP server, see the sections below.

6.10.1 Exporting Coordinates to Local KML File

Follow the procedure to export radio and WAVE user coordinates to a local KML file.

Prerequisites:

Ensure the following conditions are met:

- Desired radios and WAVE users are displayed on the map in SmartPTT Dispatcher. For details, see Radio Location Properties.

- You have access rights to the desired export destination folder.

Procedure:

1. On the menu bar, click **Service → Upload to KML**.
   The **Export to KML** window appears.

2. At the top of the window, click **Local File**.
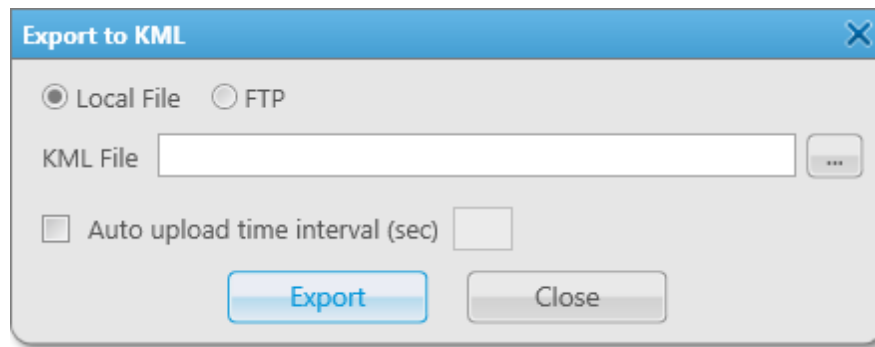
3. To the right of the **KML File** field, click Browse (⋯).

4. In the **Select KML File** window, specify the path to the desired folder, and then perform one of the following actions:

To export radio and WAVE user coordinates to a new file,	in the **File name** field, type the name for the exported file, and then click **Save**.
To export radio and WAVE user coordinates to an existing file,	select the file that you want to replace, and then click **Save**.

   In the **KML File** field the path to the file and its name appear.

5. *(Optional)* Set up automatic update of the location data in the exported file:

   a. In the **Export to KML** window, select the **Auto upload time interval** check box.

   b. In the box to the right of the **Auto upload time interval** check box, specify the interval in seconds at which the exported file will be updated.

NOTE
If you leave the **Auto upload time interval** field empty or move the exported file to another location, the location data in the file will not be updated.

6. At the bottom of the **Export to KML** window, click **Export**.

7. In the window indicating successful export, click **OK**.

Postrequisites:

- To cancel the coordinates export and save current export settings, in the **Export to KML** window, click **Cancel**.

- To cancel the coordinates export without saving current export settings, in the **Export to KML** window, click Close (✕) or press Esc.

6.10.2 Exporting Coordinates to KML File on FTP Server

Follow the procedure to export radio and WAVE user coordinates to a KML file on an FTP server.

Prerequisites:

- Ensure that the desired radios and WAVE users are displayed on the map in SmartPTT Dispatcher. For details, see Radio Location Properties.

- Ensure that you have access rights to the desired export destination folder.

- *(Optional)* Obtain user login and password for access to the desired FTP server.

Procedure:

1. On the menu bar, click **Service → Upload to KML**.
    The **Export to KML** window appears.

2. At the top of the window, click **FTP**.
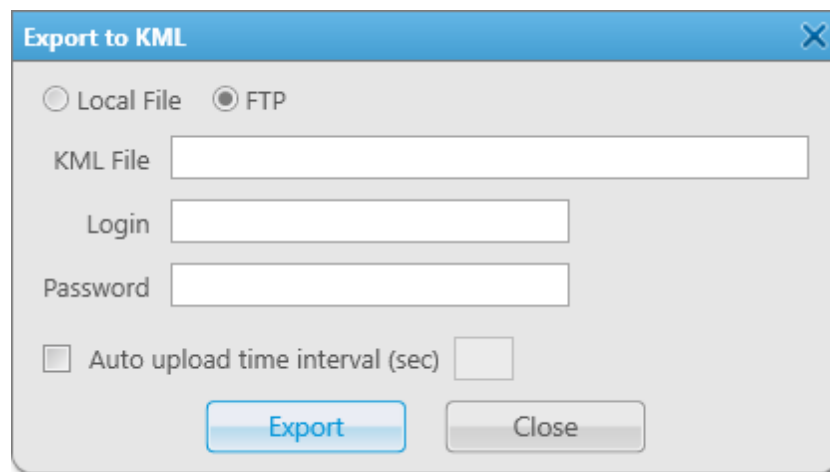
3. In the **KML File** box, specify the path and the name for saving the exported file. For example,
    ftp://myserver/smartptt/Radios_smartptt.kml

4.   *(Optional)* If the target FTP server requires user authentication, in the **Login** and **Password** boxes, type the login and password for access to the FTP server.

5.   *(Optional)* Set up automatic update of the location data in the exported file:

   a.   In the **Export to KML** window, select the **Auto upload time interval** check box.

   b.   In the box to the right of the **Auto upload time interval** check box, specify the interval in seconds at which the location data in the exported file will be automatically updated.

> **NOTE**
> If you leave the **Auto upload time interval** box empty or move the exported file to another location, the location data in the file will not be updated.

6.   At the bottom of the **Export to KML** window, click **Export**.

7.   In the window indicating successful export, click **OK**.

Postrequisites:

- To cancel coordinates export and save current export settings, in the **Export to KML** window, click **Cancel**.

- To cancel coordinates export without saving current export settings, in the **Export to KML** window, click Close (✕) or press Esc.

6.11 Save Dispatcher Settings

The **Save Dispatcher Settings** feature provides the ability to export the SmartPTT Dispatcher database and settings to a ZIP file.

Using this feature, you can preserve the current state of SmartPTT Dispatcher, including the database, language settings, layout, and other configuration settings, for their further transfer to the same or another SmartPTT Dispatcher. For details, see Restore Dispatcher Settings.

> **NOTE**
> The **Save Dispatcher Settings** feature is unavailable if SmartPTT Dispatcher is connected to a remote database.
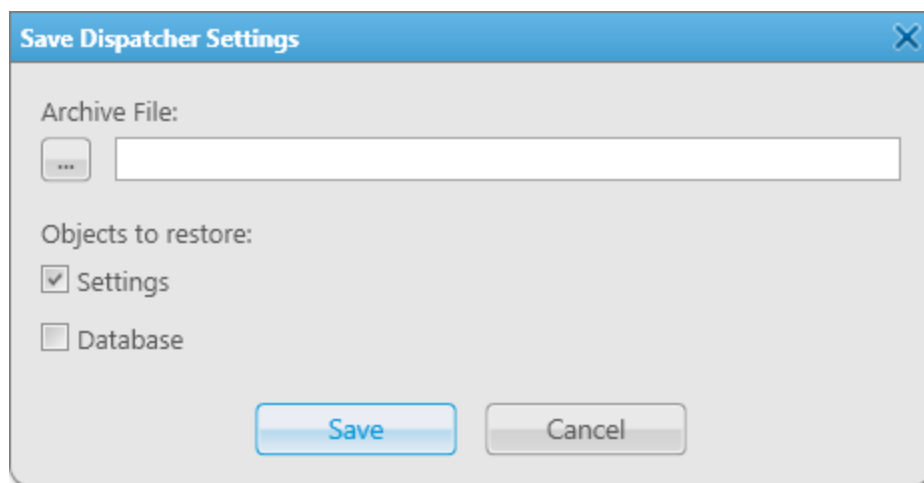
Export of the SmartPTT Dispatcher settings and database can be useful for the following purposes:

- Transfer of the SmartPTT Dispatcher database and current configuration settings to another SmartPTT Dispatcher.

- Transfer of the current SmartPTT Dispatcher position to another computer.

- Settings and database backup.

The exported file is an archive in the ZIP format that contains XML files storing data on the current configuration settings.

The SmartPTT Dispatcher database is exported to a BAK file (*SmartPTT.bak*) stored in the same archive.

For information on exporting SmartPTT Dispatcher settings and database, see the section below.

6.11.1 Saving Dispatcher Settings

Follow the procedure to export the SmartPTT Dispatcher database and/or settings in their current state to a ZIP file.

Prerequisites:

Ensure that you have access rights to the desired export destination folder.

Procedure:

1. On the menu bar, click **Service** → **Save Dispatcher Settings**.
   The **Save Dispatcher Settings** window appears.

2. In the **Archive File** area, click Browse (...).

3. In the window that appears, specify the path to the desired folder and the name of the exported ZIP file, and then click **Save**.

4. In the **Objects to restore** area, depending on the desired export parameters, select the **Settings** and/or **Database** check boxes.

5. In the window indicating successful export, click **OK**.

Postrequisites:

For information on the database and settings import procedure, see Restoring Dispatcher Settings.

6.12 Restore Dispatcher Settings

The **Restore Dispatcher Settings** feature provides the ability to import the SmartPTT Dispatcher database and settings from the same or another SmartPTT Dispatcher. For details, see Save Dispatcher Settings.

> **NOTE**
> The **Restore Dispatcher Settings** feature is unavailable if SmartPTT Dispatcher is connected to a remote database.

Using this feature, you can perform the following actions:

- Import SmartPTT Dispatcher settings, including language settings, layout, and other configuration settings.

- Import the SmartPTT database.

- Override the Globally Unique Identifier (GUID) of the current SmartPTT Dispatcher and replace it with the exported one.
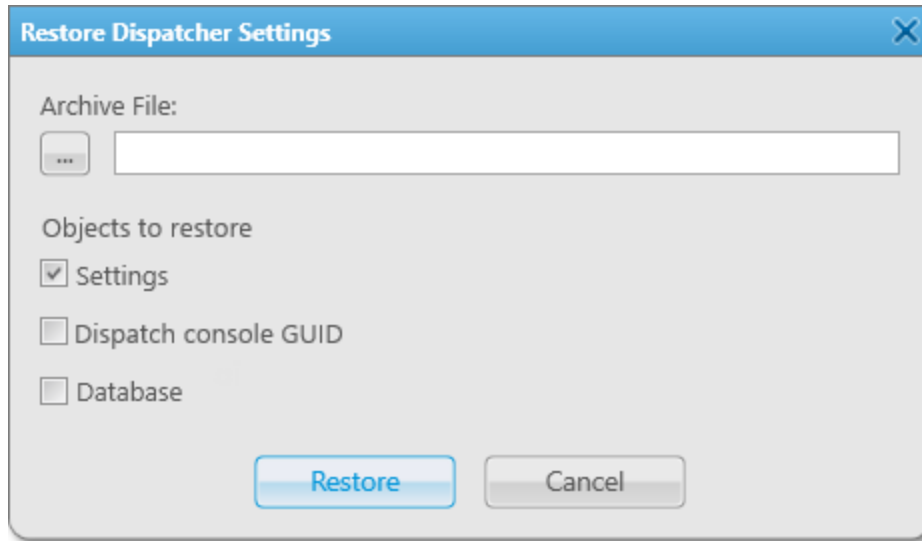
Import of the SmartPTT Dispatcher settings and database can be useful for the following purposes:

- Transfer of the SmartPTT database and configuration settings from another SmartPTT Dispatcher.

- Transfer of a SmartPTT Dispatcher position from one computer to another.

- Restoring the SmartPTT Dispatcher settings and database from a backup file.

For information on importing SmartPTT Dispatcher settings and database, see the section below.

6.12.1 Restoring Dispatcher Settings

Follow the procedure to import the SmartPTT Dispatcher database and/or settings from a ZIP file and/or overwrite the Globally Unique Identifier (GUID) of the current SmartPTT Dispatcher.

Procedure:

1. On the menu bar, click **Service → Restore Dispatcher Settings**.
   The **Restore Dispatcher Settings** window appears.

2. In the **Archive File** area, click Browse (⊡).

3. In the window that appears, specify the path to the desired ZIP file, and then click **Open**.

4. In the **Objects to restore** area, depending on the desired import parameters, perform the following actions:

To import settings,	select the **Settings** check box.
To replace your GUID with the GUID from the exported file,	perform the following actions: 1. Select the **Settings** check box. 2. Select the **Dispatch console GUID** check box.

	WARNING
	Do **not** replace GUID if you want to keep using the SmartPTT Dispatcher from which the settings were exported. If two dispatch consoles with the same GUID operate in the radio system at the same time, it may lead to errors and malfunctioning.
To import database,	select the **Database** check box.

5.   In the **Restore Dispatcher Settings** window, click **Restore**.

6.   In the window indicating successful export, click **OK**.

7.   Restart SmartPTT Dispatcher to apply changes.

7 Reports

The **Reports** menu provides access to a range of tools for creating reports on the SmartPTT Dispatcher and SmartPTT Radioserver operation for a specified period of time.

> **Important**
> The menu is available only to the Administrator or to operators with the corresponding permission.
> For details, see Operators.

The menu provides the following reporting options:

- Creating a report on the basis of SmartPTT Dispatcher or SmartPTT Radioserver Event Log.
  For details, see Report Wizard.

- Viewing the number of All Calls and group calls.
  For details, see Radio Activity Report.

- Displaying GPS coordinates of the selected radios.
  For details, see Radio Locations.

- Creating a report on the selected radios movement on the basis of the GPS data received from them.
  For details, see Radio Movement.

- Viewing registered and non-registered online radios.
  For details, see Online Radios.

- Creating reports based on the data provided by the SmartPTT monitoring feature.
  For details, see Monitoring Reports.

- Viewing information about events registered on the radios in the Lone Worker mode.
  For details, see Lone Workers.

- Creating a report on the selected radios movement inside buildings based on the data received from the connected beacons.
  For details, see Indoor Tracking.

7.1 Report Wizard

The **Report Wizard** functionality provides the ability to create reports based on information stored in the SmartPTT Dispatcher or SmartPTT Radioserver Event Log.

You can open the **Report Wizard** window by clicking **Reports → Report Wizard** on the menu bar.

To create a report, you need to fill in the required fields and set the required check boxes in the windows below.

The **Select data source** window contains the **Data source** element that provides the ability to select a data source for creating a report: SmartPTT Dispatcher or SmartPTT Radioserver.

> **Important**
> If the SmartPTT Radioserver Event Log is not activated in SmartPTT Radioserver Configurator or SmartPTT Radioserver is not running, SmartPTT Radioserver will not be displayed as a data source.
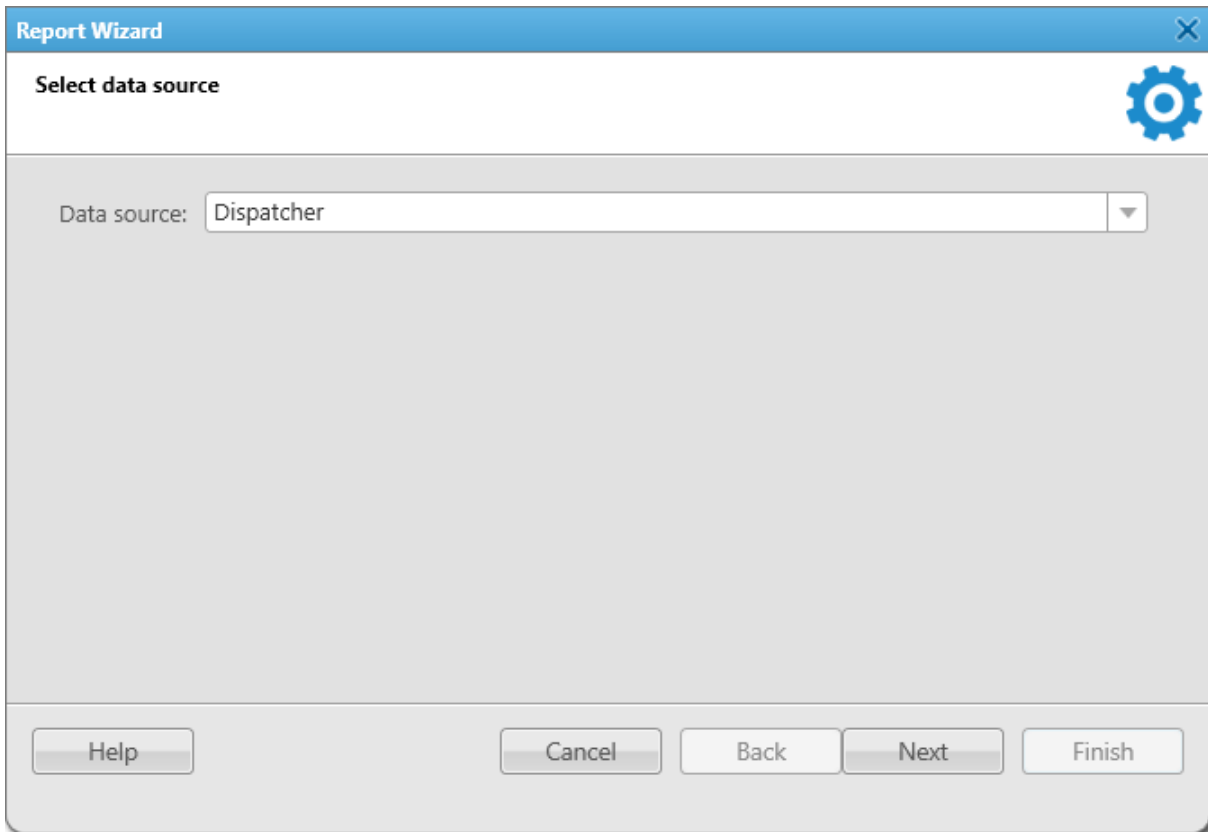
The **Select data for the report** window contains check boxes with the names of the data that will be included in the report. For information on the data that can be included in the report, see Dispatcher Event Log Table and Radioserver Event Log Table.
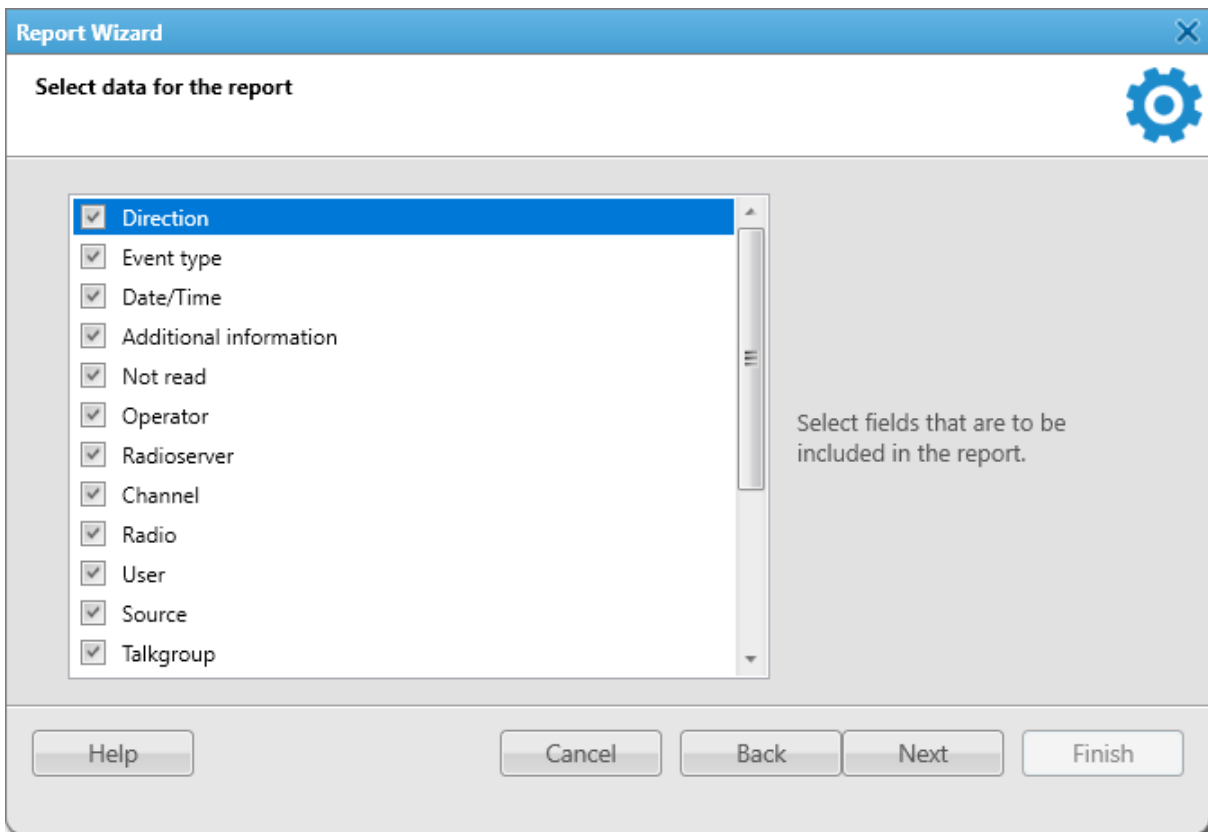
The **Group and sort report data** window contains lists with parameters that provide the ability to group or sort the report data.
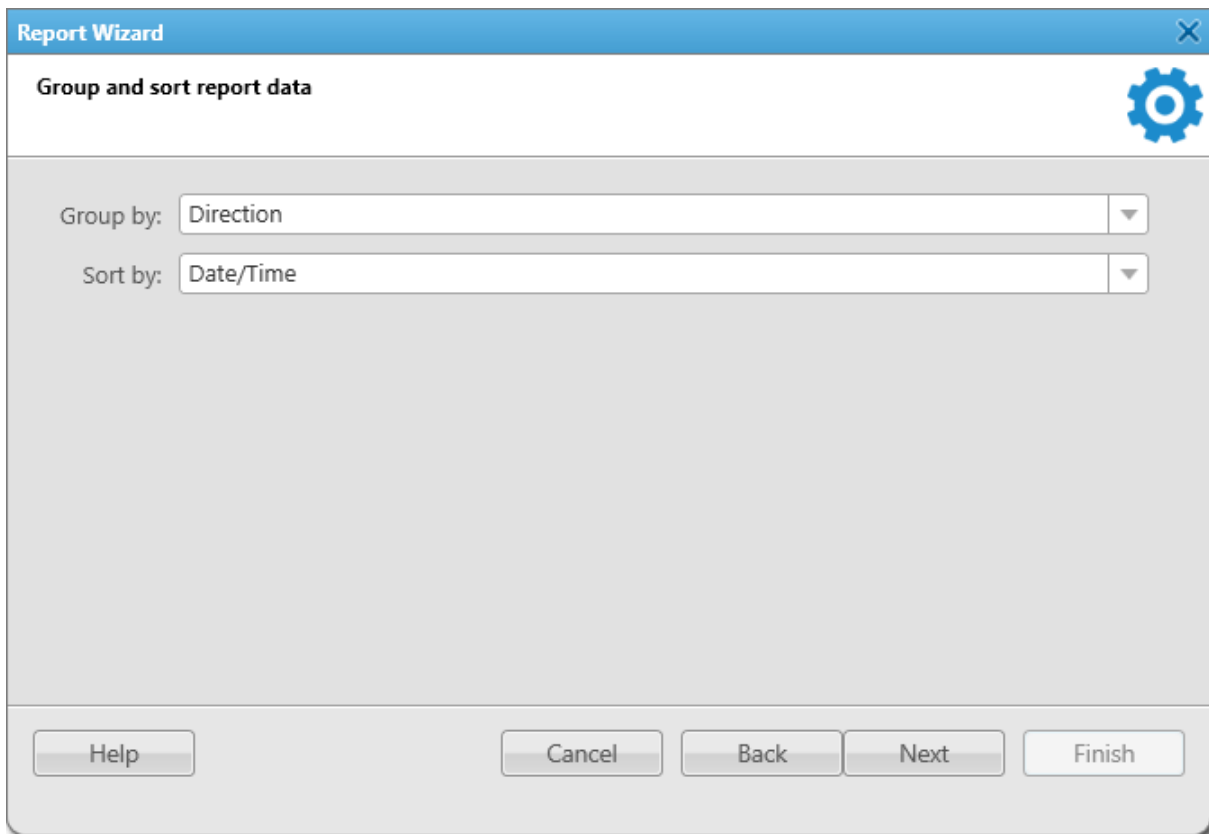
The **Group and sort report data** window provides the following elements:

Group by
   Provides the ability to group data in a report.

Sort by
   Provides the ability to sort data in a report.

The **Filter conditions** window contains lists with conditions and values, under which the data in a report will be filtered in one way or another.

The **Filter conditions** window provides the following elements:

Parameters

List of parameters whose values can be filtered.

Active

Enables or disables the ability to filter the parameter next to which the check box is selected.

Condition

Contains a condition under which the parameter value will be filtered. The condition values may be as follows: *Equal to; Not Equal to; Between*.

Value

Sets the values that match the selected conditions.

The **Create and save report** window contains the **Save as** element, which provides the ability to specify the path for saving the report on the computer by clicking the Browse (⌷) button.
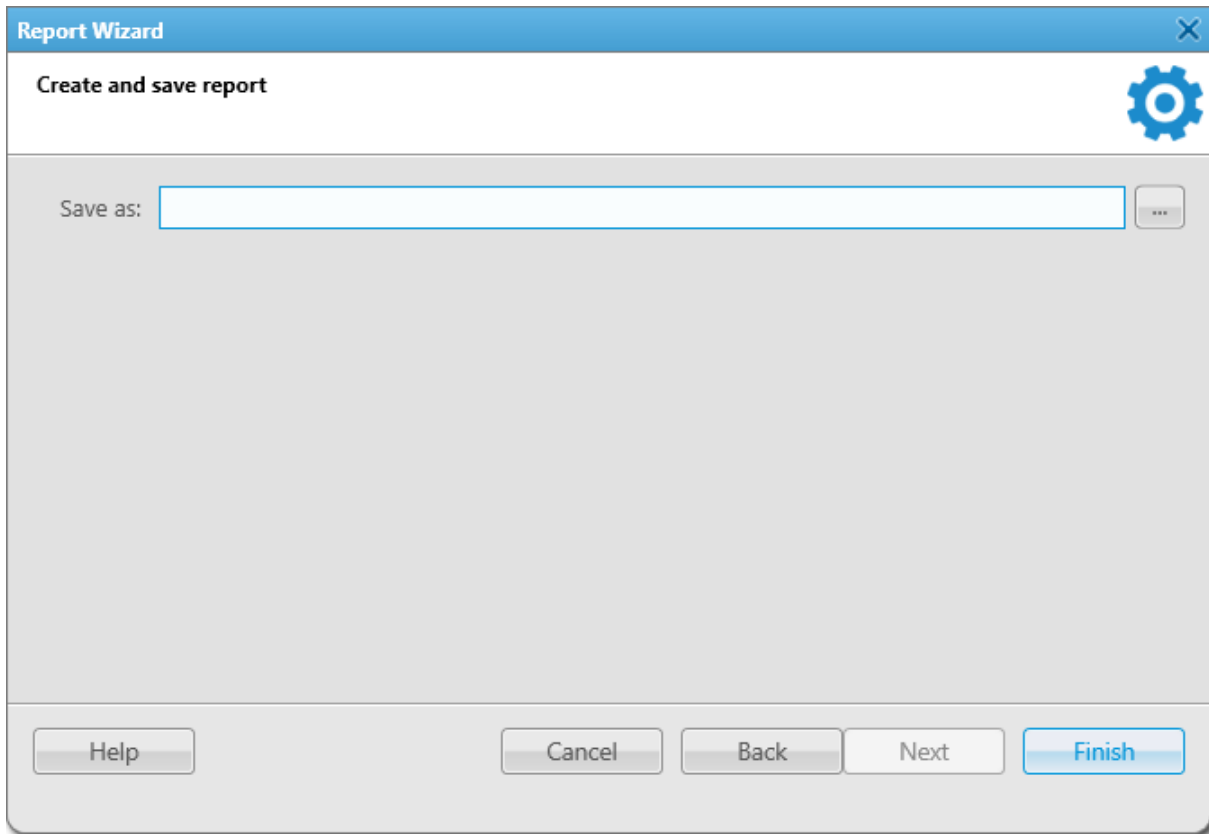
For information on report exporting, see Report Exporting.

7.1.1 Creating Report Based on Event Log

Follow the procedure to create a report based on the information stored in the SmartPTT Dispatcher or SmartPTT Radioserver Event Log.

Prerequisites:

- Ensure that the SmartPTT Radioserver Event Log is activated in SmartPTT Radioserver Configurator, otherwise it will be unavailable for creating a report. For details, see "Configuring Event Log Database Connection" in *SmartPTT Installation and Configuration Guide*.

- Ensure that the desired SmartPTT Radioserver is running, otherwise it will be unavailable for creating a report.

Procedure:

1. On the menu bar, click **Reports** → **Report Wizard**.
   The **Report Wizard** window appears.

2. In the **Select data source** window, select the data source for a report:

To select the SmartPTT Dispatcher database as the data source,	perform the following actions: 1. From the **Data source** list, select the *Dispatcher* value. 2. Click **Next**.

To select the SmartPTT Radioserver database as the data source,	perform the following actions: 1. From the **Data source** list, select the value with the desired SmartPTT Radioserver name. 2. Click **Next**.

3. In the **Select data for the report** window, select the data to display in a report:

To display data in a report,	perform the following actions: 1. Select the check box next to the desired parameter name. 2. Click **Next**.
To prevent data from displaying in a report,	perform the following actions: 1. Clear the check box next to the desired parameter name. 2. Click **Next**.

NOTE
The number of parameters available for displaying in the report depends on the selected data source.

4. *(Optional)* In the **Group and sort report data** window, from the **Group by** list, select the desired parameter by which the report data will be grouped.

NOTE
If the grouping is not specified, the report will be created with the grouping of data set in the Report Wizard by default.

5. *(Optional)* From the **Sort by** list, select the desired parameter by which the report data will be sorted.

NOTE
If the sorting is not specified, the report will be created with the sorting of data set in the Report Wizard by default.
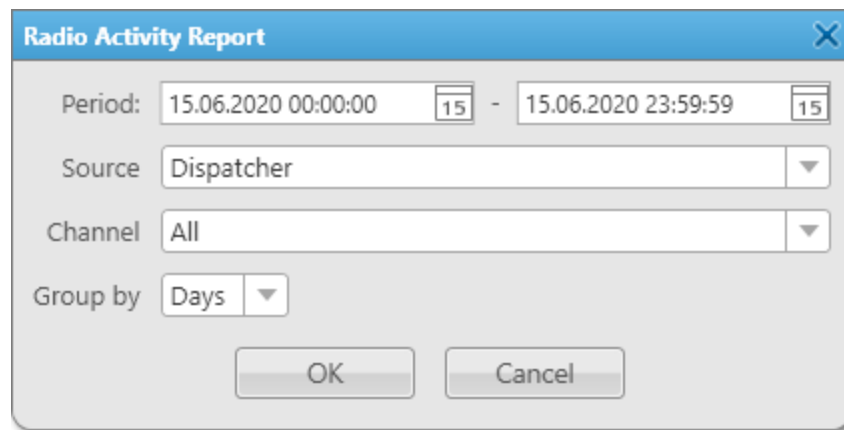
6. Click **Next**.

7. In the **Filter conditions** window, specify the data filtering conditions:

   a. Next to the desired parameter, select the **Active** check box to apply filtering.

   b. From the **Condition** list, select the required condition to filter the desired parameter: *Equal to*, *Not Equal to*, *Between*.

   c. From the **Value** list, select the value by which the desired parameter will be filtered.

   d. Click **Next**.

7. In the **Create and save report** window, specify the path to the report file on the computer:

   a. Click the Browse (⬚) button.

   b. In the **Specify File Name** window, specify the path to save a report on the computer.

    c.   In the corresponding field, specify the name of a report.

    d.   From the corresponding list, select the desired format to save a report. For information on report exporting, see Report Exporting.

8.   Click **Finish** to create a report.

7.2 Radio Activity Report

The **Radio Activity Report** contains information on the number of All Call and group calls with the grouping by hours, minutes or days.

You can open the **Radio Activity Report** window for creating a report by clicking **Reports → Radio Activity Report** on the menu bar.

The **Radio Activity Report** window provides the following elements:

Period

    Contains the start and end dates of events including time that will be displayed in the report.

Source

    Provides the ability to select the data source whose database will be used for the report. Either the SmartPTT Dispatcher database (the *Dispatcher* value) or the database of one of the available radioservers can be used as a data source.

> **Important**
> If the SmartPTT Radioserver Event Log is not activated in SmartPTT Radioserver Configurator or SmartPTT Radioserver is not running, SmartPTT Radioserver will not be displayed as a data source.

Channel

    Provides the ability to select the desired radio network channel, control station or trunked radio system to create a report. To create a report based on data from all channels, use the *All* value.

Group by

    Provides the ability to group the data in the report by days, hours, or minutes. Available values are: *Days*, *Hours*, *30 minutes*, *10 minutes*, and *Minutes*.

For information on report exporting, see Report Exporting.

7.2.1 Creating Radio Activity Report

Follow the procedure to create a report based on radio activity data.

Prerequisites:

- Ensure that the SmartPTT Radioserver Event Log is activated in SmartPTT Radioserver Configurator, otherwise it will be unavailable for creating a report. For details, see "Configuring Event Log Database Connection" in *SmartPTT Installation and Configuration Guide*.

- Ensure that the desired SmartPTT Radioserver is running, otherwise it will be unavailable for creating a report.

Procedure:

1. On the menu bar, click **Reports → Radio Activity Report**.
   The **Radio Activity Report** window appears.

2. In the window that appears, in the **Period** field, enter the desired dates and time of events to create a report on the radio activity for the specified period.

3. From the **Source** list, select the data source for a report:

To select the SmartPTT Dispatcher database as the data source,	select the *Dispatcher* value.
To select the SmartPTT Radioserver database as the data source,	select the value with the desired SmartPTT Radioserver name.

4. From the **Channel** list, select the channel for a report:

To display data for the specific channel in the report,	select a value with the name of the desired channel.
To display data for all channels in the report,	select the *All* value.

5. In the **Group by** list, specify data grouping in the report:

To group data in the report by days,	select the *Days* value.
To group data in the report by hours,	select the *Hours* value.
To group data in the report by 30 minutes,	select the *30 minutes* value.
To group data in the report by 10 minutes,	select the *10 minutes* value.
To group data in the report by minutes,	select the *Minutes* value.

6. Click **OK** to create a report.

Postrequisites:

Determine the format to export a report. For information on report exporting, see Report Exporting.

7.3 Radio Locations

The **Radio Location** report contains information on the radio coordinates for a certain period.

You can open the **Radio Locations** window for creating a report by clicking **Reports → Radio Locations** on the menu bar.

The **Radio Locations** window provides the following elements:

Period

Contains the start and end dates of events including time that will be displayed in the report.

Source

Provides the ability to select the data source whose database will be used for the report. Either the SmartPTT Dispatcher database (the *Dispatcher* value) or the database of one of the available radioservers can be used as a data source.

> **Important**
> If the SmartPTT Radioserver Event Log is not activated in SmartPTT Radioserver Configurator or SmartPTT Radioserver is not running, SmartPTT Radioserver will not be displayed as a data source.

Radio

Activates the ability to select from the list below the desired radio for which a report will be created. The list of radios is taken from the connected database. If the *All radios* value is selected from the list, a report will be created for those radios whose GPS coordinates are stored in the database.

User

Activates the ability to select from the list below the desired user for whom a report will be created. The list of users is taken from the connected database. If the *All users* value is selected from the list, a report will be created for those users whose GPS coordinates are stored in the database.

Group by radios

Provides the ability to group data in a report by radios.

Group by users

Provides the ability to group data in a report by authorized users.

UTC Time

Provides the ability to display the report time, as well as the report start and end dates in the Coordinated Universal Time standard (UTC+00:00). If the check box is not selected, the report time, as well as the report start and end dates will be displayed according to the time zone set on the dispatcher's computer (for example, UTC+07:00).

RSSI

Provides the ability to display the RSSI signal level in decibels in the report.

Address

Provides the ability to display radio address based on the received GPS coordinates. Google or OpenStreetMap is used as a data source. For information on selecting the address data provider, see Positioning Systems.

> **NOTE**
> The **Address** check box is not displayed in the **Radio Locations** window, if the **Address data provider** check box is not selected in the positioning systems settings.

> **NOTE**
> If address mapping is not selected, the report displays the *Find on Map* link to Google Maps or OpenStreetMap service. Clicking the link displays the radio location.

Route

Unlocks the ability to select a route, on which basis the report will be created, from the list on the right. For details, see Routes.

Only Key Points

Displays only key route points in the report.

> **NOTE**
> The **Only Key Points** check box is available only when the **Route** check box is selected.

> **NOTE**
> The **Precision** column of a report does not provide data for the Movement Reports Restoration feature. For such coordinates, it remains empty. For details, see the "Location with Option Boards" section in *SmartPTT Installation and Configuration Guide*.

For information on report exporting, see Report Exporting.

7.3.1 Creating Radio Location Report

Follow the procedure to create a report displaying radio coordinates data.

Prerequisites:

- Ensure that the SmartPTT Radioserver Event Log is activated in SmartPTT Radioserver Configurator, otherwise it will be unavailable for creating a report. For details, see "Configuring Event Log Database Connection" in *SmartPTT Installation and Configuration Guide*.

- Ensure that the desired SmartPTT Radioserver is running, otherwise it will be unavailable for creating a report.

Procedure:

1. On the menu bar, click **Reports → Radio Locations**.
   The **Radio Locations** window appears.

2. In the window that appears, in the **Period** field, enter the desired dates and time of events to create a report displaying radio coordinates for the specified period.

3. From the **Source** list, select the data source for a report:

To select the SmartPTT Dispatcher database as the data source,	select the *Dispatcher* value.
To select the SmartPTT Radioserver database as the data source,	select the value with the desired SmartPTT Radioserver name.

4. Specify which coordinates will be displayed in a report:

To display coordinates for unregistered radios in the report,	perform the following actions: 1. Select **Radio**. 2. From the list below, select the desired radio or the *All radios* value. 3. *(Optional)* If the grouping by radios is required, select the **Group by radios** check box.
To display coordinates for registered users in the report,	perform the following actions: 1. Select **User**. 2. From the list below, select the desired user or the *All users* value. 3. *(Optional)* If the grouping by users is required, select the **Group by users** check box.

5. *(Optional)* Configure displaying additional information in the report:

To display time in the Coordinated Universal Time standard (UTC+00:00) in the report,	select the **UTC Time** check box.

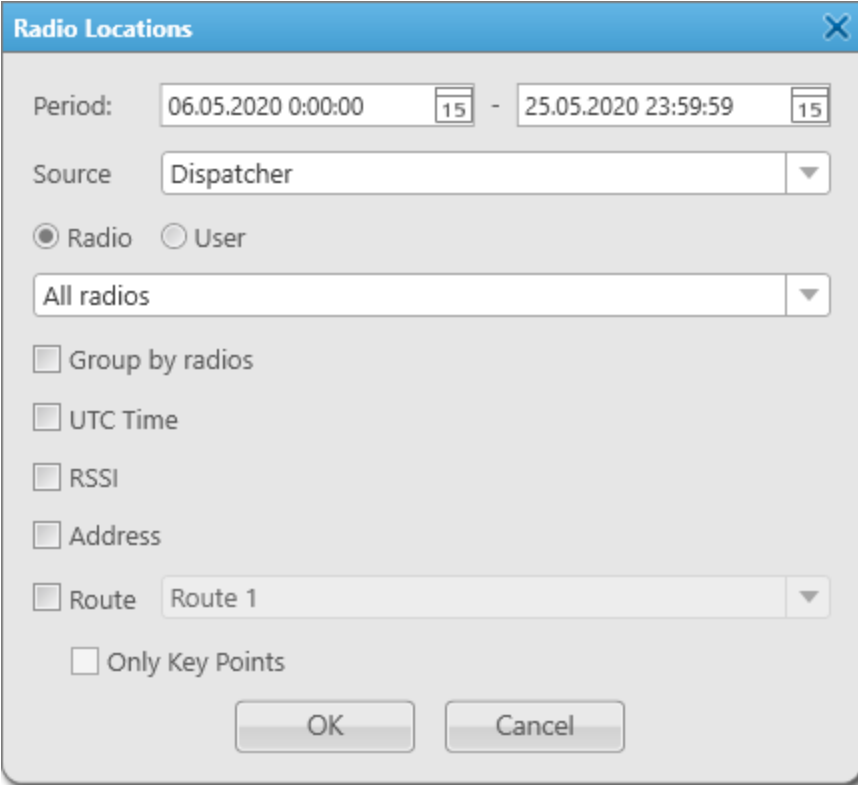|	
To display the RSSI signal level in decibels in the report,	select the **RSSI** check box.
To display the radio address in the report,	select the **Address** check box.
	NOTE The **Address** check box is not displayed in the **Radio Locations** window, if the **Address data provider** check box is not selected in the positioning systems settings.
To select the route, on which basis the report will be created,	perform the following actions: 1. Select the **Route** check box. 2. From the unlocked list on the right, select the desired route. 3. *(Optional)* If displaying only the coordinates of key route points is required, select the **Only Key Points** check box.

6. Click **OK** to create a report.

Postrequisites:

Determine the format to export a report. For information on report exporting, see Report Exporting.

7.4 Radio Movement

The **Radio Movement** report contains information on the radio movement based on the received GPS coordinates.

You can open the **Radio Movement** window for creating a report by clicking **Reports → Radio Movement** on the menu bar.

The **Radio Movement** window provides the following elements:

Period

Contains the start and end dates of events including time that will be displayed in the report.

Source

Provides the ability to select the data source whose database will be used for the report. Either the SmartPTT Dispatcher database (the *Dispatcher* value) or the database of one of the available radioservers can be used as a data source.

> **Important**
> If the SmartPTT Radioserver Event Log is not activated in SmartPTT Radioserver Configurator or SmartPTT Radioserver is not running, SmartPTT Radioserver will not be displayed as a data source.

Select radios

Activates the ability to select from the list on the right the desired radios whose movement data will be displayed in the report.

Select categories

Activates the ability to select from the list on the right the desired radio categories whose movement data will be displayed in the report.

Select users

Activates the ability to select from the list on the right the desired users whose movement data will be displayed in the report.

Minimum stop time interval (min)

Provides the ability to set the time duration to determine a radio is stopped. If the radio stands still longer than the specified value, it is considered to be parked.

Enable points of interest

Provides the ability to take into account the coordinates of points of interest when creating a report. For details, see Points of Interest.

> **NOTE**
> If the **Enable points of interest** check box is selected, the point of interest name will be indicated instead of the address in the **Location** column of a report.

Radius (m)

Provides the ability to set the acceptable distance of the radio deviation from the point of interest.

> **NOTE**
> The **Radius (m)** field is available only when the **Enable points of interest** check box is selected.

For information on report exporting, see Report Exporting.

7.4.1 Creating Radio Movement Report

Follow the procedure to create a report based on radio movement data.

Prerequisites:

- Ensure that the SmartPTT Radioserver Event Log is activated in SmartPTT Radioserver Configurator, otherwise it will be unavailable for creating a report. For details, see "Configuring Event Log Database Connection" in *SmartPTT Installation and Configuration Guide*.

- Ensure that the desired SmartPTT Radioserver is running, otherwise it will be unavailable for creating a report.

Procedure:

1. On the menu bar, click **Reports → Radio Movement**.
   The **Radio Movement** window appears.

2. In the window that appears, in the **Period** field, enter the desired dates and time of events to create a report displaying radio movement for the specified period.

3. From the **Source** list, select the data source for a report:

To select the SmartPTT Dispatcher database as the data source,	select the *Dispatcher* value.
To select the SmartPTT Radioserver database as the data source,	select the value with the desired SmartPTT Radioserver name.

4. Specify which movement information will be displayed in the report:

To display information about the unregistered radios movement in the report,	perform the following actions: 1. Select the **Select radios** element. 2. From the list next to the element, select the desired radios.
To display information about the radio categories movement in the report,	perform the following actions: 1. Select the **Select categories** element. 2. From the list next to the element, select the desired radio categories.
To display information about the registered users movement in the report,	perform the following actions: 1. Select the **Select users** element. 2. From the list next to the element, select the desired users.

5. To specify the time after which a radio will be considered as stopped, enter the desired value in the **Minimum stop time interval (min)** field.

6. *(Optional)* Configure displaying points of interest in the report:

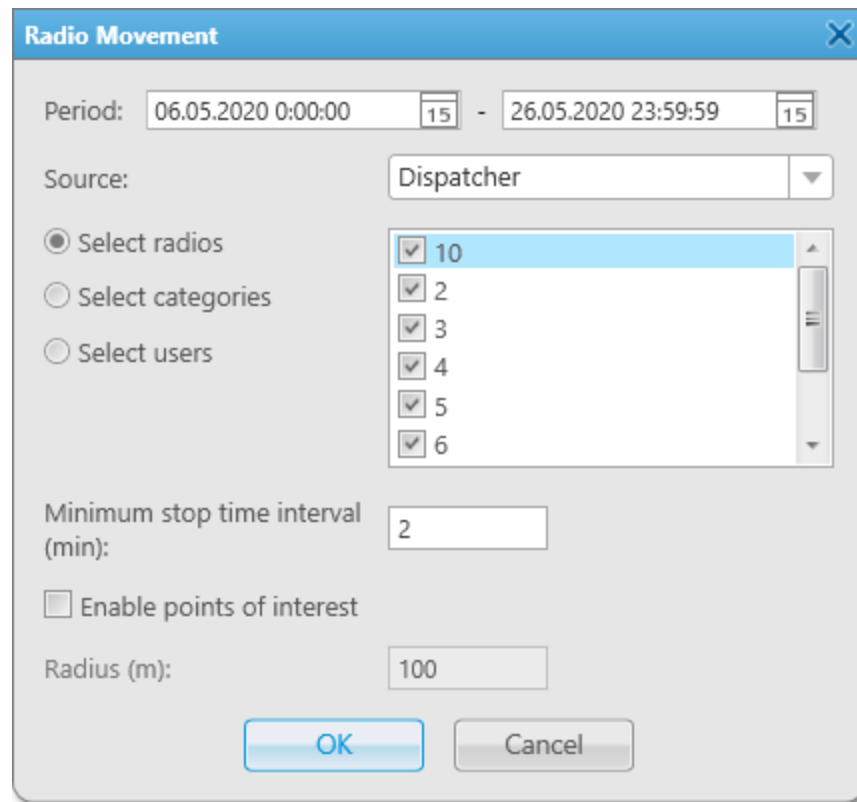|	
To include points of interest in the report,	select the **Enable points of interest** check box.
To set the acceptable distance of the radio deviation from the point of interest,	perform the following actions: 1. Select the **Enable points of interest** check box. 2. Enter the desired value in the unblocked **Radius (m)** field.

7. Click **OK** to create a report.

Postrequisites:

Determine the format to export a report. For information on report exporting, see Report Exporting.

7.5 Online Radios

The **Online Radios** report provides the ability to export the list of radios that are currently in the network. The report displays both registered and unregistered radios.

You can open the **Online Radios** window for creating a report by clicking **Reports** → **Online Radios** on the menu bar.
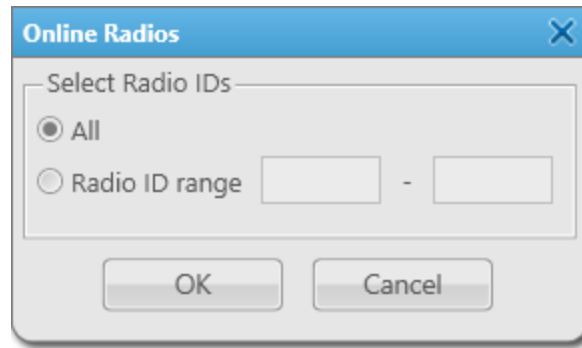
The window provides the following elements:

All

Provides the ability to include all online radios in the report.

Radio ID range

Provides the ability to create a report for a specific range of radios. For this, in the fields next to the element, the range of radio identifiers must be entered.

The report will be created after clicking the **OK** button. For information on report exporting, see Report Exporting.

> **NOTE**
> The **Channel Type** column of a report can have three values: *MOTOTRBO*, *Analog*, *Select 5*.

7.6 Monitoring Reports

The **Monitoring** submenu is available from the **Reports** menu on the SmartPTT Dispatcher menu bar. It provides the following reporting tools:

- Displaying radio system calls information, such as repeater IDs, IDs of the call participants, event duration and type, RSSI, and other related call parameters.
  For details, see Air Monitoring Report.

- Displaying information on events and alarms registered on the radio system devices, such as repeaters, routers, and UPS.
  For details, see Event Log Report.

- Displaying information on the system load, uptime, downtime, and other related radio system parameters.
  For details, see System Usage Report.

> **NOTE**
> The reporting functionality is available only if the **Monitoring** feature is activated in SmartPTT Radioserver Configurator. For details, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide*.
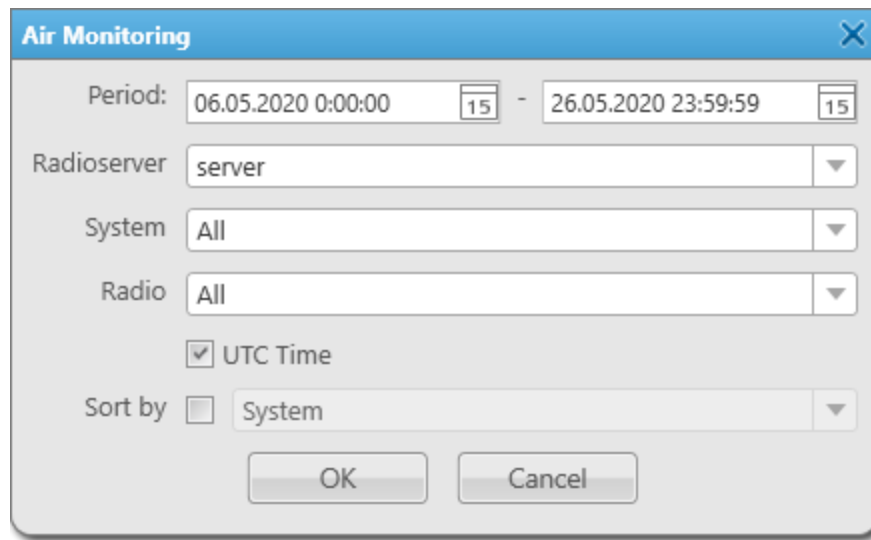
7.6.1 Air Monitoring Report

Monitoring report is created on the basis of data stored in the air monitoring.

NOTE
To create monitoring report, the monitoring feature must be activated in SmartPTT Radioserver Configurator. For information on configuring monitoring, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide.*

You can open the **Air Monitoring** window for creating the air monitoring report by clicking **Reports →
Monitoring → Air Monitoring** on the menu bar.

The **Air Monitoring** window provides the following elements:

Period
Contains the start and end dates of events including time that will be displayed in the report.

Radioserver
Provides the ability to select SmartPTT Radioserver whose database will be used as a data source for reporting.

System
Provides the ability to select the radio network for which the air monitoring report will be created. It contains both active networks and inactive ones that are no longer in use. The network identifier is displayed for inactive networks, and the network name is displayed for active networks. The *All* value is used to display all radio networks in the report.

Radio
Provides the ability to select a radio for which the air monitoring report will be created. If the *All* value is selected, the air monitoring report will be created for all radios.

UTC Time
Provides the ability to display the report time, as well as the report start and end dates in the Coordinated Universal Time standard (UTC+00:00). If the check box is not selected, the report time, as well as the report start and end dates will be displayed according to the time zone set on the dispatcher's computer (for example, UTC+07:00).

Sort by

Activates the parameters by which the report data can be sorted: *System, Repeater, Slot, Event type, From, To, Duration (ms), RSSI (dBm).*

For information on report exporting, see Report Exporting.

7.6.1.1 Creating Air Monitoring Report

Follow the procedure to create the air monitoring report.

Prerequisites:

- Ensure that the **Monitoring** feature is activated in SmartPTT Radioserver Configurator. For details, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide.*

- Ensure that the desired SmartPTT Radioserver is running.

Procedure:

1. On the menu bar, click **Reports → Monitoring → Air Monitoring**.
   The **Air Monitoring** window appears.

2. In the window that appears, in the **Period** field, enter the desired dates and time of events to create the air monitoring report for the specified period.

3. From the **Radioserver** list, select the desired SmartPTT Radioserver.

4. From the **System** list, select the network to create a report:

To create a report for the specific network,	select the desired network.
To create a report for all networks,	select the *All* value.

5. From the **Radio** list, select the radio to create a report:

To build a report for the specific radio,	select the desired radio.
To create a report for all radios,	select the *All* value.

6. *(Optional)* Configure additional parameters to create a report:

 | | |
   |---|---|
   | To display time in the Coordinated Universal Time standard (UTC+00:00) in the report, | select the **UTC Time** check box. |
   | To sort data in the report, | perform the following actions:
1. Select the **Sort by** check box.
2. Select one of the parameters to sort data in the report: *System, Repeater, Slot, Event type, From, To, Duration (ms), RSSI (dBm).* |

7. Click **OK** to create a report.

Postrequisites:

Determine the format to export a report. For information on report exporting, see Report Exporting.

7.6.2 Event Log Report

The **Event Log** report is created on the basis of data stored in the monitoring Event Log.

> **NOTE**
> To create Event Log report, the monitoring feature must be activated in SmartPTT Radioserver Configurator. For information on configuring monitoring, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide.*

You can open the **Event Log** window for creating the Event Log report by clicking **Reports → Monitoring → Event Log** on the menu bar.
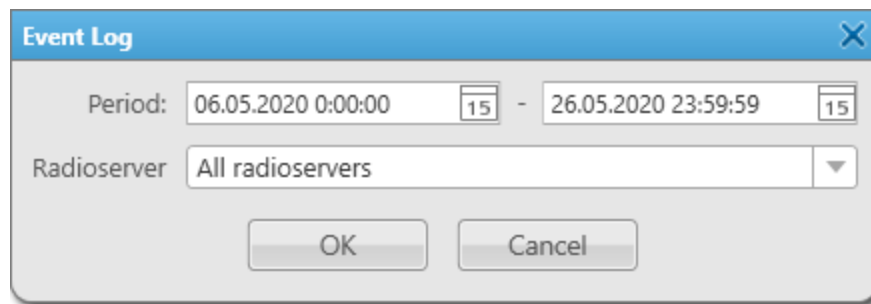
The **Event Log** window provides the following elements:

Period
    Contains the start and end dates of events including time that will be displayed in the report.

Radioserver
    Provides the ability to select SmartPTT Radioserver whose database will be used as a data source for reporting. The *All radioservers* value provides the ability to receive data for all radioservers.

The report will be created after clicking the **OK** button.

For information on report exporting, see Report Exporting.
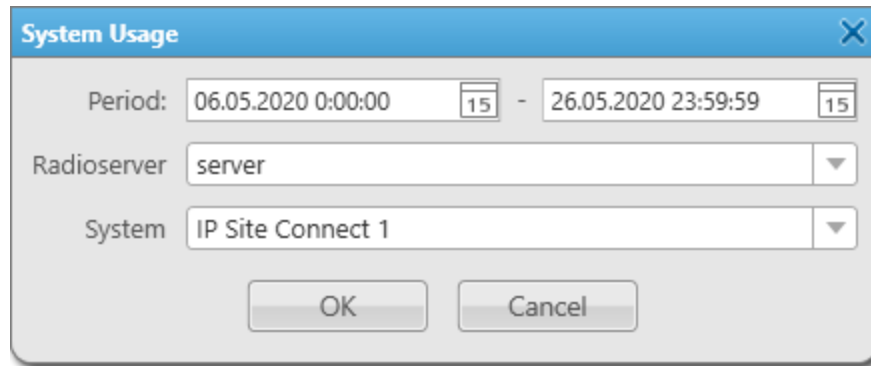
7.6.3 System Usage Report

The **System Usage** report provides information on the radio network channel load, radio network uptime, radio network downtime, etc.

> **NOTE**
> To create system usage report, the monitoring feature must be activated in SmartPTT Radioserver Configurator. For information on configuring monitoring, see "Configuring Monitoring Database Connection" in *SmartPTT Installation and Configuration Guide.*

You can open the **System Usage** window for creating the system usage report by clicking **Reports → Monitoring → System Usage** on the menu bar.

The **System Usage** window provides the following elements:

Period

Contains the start and end dates of events including time that will be displayed in the report.

Radioserver

Provides the ability to select SmartPTT Radioserver whose database will be used as a data source for reporting.

System

Provides the ability to select the radio network for which a report will be created. It contains both active networks and inactive ones that are no longer in use. The network identifier is displayed for inactive networks, and the network name is displayed for active networks. The *All* value is used to display all radio networks in the report.

The report will be created after clicking the **OK** button.

> **NOTE**
> For drop repeaters of the backhaul chain, the report does not provide information on the channel load. For link repeaters, the report does not provide any information. For information on backhaul chain repeater roles, see Diagnostics Table.

> **NOTE**
> If a radio is not registered by a drop repeater of a backhaul chain, the **Radios** table of the report will indicate that the radio is registered by the proxy repeater of the backhaul chain, or is registered on the site of the proxy repeater.

For information on report exporting, see Report Exporting.

7.7 Lone Workers

The **Lone Workers** report provides information about registration, calls, sending messages, and other events for radios which are in the Lone Worker mode. For details, see Lone Worker Rules.

You can open the **Lone Workers** window for creating a report by clicking **Reports → Lone Workers** on the menu bar.

The window provides the following elements:

Period

Contains the start and end dates of events including time that will be displayed in the report.

Radio

Provides the ability to select a radio for which a report will be created. If the *All* value is selected, the report will be created for all radios.

Sort By

Activates the parameters by which the report data can be sorted: *Direction, Event Type, Date/Time, Additional information, Operator, Radioserver, Channel, Radio, Talkgroup, Status, Duration, Destination*. For details, see Dispatcher Event Log Table.

The report will be created after clicking the **OK** button. For information on report exporting, see Report Exporting.

7.8 Indoor Tracking

The **Indoor Tracking** report contains information on the movement of indoor radios based on the data received from special beacons. For details, see Indoor Tracking.

You can open the **Indoor Tracking** window for creating a report by clicking **Reports → Indoor Tracking** on the menu bar.

The **Indoor Tracking** window provides the following elements:

Period

Contains the start and end dates of events including time that will be displayed in the report.

Radioserver

Provides the ability to select SmartPTT Radioserver whose database will be used as a data source for reporting. The *All radioservers* value provides the ability to create a report for all radioservers.

Beacon

Provides the ability to select the beacon for which a report will be created. The *All beacons* value provides the ability to create a report for all beacons.

Radio

Activates the ability to select from the list below the desired radio for which a report will be created. If the *All radios* value is selected from the list, a report will be created for those radios that have been registered on the beacons side.

User

Activates the ability to select from the list below the desired user for whom a report will be created. The list of users is taken from the connected database. If the *All users* value is selected from the list, a report will be created for those users that have been registered on the beacons side.

Group by

Activates the ability to group data in a report by the following values: *Beacons*, *Radios* and *Users*.

For information on report exporting, see Report Exporting.

> **Important**
> Under the high load conditions of a repeater, the report may contain corrupted beacon IDs. To resolve the problem, it is necessary to increase the number of acknowledgments sent from the beacon to the radio by increasing the values in the **Beacon sign on count** and the **Beacon sign off count** fields in the K-Term CPS settings (applied for K-Term beacons by Kilchherr Elektronik AG). In the **Indoor Tracking** settings of SmartPTT Radioserver Configurator, the **Set list of allowed beacons** check box must be selected and beacon IDs which data are processed by SmartPTT Radioserver must be specified. You can also submit a request to the SmartPTT Technical Support Center.

> **NOTE**
> *N/A* is displayed in the **Beacons** column of the report if a radio leaves the coverage area of the beacons.

7.8.1 Creating Indoor Tracking Report

Follow the procedure to create a report on the movement of indoor radios based on data received from special beacons.

Prerequisites:

- Ensure that the SmartPTT Radioserver Event Log is activated in SmartPTT Radioserver Configurator. For details, see "Configuring Event Log Database Connection" in *SmartPTT Installation and Configuration Guide*.

- Ensure that the desired SmartPTT Radioserver is running.

Procedure:

1. On the menu bar, click **Reports → Indoor Tracking**.
   The **Indoor Tracking** window appears.

2. In the window that appears, in the **Period** field, enter the desired dates and time of events to create a report for the specified period.

3. From the **Radioserver** list, select SmartPTT Radioserver for creating a report:

To create a report for the specific SmartPTT Radioserver,	select SmartPTT Radioserver with the desired name.
To create a report for all radioservers,	select the *All radioservers* value.

4. From the **Beacon** list, select the beacon for creating a report:

To create a report for the specific beacon,	select a beacon with the desired name.
To create a report for all beacons,	select the *All beacons* value.

5. Specify which data will be displayed in a report:

To display data for unregistered radios in the report,	perform the following actions: 1. Select **Radio**. 2. From the list below, select the desired radio or the *All radios* value.
To display data for registered users in the report,	perform the following actions: 1. Select **User**. 2. From the list below, select the desired user or the *All users* value.

6. *(Optional)* Specify data grouping in the report:

   a. Select the **Group by** check box.

   b. Select the desired value:

To group data in the report by beacons,	from the unblocked list on the right, select the *Beacons* value.
To group data in the report by radios,	from the unblocked list on the right, select the *Radios* value.
To group data in the report by users,	from the unblocked list on the right, select the *Users* value.

7.   Click **OK** to create a report.

Postrequisites:

Determine the format to export a report. For information on report exporting, see Report Exporting.

7.9 Report Exporting

Reports on the SmartPTT Dispatcher and SmartPTT Radioserver operation are created as separate files that can be saved on a computer in the desired format, printed or sent to the desired email address. All these actions are performed in the Print Preview window, where the created report is opened.

Reports on the SmartPTT Dispatcher and SmartPTT Radioserver operation are saved on the computer in the PRNX format.

If necessary, the created report can be exported in any of the following formats: PDF, HTML, MHT, RTF, XLS, XLSX, CSV, TXT, XPS. The created reports can also be saved as image files of the following formats: BMP, EMF, WMF, GIF, JPEG, PNG, TIFF.

> **NOTE**
> Reports created by the Report Wizard on the basis of SmartPTT Dispatcher and SmartPTT Radioserver Event Logs are saved on a computer as separate files of the following formats: HTML, MHT, XLS, XLSX, CSV, TXT.

8 Conference Calls

The Conference Calls feature provides the ability to connect multiple people in a single call. All participants of the conference call can hear and speak to each other.

Conference calls are initiated in SmartPTT Dispatcher. Participants of the conference do not see other participants. Only the dispatcher that initiated the call can see, add, and remove participants from the conference.

Important
Conference calls are available to the Administrator, or to operators with the corresponding permission. For details, see Operators.

The following user groups can participate in conference calls:

- Radios and WAVE users

- Talkgroups

- Dispatchers

- Telephone subscribers

NOTE
Connection to telephone subscribers through a conference call does not require the **Telephone Interconnect** license.

The conference call initiates automatically when you add a participant to the Participants box in the **Conference Calls** window.

The conference call finishes automatically when the **Conference call idle session timeout** period set in SmartPTT Radioserver Configurator expires. For details, see "Configuring Phone Calls" in *SmartPTT Installation and Configuration Guide.*

For information on ways of initiating conference calls, see the sections below.

8.1 Conference Calls Window

The **Conference Calls** window provides controls for organizing a conference call. In this window, you can add and remove the conference call participants and manage your sound settings.
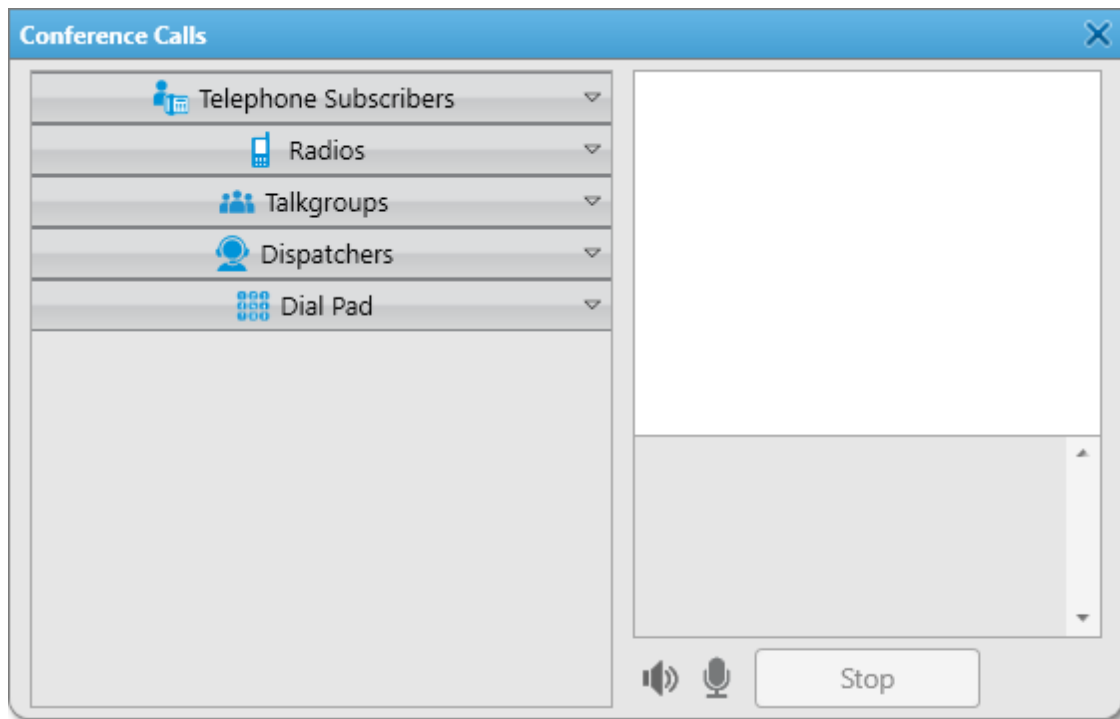
You can open the **Conference Calls** window in one of the following ways:

- By clicking the **Make Conference Call (📷)** button on the menu bar. For details, see <u>Dispatchers</u>.

- By clicking the **Make Conference Call (👥)** button:

  - In the Actions Menu or Call Window of a radio, WAVE user or talkgroup. For details, see <u>Dispatchers</u>.

  - In the radio or WAVE user menu from the **Maps** panel. For details, see <u>Dispatchers</u>.

  - In the **Telephone Subscribers** window. For details, see <u>Telephone Subscribers Settings</u>.

  - In the **Dispatchers** window. For details, see <u>Dispatchers</u>.

The **Conference Calls** window consists of two areas.

The area in the right part of the window contains information on the current conference call.

The Participants box in the upper-right corner contains information on the conference call participants. It provides the following elements:

Icon

Indicates the type of the participant (radio, WAVE user, talkgroup, dispatcher, or telephone subscriber).

Name

Name of the conference call participant registered in SmartPTT Dispatcher or number of the unregistered telephone subscriber.

Status

The connection status. It can have the following values:

- The *Ringing* status indicates that the invitation request has been sent, and SmartPTT Dispatcher is waiting for connection to be established.

- The *Call* status indicates that connection has been successfully established and the conference call is in progress.

If SmartPTT Dispatcher failed to send the invitation request, the user does not appear in the Participants box. The relevant entry appears in the Event Log.

Finish Conference Call (⬚)

Finishes the conference call for the participant. If connection has not yet been established, it stops connection attempts.

The Log box below the Participants box contains the conference call history. It provides information on the connection status changes and errors that occurred during the connection establishing.

The left area of the **Conference Calls** window contains groups of available participants divided according to their type. This area provides the following elements::

Telephone Subscribers

Expands the list of telephone subscribers registered in SmartPTT Dispatcher. For details, see Telephone Subscribers Settings.

Radios

Expands the list of radios and WAVE users that are currently registered in SmartPTT Dispatcher.

Talkgroups

Expands the list of talkgroups configured on SmartPTT Radioserver. For details, see "Talkgroups" in the corresponding network settings description in *SmartPTT Installation and Configuration Guide*.

Dispatchers

Expands the list of SmartPTT Dispatchers that are currently online.

> **NOTE**
> If no dispatchers are added to the list of dispatchers, the **Dispatchers** group is not displayed.

Dial Pad

Expands the dial pad using which you can dial the number of a telephone subscriber that is not registered in SmartPTT Dispatcher.

Mute (⬚)

Turns off the conference call sound in SmartPTT Dispatcher. When activated, the dispatcher's microphone is turned off automatically.

Turn off microphone (⬚)

Turns off the dispatcher's microphone.

Stop

Finishes the conference call.

> **NOTE**
> A special tone indicates the end of the call on the radio. If the radio user initiates a new transmission before they hear the tone, the transmission will be initiated incorrectly and may fail.

For information on the Conference Calls functionality, see Conference Calls.

For information on ways of initiating conference-calls, see Initiating Conference Calls.

8.2 Initiating Conference Calls

The Conference Calls feature provides the ability to organize conference with radios, WAVE users, talkgroups, dispatchers, and telephone subscribers.

In SmartPTT Dispatcher you can organize a conference call in one of the following ways:

- By selecting the desired participants from the **Conference Calls** window. For details, see Initiating Calls from the Conference Calls Window.

- By inviting a specific participant to the conference using the following SmartPTT Dispatcher elements:

  - SmartPTT Dispatcher panels. For details, see Initiating Calls from Dispatcher Panels.

  - The **Dispatchers** window. For details, see Initiating Calls from the Dispatchers Window.

  - The **Telephone Subscribers** window. For details, see Initiating Calls from the Telephone Subscribers Window.

8.2.1 Initiating Calls from the Conference Calls Window

Follow the procedure to initiate a conference call using the **Make Conference Call ( )** button.

Prerequisites:

Ensure that the desired radio, WAVE user, or dispatcher is online.

Procedure:

1. On the menu bar, click **Make Conference Call ( )**.
   The **Conference Calls** window appears.

2. In the **Conference Calls** window, invite the desired participant to the conference:

To invite a radio, WAVE user, talkgroup, dispatcher, or a telephone subscriber registered in SmartPTT Dispatcher,	in the left part of the **Conference Calls** window, expand the desired group, and then double-click or drag and drop the desired conference participant to the Participants box in the upper-right corner of the window.
To invite a telephone subscriber not registered in SmartPTT Dispatcher,	perform the following actions: 1. In the left part of the **Conference Calls** window, click **Dial Pad**. The dial pad appears.

2.   On the dial pad, dial the desired subscriber's number, and then click the Phone (📞) button.

> **NOTE**
> If the VoIP gateway default settings are specified in SmartPTT Radioserver Configurator, you only need to dial the subscriber's phone number. If default settings are not specified, you need to dial the subscriber's full address.

The selected user appears in the Participants box in the right part of the window.

Postrequisites:

- To invite more participants to the conference call, repeat step 2.

- To mute the conference call sound and turn off your microphone, click **Mute (🔊)**.

- To turn off your microphone and keep listening to the conference participants, click **Turn off microphone (🔊)**.

- To remove a participant from the current conference call, click **Finish Conference Call (❌)** next to the name of the desired participant in the Participants box.

- To finish the conference call for all participants, click **Stop**.

8.2.2 Initiating Calls from Dispatcher Panels

Follow the procedure to initiate a conference call by sending an invitation request to a radio, WAVE user, or talkgroup.

Prerequisites:

Ensure that the desired radio or WAVE user is online.

Procedure:

Initiate a conference call in one of the following ways:

To send an invitation request to a radio, WAVE user, or talkgroup from the **Radio Fleet** panel,	click the Actions (⇒) button on the desired radio object, and then click **Make Conference Call ( )**.
To send an invitation request to a radio or a WAVE user from the **Radios** panel,	click the Actions (⇒) button on the desired radio object element, and then click **Make Conference Call ( )**.
To send an invitation request to a radio or a WAVE user from the **Maps** panel,	on the map or in the expandable **Radios** panel, right-click the desired radio object, and then click **Make Conference Call ( )**.
To send an invitation request to a radio, WAVE user, or talkgroup from the **Call Window**,	in the **Call Window** of the desired radio object, click **Make Conference Call ( )**. For information on Call Windows, see Radio Call Window.

The **Conference Calls** window with information on the initiated conference call appears.

Postrequisites:

- For information on adding more participants to the conference call, see Initiating Calls from the Conference Calls Window.

- To mute the conference call sound and turn off your microphone, click **Mute ( )**.

- To turn off your microphone and keep listening to the conference participants, click **Turn off microphone ( )**.

- To remove a participant from the conference call, click **Finish Conference Call ( )** next to the name of the desired participant in the Participants box.

- To finish the conference call, click **Stop**.

8.2.3 Initiating Calls from the Dispatchers Window

Follow the procedure to initiate a conference call by sending an invitation request to a dispatcher from the **Dispatchers** window.

Prerequisites:

Ensure that the desired dispatcher is added to SmartPTT Dispatcher and online.

Procedure:

1. On the menu bar, click **Dispatchers (👤)**.
   The **Dispatchers** window appears.

2. In the list of dispatchers, click the desired dispatcher, and then click **Make Conference Call (👥)** in the lower-right corner of the window.
   The **Conference Calls** window with information on the initiated conference call appears.
   The log of the call appears in the Log box in the lower-right corner of the window.

> **NOTE**
> If during the conference call the **Dispatchers** window is open, closing it will automatically remove the dispatcher from the conference-call.

Postrequisites:

- For information on adding more participants to the conference call, see [Initiating Calls from the Conference Calls Window](#).

- To mute the conference call sound and turn off your microphone, click **Mute (🔊)**.

- To turn off your microphone and keep listening to the conference participants, click **Turn off microphone (🎤)**.

- To remove a participant from the conference call, click **Finish Conference Call (📵)** next to the name of the desired participant in the Participants box.

- To finish the conference call, click **Stop**.

8.2.4 Initiating Calls from the Telephone Subscribers Window

Follow the procedure to initiate a conference call by sending an invitation request to a telephone subscriber.

Prerequisites:

- Ensure that the desired telephone subscriber is online.

- Ensure that the required conference calls parameters are configured in the Telephone Interconnect settings.

Procedure:

1. On the menu bar, click **Telephone Subscribers (☎)**.
   The **Telephone Subscribers** window appears.

2. Initiate the conference call in one of the following ways:

To invite a telephone subscriber registered in SmartPTT Dispatcher,	on the **Telephone Subscribers** tab, in the list of telephone subscribers, click the desired subscriber, and then click **Make Conference Call ( )** in the lower-right corner of the window.
To invite a telephone subscriber not registered in SmartPTT Dispatcher,	on the **Dial Pad** tab, dial the desired subscriber's number, and then click **Make Conference Call ( )** in the lower-right corner of the window. **NOTE** If the VoIP gateway default settings are specified, you only need to dial the subscriber's phone number. If default settings are not specified, you need to dial the subscriber's full address.

The **Conference Calls** window with information on the initiated conference call appears.

The log of the call appears in the Log box in the lower-right corner of the window.

Postrequisites:

- For information on adding more participants to the conference call, see Initiating Calls from the Conference Calls Window.

- To mute the conference call sound and turn off your microphone, click **Mute ( )**.

- To turn off your microphone and keep listening to the conference participants, click **Turn off microphone ( )**.

- To remove a participant from the conference call, click **Finish Conference Call ( )** next to the name of the desired participant in the Participants box.

- To finish the conference call, click **Stop**.

9 Text Messages

The Text Messaging feature provides the ability to send and receive text messages in SmartPTT Dispatcher. Using this feature, you can also create templates for frequently sent messages.

In SmartPTT Dispatcher you can perform the following actions:

- Send messages to radios and talkgroups.

- Receive messages from radios.

- Send and receive messages from other dispatchers.
  For details, see Sending Messages to Dispatchers.

> **Important**
> To use the text messages, operator need to have the corresponding permission. For details, see Operators.

> **NOTE**
> The Text Messaging feature is unavailable to WAVE users.

The character limit for a text message is 500 characters including spaces and punctuation marks.

Text messages to radios and talkgroups in SmartPTT Dispatcher can be sent in one of the following ways:

- From the **Send Message** window.
  This window provides full functionality of the Text Messaging feature in SmartPTT Dispatcher. For details, see Sending Messages from the Send Message Window and Managing Message Templates.

- From the Call Window of a radio or talkgroup.
  The Call Window is normally used for sending quick messages. For details, see Sending Messages from the Call Window.

- From the TMS element in the Custom Console.
  The TMS element can be used for sending quick messages and message templates without the ability to edit them. For details, see Sending Messages.

- Automatically when triggered by a rule configured in the **Custom Rules** settings. For details, see Custom Rules.

Only online radios can receive messages. You can track your messages in the **Status** column in Event Log and in the log box of the Call Window.

After sending or receiving a message, the information on it appears in the the log box of the Call Window and in the Event Log. SmartPTT Dispatcher provides the following statuses:

Status	Description
Message delivered	The message was successfully delivered to the target radio.
Message not delivered	The message was not delivered due to issues with the radio connection to the radio system

Message accepted	A message from a radio or another dispatcher was received.
Message sent	The message was successfully sent to the talkgroup.
Message was not sent	The message was not sent to the talkgroup due to issues with the SmartPTT Dispatcher connection to the SmartPTT Radioserver.

SmartPTT Dispatcher does not provide information on which of the radios in the talkgroup received the message. To check the message delivery status for a specific radio, you can resend the message to the desired radio individually.

NOTE
The delivery status may be affected by the radio device settings. For information on your system configuration, contact your system administrator.

When a message from a radio is received, a new entry with the message details appears in the Event Log. In the **Call Windows** settings you can also configure the Call Window to appear automatically. For details, see Call Window Settings.

When a message from another dispatcher is received, the Dispatchers window appears. For details, see Dispatchers.

An audio file can be set to play to inform you of a new incoming message. For details, see "Rules" in *SmartPTT Installation and Configuration Guide*.

For information on ways of sending text messages, see the sections below.

9.1 Send Message Window

The **Send Message** window provides the full text messaging functionality in SmartPTT Dispatcher. In this window, you can perform the following actions:

- Send your own messages or preconfigured message templates. For details, see Sending Messages from the Send Message Window.

- Create, edit, and delete message templates. For details, see Managing Message Templates.
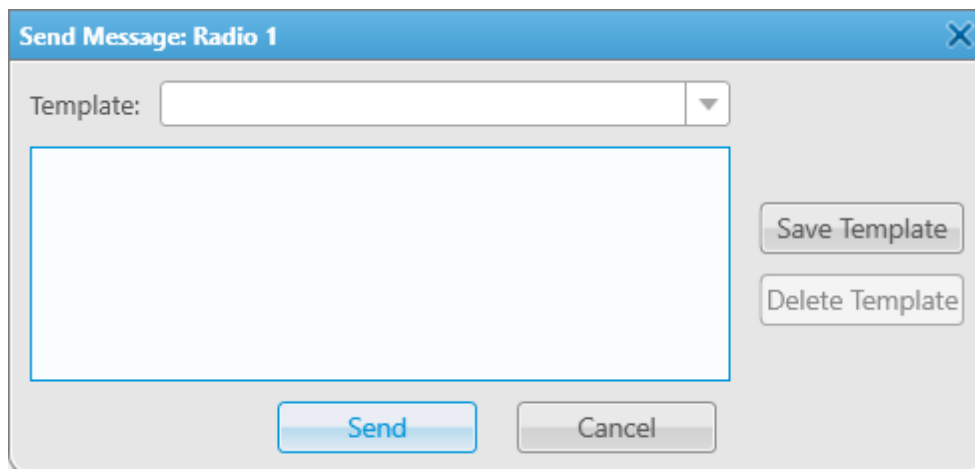
The **Send Message** window provides the following elements:

Template

Expands the list of existing message templates.

Save Template

Opens the **Message Template Name** window where you can set the name for the new template. It also saves the changes that you make to an existing template.

Delete Template

Deletes the template that is currently selected in the **Template** list.

Send

Sends the message from the text box to the selected radio or talkgroup.

Cancel

Closes the **Send Message** window.

9.2 Sending Messages from the Send Message Window

Follow the procedure to send a text message from the **Send Message** window to a radio or a talkgroup.

Prerequisites:

Ensure you have the corresponding operator permission to send messages. For details, see Operators.

Procedure:

1. Open the **Send Message** window in one of the following ways:

To open it from the **Radio Fleet** panel,	to the right of the desired radio, talkgroup, or category name, click the Actions (≫) button, and then click **Send Message (✉)**.
To open it from the **Radios** panel or the Custom Console panel,	click the Actions (≫) button on the desired radio or talkgroup element, and then click **Send Message (✉)**.
To open it for a radio from the **Maps** panel,	on the map or in the **Radios** tab of the **Radios** panel, right-click the desired radio, and then click **Send Message (✉)**.
To open it for a category from the **Maps** panel,	in the expandable **Radios** panel, in the **Categories** tab, right-click the desired category, and then click **Send Message (✉)**.
To open it from the Call Window of a radio or a talkgroup,	in the Call Window, click **Message (✉)**. For information on call windows, see Radio Call Window and Talkgroup Call Window..

2. Depending on the message that you want to send, perform one of the following actions:

To type a new text message,	in the text box, type your message, and then click **Send**.
To use a message template,	perform the following actions:

   For the "To use a message template" row:

   1. From the **Template** list, select the name of the desired template.
      The text of the message appears in the text box below.

   2. *(Optional)* In the text box, edit the text of the message.

   3. Click **Send**.

   The information on the sent message appears in the log box of the Call Window and in the Event Log.

> **NOTE**
>
> If you send the message to a radio group or a category in the **Radio Fleet** panel, the information on its delivery is displayed for each radio and talkgroup individually.

Postrequisites:

For information on working with message templates, see Managing Message Templates.

9.3 Sending Messages from the Call Window

Follow the procedure to send a quick message from the Call Window of a radio or a talkgroup.

Prerequisites:

- Ensure you have the corresponding operator permission to send messages. For details, see Operators.

- Ensure that the Call Window of the desired radio or talkgroup is open.
  For information on ways to access the Call Window, see Radio Call Window.

Procedure:

Send the message in one of the following ways:

To type a new message and send it from the Call Window,	at the bottom of the Call Window, in the text box, type your message, and then click the **Send (➡)** button.
To type a new message or use a message template and send it from the **Send Message** window,	perform the following actions: 1. Click the **Message (✉)** button to the right of the text box. 2. In the **Send Message** window, type the message in the text box or use a message template, and then click **Send**. For information on sending messages from the **Send Message** window, see Sending Messages from the Send Message Window.

The information on the sent message appears in the log box of the Call Window and in the Event Log.

9.4 Managing Message Templates

Follow the procedure to to configure message templates for frequently sent messages.

Prerequisites:

Ensure you have the corresponding operator permission to send messages. For details, see Operators.

Procedure:

1. Open the **Send Message** window. For details, see Send Message Window.

2. Depending on what you want to do with the template, perform one of the following actions:

| To create a new template, | perform the following actions:

1. In the text box, type your message, and then click **Save Template**.

2. In the **Message Template Name** window, in the text box, type the template name.

    > **NOTE**
    >
    > If you leave the box empty, the template gets the *New Template* name that you can change later.

| To edit an existing template, | perform the following actions:

1. From the **Template** list select the name of the desired template.

2. In the text box below, edit the template message.

3. Click **Save Template**.

| To delete an existing template, | perform the following actions:

1. From the **Template** list select the name of the desired template.
    The text of the message appears in the text box below.

2. Click **Delete Template**.

3. In the **Delete Template** window, click **OK**.

10 Voice Calls

In SmartPTT Dispatcher you can initiate and reinitiate a range of voice calls inside the radio system. These voice calls include the following types:

- Private voice calls. For details, see Initiating Private Voice Calls.

- Group voice calls, All Calls and site All Calls. For details, see Initiating Group Voice Calls and All Calls.

- Multiselect calls. For details, see Multicalls.
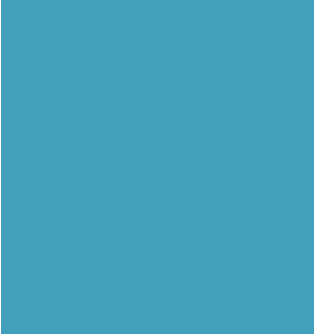
Dispatchers also receive private calls from any radio that appears in the list of radios available in SmartPTT Dispatcher. They also receive group calls targeted to any talkgroup (or All Call) they see in the user interface.

For information on initiating voice calls, see the sections below.

10.1 Color Indication of Voice Calls

For operator convenience all voice calls in SmartPTT Dispatcher have their own color indication depending on the voice call status. This indication informs the operator about the current voice call status, thus allowing to work faster with the main functionality of the dispatch system.

The following colors for radio objects elements are used during voice calls in SmartPTT Dispatcher:

Color	Indication	Call Status
Light-orange		Establishing connection via the radio channel. Refers to outgoing calls made by the Dispatcher.
Orange		Sending a voice transmission to a radio. Refers to outgoing calls made by the Dispatcher.
Light-green		Waiting for the radio to answer the call. Refers to outgoing calls made by the Dispatcher.
Green		Sending a voice transmission from a radio to SmartPTT Dispatcher, including the (remote) monitoring mode. Refers to incoming calls received by the Dispatcher.
Blue		Channel hold mode (none of the parties are transmitting the voice call). Clicking the PTT button before the hold time expires resumes the call. Clicking it after initiates a new call. **NOTE** The duration of hangtime can be different for different radio objects.

> **NOTE**
> Colors in SmartPTT Dispatcher are gradient.

During voice calls color indication is displayed in the following places in SmartPTT Dispatcher:

- The **Calls** panel ongoing call entries. For details, see Calls.

- PTT buttons of the **Radio Fleet** panel. For details, see Radio Fleet.

- PTT buttons of the **Cross Patches** panel. For details, see Cross Patches.

- PTT button in an emergency notification of the **Emergencies** panel. For details, see Emergencies.

- The **Radios** panel elements. For details, see Radios.

- The **Channel** panel elements. For details, see Channels.

- The custom consoles elements. For details, see Custom Consoles.

- The Call Window of the desired object. For details, see Radio Call Window, Talkgroup Call Window, or All Call Window.

Color indication of radio objects elements during voice calls is accompanied by displaying additional information (for example, the names of the voice call initiator and recipient).

In addition, the color of radio objects elements can be changed in the following cases:

- During the radio object status change (online or offline).

- When changing the radio object element color in the custom console.

10.2 Incoming Group Calls

Dispatchers receive private calls from any radio that appears in the list of radios available in SmartPTT Dispatcher. They also receive group calls targeted to any talkgroup (or All Call) they see in the user interface.

In P25 radio systems, depending on the APX control station configuration, the Fixed Group option can be available for dispatchers:

- When dispatchers select the specific talkgroup in the channel selector of the control station, they receive only the corresponding group call.

- When dispatchers select All Call in the channel selector of the control station, they receive any group call in the radio network.

NOTE
Elements of MOTOTRBO radio systems and P25 radio systems appear similarly in SmartPTT Dispatcher, while dispatchers receive incoming calls for those systems differently. Therefore, dispatchers must be instructed on how to receive calls in different radio systems.

10.3 Initiating Private Voice Calls

Follow the procedure to initiate a private call.

> **NOTE**
>
> Call can also be initiated using hotkeys. For information on hotkeys, see Keys.

Prerequisites:

- Check the current settings of the pointing devices. For details, see Pointing Devices.

- Ensure the one of the following panels or windows are opened:

  - The **Radio Fleet** panel. For details, see Radio Fleet.

  - The **Radios** panels. For details, see Radios.

  - The radio Call Window. For details, see Radio Call Window.

  - The Custom Console. For details, see Custom Consoles.

Procedure:

1. Initiate a private call in one of the following ways:

To initiate a private call using the PTT button,	press and hold, or click the PTT button of the desired radio.
To initiate a private call using the Radio element,	press and hold, or click the Radio element of the desired radio.

   The PTT button or the Radio element becomes light-orange (▨), and three dots appear on it.

2. After the color indication appears, perform the following actions:

If the PTT button or the Radio element becomes orange, and three dots appear on it (▮),	perform the following actions: 1. Speak into your microphone. 2. Release or click again the PTT button or the Radio element to end the radio transmission.
If the PTT button or the Radio element becomes light-green (▨),	perform the following actions: 1. When the PTT button or Radio element becomes green (▮), listen to the radio transmission. The PTT button or the Radio element becomes blue (▮), when the radio ends the transmission. 2. Click the PTT button or the Radio element again.

3. When the PTT button or the Radio element becomes orange (■), speak into your microphone.

4. To end the radio transmission, release or click again the PTT button or the Radio element.

When the radio transmission is over, the PTT button or the Radio element becomes blue (■).

3. When the blue color indication (■) appears perform one of the following actions:

To transmit again,	repeat the step 1.
To listen to the radio transmission,	wait until the PTT button or the Radio element becomes green (■), and audio is heard from the speakers or headsets.
To end the call,	wait until the blue indication (■) disappears.

> **NOTE**
> In some cases, on the **Calls** panel, the Cross (✖) button can be available. It provides the ability to end a call at any time.

10.4 Initiating Group Voice Calls and All Calls

Follow the procedure to initiate a call into a talkgroup, an All Call or a site All Call.

> **NOTE**
> Call can also be initiated using hotkeys. For information on hotkeys, see Keys.

Prerequisites:

- Check the current settings of the pointing devices. For details, see Pointing Devices.

- Ensure one of the following panels is open:

    - The **Radio Fleet** panel. For details, see Radio Fleet.

    - The **Channels** panel. For details, see Channels.

    - The Custom Console. For details, see Custom Consoles.

- Determine the group call or All Call type you want to initiate: standard or broadcast. For information on group call and All Call types, see Talkgroup Actions Menu.

Procedure:

1. Initiate a group call or All Call in one of the following ways:

To initiate a call using the PTT button,	press and hold, or click the PTT button of the desired talkgroup or All Call.

To initiate a call using the Radio element,	press and hold, or click the Group Call or All Call element.

The PTT button or the call element becomes light-orange (▢), and three dots appear on it.

2. When the PTT button or the call element becomes orange (◼), speak into your microphone.

3. To end the transmission, release or click again the PTT button or the call element.
    The PTT button or the element becomes blue (◼).

4. When the blue color indication (◼) appears perform one of the following actions:

To transmit again,	repeat the <u>step 1</u>.
To listen to the radio transmission,	wait until the PTT button or the call element becomes green (◼), and audio is heard from the speakers or headsets.
To end the call,	wait until the blue indication (◼) disappears.

10.5 Multicalls

For operator convenience SmartPTT Dispatcher provides the ability to initiate calls simultaneously to several selected radios and/or talkgroups, including All Call.

Multicalls can be initiated in the following ways:

- On the **Radios** panel. For details, see <u>Radios</u>.

- On the **Channels** panel. For details, see <u>Channels</u>.

- On the Custom Console. For details, see <u>Custom Consoles</u>.

To initiate a multicall, it is necessary to select the desired radio object elements while pressing and holding the CTRL or SHIFT button. The blue frame appears on the Radio elements.

> **NOTE**
> The same action is performed to deselect the radio object elements.

A call to the selected objects is initiated by pressing and holding or pressing the hotkey for the PTT button. For information on hotkeys, see <u>Keys</u>.

When the call is initiated, the radio objects become orange (◼). For information on color indication of voice calls, see <u>Color Indication of Voice Calls</u>.

Multicalls can also be initiated with the help of special elements of the Custom Console, in particular:

- The Panel element. For details, see <u>Panel</u>.

- The Multiselect element. For details, see <u>Multiselect</u>.

- The Broadcast Call element. For details, see <u>Broadcast Call</u>.

10.6 Incoming/Outgoing Transmissions Interrupt

In some networks, voice calls from operators can interrupt voice calls from radios and, vice versa, voice calls from radios can interrupt voice calls from operators. These settings are set in SmartPTT Radioserver.

NOTE

These settings do not relate to the radio codeplug settings. To apply these settings, the permission to interrupt in both ways must be configured in the radio codeplug.

Regardless of the specified settings, emergency calls from radios cannot be interrupted. They always have the highest priority regarding outgoing voice calls from an operator and other voice calls.

If a voice call involving multiple channels simultaneously was interrupted, then SmartPTT stops sending sound only to the channel on which a voice call was interrupted.

If the corresponding settings are specified, then radios can be interrupted as the result of the following actions:

- Sending sound notifications to the radio network.

- Performing a deferred action with sending sound to the radio network.

- Performing a server rule related to sending sound to the radio network.

- Sending a voice message to the lone worker.

- Initiating a voice call to a cross patch or any other type of a voice call.

11 Bridging Service

In SmartPTT you can use bridging service to interconnect subscribers of multiple networks. The bridging service is implemented by SmartPTT Radioserver, and you should activate the service in SmartPTT Radioserver Configurator.

By using the bridging service in SmartPTT, you can perform the following actions:

- Connect various radio networks

- Route voice calls from selected radios, talkgroups, and radio groups

- Route private calls dynamically

The bridging service is supported between digital and analog channels in the following networks:

- IP Site Connect, Extended Range Direct Mode, Capacity Plus, and Linked Capacity Plus over NAI

- Connect Plus

NOTE
The current version of SmartPTT Dispatcher supports only talkgroup calls to and from Connect Plus networks.

For information on using the bridging service, see the sections below.

11.1 Bridging Configuration Window

The main idea of bridging configuration in SmartPTT Dispatcher is using of profiles and route groups. Profiles contain information on the bridging rules, which are specified in routes and route groups.

In the **Bridging Configuration** window you can create routes and route groups, and add them to profiles. For details, see Configuring All Routes, Adding Route Groups, Adding Profiles. Bridging settings can be configured individually for each SmartPTT Radioserver.

Important
The bridging service is available to the Administrator, or to operators with the corresponding permission. For details, see Operators.

You can open the window by clicking the Actions (≫) button next to SmartPTT Radioserver in the **Radio Fleet** panel, and selecting **Configure Call Bridging Table**. For details, see Radioserver Actions Menu.
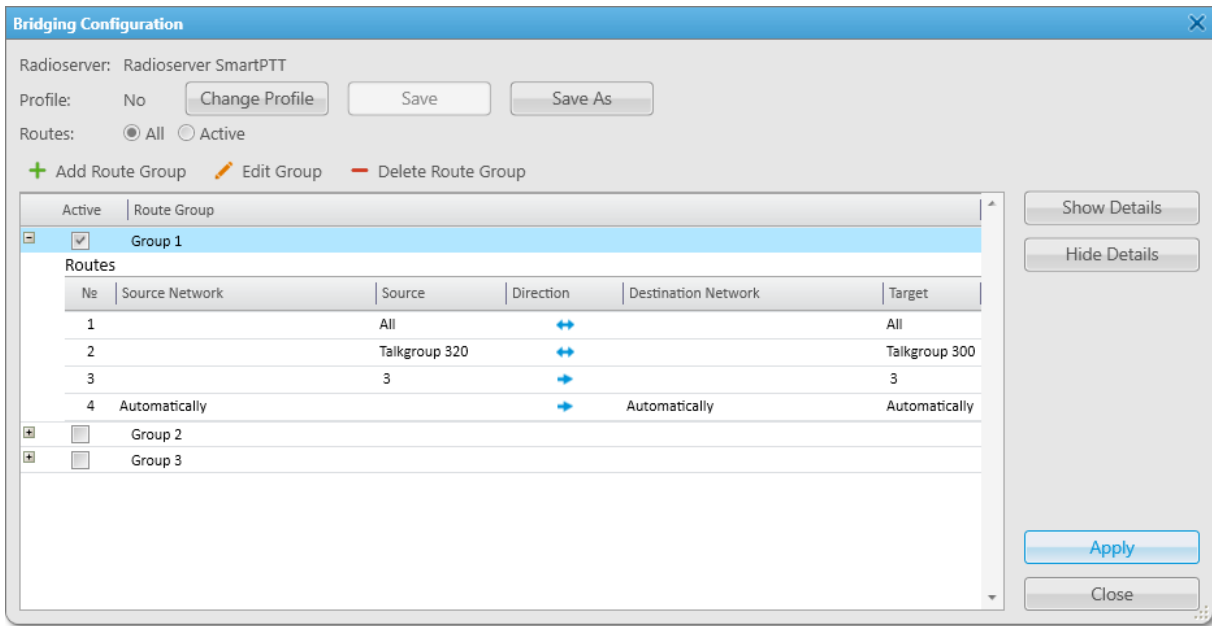
The **Bridging Configuration** window provides the following elements:

Radioserver

Name of the current radioserver.

Profile

Name of the current profile. If no profile is applied, the **No** text is displayed. For information on profiles, see Bridging Profiles Window.

All / Active

Displays all or only active route groups in the Route Groups table.

Change Profile

Opens the **Bridging Profiles** window where you can manage profiles. For information on profiles management, see Adding Profiles.

Save

Saves changes of the configuration to the current profile.

Save As

Opens the **Enter Profile Name** window. Saves the current configuration as a new profile.

Add Route Group

Opens the **Add Route Group** window for adding a new route group.

Edit Group

Opens the **Add Route Group** window for editing the selected group.

Delete Route Group

Removes the selected route group from all profiles.

Show Details / Hide Details

Show or hide detailed information on all groups respectively.

Apply

Activates the current profile settings. After activating the profile, the asterisk character (*) appears next to the profile name.

Route Groups table

Contains a list of of available routes organized in groups.

The table provides the following elements:

- Expand (⊞) or Collapse (⊟) controls next to the group name show or hide the group detailed information.

> **NOTE**
> When the group is expanded, it contains the routes added in the <u>Add Route Group Window</u> window.

- The **Active** column contains the check box to activate or deactivate the desired groups.

- The **Route Group** column contains the route group name.

11.1.1 Add Route Group Window

A route group unites several routes into one group. Route groups provide a neat look to profiles. Route groups can be activated and deactivated for using routes inside these groups.

In the **Add Route Group** window you can <u>create a new route group</u>, or edit the existing group.
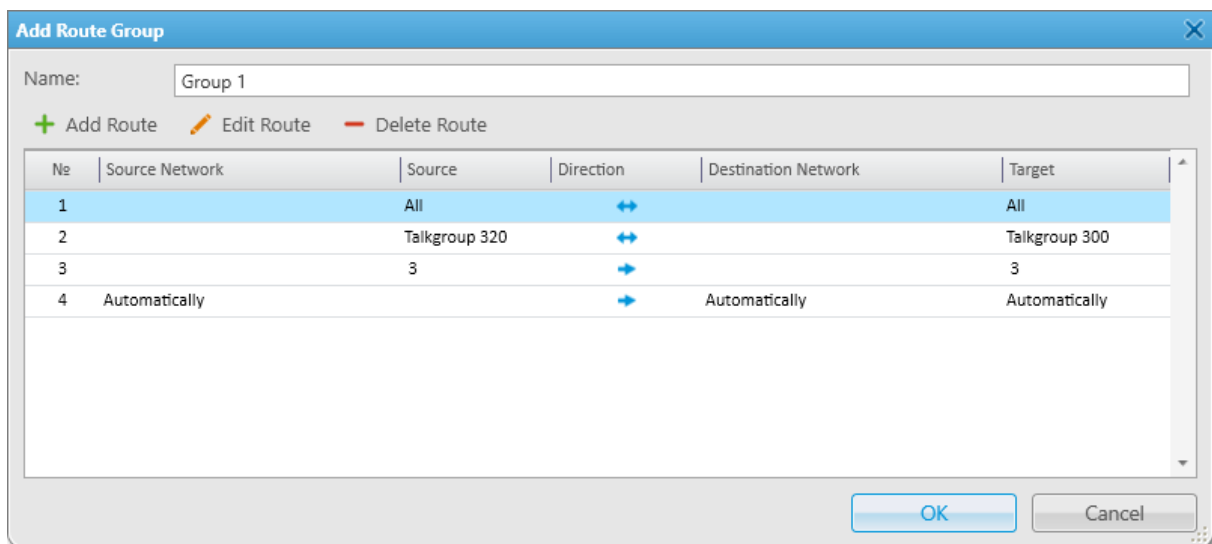
The **Add Route Group** window provides the following elements:

Name

Name of a route group.

Add Route

Opens the **Route** window for adding a new route.

Edit Route

The button is available when at least one route is added. Opens the **Route** window of the existing route for editing.

Delete Route

The button is available when at least one route is added. Removes the route from the group.

Routes Table

Contains the added routes. For details, see Route Window.

11.1.2 Route Window

Route is a basic unit of bridging process, and is an integral part of a route group. Routes cannot be used separately from route groups.

In the **Route** window you can create a new route, or edit the existing.

The **Route** window provides the following elements:

Route Number

Contains a unique route number. The box appears at creating a new route.

Source Control Station

Provides the list of available source channels for the route. In the Routes Group table it calls as **Source Network**.

Route Type

Provides the list of route types to configure:

- *All* type for routing all voice calls from the source network to the destination network.

- *Talkgroup* type for routing non-private calls (group calls and All Calls).

- *Radio* type for routing individual calls between subscribers.

- *Dynamic* type for routing radio private calls inside radio groups created in SmartPTT Radioserver Configurator. For details, see "Managing Radio Groups" in *SmartPTT Installation and Configuration Guide*.

Destination Control Station

Provides the list of available destination channels for the route. In the Routes Group tables it calls as **Destination Network**.

Important
Bridging is unavailable for systems accessed over the 4-wire interfaces.

Source

Contains a source ID or name for the route (radio ID, talkgroup name, or All Call name).

Direction

Provides the list of directions for the route:

- If One-way (➡) direction is selected, only source network can route calls.
  For the one-way direction of the Radio route, a radio from the source network can initiate calls to the destination channel and receive private calls from this channel.

- If Two-way (↔) direction is selected, both source and destination networks can route calls.
  For the two-way direction of the Radio route, a radio from the source network can initiate calls to the destination channel, receive private calls from this channel, and repeat these actions when re-registering on the destination channel.

> **NOTE**
> You can select any direction for the Dynamic route type, because connection between subscribers occurs within the subscriber group.

Target

Contains the target ID or name for the route (radio ID, talkgroup name, or All Call name).

Process Routed Calls

When selected, it provides routing of incoming calls of the channel by another route.

EXAMPLE

You can add all these routes without the **Process Routed Calls** check box selected:

- IPSC 01 slot 01 ←→ IPSC 02 slot 01
- IPSC 01 slot 01 ←→ IPSC 03 slot 01
- IPSC 01 slot 01 ←→ IPSC 04 slot 01
- IPSC 02 slot 01 ←→ IPSC 03 slot 01
- IPSC 02 slot 01 ←→ IPSC 04 slot 01
- IPSC 03 slot 01 ←→ IPSC 04 slot 01

Or, you can select the check box, and add only three routes:

- IPSC 01 slot 01 ←→ IPSC 02 slot 01
- IPSC 02 slot 01 ←→ IPSC 03 slot 01
- IPSC 03 slot 01 ←→ IPSC 04 slot 01

> **Important**
> Do not use round routes. They can cycle all routes and lead to unstable system operation (for example, IPSC 01 slot 01 ←→ IPSC 04 slot 01).

11.1.3 Bridging Profiles Window

You can use profiles for quick switching between preconfigured activated route groups. Profiles can be created for general purposes, for carrying out engineering work, for emergency situations, etc.

In the **Bridging Profiles** window you can manage profiles (add, rename, delete, and switch between them). For details, see Adding Profiles. The window appears by clicking **Change Profile** in the **Bridging Configuration** window.
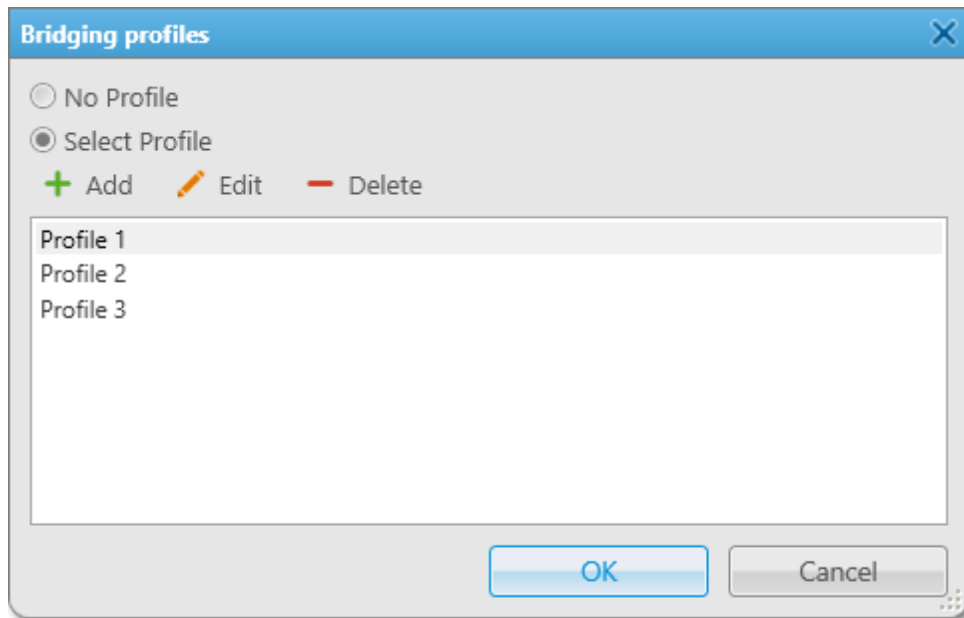
The **Bridging Profiles** window provides the following elements:

No Profile

When selected, the created groups have no reference to a specific profile. The profile list and buttons for profile edition become unavailable.

Select Profile

When selected, the profile list is available for editing, and route groups can be assigned to the selected profile.

Add

Opens the **Enter Profile Name** window for adding a new profile.

Edit

Opens the **Enter Profile Name** window for renaming the existing profile.

Delete

Removes the selected profile.

11.2 Adding Route Groups

Follow the procedure to add a route group.

Procedure:

1. In the **Bridging Configuration** window, click **Add Route Group**.
    The **Add Route Group** window appears.

2. In the **Name** box, type the group name.

3. Add the desired routes to the group depending on the call types:

    • To route any type of voice calls, see <u>Configuring All Routes</u>.

    • To route group calls and All Calls, see <u>Configuring Non-Private Routes</u>.

    • To route individual calls only, see <u>Configuring Private Routes</u>.

    • To route private voice calls initiated and received by radios included in the radio group, see <u>Configuring Dynamic Routes</u>.

4. Click **OK** to apply changes and close the window.

Postrequisites:

• To edit the route group, in the **Bridging Configuration** window, select the desired group, and then click **Edit Group**.

• To delete the route group, in the **Bridging Configuration** window, select the desired group, and then click **Delete Group**.

11.2.1 Configuring All Routes

Follow the procedure to route all voice calls from the source network to the destination network.

Prerequisites:

Ensure that the desired networks are configured in SmartPTT Radioserver Configurator.

Procedure:

1. In the **Bridging Configuration** window, click **Add Route Group**.
    The **Add Route Group** window appears.

2. In the **Add Route Group** window, click **Add Route**.
    The **Route** window appears.

3. In the **Route** window, in the **Route Number** box, type a unique route number.

4. From the **Route Type** list, select **All**.

5. From the **Source Control Station** list, select the desired source channel.

6. From the **Destination Control Station** list, select the desired destination channel.

7. From the **Direction** list, select one-way or two-way direction.

8.   *(Optional)* Select the **Process Routed Calls** check box to route incoming calls by another route.

9.   Click **OK** to apply changes and close the window.

Postrequisites:

- To edit the route, in the **Add Route Group** window, select the desired route, and then click **Edit Route**.

- To delete the route, in the **Add Route Group** window, select the desired route, and then click **Delete Route**.

11.2.2 Configuring Private Routes

Follow the procedure to route individual radio calls.

> **Important**
> Private calls cannot be routed in networks with control stations.

Prerequisites:

- Ensure that the desired networks are configured in SmartPTT Radioserver Configurator.

- Obtain the desired radio ID from the source network.

Procedure:

1.   In the **Bridging Configuration** window, click **Add Route Group**.
      The **Add Route Group** window appears.

2.   In the **Add Route Group** window, click **Add Route**.
      The **Route** window appears.

3.   In the **Route** window, in the **Route Number** box, type a unique route number.

4.   From the **Route Type** list, select **Radio**.

5.   From the **Source Control Station** list, select the desired source channel.

6.   From the **Destination Control Station** list, select the desired destination channel.

7.   In the **Source** box, type the radio ID from the source network.

> **NOTE**
> The **Target** box is unavailable when you configure individual radio calls.

8.   From the **Direction** list, select one-way or two-way direction.

9.   *(Optional)* Select the **Process Routed Calls** check box to route incoming calls by another route.

10.   Click **OK** to apply changes and close the window.

Postrequisites:

- To edit the route, in the **Add Route Group** window, select the desired route, and then click **Edit Route**.

- To delete the route, in the **Add Route Group** window, select the desired route, and then click **Delete Route**.

11.2.3 Configuring Non-Private Routes

Follow the procedure to route group calls or All Calls.

Prerequisites:

- Ensure that the desired networks are configured in SmartPTT Radioserver Configurator.

Procedure:

1. In the **Bridging Configuration** window, click **Add Route Group**.
   The **Add Route Group** window appears.

2. In the **Add Route Group** window, click **Add Route**.
   The **Route** window appears.

3. In the **Route** window, in the **Route Number** box, type a unique route number.

4. From the **Route Type** list, select **Talkgroup**.

5. From the **Source Control Station** list, select the desired source channel.

6. From the **Destination Control Station** list, select the desired destination channel.

7. From the **Source** list, select the desired source talkgroup or All Call.

8. From the **Target** list, select the desired destination talkgroup or All Call.

9. From the **Direction** list, select one-way or two-way direction.

10. *(Optional)* Select the **Process Routed Calls** check box to route incoming calls by another route.

11. Click **OK** to apply changes and close the window.

Postrequisites:

- To edit the route, in the **Add Route Group** window, select the desired route, and then click **Edit Route**.

- To delete the route, in the **Add Route Group** window, select the desired route, and then click **Delete Route**.

11.2.4 Configuring Dynamic Routes

Follow the procedure to route private voice calls initiated and received by radios included in the radio group.

> **Important**
> Private calls cannot be routed in networks with control stations.

Prerequisites:

Ensure the radio group is added in SmartPTT Radioserver Configurator.
For details, see "Managing Radio Groups" in *SmartPTT Installation and Configuration Guide*.

> **NOTE**
> Do not confuse radio groups (created in SmartPTT Radioserver Configurator) and talkgroups (radio system entities which are set in radio codeplugs).

Procedure:

1. In the **Bridging Configuration** window, click **Add Route Group**.
    The **Add Route Group** window appears.

2. In the **Add Route Group** window, click **Add Route**.
    The **Route** window appears.

3. In the **Route** window, in the **Route Number** box, type a unique route number.

4. From the **Route Type** list, select **Dynamic**.

5. In the **Subscriber Group** box, select the desired radio group.

6. From the **Direction** list, select any direction.

7. Click **OK** to apply changes and close the window.

Postrequisites:

*   To edit the route, in the **Add Route Group** window, select the desired route, and then click **Edit Route**.

*   To delete the route, in the **Add Route Group** window, select the desired route, and then click **Delete Route**.

11.3 Configuring Profiles

Configuration and managing of profiles in SmartPTT Dispatcher include the following:

*   Adding profiles. For details, see Adding Profiles.

*   Switching between added profiles, and renaming and deleting of profiles. For details, see Managing Profiles.

11.3.1 Adding Profiles

Follow the procedure to to save the current configuration as a new profile.

Prerequisites:

Ensure you added the desired route groups.
For details, see Adding Route Groups.

Procedure:

1. In the **Bridging Configuration** window, in the Route Groups table, select the **Active** check boxes next to the desired route groups.

2. *(Optional)* On the right of **Routes**, click **All** or **Active** to display all or only active route groups.

3. Save the configuration as a new profile:

    a. In the **Bridging Configuration** window, click **Save As**.
        The **Enter Profile Name** window appears.

    b.   In the **Profile Name** box, type the desired profile name.

    c.   Click **OK** to apply changes and close the window.

        The saved profile configuration opens.

4.   To activate the profile settings, click **Apply**.

    The asterisk character (*) appears next to the profile name.

11.3.2 Managing Profiles

Follow the procedure to switch, rename, or delete the profile.

Procedure:

1.   In the **Bridging Configuration** window, click **Change Profile**.

    The **Bridging Profiles** window appears.

2.   Click **No Profile** or **Select Profile** for managing groups by using profiles.

3.   If **Select Profile** is selected, in the **Bridging Profiles** window, perform one of the following actions:

To switch between profiles,	select the desired profile from the list.
To rename the profile,	perform the following actions: 1. Select the desired profile from the list, and click **Edit**. 2. In the open **Enter Profile Name** window, type a new name for the profile. 3. Click **OK** to apply changes and close the window.
To delete the profile,	perform the following actions: 1. Select the desired profile from the list, and click **Delete**. 2. In the open confirmation window, click **OK**.

4.   In the **Bridging Profiles** window, click **OK** to apply changes and close the window.

12 Help

The **Help (?)** menu provides the following elements:

SmartPTT Help

Contains information on the system objects and functionality. You can also open the SmartPTT Help file any time by pressing F1.

About

Contains information on the application version, license, and the third-party software used in development process.

13 Remote Assistance

SmartPTT contains Remote Assistance program which provides the remote access to your computer for SmartPTT technical support engineer. Using this program he can resolve technical issues on your computer.

To use Remote Assistance program, perform the following actions:

1. Run *Remote Assistance*.

2. Contact technical support engineer and pass your ID and password to it.
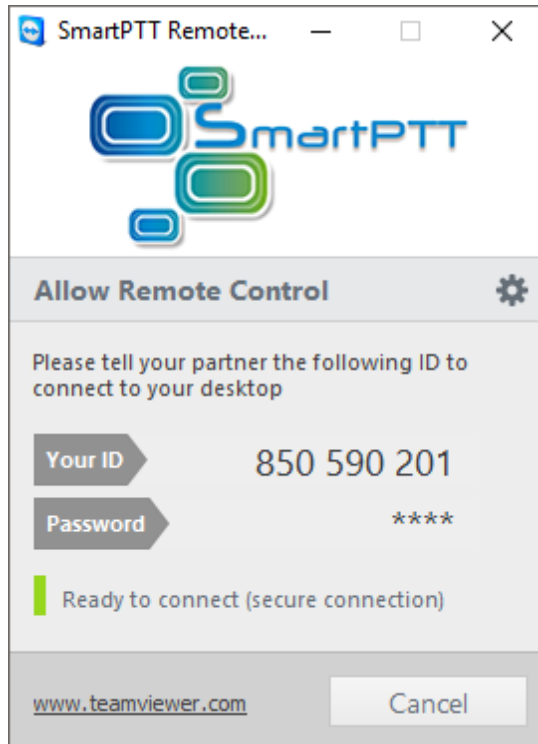
3. When the connection is established, you will see session window on the screen.

4. *(Optional)* To communicate with the engineer, use the chat function.

To stop the session, click **Close (** ✕ **).**

Contact Information

The document describes the product developed by Elcomplus LLC. The official company's website is www.elcomplus.com.

For contact information with the Elcomplus LLC representatives, see www.smartptt.com/contacts/.

Technical Support

Customer support is provided by Technical Support Center. The official website of the Center is support.smartptt.com.

To contact the support engineer, perform one of the following actions:

- Fill in and submit the support request from the website.

- Email the support request to support@smartptt.com.

In America, customer support is also provided by Elcomplus, Inc. To contact support engineers, use the following contact information:

- Phone: +1 786-362-5525

- Email: miami@smartptt.com

- Mailbox: 290 NW 165th St, Ste P-200, 3rd Flr
  Miami, FL, 33169, USA

Technical Support Center and Elcomplus, Inc. do not consult on deployment and maintenance of Motorola Solutions products except on settings related to SmartPTT connection and data communication. For the technical support on Motorola Solutions products, please contact an authorized Motorola Solutions representative in your region.

Customer Documentation

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