

SmartPTT PLUS 9.4

Dispatcher User Guide

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1 SmartPTT Dispatcher Interface

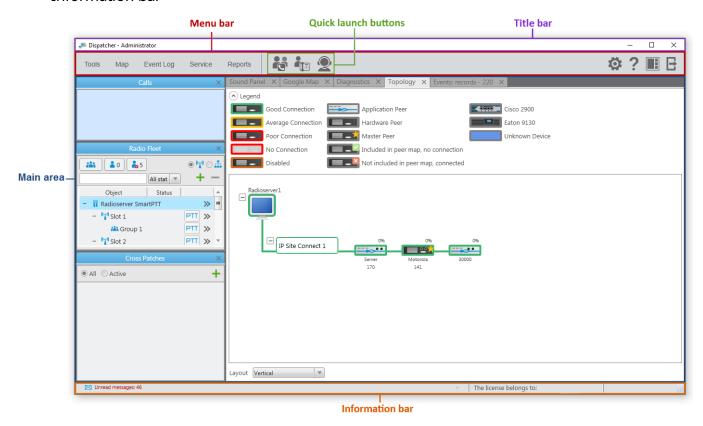
SmartPTT Dispatcher interface includes various elements, indications, and controls that provide you with the necessary information and functionality.

NOTE

Some SmartPTT Dispatcher elements are unavailable if you do not have corresponding predefined 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 (\blacksquare), application name with the current operator name in the **Dispatcher - <name>** format, and standard Windows Minimize (\square), Maximize (\square), and Close (\times) 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 <u>Tools</u>.

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 <u>Maps</u>.

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 <u>Event Log</u>.

Service

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

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 <u>Conference Calls</u>.
- The **Telephone Subscribers** () button opens the **Telephone Subscribers** window for initiating calls to telephone subscribers from SmartPTT Dispatcher. For details, see <u>Telephone</u> Interconnect.
- The **Dispatchers** (**②**) button opens the **Dispatchers** window for initiating calls to external dispatchers from SmartPTT Dispatcher. For details, see <u>Dispatchers</u>.

Settings (🌣)

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

Help(?)

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

UI Layout Settings (🔳)

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

Change Operator ($oxdot{B}$)

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 below to move a panel inside the main area.

Prerequisites:

Ensure the current layout is unlocked.

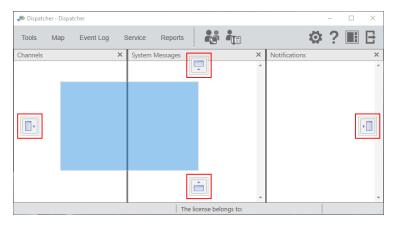
Procedure:

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,

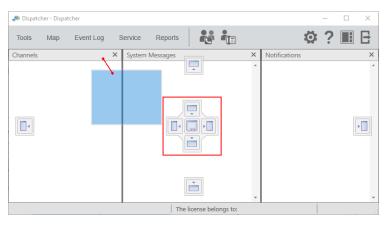
drop it to the corresponding positioning control of the main area.



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 (\square) control unless you want to tab panels.

For information on tabbing panels, see <u>Tabbing</u> <u>Panels</u>.

1.1.2 Tabbing Panels

Follow the procedure below to tab panels into a tab panel.

NOTE

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

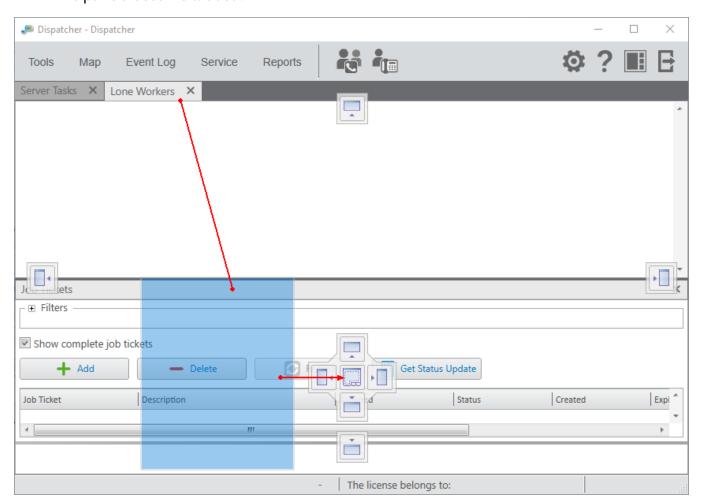
Prerequisites:

- 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 below 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

In SmartPTT Dispatcher dispatch console provides the ability to manage its layout in the following ways:

- Save the current layout
- Apply the existing layout
- Lock the current layout

You can perform these actions using menu items that appear after clicking **UI Layout Settings** (**III**) on the menu bar.

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

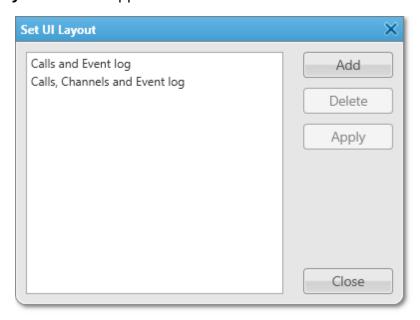
For information on layout management, see the sections below.

1.2.1 Saving Layout

Follow the procedure below to save the current layout.

Procedure:

1. On the menu bar, click **UI Layout Settings (** \blacksquare **)** \rightarrow **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 below to to apply the saved layout.

Procedure:

- 1. On the menu bar, click **UI Layout Settings** (\blacksquare) \rightarrow **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 below to lock the current layout.

IMPORTANT

Only Administrator can lock the layout.

Procedure:

On the menu bar, click **UI Layout Settings** (\blacksquare) \rightarrow **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 features, and activate and configure parameters of additional features. It 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 <u>Equipment</u>.
- Configuring connection to telephone subscribers.
 For details, see <u>Telephone Interconnect</u>.
- Configuring operator profiles and operator permissions.
 For details, see Operators.
- Configuring the call recording feature and the database backup settings.
 For details, see <u>Information Storage</u>.
- Configuring the list of radios and WAVE users, their categories, statuses and other related settings.

For details, see Radios.

- Configuring GPS and Indoor Tracking settings.
 For details, see <u>Positioning Systems</u>.
- 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.
- Installing licenses required for access to additional SmartPTT Dispatcher features.
 For details, see <u>Licenses</u>.

• Configuring SmartPTT Dispatcher databases.

For details, see **Database**.

Configuring radioserver parameters.

For details, see Radioservers.

For information on these settings see the corresponding sections below.

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 Windows Settings.

 Configuring parameters of the Emergencies, System Messages, and Recent Incoming Calls panels.

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.

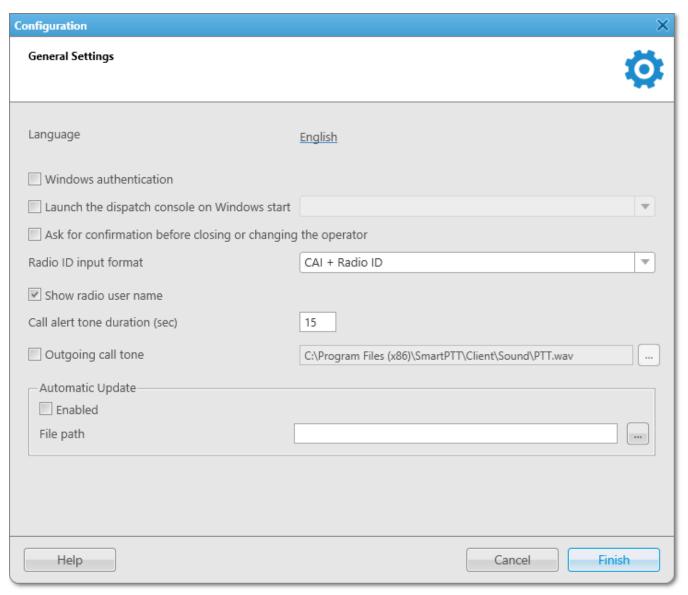
For details, see SCADA.

For information on these settings see the corresponding sections below.

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** (a) \rightarrow **Interface** \rightarrow **General Settings** on the menu bar.



The **General Settings** window provides the following elements:

Language

The language of the SmartPTT Dispatcher interface language.

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

In Windows 7, domain users must belong to domain user groups to be able to log on to SmartPTT Dispatcher. 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.

Radio ID input format

The radio ID format used in SmartPTT Dispatcher. You can select the desired format from the list to the right.

The following options are available:

- IP address
- CAI + Radio ID

The radio ID is displayed in the selected format in the corresponding box in the **Radio Properties** window. For details, see <u>Radio Properties Window</u>.

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 "User Authorization" in *Radioserver Configurator User 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.

The **Automatic Update** area provides controls for setting the automatic update parameters. The use of the **Automatic Update** feature is relevant for the radio systems where multiple SmartPTT Dispatchers have access to a single installation file downloaded by the radio system administrator.

The **Automatic Update** area provides the following elements:

Enabled

Activates the automatic update functionality. If selected, SmartPTT Dispatcher will regularly check for updates of the installation file in the specified folder.

File Path

The path to the folder storing the *ClientSetup.exe* installation file that ships with SmartPTT Software Installation Package.

After the radio system administrator updates the installation file, the dialog box indicating available updates appears at launch of SmartPTT Dispatcher.

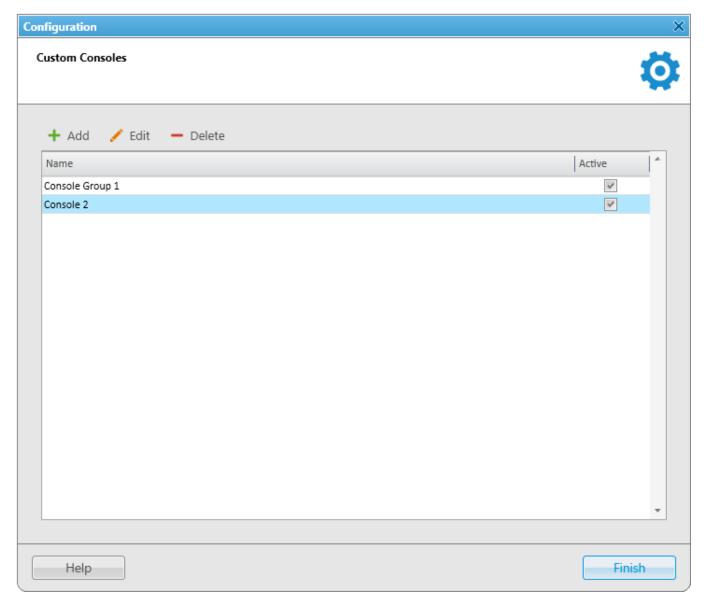
2.1.2 Custom Consoles

Custom Console is a tool that provides the dispatcher with custom workplace. Custom consoles are visual panels containing various elements, e.g. radios, <u>WAVE users</u>, external dispatchers, talkgroups, in short, everything the dispatcher need for daily work.

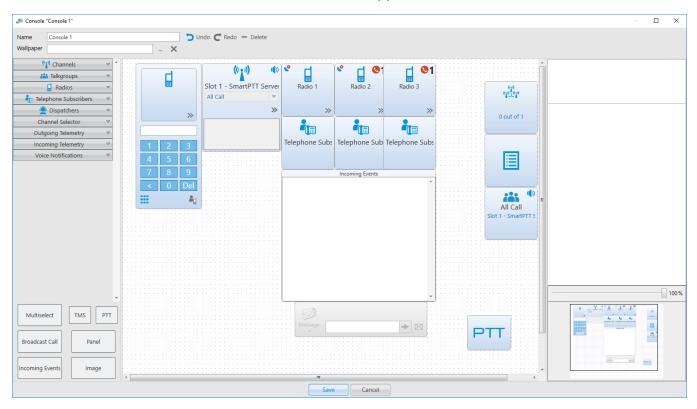
Every dispatcher can have his own console with all the radio objects necessary for his work.

If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, on the corresponding elements of custom console the name of the user authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

To create and set up a custom console, on the menu bar of the SmartPTT Dispatcher window, click **Settings ()** \rightarrow **Interface** \rightarrow **Custom Consoles**. The **Custom Consoles** window appears.



To add a new console, click **Add**. The console editor appears.



Name: A name of a custom console which will be displayed in the **Tools** menu.

Wallpaper: Allows you to select an image for the background of the console. The supported formats are .bmp, .jpg, .png.

There are more than a dozen types of visual elements available in **Custom Consoles**. Description of each element is given further in this article.

To add an element to the custom console, drag and drop the desired element onto the work space of the console designer. To remove the element from the work space, select it and press **Delete**. To erase the last change or perform the redo function click the **Undo** or **Redo** buttons.

You can adjust size, color or location of each element on the custom console. You can also add or remove different properties. To do this, select the element and use the **Misc** or the **Properties** sections on the right of the console designer work space. To move the element up, down, left, or right, press the arrow keys. To move the element diagonally, press the Up or Down Arrow key and the Left or Right Arrow key. For example, to move the element diagonally toward the upper-right corner, press Right Arrow-Up Arrow.

Channel



The **Channel** element stands for a physical or logical channel. It gives the following information about the channel:

- Information about the current call on the channel the call state, the called party and the call originator
- Default target for outgoing calls (it can be either All Call or any particular talkgroup)
- Muted or unmuted
- The number of missed incoming calls

To mute the channel, click . Check the mute mode settings before applying this function. For details, see Other Settings.

To open the Actions Menu of actions that can be applied to an element, click the Actions (>>) button. For details, see Actions.

To display the channel name as *Radioserver name – Channel name*, select the **Radioserver Name** check box in the **Misc** section.

Otherwise, only the channel name will be displayed.

To view the number of missed incoming calls, select the **Missed Calls** check box in the **Properties** section.

shows the number of calls not answered by the dispatcher. The red figure stands for the number of private calls not answered by the dispatcher. The blue one shows the total number of calls not answered by the dispatcher, including private and group calls. As soon as the dispatcher called back the talkgroup,or the radio, or the WAVE user, the counter is set to zero.

By clicking the button, the window with details appears.



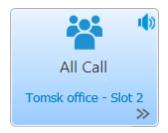
Missed (Dispatcher): Filters only private calls not answered by the dispatcher.

Missed (All): Filters private and group calls not answered by the dispatcher.

All: Removes all filters and shows all available talkgroups, radios and WAVE users, and their call statistics.

Clear All: Sets all counters to zero.

Talkgroup





The **Talkgroup** element stands for a talkgroup on the channel. You can make a call to the selected talkgroup by clicking on the element.

To open the Actions Menu, click the Actions (») button. For details, see <u>Actions</u>.

Also, the element displays that the radio enters emergency mode (the **Emergency** icon appears), when the Emergency button is pressed on the radio. Once the dispatcher solves the problem by clicking in the **Emergencies** panel, he clears the emergency state on the element of the **Custom Console**. Once the initiator clears the emergency on the initiator radio, the emergency is considered over.

You can mute the group call by clicking on the **Mute** icon. The element also shows the state of the current call.

To display the channel name as *Radioserver name – Channel name*, select the **Radioserver Name** check box in the **Misc** section. Otherwise, only the channel name will be displayed.

Radios



The Radio element for a certain radio



The Radio element for a certain WAVF radio

The **Radio** element is used for making private voice calls. There are two types of the **Radio** element:

 The Radio element for a certain radio or a <u>WAVE user</u> – is used to call the radio or the WAVE user selected in advance, when adding the element to the console.

You can also assign this type of element to different radios and WAVE users from the drop-down list. To enable this option, select the **Allow Changes** check box in the **Properties** section, when adding the element to the console.

• The **Radio** element for an optional radio or WAVE user – is used to call the radio or the WAVE user that can be selected using dial pad or list of radios and WAVE users on the element.

To open the dial pad, click the button in the bottom left corner of the element. To select the necessary radio or WAVE user, enter its **Radio ID** in the search box using the dial pad or keyboard.

To open the list of radios and WAVE users, click the button lin the bottom right corner of the element.

The **Radio** element shows the radio or the WAVE user name or its **Radio ID**, if name is not specified.



The icon on the radio or WAVE user button shows that the dispatcher did not answer the call from a radio or a WAVE user. The figure next to it shows the number of missed calls.

Also, the element displays that the radio enters emergency mode (the **Emergency** label), when the Emergency button of the radio is



The Radio element for an optional radio



The Radio element for an optional WAVE user

pressed. Once the dispatcher solves the problem by clicking in the **Emergencies** panel, he clears the emergency state on the element of the **Custom Console**. Once the initiator clears the emergency on the initiator radio, the emergency is considered over.

NOTE

Emergency and Man Down modes are unavailable to WAVE users.

To open the Actions Menu of a radio or a WAVE user, click the Actions (\gg) button.

To open the Call Window of a radio or a WAVE user, right click the element.

For information on the color indication applied to the radio and WAVE user elements, see <u>Radios</u>.

Telephone Subscriber



The **Telephone Subscriber** element is used for making calls to telephone subscribers. Double-clicking the element opens the **Call Window** and initiates the call.

NOTE

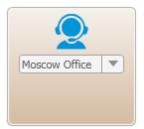
For proper operation of the element select **Allow Calls to Telephone Subscribers** in the **General Settings** tab of the
<u>Telephone Settings</u> window.

You can assign the element to different telephone subscribers from the drop-down list. To enable this option, select the **Allow Changes** check box in the **Properties** section.

NOTE

To set the list of telephone subscribers, go to the <u>Telephone</u> Subscribers window.

Dispatcher



The **Dispatcher** element is used for making connection to other dispatchers. Double-clicking on the element opens the dispatcher's **Call Window** and initiates the call.

NOTE

For proper operation of the element make sure that the operator has the permission **Connect with external dispatchers** (Settings ($\textcircled{\circ}$) \rightarrow Operators)

You can assign the element to different dispatchers from the dropdown list. To enable this option, select the **Allow Changes** check box in the **Properties** section.

NOTE

The list of dispatchers contains dispatchers added in the <u>Dispatchers</u> window.

Channel Selector



The **Channel Selector** element allows the dispatcher to switch from one channel of the control station to another.

NOTE

The functionality requires the control station to be connected to the PC and its channels to be set up via *MOTOTRBO CPS* and SmartPTT Radioserver Configurator.

Channel setting in SmartPTT Radioserver Configurator is carried out on the **Channels** tab of the control station. **Channels** listed on this

tab must match the channels set in MOTOTRBO CPS (channel number, zone number).

To configure this functionality in SmartPTT Dispatcher, add the **Channel Selector** element into the console designer work space. One element can be assigned to one channel. To allow switching between channels, you should add the required number of elements.

Outgoing Telemetry



The **Outgoing Telemetry** element is used for sending telemetry commands to the radio. You can assign only one telemetry command per element. Before assigning the telemetry command to the element, add it to the telemetry list of commands and to the radio. Apart from sending commands, you can also check the current status and the time of the last status update.

Incoming Telemetry



The **Incoming Telemetry** element is used for receiving the current status of the selected pin. You can also see the time of the last status update.

Voice Notification



The **Voice Notifications** element starts or stops the voice notification and displays how many times the voice notification is reproduced. To configure voice notifications see the **Voice Notification** section in SmartPTT Radioserver Configurator.



NOTE

To monitor the current status of the voice notification playing, open the <u>Voice Notifications</u> window (**Service** \rightarrow **Voice Notifications**).

To display the element name as *Radioserver name – Voice Notification name*, select the **Radioserver Name** check box in the **Misc** section. Otherwise, only the voice notification name will be displayed.

Multiselect





The **Multiselect** element is used to make a simultaneous call to several radio objects (talkgroups and radios and <u>WAVE users</u> which were added in advance by dispatcher to the **Multiselect** list.

To initiate a simultaneous call to the participants of the **Multiselect** list, click the **Multiselect** element in the opened custom console. All participants will hear the dispatcher, but only the dispatcher will hear the participant who answers the call.

To add radio objects to the **Multiselect** list, add the **Multiselect** element to the custom console in the console editing mode, open the custom console from the **Tools** menu and click the **Edit list** button on . In the **Multiselect** window, that opened, add the required radio objects from the **Radio Fleet** list to the **Multiselect objects** list, and click **OK**.

NOTE

You can create more than one **Multiselect objects** list, by adding the corresponding number of the **Multiselect** elements to the custom console.

To edit the **Multiselect** list, click the **Edit list** button **I** in the opened custom console.

Broadcast Call



The **Broadcast Call** element is used for making group calls or an All Call within all the channels of SmartPTT Dispatcher simultaneously. Select the required talkgroup or All Call ID in the **Talkgroup ID** box of the **Properties** section. When such a call is initiated, SmartPTT Dispatcher tries to call all participants with the given identifier.

Panel



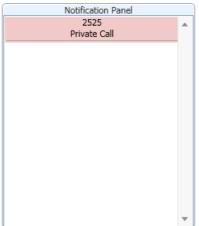
The **Panel** element is used for uniting several elements. The panel can have its own color, size and placement. All inside elements of one panel are moved together with the panel.

Image



The **Image** element is used for adding logos and other images to the custom console. You can select the image file under the **Properties** section on the right. The supported formats are .bmp, .jpg, .png.

Incoming Events



The **Incoming Events** informs about incoming messages, call alerts and missed private calls to SmartPTT Dispatcher from radios or WAVE users. Double-click the record in the panel to open the radio or WAVE user **Call Window**.

TMS



The **TMS** element is used for sending short text messages to all radios or talkgroups situated in one panel with the **TMS** element. To do this, just enter the text of the message or select a template and send it. If the **TMS** element is placed outside a panel, it will send private messages. To do this, just select the radio, enter the text of the message and send the message.

The **TMS** element contains the following controls:

- The **Message** (♥️) button expands the list of existing message templates. When you click the template name, the message is automatically sent and cannot be edited.
- The text box is the place for typing the message text.
- The **Send** (→) button sends the message from the text box to the left of it.
- The **Send Message** (⋈) button opens the **Send Message** window.

NOTE

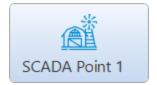
If the **TMS** element is located on the **Panel** element, the messages are sent to all the radios and talkgroups located within the element.

PTT



The **PTT** element is used for a multiple-user call. If it is located inside the panel, clicking the **PTT** element makes a call to all the radios, <u>WAVE users</u> and talkgroups located within this panel. If it is located outside the panel, the **PTT** element becomes disabled.

SCADA point



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 panel in SmartPTT Dispatcher. To add a SCADA point to the custom console, before that, you need to add it to the SCADA module. For details, see <u>Adding SCADA Points</u>.

When you point to the SCADA point tile, a tooltip with all its parameters appears. Alternatively, you can view them in the SCADA point dashboard by double-clicking the tile of the desired point. For details, see "SCADA Module" in SCADA Module Setup and User Guide.

The **SCADA point** element provides the following indication:

- Grey color of the tile background indicates that either the SCADA point is not currently available or the SCADA module is deactivated in SmartPTT Dispatcher settings. For details, see <u>Activating SCADA Module</u>.
- Flashing red frame around the tile indicates the alarm state of one of the SCADA point parameters.
- Red frame around the tile 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

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

You can open the created custom consoles from the **Tools** menu. SmartPTT Dispatcher allows opening multiple custom consoles simultaneously.

2.1.2.1 Sending Messages Using the TMS element

Follow the procedure below to to send a text message to a single or multiple radios and talkgroups from the **TMS** element in the Custom Console.

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 <u>Custom Consoles</u>.

Procedure:

- If the Custom Console panel is closed, on the menu bar, click Tools → <custom console name>.
- 2. In the Custom Console panel, select the tiles of the radios and talkgroups to which you want to send the message.

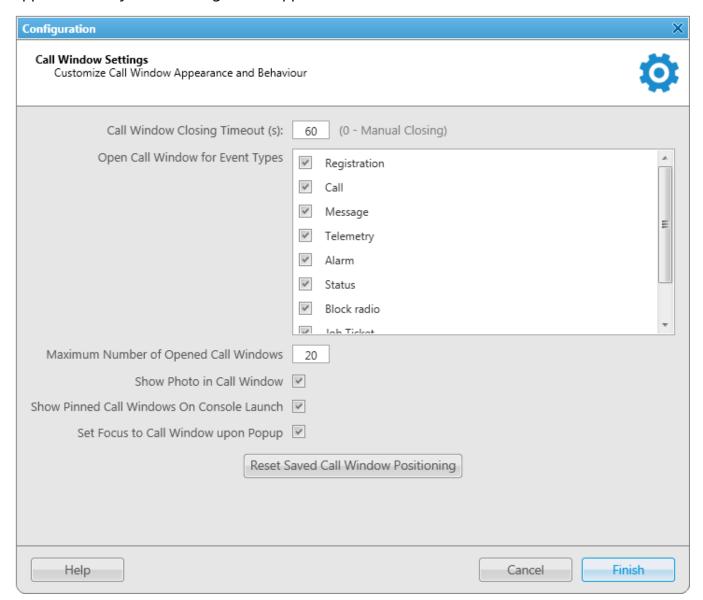
NOTE

If the **TMS** element is located on the **Panel** element, the messages are sent to all the radios and talkgroups located within the element.

3. Send the message in one of the following ways:	
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 from the Template 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,	 Click the Message (⋈) button to the left of the text box. 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 information on the sent message appears in the log box of the Call Window and in the Event Log.

2.1.3 Call Windows Settings



Call Window Closing Timeout (s): Sets the time period in seconds at the end of which the **Call Window** closes automatically.

NOTE

If you enter 0 in the box, the **Call Window** will not close automatically.

Open Call Window for Event Types: Specifies types of events triggering the **Call Window** opening (**Registration**, **Call**, **Message**, **Telemetry**, **Alarm**, **Status**, **Block radio**, **Job ticket**, **Radio Check**, **User Authorization**, **Radio Kill**).

Maximum Number of Opened Call Windows: Allows you to set up the maximum number of call windows opened automatically.

Show Photo in Call Window: Select to display the radio image in the **Call Window**.

Show Pinned Call Windows on Console Launch: If selected, the position of the **Call Windows**, pinned before the SmartPTT Dispatcher application closing, will be restored during next launch.

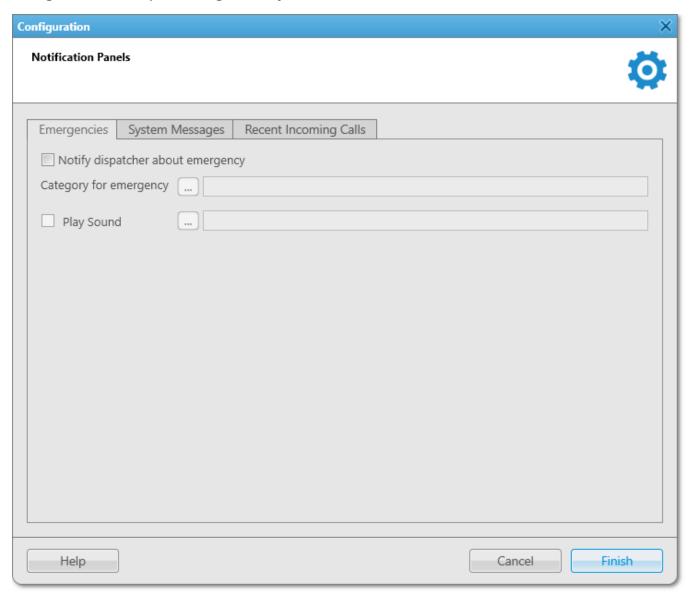
Set Focus to Call Window upon Popup: Select the check box to focus on the **Call Window** when it is opened or have a new activity.

Reset Saved Call Window Positioning: Click the button to reset the current position of the call windows.

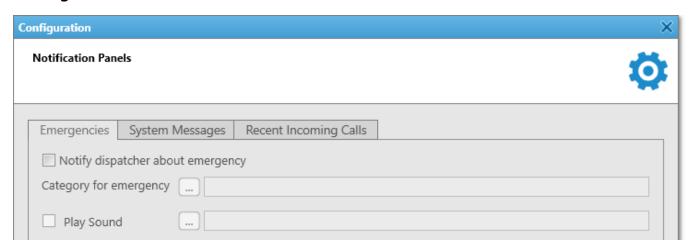
2.1.4 Notification Panels

The **Notification Panels** window provides the following settings:

- Settings for the **Emergencies** panel
- System message settings
- Recent Incoming Calls settings



Emeregencies



In this tab you can configure the emergency situation processing:

Notify dispatcher about emergency: Select to open the <u>Emergencies</u> panel automatically and/or show the radio on the map if <u>Maps</u> are opened.

Category for Emergencies: Click Browse (\square) to select the category (only one) of emergency situations (see <u>Categories</u>).

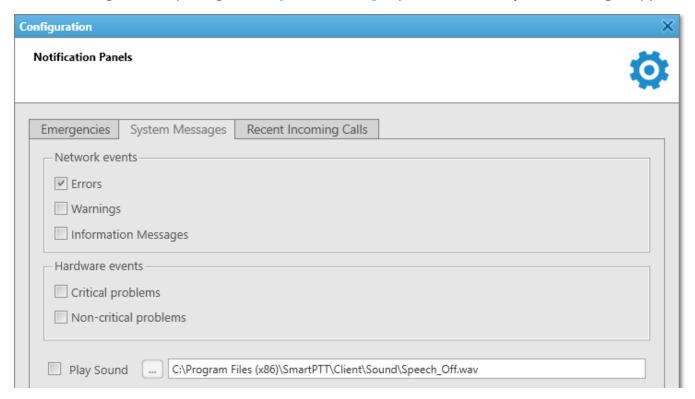
Play Sound File: Click Browse (\square) to select the audio file, which should be played at the emergency situation.

NOTE

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

System Messages

You can configure the opening of the <u>System messages</u> panel where all system messages appear.



Network events area

Errors:

- Select to show error messages in the <u>System messages</u> panel.
- Clear to get error messages in separate windows instead of the **System messages** panel.



Warnings: Select to show warning messages in the **System messages** panel.

Information Messages: Select to show information messages in the **System messages** panel.

Hardware events area

NOTE

Hardware events processing works only if **Monitoring** is active.

Critical problems: Select to show errors in the **System messages** panel.

Non-critical problems: Select to show warnings in the **System messages** panel.

Play Sound File: Click Browse () to select the audio file, which should be played when system messages appears.

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

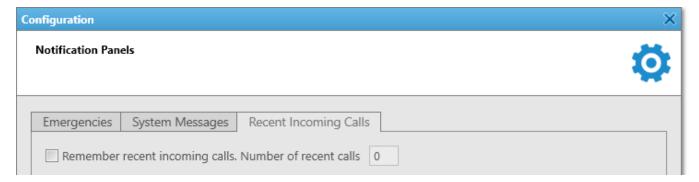
If you do not select some of the check boxes in the **Network or Hardware events** area, system messages appear in the **System messages** panel in any case. But if the panel is closed, it does not open automatically with the appeared corresponding message.

NOTE

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

Recent Incoming Calls

You can configure recent calls processing.



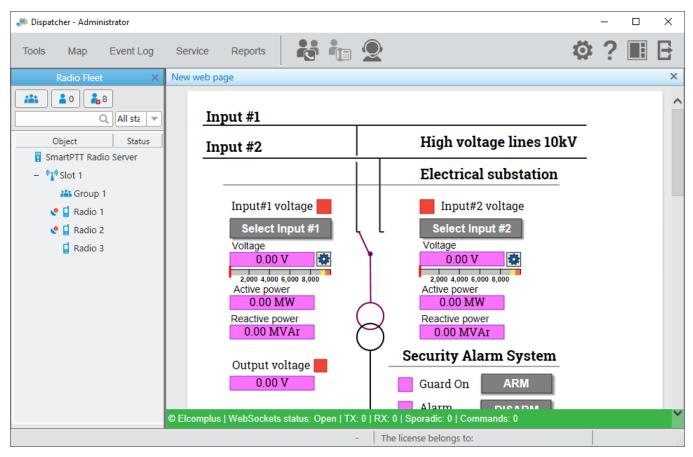
Remember recent incoming calls: Select to log recent incoming calls (see <u>Recent Incoming Calls</u>).

Number of recent calls: Enter the maximum number of recent incoming calls records.

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.

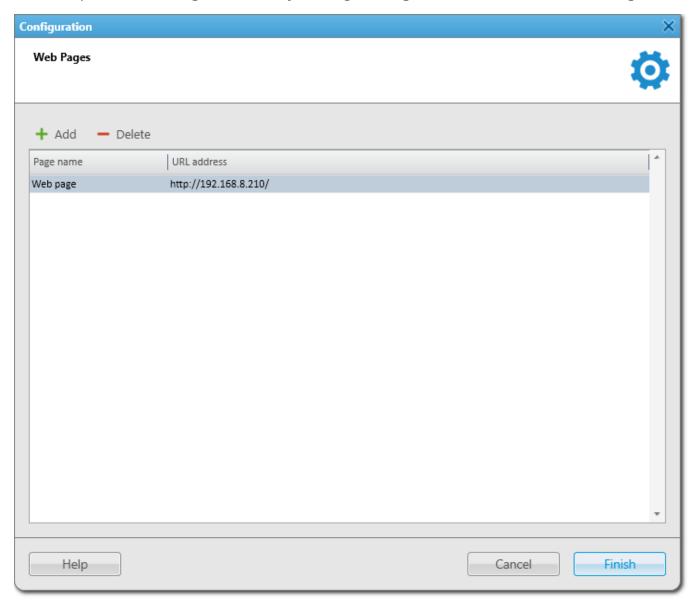


For information on web pages and their adding, see the sections below.

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 ()** \rightarrow **Interface** \rightarrow **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 <u>Adding Web Pages</u>.

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 below 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 (\circ) \rightarrow Interface \rightarrow 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 cancel changes and close the window, click **Cancel**.
- 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.

IMPORTANT

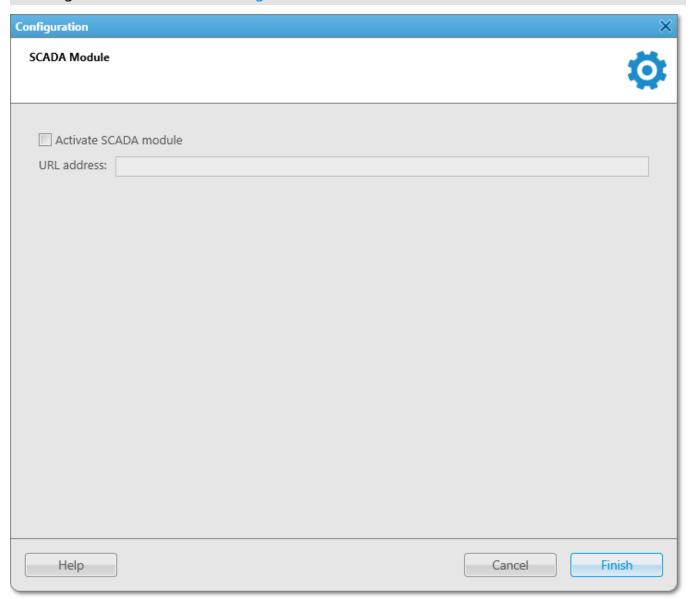
Access to the SCADA module functionality requires the SCADA license. For details, see <u>Licenses</u>.

For information on the SCADA module functionality in SmartPTT Dispatcher, see <u>SCADA Module</u> and "SCADA Module" in *SCADA Module Setup and User Guide*.

You can open the **SCADA Module** window by clicking **Settings (\textcircled{o})** \rightarrow **Interface** \rightarrow **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 <u>Activating SCADA Module</u>.



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 below 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:

- 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.
- 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 <u>Control Devices</u>.

- Configuring general sound settings and settings of connected audio output devices.
 For details, see Sound.
- Configuring the Tipro console parameters.
 For details, see <u>Tipro Console</u>.

For information on these settings see the corresponding sections below.

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 or Call Tiles 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 ()** \rightarrow **Equipment** \rightarrow **Control Devices** on the menu bar.

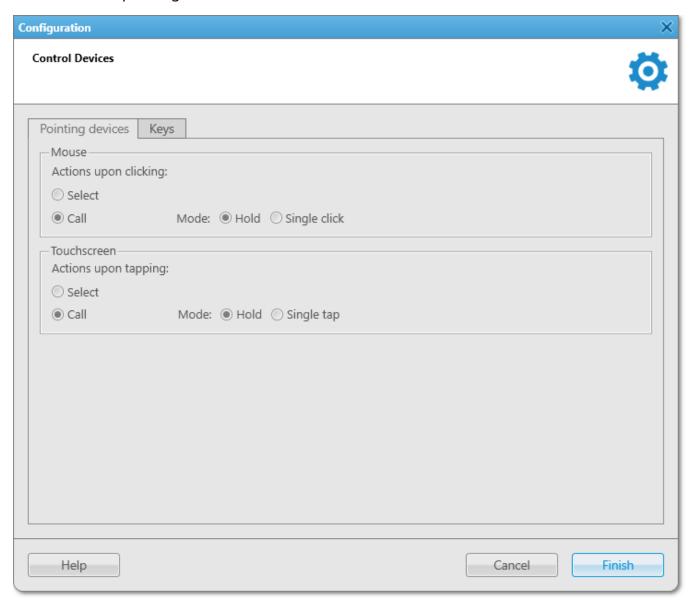
The **Control Devices** window provides you the following tabs:

- The **Pointing devices** tab. For details, see <u>Pointing Devices Tab</u>.
- The Keys tab. For details, see Keys Tab.

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

2.2.1.1 Pointing Devices Tab

In the **Pointing devices** tab, you can configure actions on clicking or tapping the PTT button or Call Tiles with 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.

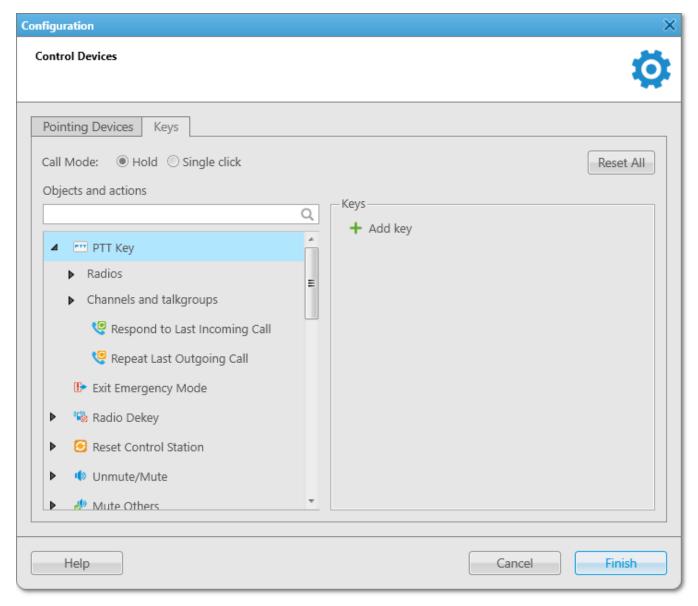
The button also provides you access to the controls that affect a call initiating:

- 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 Tab

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
- Repeat Last Outgoing Call
- End call

NOTE

The **End call** action is available only for outgoing calls in Capacity Max radio system 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.

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

NOTE

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 below to configure actions activated by clicking or tapping the PTT button or the SmartPTT Dispatcher Call Tile.

Procedure:

- 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 <u>Pointing Devices Tab</u>.
- 4. Click **Finish** to save changes and close the window.

2.2.1.4 Assigning Hotkeys

Follow the procedure below to assign a hotkey.

Prerequisites:

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

Procedure:

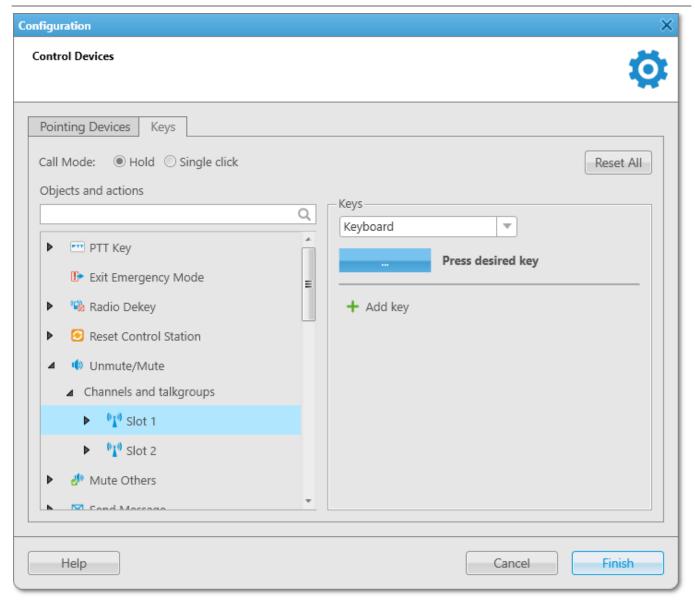
- 1. On the menu bar, click **Settings ()** \rightarrow **Equipment** \rightarrow **Control Devices**. The **Control Devices** window appears.
- 2. Open the **Keys** tab.
- 3. In the top part of the window, select the desired call mode. For information on call modes, see <u>Keys Tab</u>.
- 4. In the **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.
	 Click the desired object. In the Keys area, the Add key button appears.

In the **Keys** area, click the **Add key** button.
 Controls for the hot key configuration appear in the **Keys** area.

To use a keyboard,	select Keyboard .
To use an external device connected using USB port,	perform the following actions:
	 Select Input Device (HID) item. List of available USB devices appears to the right of the Input Devices list.
	 From the list that appears, select the desired USB device. The selected USB device is used as a hotkey.
To use an external device connected using COM port,	perform the following actions:
	 Select External Device COM Port item. List of available COM devices appears to the right of the Input Devices list.
	 From the list that appears, select the desired COM device. The selected COM device is used as a hotkey.
	NOTE
	COM devices do not support the hot keys functionality.

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.



4. Press the key or key combination you want to assign to the object or action. For details, see <u>Keys Tab</u>.

The key or key combination that you pressed is displayed on the Assign Hotkey button and the **Press desired key** message disappears.

5. 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 below to edit or delete a hotkey.

Procedure:

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

2. Open the **Keys** tab.

3. Perform the desired action:	
To change the input device,	see step 6 of the <u>Assigning Hotkeys_2</u> procedure.
To assign another hotkey to an action or object,	see steps 7-8 of the <u>Assigning Hotkeys_2</u> procedure.
To delete a hotkey,	perform the following actions:
	 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. 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 Keys Tab.

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

2.2.2 Sound

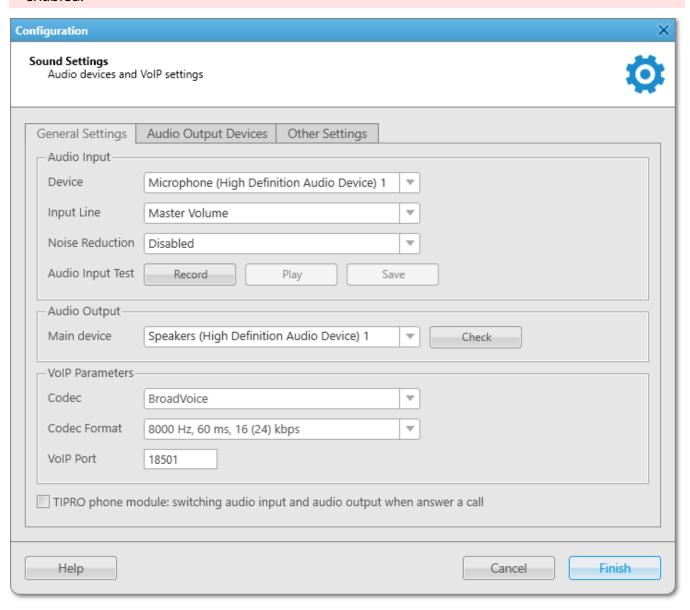
In the **Sound** window, you can perform the following actions:

- 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 (\circ)** \rightarrow **Equipment** \rightarrow **Sound** on the menu bar and provides the following tabs:

• The **General Settings** tab. For details, see <u>General Settings</u>.

- The Audio Output Devices tab. For details, see Audio Output Devices.
- The **Other Settings** tab. For details, see <u>Other Settings</u>.

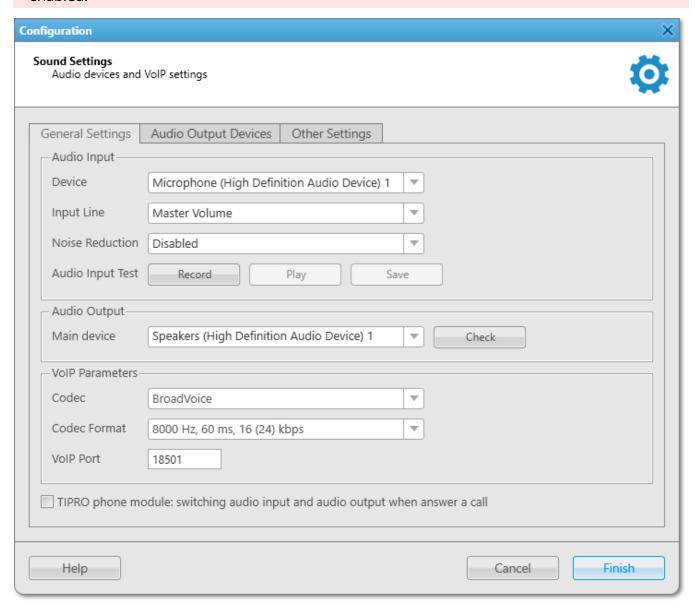
For information on SmartPTT Dispatcher sound settings, see the sections below.

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.

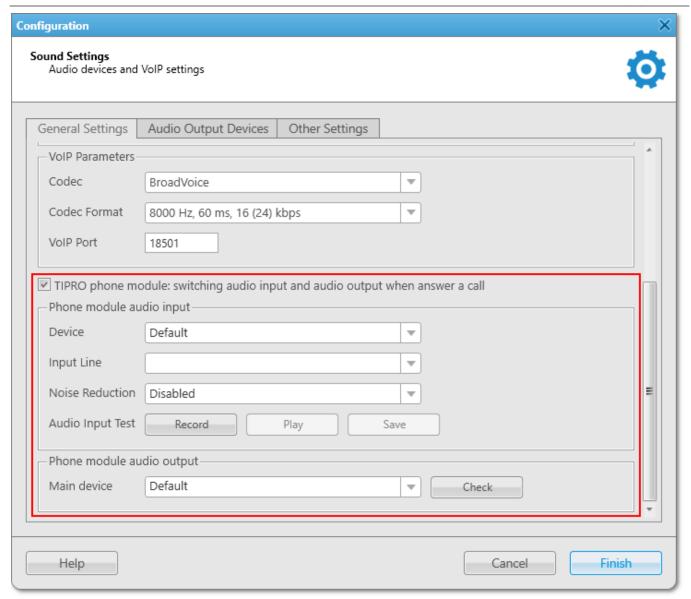
VoIP Port

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

Under the VoIP Parameters area the TIPRO phone module: switching audio input and audio output when answer a call check box.

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

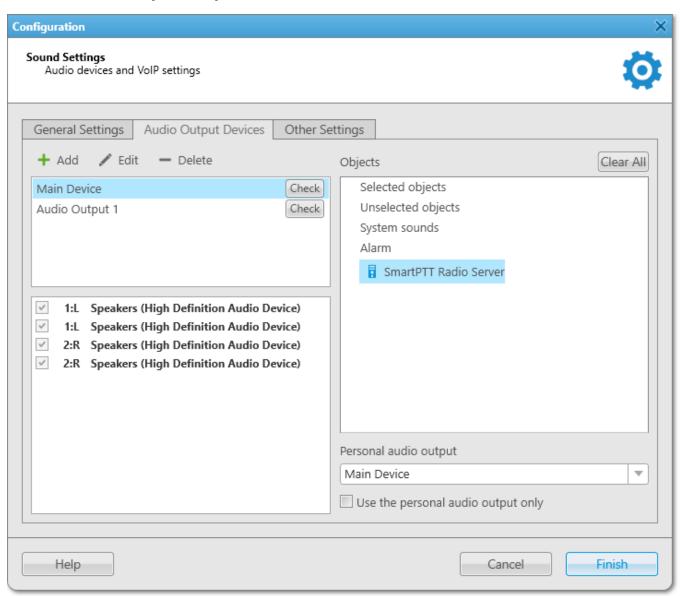
Audio device to which headsets or speakers are connected.

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 <u>Sound</u> 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 <u>Sound</u>.

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
- FOACSU call notification
- · Sound of the Call Alert command

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

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 (1)
- Channels (🚻)

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.

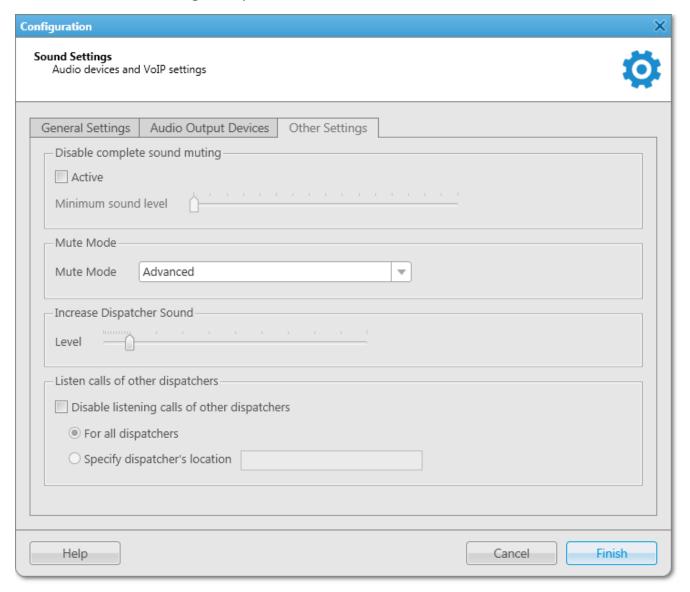
Unavailable for main objects such as selected/unselected objects, system sounds, and alarm.

2.2.2.3 Other Settings

In the **Other Settings** tab you can configure additional settings of SmartPTT Dispatcher sound such as:

- Muting disabling
- Mute mode

- · Dispatcher sound volume
- · Acoustic cross muting of dispatchers



The **Disable complete sound muting** area provides the following elements:

Active

Disables complete sound muting and unblocks the **Minimum sound level** slider.

Minimum sound level

The slider that adjusts muted objects sound. By default the slider is set to 10.

The specified level affects only SmartPTT Dispatcher and depends on the sound level of the operating system.

The **Mute mode** area provides the **Mute mode** list from which you can select a mute mode used in SmartPTT Dispatcher:

- In the Basic mode, control stations (¹¹), conventional channels (¹¹), or trunking systems (
 ¹¹) are muted completely using Mute (⁴x) or Mute Others (๗) action.
- In the **Advanced** mode, control stations ('1'), conventional channels ('1'), or trunking systems ('1') are muted completely except for the sound of incoming dispatcher calls, and incoming private calls made using the dispatcher ID.
 - If the dispatcher has no profile assigned, the ID is equal to the value of the **Radio ID** box of the corresponding control station, conventional channel or trunk system in SmartPTT Radioserver Configurator.

If the dispatcher has the profile assigned, the ID is equal to the value of the ID set in the profile settings in SmartPTT Radioserver Configurator.

For information on profile configuring, see Radioserver Configurator User Guide.

For information on profile assigning, see <u>Assigning Profile to Operators</u>.

The **Increase dispatcher sound** area provides the **Level** slider for increasing or decreasing the volume level of the dispatcher voice on a radio.

The **Listen calls of other dispatchers** area provides the following elements:

Disable listening calls of other dispatchers

Activates acoustic cross muting of dispatchers in SmartPTT Dispatcher and unblocks the **For all dispatchers** and **Specify dispatcher's location** options.

For all dispatchers

Mutes calls of all dispatchers connected to the radio server.

Specify dispatcher's location

Unblocks the box in which you can specify a name or a number of the location where dispatchers are located. All dispatchers with the same location number or name specified in the box will not hear each other's calls.

The location name or number should be one-line text containing up to 50 symbols including unprintable signs.

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 <u>Configuring General Sound Settings</u>.
- Configure sound settings of a Tipro Phone Module. For details, see <u>Configuring Sound Settings of Tipro Phone Module</u>.
- Configure muting options. For details, see <u>Configuring Muting Options</u>.
- Configure dispatcher voice sound options. For details, see <u>Configuring Dispatcher Voice</u> <u>Sound Options</u>.
- Activate the dispatcher cross muting. For details, see <u>Activating Dispatcher Cross Muting</u>.

2.2.2.4.1 Configuring General Sound Settings

Follow the procedure below to configure general sound settings.

Prerequisites:

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

Procedure:

- 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 <u>General Settings</u>.
- 4. Check the selected audio input device:
 - a. Click the **Record** button and speak to 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. To save changes and close the window, click **Finish**.

2.2.2.4.2 Configuring Sound Settings of Tipro Phone Module

Follow the procedure below 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:

- 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 <u>Configuring General Sound Settings</u>.

- 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 <u>General Settings</u>.
- 6. Check the selected audio input device:
 - a. Click the **Record** button and speak to 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 below to configure muting options.

Procedure:

1. On the menu bar, click **Settings** \rightarrow **Equipment** \rightarrow **Sound**. The **Sound Settings** window appears.

- 2. In the **Sound Settings** window, open the **Other Settings** tab.
- 3. In the **Other Settings** tab, configure the mute settings:

To disable complete sound muting,

perform the following actions:

 In the Disable complete sound muting area, click Active.

The **Minimum sound level** slider becomes available.

Move Minimum sound level slider left or right to set the minimum sound volume of muted objects.

To change the mute mode, in the

select the desired mode.

Mute mode area,

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

Postrequisites:

To configure acoustic cross muting of dispatchers, see <u>Configuring Dispatcher Voice Sound Options</u>.

2.2.2.4.4 Configuring Dispatcher Sound Options

Follow the procedure below to configure dispatcher voice sound options.

Procedure:

- 1. On the menu bar, click **Settings** \rightarrow **Equipment** \rightarrow **Sound**. The **Sound Settings** window appears.
- 2. In the **Sound Settings** window, open the **Other Settings** tab.

3. In the **Increase dispatcher sound** area, move the **Level** slider left or right to amplify or decrease the sound of a dispatcher voice.

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

2.2.2.4.5 Activating Dispatcher Cross Muting

Follow the procedure below to activate the dispatcher cross muting.

Procedure:

- 1. On the menu bar, click **Settings** \rightarrow **Equipment** \rightarrow **Sound**. The **Sound Settings** window appears.
- 2. In the **Sound Settings** window, open the tab.
- 3. Select **Disable listening calls of other dispatchers** check box.
- 4. Select the desired option:

To activate the cross muting for all dispatchers,	click For all dispatchers .
To activate cross muting for the desired dispatchers,	 Click Specify dispatcher's location. The box on the left becomes available. In the box on the left, type the dispatcher name, or the room number. Using entered data, repeat the procedure for other dispatchers that should not hear each other. Dispatchers for whom in the Specify dispatcher's location box the identical data is set, are unable to hear each other.

5. 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 <u>Configuring Audio Output Device</u>.

 assigning virtual audio output devices to system objects. For details, see <u>Assigning Audio</u> <u>Output Devices to System Objects</u>.

2.2.2.5.1 Configuring Audio Output Device

Follow the procedure below to configure virtual audio output device.

Prerequisites:

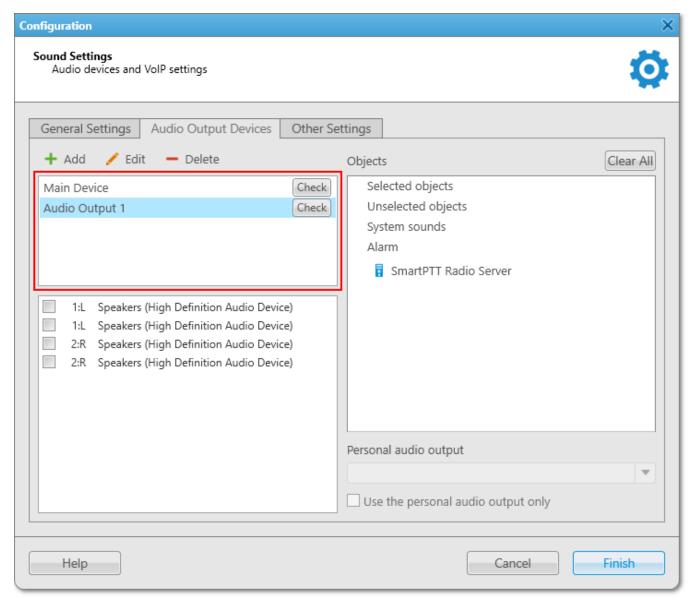
Ensure that audio input/output devices of SmartPTT Dispatcher are configured.

Procedure:

- 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.

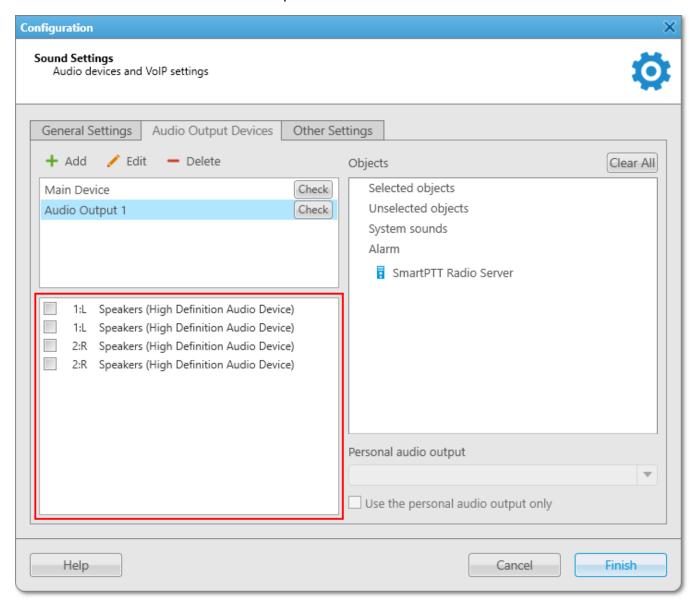
3. Click Add.

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 <u>Assigning Audio Output Devices to System Objects</u>.

2.2.2.5.2 Assigning Audio Output Devices to System Objects

Follow the procedure below 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 <u>Configuring Audio Output Device</u>.

Procedure:

- 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.
- 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, follow these steps:

- 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 (http://www.microsoft.com/en-us/download/details.aspx?id=42081).
- 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 (http://www.microsoft.com/en-us/download/details.aspx? id=42081).
- 3. Contact SmartPTT support team (http://support.smartptt.com/hc/en-us/requests/new) 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 <u>Telephone Interconnect Settings</u>.
- Configuring the list of telephone subscribers in SmartPTT Dispatcher For details, see <u>Telephone Subscribers Settings</u>.

For information on these settings see the corresponding sections below.

2.3.1 Telephone Interconnect Settings

The Telephone Interconnect feature provides the ability to establish connection between the radio system users and telephone subscribers. A call can be initiated both by dispatchers and telephone subscribers. Voice between them is transmitted in full-duplex mode.

IMPORTANT

Access to full functionality of the Telephone Interconnect feature requires installing the corresponding license. For details, see <u>Licenses</u>.

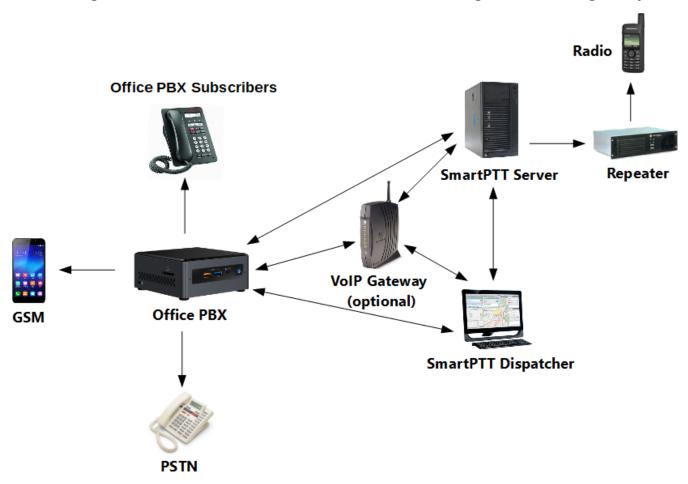
Voice is transmitted through the Real-time Transport Protocol (RTP). Connection and subscriber addressing are performed over the Session Initiation Protocol (SIP).

The connection to telephone subscribers can be established using SIP trunking or accounts on SIP servers.

NOTE

The SIP protocol can be blocked by the Windows firewall. Consult your system administrator to check if your firewall settings allow using it.

The following scheme shows how the connection is established using standard VoIP gateways:



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

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

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

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 ()** \rightarrow **Telephone Interconnect** \rightarrow **Telephone Interconnect** on the menu bar.

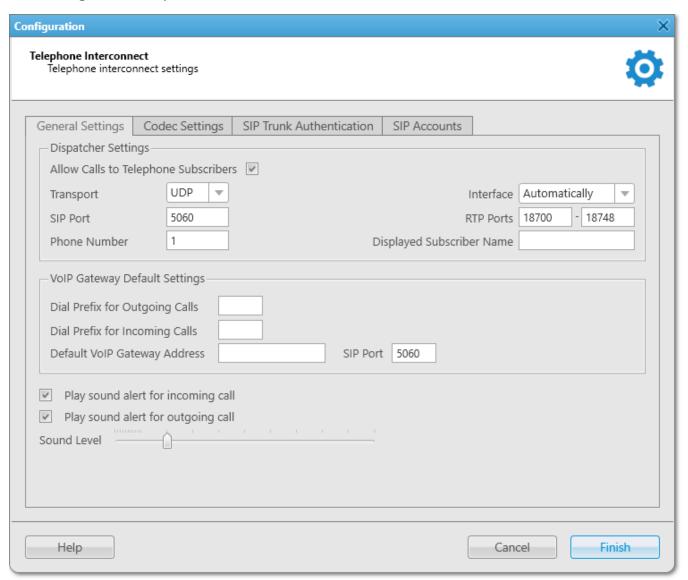
The **Telephone Interconnect** window consists of four tabs. They provide the following configuration options:

- General settings required for correct functioning of the Telephone Interconnect feature. For details, see <u>General Settings</u>.
- Audio codecs used for processing incoming and outgoing audio.
 For details, see <u>Codec Settings</u>.
- SIP trunk authentication.
 For details, see <u>SIP Trunk Authentication</u>.
- SIP accounts.
 For details, see <u>SIP Accounts</u>.

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

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 <u>Custom Rules</u>.

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

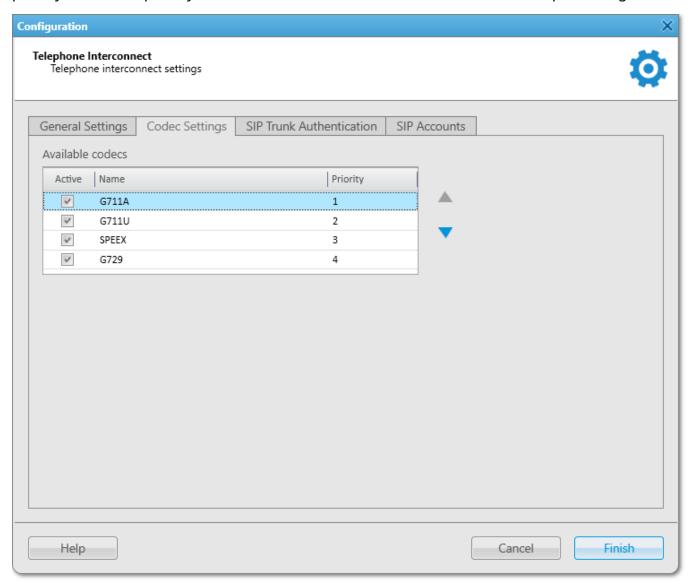
Plays an alert sound when SmartPTT Dispatcher calls a telephone subscriber.

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** (\triangle) 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 below to activate/deactivate an audio codec or change its priority level.

Procedure:

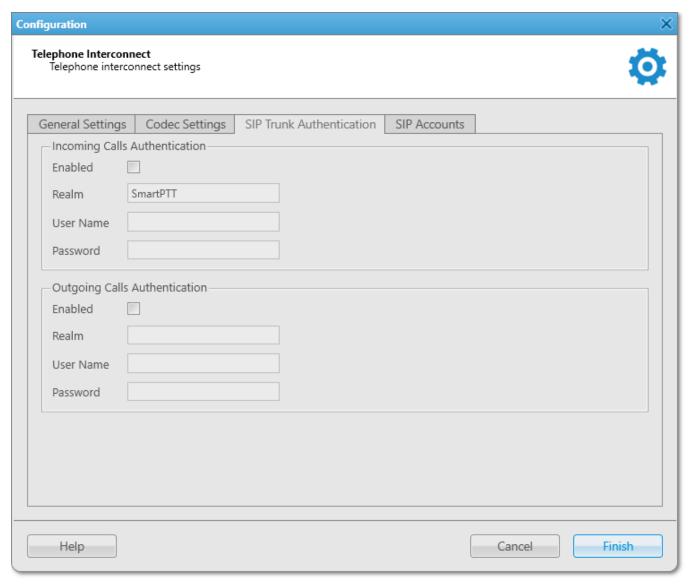
- 1. Open the **Codec Settings** tab in the **Telephone Interconnect** window.
- 2. Perform the desired action:

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.
	 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 SIP server 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.

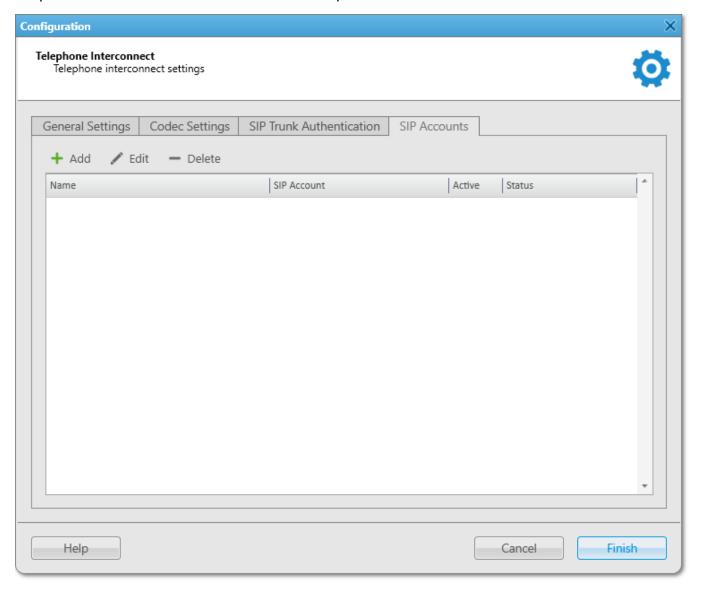
Password

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 an SIP server account. SmartPTT Dispatcher regularly sends its authentication data and current IP address at defined intervals to re-register on the SIP server 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 SIP server.

The following registration statuses are available:

- The *Registered* status indicates that the account is successfully registered on the SIP server and is currently active.
- The *Not registered* status indicates that the account is not registered on the SIP server and is currently inactive.
- The *Processing* status indicates that SmartPTT Dispatcher has sent a registration request and is currently waiting for the SIP server 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 <u>Managing SIP Accounts</u>.

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.

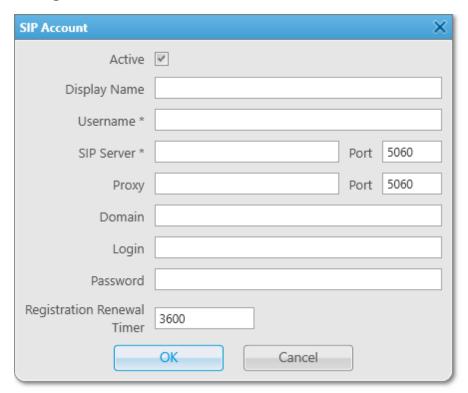
For information on managing SIP accounts and the **SIP Account** window, see the sections below.

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 SIP server.

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 SIP server.

The required parameter.

SIP Server

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

The required parameter.

SIP Server Port

The SIP server 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 SIP server.

Some providers require using proxy for sending requests to SIP servers.

Proxy Port

The proxy server port used for receiving data.

The default value is 5060.

Domain

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

Login

Login for the account authentication on the SIP server.

Password

Password for the account authentication on the SIP server.

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 SIP server.

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

Procedure:

1. On the menu bar, click **Settings ()** \rightarrow **Telephone Interconnect** \rightarrow **Telephone Interconnect**.

The **Telephone Interconnect** window appears.

2. Open the SIP Accounts tab, and t	·
To add a new account,	perform the following actions: 1. In the top part of the tab, click Add (+) . The SIP Account window appears.
	 In the SIP Account window, in the Username and SIP Server boxes, type your username and the desired SIP server IP address.
	 Optional: Complete other boxes with desired information. For details, see <u>SIP Account</u> <u>Window</u>.
	 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:
	 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:
	 In the table, click the desired account, and then click Delete (-). The Confirmation window appears.
	2. In the Confirmation window, click OK .

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

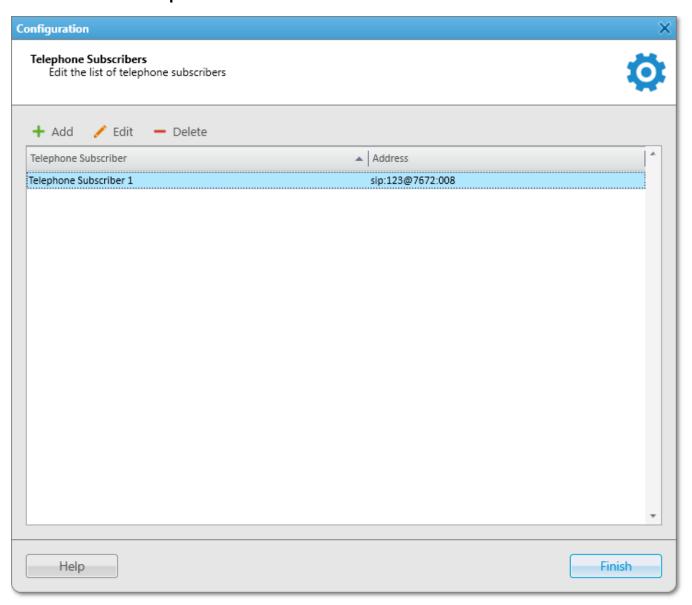
The selected account is removed from the table.

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** (o) \rightarrow **Telephone Interconnect** \rightarrow **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 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.

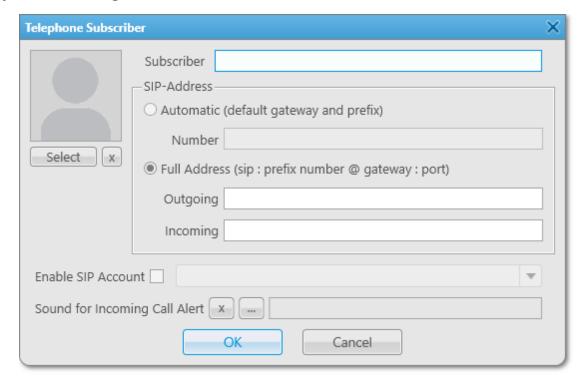
2.3.2.1 Telephone Subscriber Window

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:

Subscriber

The telephone subscriber's name.

Select

Opens the window for selecting the telephone subscriber's avatar. You can remove the selected avatar by clicking the **Delete Subscriber Photo** () button.

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 <u>SIP Accounts</u>.

Sound for Incoming Call Alert

The path to the audio file that will play in SmartPTT Dispatcher on receiving a call from this telephone subscriber.

By default, a standard system sound is used. You can replace it with a custom audio file by clicking the **Select a sound file for an incoming call (b**) button.

You can clear the path to the selected audio file and reset the sound to default by clicking the **Use a system sound (** \boxtimes **)** button.

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

2.3.2.2 Adding Telephone Subscribers

Follow the procedure below to add a new subscriber to the list of telephone subscribers in SmartPTT Dispatcher.

Prerequisites:

• 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 an 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.
- If you want to use your own incoming call alert sound and/or avatar, ensure that you have access rights to the folder where the desired files are stored.

Procedure:

On the menu bar, click Settings (♥) → Telephone Interconnect → Telephone Subscribers.

The **Telephone Subscribers** window appears.

- In the top part of the window, click Add (+).
 The Telephone Subscriber window appears.
- 3. In the **Subscriber** box, type the subscriber's name.

4.	Select the desired SIP addressing for	mat:	
To use default gateway settings,		perf	orm 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:		orm 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: In the upper-left corner of appears, select an image for the subs		ndow, click Select , and then, in the window that r's avatar.

- 6. *Optional:* Select the **Enable SIP Account** check box, and then, from the list on the right, select the desired SIP account.
- 7. *Optional:* Click **Select a sound file for an incoming call (** \square **)**, and then, in the window that appears, select an audio file with the desired incoming call alert sound.
- Click **OK**.
 In the **Telephone Subscribers** window, the new subscriber appears in the list of telephone subscribers.

Postrequisites:

• To remove the subscriber avatar, click **Delete Subscriber Photo (** 🗵 **)**.

The subscriber's avatar appears above the **Select** button.

To restore default settings and use the standard system sound, click Use a system sound (
).

- To edit an existing subscriber, in the Telephone Subscribers window, click the name of the subscriber, and then click Edit (/), or double-click the name of the desired subscriber.
- 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 <u>Configuring Telephone Interconnect Settings</u>.
- Configuration of the conference call settings (the license is not required).
 For details, see <u>Configuring Conference Calls Settings</u>.

For information on these settings see the sections below.

2.3.3.1 Configuring Telephone Interconnect Settings

Follow the procedure below 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 <u>Licenses</u>.
- 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 "Configuring Telephone Interconnect Settings" in *Radioserver Configurator User 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 ()** \rightarrow **Telephone Interconnect** \rightarrow **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:

- On the **General Settings** tab, in the **VoIP Gateway Default Settings** area, perform the following actions:
 - 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.
 - In the Realm, User Name and Password boxes, specify the authentication parameters configured on SmartPTT Radioserver.
- 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 Managing SIP Accounts.

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NOTE

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

2.3.3.2 Configuring Conference Calls Settings

Follow the procedure below 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 "Configuring Conference Calls Settings" in *Radioserver Configurator User Guide*.

Procedure:

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.
- 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 <u>Accepting Calls</u> from <u>Telephone Subscribers</u>.
- Calls from SmartPTT Dispatcher a telephone subscriber. For details, see <u>Initiating Calls to Telephone Subscribers</u>.
- Connection of radios or talkgroups with telephone subscribers established by SmartPTT Dispatcher. For details, see <u>Connecting Radios with Telephone Subscribers</u>.
- SmartPTT Dispatcher Conference calls initiated by SmartPTT Dispatcher for connection of telephone subscribers, radios and WAVE users, talkgroups and/or dispatchers. For details, see <u>Conference Calls</u>.

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.

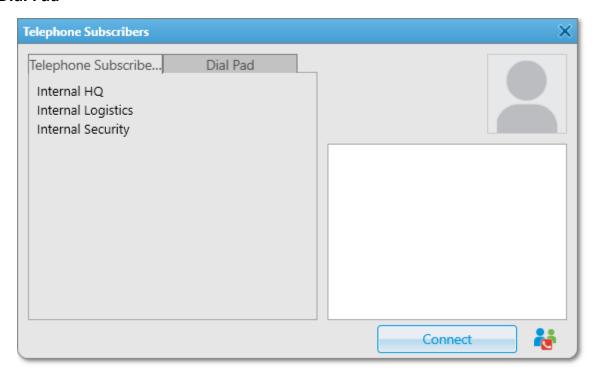
2.3.4.1 Telephone Subscribers Window

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** (in) on the menu bar.

The left part of the window consists of two tabs:

- Telephone Subscribers
- Dial Pad



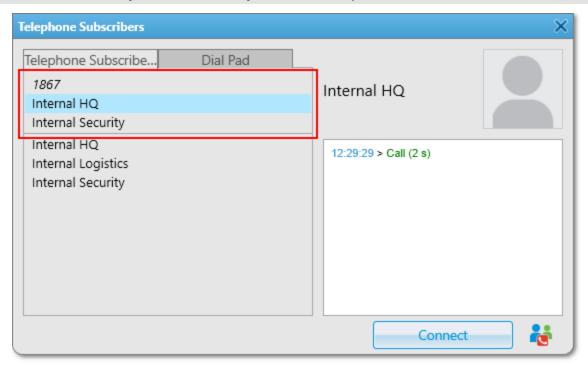
The **Telephone Subscribers** tab is used for calling subscribers added to the SmartPTT Dispatcher list of telephone subscribers. For details, see <u>Initiating Calls to Telephone Subscribers</u>.

The left pane contains the list of registered telephone subscribers from which you can select the desired subscriber.

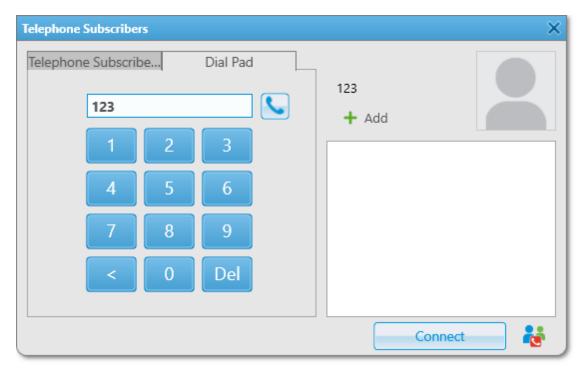
After the call initiation the name of the called subscriber appears in the Recent Calls list located above separator line on top of the telephone subscribers list. The Recent Calls list contains calls from registered and unregistered telephone subscribers. The names of unregistered subscribers are in 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.

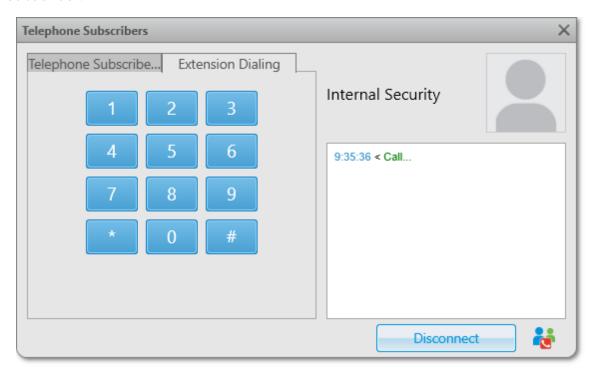
Dial Pad

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 <u>Initiating Calls from the Telephone Subscribers Window</u>.

For information on establishing connection to telephone subscribers, see the section below.

2.3.4.2 Initiating Calls to Telephone Subscribers

Follow the procedure below to initiate a call to a telephone subscriber.

Procedure:

- 1. On the menu bar, click **Telephone Subscribers (im)**. 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:

- 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:

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 <u>General Settings</u>.

- 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 <u>Conference Calls</u>.

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 below 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 (\bigcips).
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 (\bullet =>>).
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 (t).
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 <u>Call Window of Radio</u> and <u>Talkgroup Call Window</u> .

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:

- Click the **Dial Pad (iii)** button.
 The **Dial Pad** window appears.
- 2. Dial the desired subscriber's number, and then click the **Phone** (**\scrib**) 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 <u>General Settings</u>.

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 <u>Call Windows Settings</u>.

3. To close the **Call Telephone Subscriber** window, click Close (\times).

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 below 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 .
	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 .
	 In the Outgoing box, type the subscriber's SIP address for outgoing calls in the following format: sip:prefix number@gateway:port
	 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 (** \square **)**, 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:

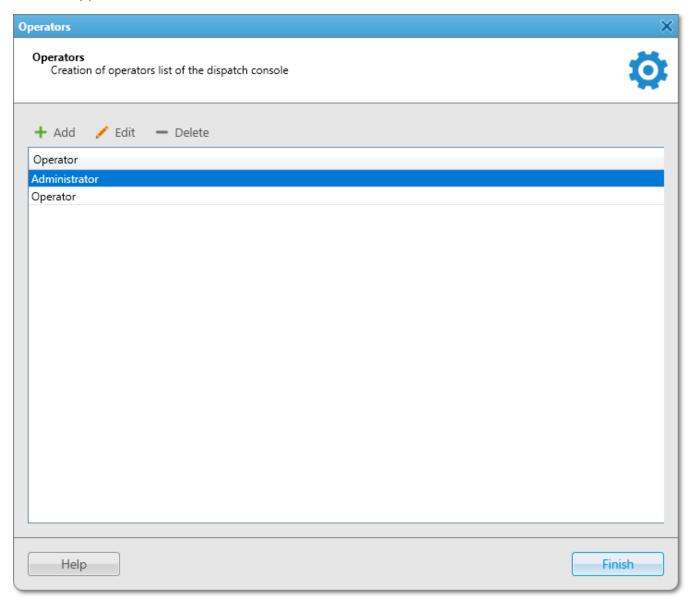
- To remove the subscriber avatar, click **Delete Subscriber Photo** (\boxtimes).
- To restore the standard system sound, click **Use a system sound (** \square **)**.
- For information on editing and deleting telephone subscribers, see <u>Adding Telephone</u> <u>Subscribers</u>.

Settings Operators Operators

2.4 Operators

By default, an operator with the name **Administrator** and no password is created in SmartPTT Dispatcher. The Administrator has full access to SmartPTT management functions.

The Administrator can add new system operators and customize their access to specific functionality.



To add a new operator, click **Add.** A new window for adding operators appears.



Status: The operator's status (**Active** or **Archived**). Status *in the archive* is used for registered operators which are not used any longer, but cannot be removed from the system as the event log contains entries referring to them.

Rights: A list of permissions which can be selected or cleared for each operator individually. The following rights can be assigned to the operator:

Right	Description
Edit radio lists	allows/denies adding, changing properties and deleting radios in the <u>Radio Fleet</u> window and in the <u>Radios</u> panel
Manage unregistered radios	shows/hides radios which were not added in the <u>Radio</u> <u>Fleet</u> window or in the <u>Radios</u> panel

Right	Description
Make voice calls	allows/denies <u>making calls</u> to a radio except <u>conference</u> <u>calls</u>
	NOTE This option does not have visual effect in SmartPTT Dispatcher
Connect with external dispatchers	allows/denies the <u>connection of the dispatchers</u> to each other
	Note: Requires preliminary configuration in the each dispatch program
Make telephone calls	allows/denies making call to the <u>telephone subscriber</u>
Change channel on control station	allows/denies the channel selection for <u>control stations</u>
Block/Unblock radios	allows <u>blocking/unblocking radios</u> listed in the <u>Radio</u> <u>Fleet</u> window
Radio Kill	allows to block a radio irreversibly by means of the Radio Kill command
Remote monitor	allows/denies the <u>remote monitoring</u> of a radio (remote turning on the microphone of the radio)
	NOTE Permission must be configured on the radio
Reboot control station	allows/denies rebooting the <u>control station</u>
Manage radio location settings	enables/disables configuring regular requests for <u>radio</u> <u>location</u> in the Location tab
Request radio location	allows/denies requesting and deleting current location of the <u>radio</u> :
	• Set Location (🍨)
	• Find on Map (📵)
	• Show Address (📵)

Right	Description
	• Remove from Map (💿)
Send text messages	allows/denies sending <u>text messages</u>
Send telemetry commands	allows/denies sending <u>telemetry commands</u>
Manage bridging settings	enables/disables configuring <u>bridging service</u>
Manage routes	enables/disables managing <u>routes</u>
Manage geofences	enables/disables managing <u>geofences</u>
Manage points of interest	enables/disables managing points of interest
Manage tracks	enables/disables showing, animating, and clearing tracks
View coverage map	enables/disables showing and configuring <u>coverage map</u>
Build reports	allows/denies managing <u>reports</u>
Edit custom radio properties	enables/disables configuring additional <u>properties</u> of a radio
Attach radios to selected channel	enables/disables displaying radios as attached to the particular slot in Radio Fleet window. This option is recommended to be set for Capacity Plus systems
Make conference calls	enables/disables making conference calls
View radioserver event log	enables/disables showing <u>radioserver event log</u>
Create deferred action	enables/disables creating <u>deferred actions</u> for a radio
Manage statuses	enables/disables creating, editing and deleting <u>statuses</u> ;
Manage rules and alerts	allows/denies creating, editing and deleting <u>rules and</u> <u>alerts</u>

Right	Description
Manage positioning rules	allows/denies managing positioning rules <u>positioning</u> rules
Manage lone worker rules	allows/denies managing lone worker rules

Set/Change Password: Sets new operator's password or changes the old one.

To edit an operator, select it in the list of operators and click **Edit**. The edit window is displayed where you can change **Name**, **Status** and **Password** parameters.

To delete an operator from the operators list, select it and click **Delete**.

NOTE

You cannot delete the Administrator from the system.

To switch operators, click (🖹) in the upper-right corner of SmartPTT Dispatcher, and after the dispatch console has restarted, select a new operator.

2.5 Information Storage

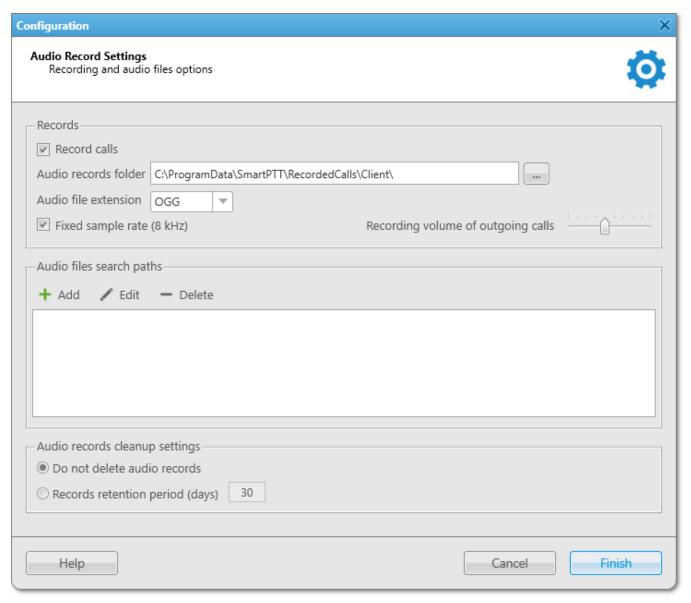
The **Information Storage** submenu is available from the **Settings (*)** menu on the SmartPTT Dispatcher menu bar. It provides the following configuration options:

- Activating and configuring call recording in SmartPTT Dispatcher.
 For details, see <u>Records</u>.
- Activating and configuring automatic backup of the SmartPTT Dispatcher database. For details, see Database Auto Backup.

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

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 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 <u>Playing Call Records</u> and <u>Opening Call Records</u> 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 below to configure the audio recording settings in SmartPTT Dispatcher.

Procedure:

- 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.
	 Click Edit (/), and then, in the window that appears, select the desired folder. The path to the selected folder changes in the table.

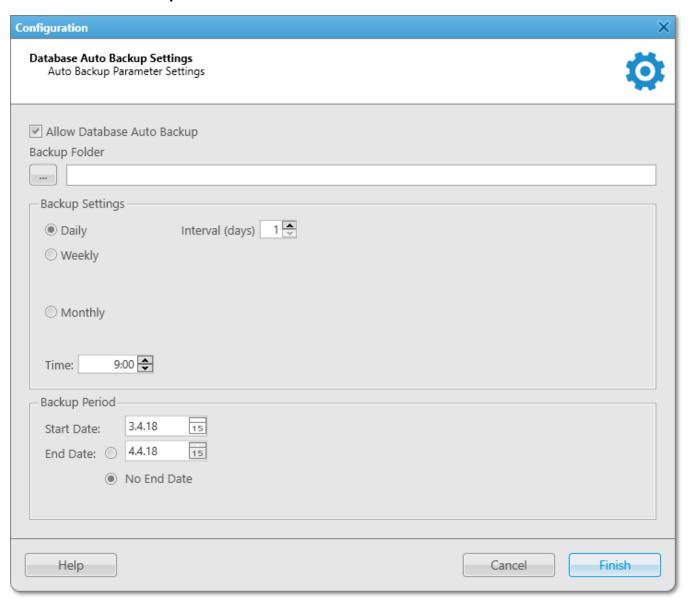
To delete a folder,	in the Audio files search paths table, click the desired path, and then click Delete (–) . The path to the selected folder disappears from the table.
8. In the Audio records cleanup sett	tings area, select the desired cleanup option:
To keep call recordings for as long as there is 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.

Settings Information Storage

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 below to configure the automatic database backup settings in SmartPTT Dispatcher.

Procedure:

- 1. On the menu bar, click **Settings ()** \rightarrow **Information Storage** \rightarrow **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: Select Weekly. On the right, select one or multiple days the week by selecting the corresponding check boxes.

	 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 .
	 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:

 - 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 (
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 <u>List of Radios</u>.

Configuring categories of radios, talkgroups, and WAVE users.
 For details, see <u>Categories</u>.

Configuring radio, talkgroup, and WAVE user statuses displayed in the Radio Fleet panel.
 For details, see <u>Statuses</u>.

Configuring telemetry commands.
 For details, see <u>Telemetry</u>.

Configuring the job ticket statuses.
 For details, see <u>Job Ticket Statuses</u>.

- Configuring rules applied to radios and WAVE users in the Lone Worker mode. For details, see <u>Lone Worker Rules</u>.
- Configuring additional parameters displayed in the radio and WAVE user **Properties** window.

For details, see <u>Custom Radio Properties</u>.

For information on these settings see the corresponding sections below.

2.6.1 List of Radios

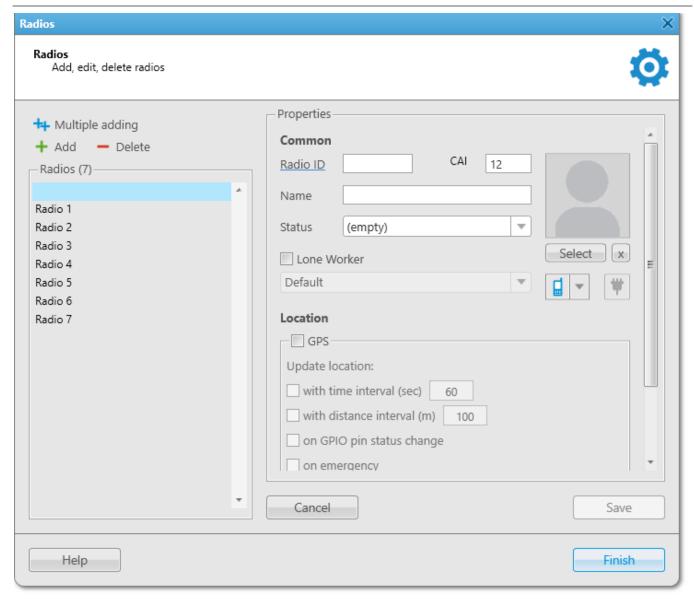
In the **Radios** window, you can add, edit, and delete radios, edit and delete <u>WAVE users</u>. In the **Radios** window you can perform these actions with one object or with several objects simultaneously.

To open the Radios window, click Settings (\circ) \rightarrow Radios \rightarrow List of Radios.

To add one radio, click **Add**, specify its <u>properties</u> in the **Properties** section on the right, and click **Save**.

NOTE

The radio properties may vary depending on the selected radio ID type (**Radio ID/IP-Address**, **MDC ID**, or **5 Tone ID**).

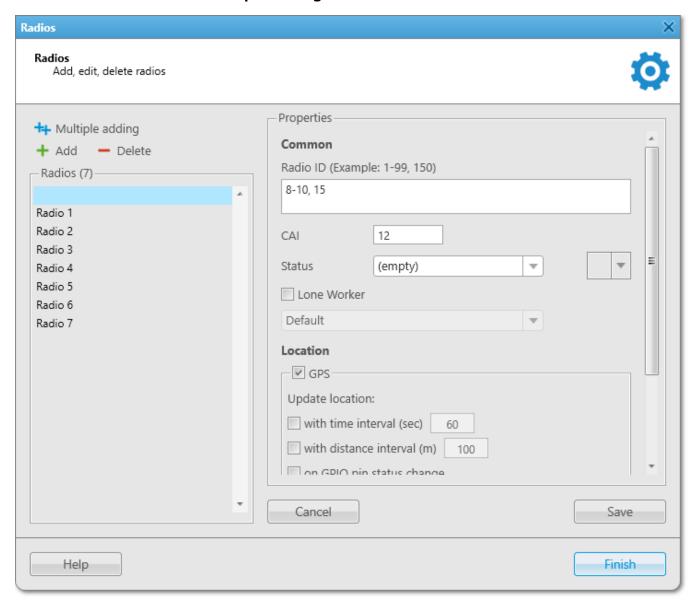


If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, the name of the user authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

To edit one radio or one WAVE user, select it in the **Radios** list, change the required data in the **Properties** tab on the right and click **Save**.

To delete one radio or one WAVE user, select it in the **Radios** list, click **Delete** and click **OK** in the open **Confirmation** window.

To add several radios, click Multiple adding.



In the **Radio ID** box of the **Properties** section, input the range of the radio identifiers that are added or specify them separated by comma. Specify other properties, common for all radios, that are added, and click **Save**.

To change the properties of several radios, select the required radios in the **Radios** list, change their properties and click **Save**.

To delete several objects, press and hold the **Ctrl** button and select the required objects in the **Radios** list, then click **Delete** and click **OK** in the **Confirmation** window that will open.

2.6.2 Categories

The category is used for configuring parameters applied to all object included to it.

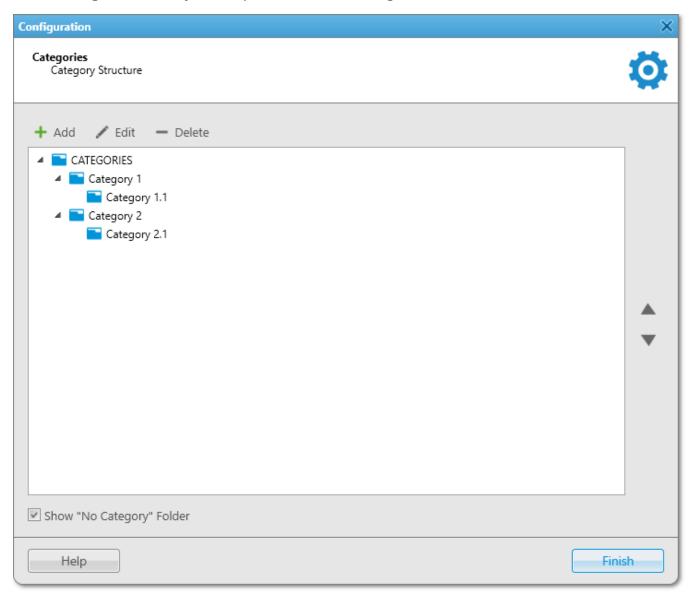
- Radios
- WAVE-users
- Talkgroups

Actions assigned to category objects are applied only to radios and WAVE-users.

You can assign a status for a category. Ensure you preconfigured the status in the **Settings** (a) \rightarrow **Radios** \rightarrow <u>Statuses</u> window.

If you want to assign GPS parameters for all radios included in the category, ensure in their properties in the **Location** tab, the **GPS** check box is selected.

In the **Categories** menu you can perform the following actions:



- Add, edit, and delete categories
- Change the sequence of categories in the category structure with triangle-shaped buttons
- Change the nesting of categories by moving the needed category into another one
- Show or hide **No Category** folder in the <u>Radio Fleet</u> panel. It contains all radios, <u>WAVE users</u>, and talkgroups without categories

NOTE

If no category is added you can only add the new one and also permit or prohibit the **No Category** folder displaying in the **Radio Fleet** panel.

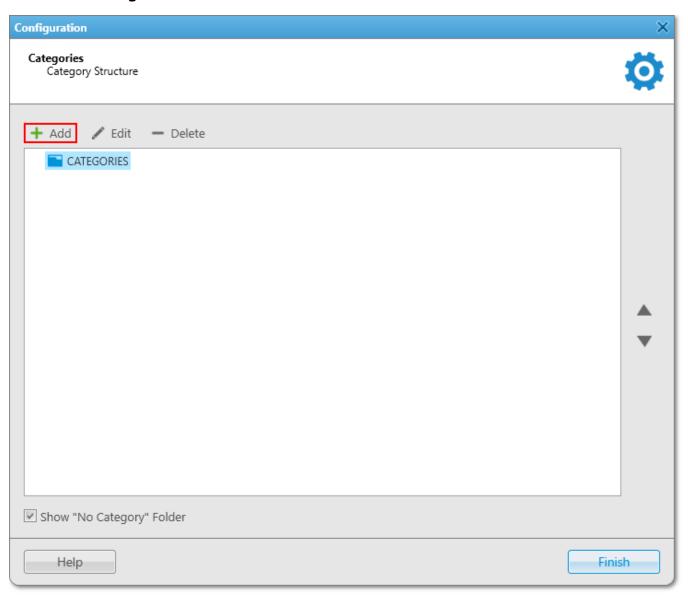
For information on configuring and managing categories, see the sections below.

2.6.2.1 Adding Category

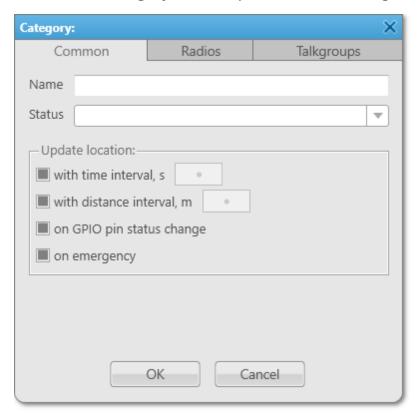
Follow the procedure below to add a new category.

Procedure:

1. In the **Categories** window, click **Add**.



2. In the **Common** tab of the **Category** window, perform the following actions:



- a. In the **Name** box, enter the name of a new category.
- b. *Optional:* From the **Status** list, select <u>previously added status</u> which is applied to all objects included in the category.

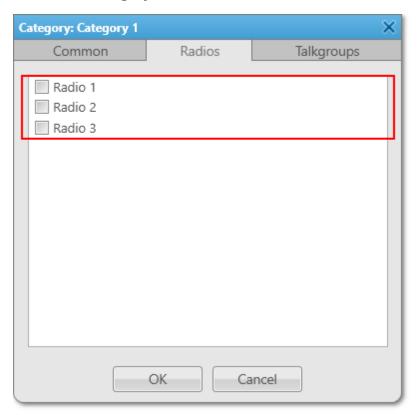
NOTE

You can change parameters in the **Update locations** area only while editing the category.

- 3. In the **Radio** and **Talkgroups** tabs select radios and talkgroups for including. For details, see <u>Adding Radios to Category</u> and <u>Adding Talkgroups to Category</u>.
- 4. Click **OK** to apply changes and close the window.

2.6.2.1.1 Adding Radios to Category

To add one or more radios to a category, in the **Radios** tab select the needed radios and click **OK**



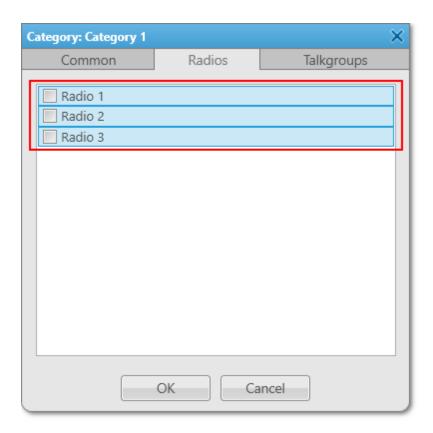
Radios multiple adding

Follow the procedure below to add to the category all or several radios simultaneously.

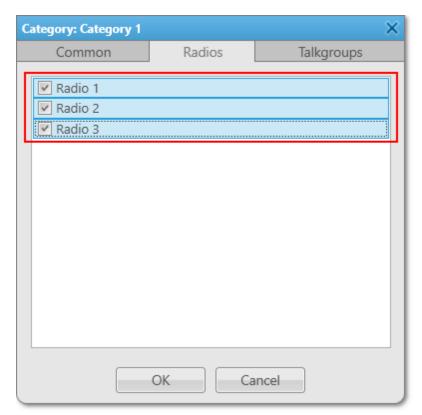
Procedure:

- 1. In the **Radios** tab, highlight the needed radios using one of the following methods:
 - Shift+left click

- Shift+Up Arrow or Down Arrow
- Ctrl+A



2. Press Space to select all check boxes and then click **OK**.



3. Click \mathbf{OK} to apply changes and close the window.

2.6.2.1.2 Adding Talkgroups to Category

Follow the procedure below to add talkgroups to a category.

Procedure:

1. In the **Talkgroups** tab select the desired radios for including.

NOTE

Multiple adding is unavailable for talkgroups.



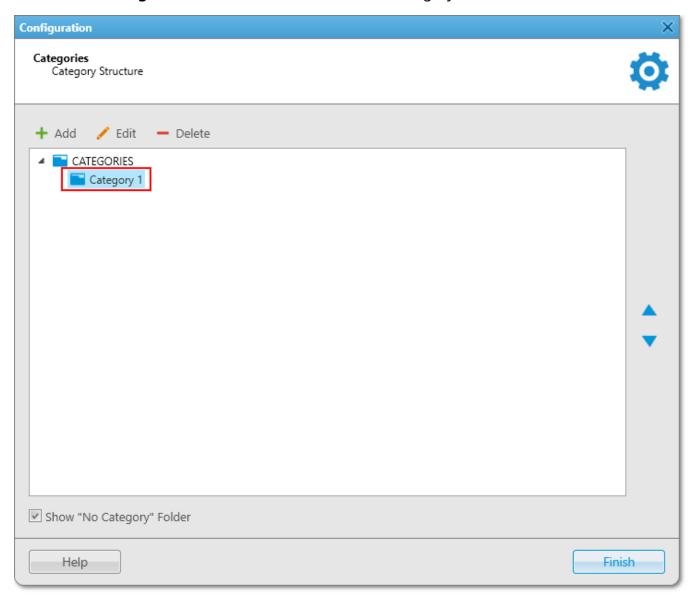
2. Click \mathbf{OK} to apply changes and close the window.

2.6.2.2 Editing Category

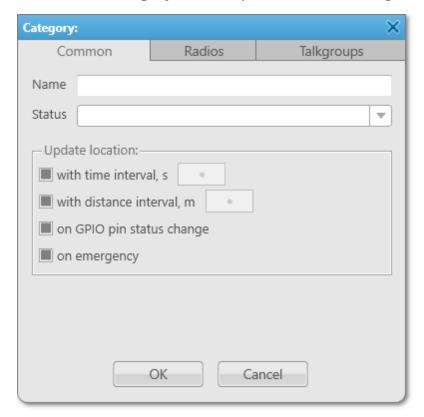
Follow the procedure below to edit a category.

Procedure:

1. In the **Configuration** window, select the needed category and click **Edit**.



2. In the **Common** tab of the **Category** window, perform the following actions:



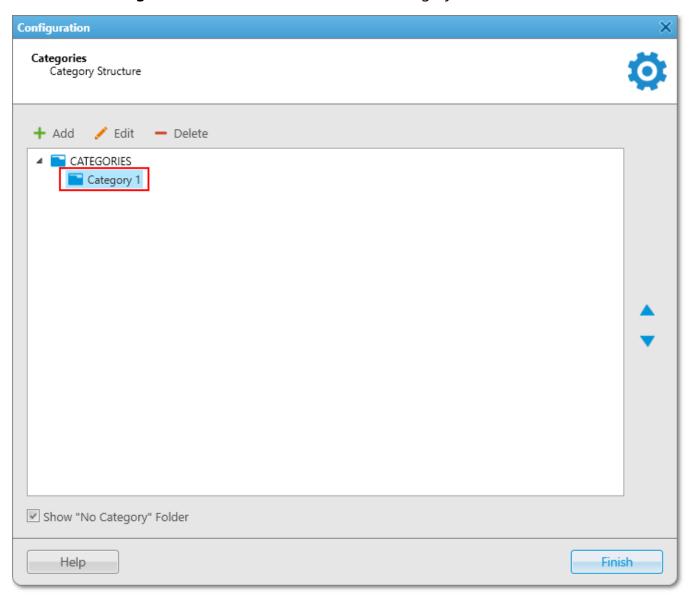
- Change the category name
- Change the category status
- Under **Update location**, change the GPS-monitoring settings which applied to every object in the category.
- parameter is set for all objects in the category.
- parameter is not set for all objects in the category.
- parameter is set for some radio objects in the category.
 - 3. *Optional:* In the **Radios** and **Talkgroups** tabs add or remove radios and talkgroups to/from the category.
 - 4. Click **OK** to apply changes and close the window.

2.6.2.3 Deleting Category

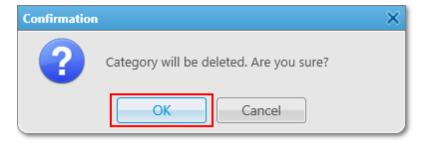
Follow the procedure below to delete a category.

Procedure:

1. In the **Configuration** window, select the needed category and click **Delete**.



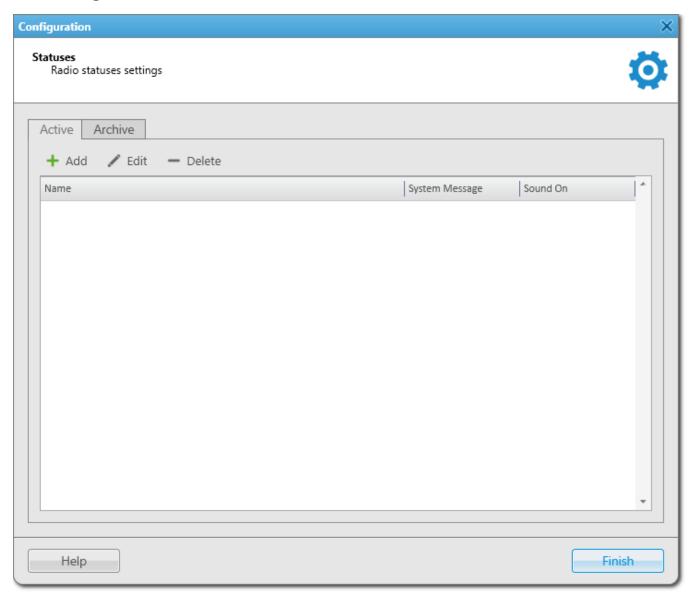
2. In the open window, click **OK**.



2.6.3 Statuses

Statuses allow you to specify the current condition of radios or <u>WAVE users</u>.

Before managing statuses, ensure you have all the necessary rights selected in the <u>Operators</u> menu.



Statuses Window Tabs

Active: Displays all active statuses. On this tab you can <u>add</u>, <u>edit</u> or <u>delete</u> radio statuses.

Archive: Displays archived statuses. On this tab you can <u>restore</u> archived statuses.

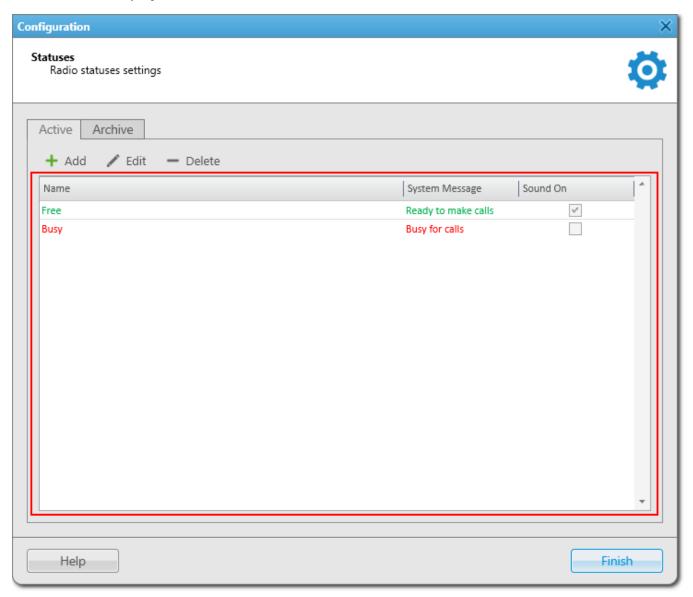
Archived statuses cannot be used in alert rule definitions. However, the statuses remain valid if

they were assigned to radios or WAVE users previously.

Archived statuses are also displayed in the event log entries.

Statuses Window Table

Statuses table displays active or archived statuses.



The table consists of the following columns:

Name: Displays status name.

System Message: Displays <u>text message for automatic status change</u> which is set at status adding.

Sound On: Displays if a <u>sound notification</u> of status activation is turned on or off.

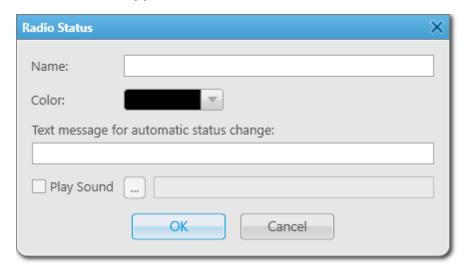
For information on configuring and managing statuses, see the sections below.

2.6.3.1 Adding Statuses

Follow the procedure below to add a new status.

Procedure:

On the **Active** tab, click **Add**.
 The **Radio Status** window appears.



- 2. In the open **Radio Status** window, perform the following actions:
 - a. In the **Name** box, type the status name to be displayed in SmartPTT Dispatcher.
 - b. *Optional:* From the **Color** list, select the desired status color.
 - c. *Optional:* In the **Text message for automatic status change** box, enter the message that initiates the status changing. If a radio sends the message to the dispatcher or to any other addressee, the radio receives the status.

NOTE

Text messages cannot be the same for different statuses. If the entered text message is already specified for another status, the corresponding warning window appears.

d. *Optional:* Activate and configure a sound notification at the status activating:

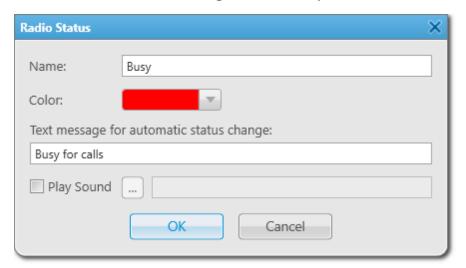
- i. Select the **Play Sound** check box.
- ii. Click to specify a path to the desired audio file.
- 3. Click **OK**.

2.6.3.2 Editing Statuses

Follow the procedure below to edit the existing status.

Procedure:

- 1. On the **Active** tab, select the desired status in the table of active statuses and click **Edit**.
- 2. In the open **Radio Status** window, change the desired parameters and click **OK**.

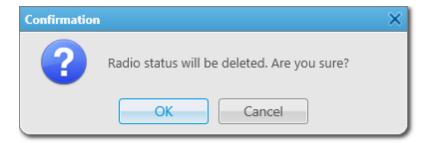


2.6.3.3 Deleting Statuses

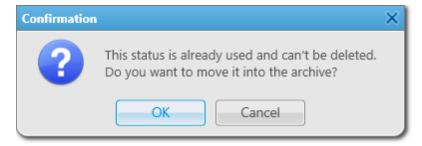
Follow the procedure below to delete a status.

Procedure:

- 1. On the **Active** tab, select the desired status in the table of active statuses and click **Delete**.
- 2. In the open **Confirmation** window, click **OK**.



If the status is currently assigned or was assigned to a radio or a WAVE user, it can't be deleted. If you try to delete such status, the **Confirmation** window appears.



You can restore archived statuses later. Restored statuses become active.

2.6.3.4 Restoring Statuses

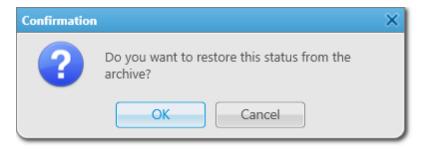
Follow the procedure below to restore an archived status.

Procedure:

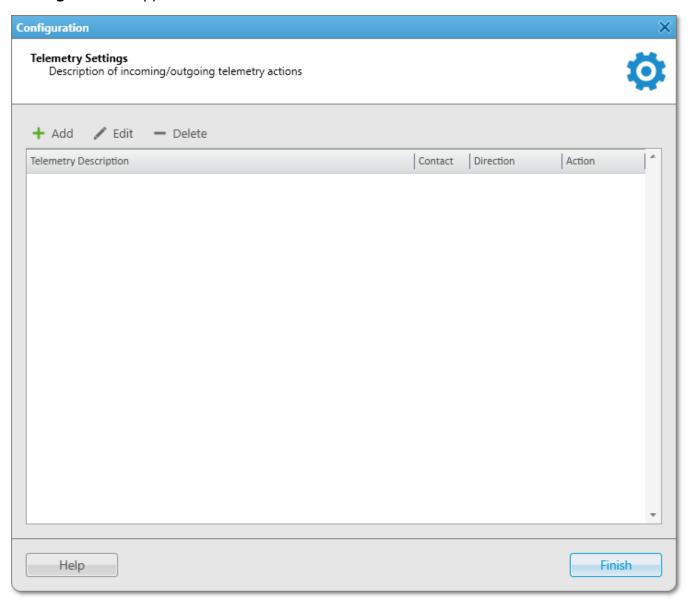
1. On the **Archive** tab, select the desired status in the table of archived statuses and click **Restore**.

2. In the open window, click **OK**.

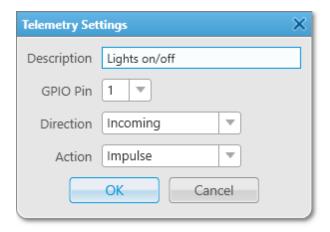
The restored status appear in the active statuses table of the **Active** tab.



2.6.4 Telemetry



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**.

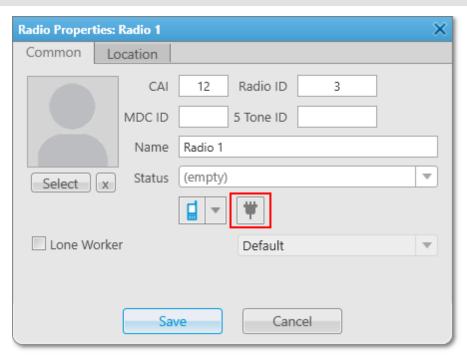
To delete the settings, select the entry in the list of settings and click **Delete**.

How to Assign Telemetry to Radio

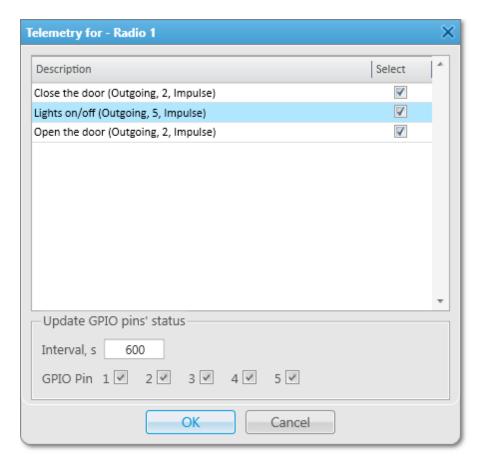
You can select telemetry settings in the radio **Properties** window.

NOTE

Only registered radios can be assigned to a telemetry command. For not registered radios the **Telemetry** button will be unavailable.



Click the **Telemetry** button to open the window for selecting available telemetry commands for the radio.

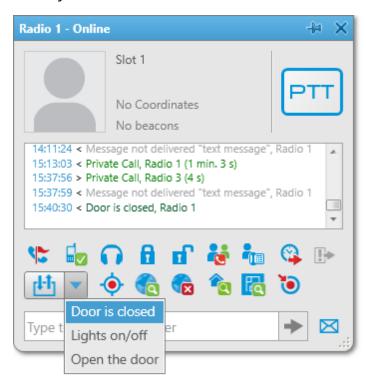


Select the required command to make it available in the **Call Window** of the radio and in the custom consoles. Also, it allows you to set automatic status updates of the GPIO pins. To receive status updates of the GPIO pins automatically, select the required GPIO pins in the **Update GPIO pins' status** area and set the update interval in seconds.

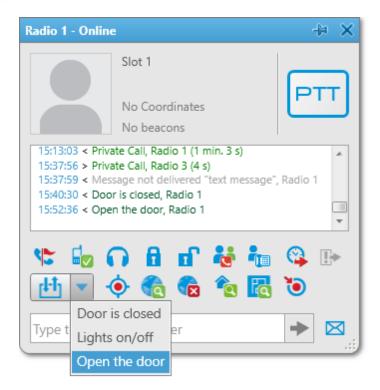
NOTE

Automatic GPIO pins' status update is applied only for incoming telemetry commands.

Then you can run the telemetry command from the radio **Call Window**.



To receive the current telemetry status, click . The updated status will be displayed in **Call Window** of the radio.

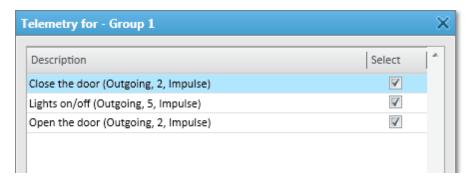


How to Assign Telemetry to Talkgroup

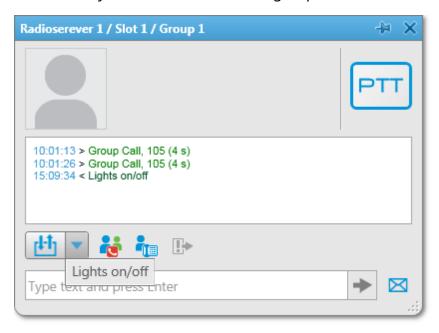
You can select telemetry settings in the **Properties** window of the talkgroup.



Click the **Telemetry** button and select available telemetry commands for the talkgroup.

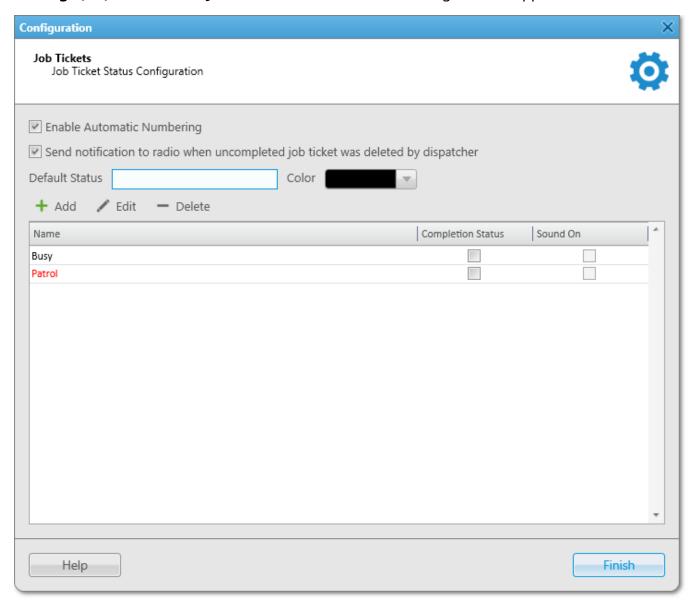


Then you can run the telemetry command from the talkgroup **Call Window**.



2.6.5 Job Ticket Statuses

Here you can create job ticket statuses and specify their settings. For example, assign a color to a status or add alert on status change.



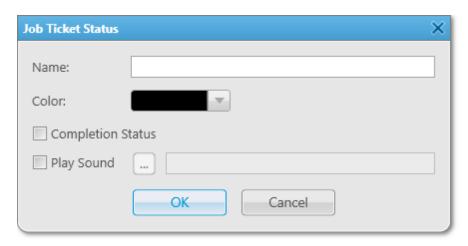
Enable Automatic Numbering: When this option is enabled, a unique number is assigned to each new job ticket. It is necessary to distinguish job tickets with same names.

Send notification to subscriber 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: It is the final status of a job ticket. If a job ticket has such a status and if **Remove job ticket from the list within** *n* **seconds after completion** is enabled, the job ticket will be hidden from the list.

NOTE

You can also select the **Completion status** later in the **Job Tickets** cconfiguration window.

Sound: This setting enables the sound signal which will notify the operator that a job ticket changed its status.

WARNING

Added statuses must match the statuses set in MOTOTRBO CPS.



If the statuses of SmartPTT Dispatcher does not correspond to statuses in *MOTOTRBO CPS*, all settings (color, sound signal and status completion) won't be applied.

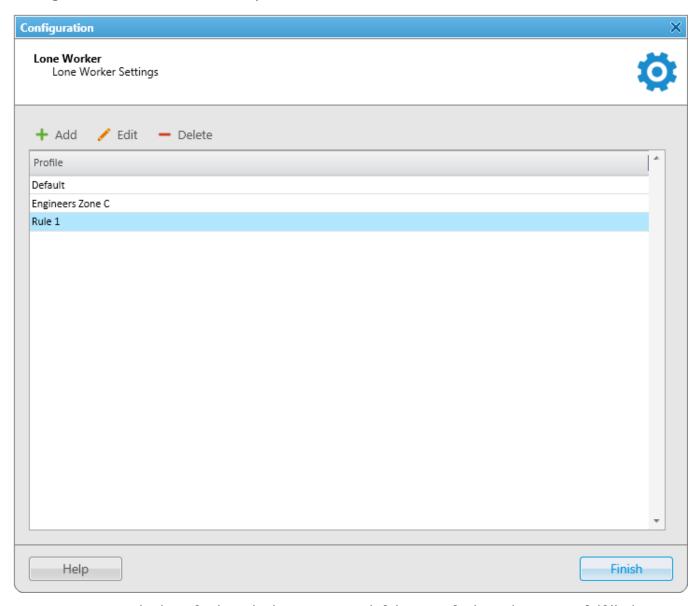
2.6.6 Lone Worker Rules

SmartPTT Dispatcher supports the Lone Worker mode for radios and WAVE users.

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.



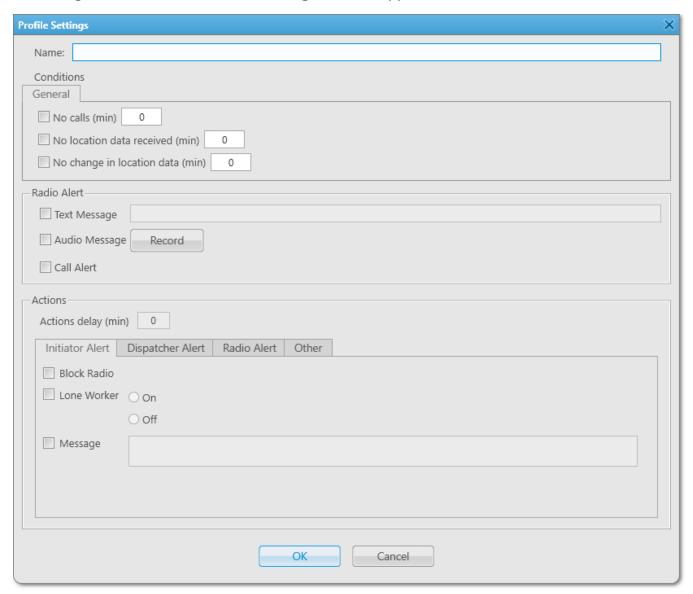
Here you can see the list of rules which get executed if the specified conditions are fulfilled. SmartPTT supports multiple rules, so it is possible to create a lone worker rule for each radio or WAVE user.

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:

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** is sent to the lone worker.

NOTE

This action is unavailable to WAVE users.

The **Actions delay** timer defines the time interval after which **Actions** will be executed after **Radio Alert**.

If the rule meets selected criteria, the system can execute the following actions:

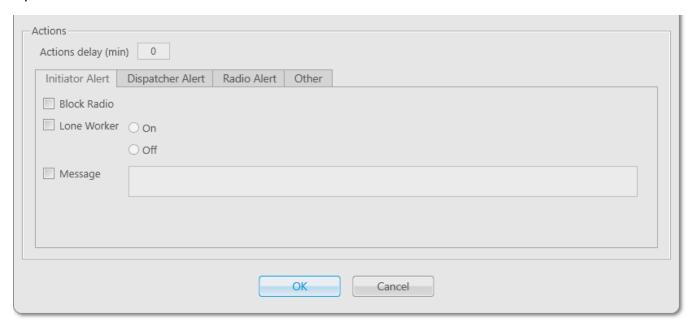
- Actions addressed to the initiator
- Alerts addressed to the dispatcher
- Alerts addressed to the radio
- Other

To save the rule, click **OK**. 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

Open the **Initiator Alert** tab.



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.

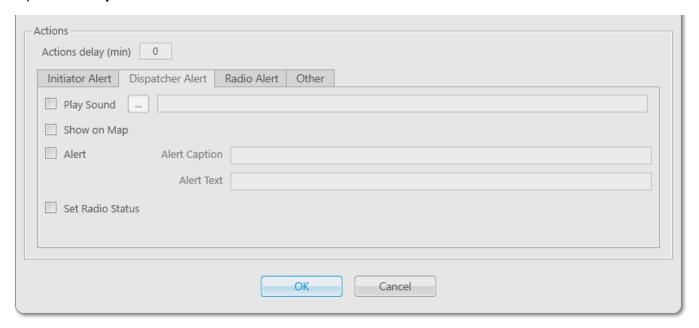
Message: A text message is sent to the initiator that triggered the rule.

NOTE

This action is unavailable to WAVE users.

Dispatcher Alert

Open the **Dispatcher Alert** tab.



Play Sound: Select the audio file to play in SmartPTT Dispatcher. The supported audio formats: MP3, OGG, WAV.

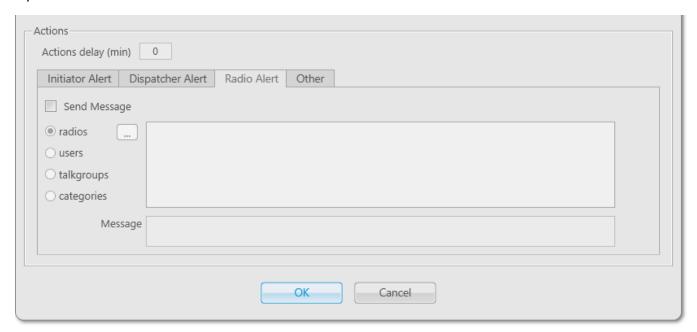
Show on Map: The radio or the <u>WAVE user</u> specified in the rule is shown on the map (with an icon).

Alert: Notification with the event description is displayed in the **System Notification** window. You can define the title in the **Alert Caption** box. and the description in the **Alert Text** box. Description of the event can't be set, it is generated 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

Open the **Radio Alert** tab.



Send Message: A text message is sent to the selected radios, users, talkgroups or categories.

NOTE

This action is unavailable to **WAVE users**.

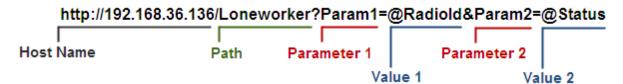
Other

Open the Other tab.



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 <u>Statuses</u> settings.

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

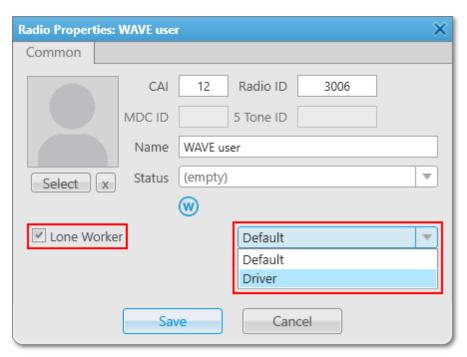
See information about SmartPTT Radioserver configuration for sending and receiving e-mails and SMS messages in SmartPTT Radioserver Configurator Help under

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 <u>WAVE user</u> open its **Properties** window.

In the opened window select the **Lone Worker** check box, and in the drop-down list select the created profile.



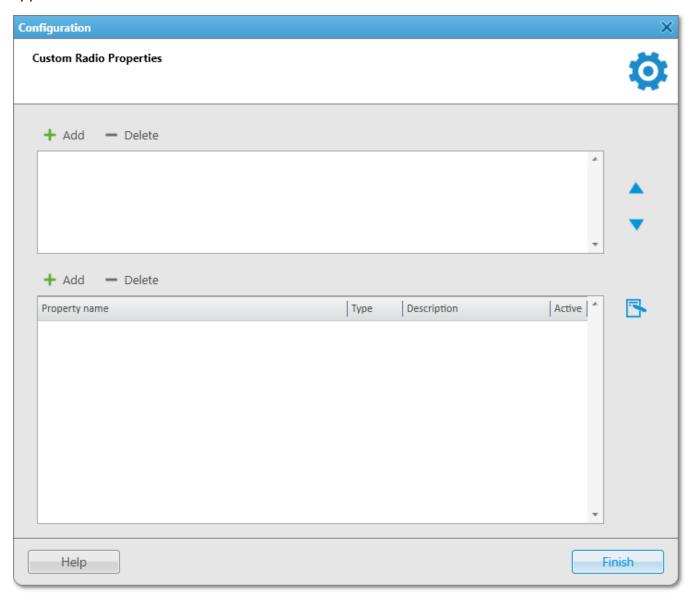
To remove the profile from a radio or a WAVE user, clear the **Lone Worker** check box.

2.6.7 Custom Radio Properties

SmartPTT Dispatcher provides the ability to add custom properties of a radio and a <u>WAVE user</u>, which can be used for giving additional information. Custom radio and WAVE user properties have the following four types:

- Text
- Numeric

- Date
- List



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.

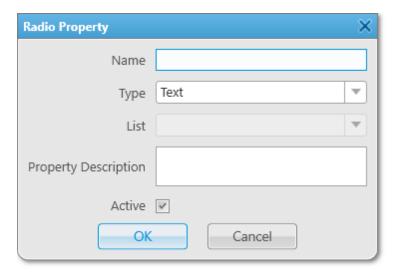
Type: Property type (Text, Numeric, Data or List).

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:

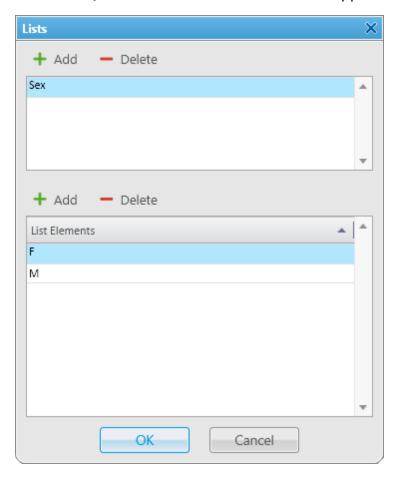


Fill all the boxes required. Select the **Type** and click **OK**.

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.

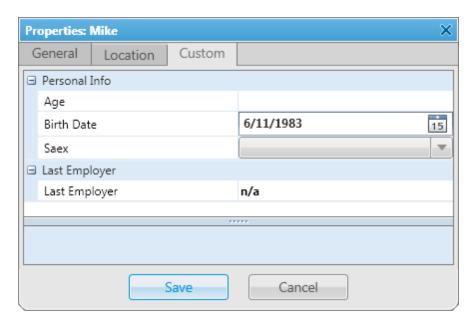
To create the list, click the **Create/Edit Lists** button **.** The window appears:



In the top box add list names by clicking **Add**.

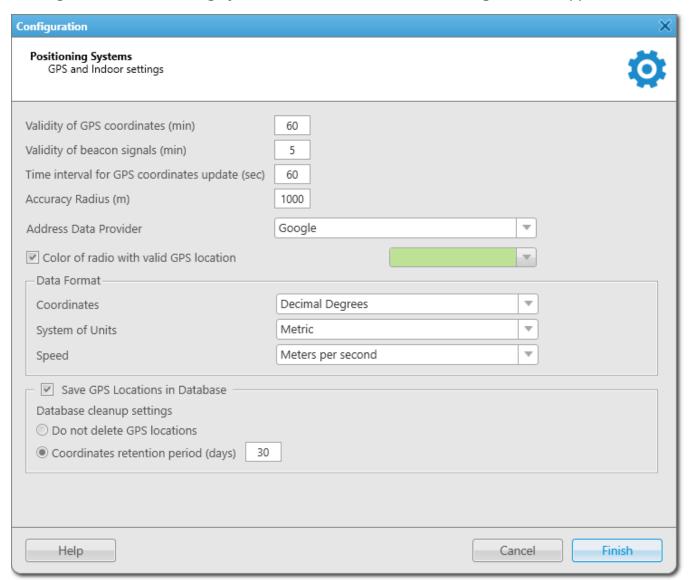
Select the created list and add elements of the list. To do it, go to the bottom box and click **Add** just above it.

To view the active custom properties go to the radio or WAVE user **Properties** window, **Custom** tab.



Settings Positioning Systems

2.7 Positioning Systems



The **GPS and Indoor settings** window contains the following parameters:

Validity of GPS coordinates: The parameter sets GPS data validity period in minutes. If new GPS coordinates were not received during this period, the radio or <u>WAVE user</u> label is removed from the map.

Settings Positioning Systems

Validity of beacon signals: The parameter defines 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: It sets the default time interval for updating radio and WAVE user location data. 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.

Color of radio with valid GPS location: It sets the color which will be used for a radio label with valid GPS locations.

Address Data Provider: It defines the map service (Google or OpenStreetMap), which will determine the object address on the map corresponding to the radio or WAVE user current GPS coordinates.

Data Format area

It defines the format of location data to display in the radio and WAVE user **Call window**:

Coordinates: It allows you 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 allows you to select the measurement system (*Metric* or *Imperial*).

NOTE

When changing measurement system, the data previously logged won't be recalculated according to the new measurement system.

Speed: It allows you to select the format of a radio and WAVE user speed.

Save GPS Locations in Database: It defines if GPS coordinates received from radios and WAVE users are stored in the database.

Settings Positioning Systems

Database cleanup settings

It defines 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 defines 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

To communicate with external dispatchers, you need to have the **Connect with external dispatchers** operator permission. For details, see <u>Operators</u>.

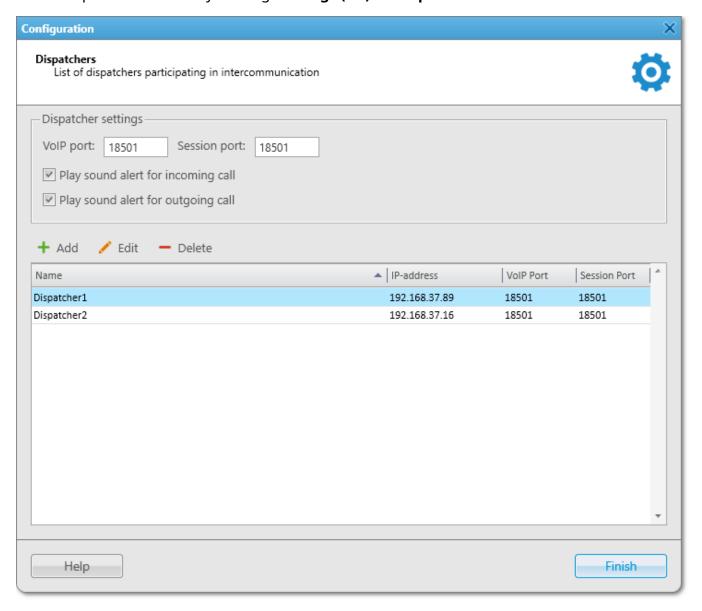
For information on configuring dispatcher settings and establishing communication with external dispatchers, see the sections below.

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** (\circ) \rightarrow **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 <u>Dispatcher Window</u>.

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:

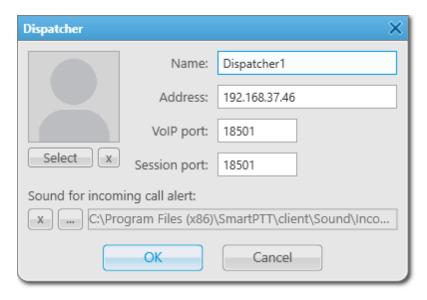
- The Name column contains the dispatcher name.
- The **IP address** column contains the dispatcher IP address.
- The **VoIP Port** column contains the UDP port which is selected for the voice transmission.
- The **Session Port** column contains the TCP port which is selected for the commands and text 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 (** \square **)** 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** (\square) 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.

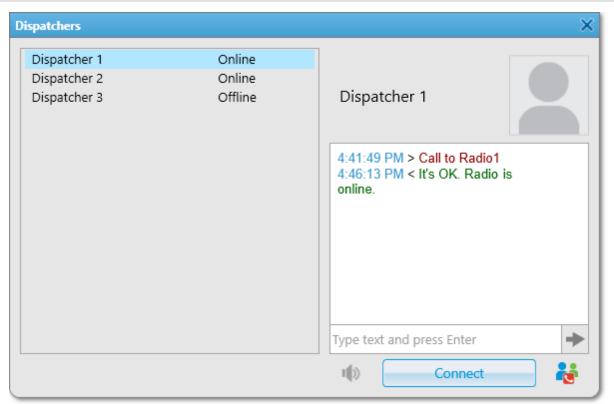
2.8.3 Dispatchers Window

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** (**2**) button on the menu bar.

NOTE

The **Dispatchers** (\mathfrak{D}) 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 <u>Dispatchers Settings</u> and <u>Operators</u>.



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 <u>Dispatcher Window</u>.

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 <u>Conference Calls</u>.

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 <u>Configuring Dispatcher Settings</u>.
- Add external dispatchers. For details, see <u>Adding Dispatchers</u>.

2.8.4.1 Configuring Dispatcher Settings

Follow the procedure below to configure the SmartPTT Dispatcher settings for communicating with external dispatchers.

Prerequisites:

Obtain UDP and TCP ports of your SmartPTT Dispatcher computer.

Procedure:

- 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.
- Add the desired external dispatchers.For details, see <u>Adding Dispatchers</u>.
- 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 below to add a new dispatcher.

Prerequisites:

Obtain the external dispatcher IP address, UDP, and TCP ports.

Procedure:

- 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.
- Click **OK** to save the changes and close the window.The added dispatcher appears in the Dispatchers Table.

Postreguisites:

- 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 <u>Initiating Voice Calls to Dispatchers</u> and <u>Accepting External Dispatcher Calls</u>.

By sending text messages. For details, see <u>Sending Messages to Dispatchers</u>.

2.8.5.1 Initiating Voice Calls to Dispatchers

Follow the procedure below to initiate a voice call to an external dispatcher.

Prerequisites:

Ensure the following conditions are met:

- The **Dispatchers** (**②**) 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 <u>Dispatchers Window</u>.

Procedure:

- 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 to 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 below to send a text message to an external dispatcher.

Prerequisites:

Ensure the following conditions are met:

• The **Dispatchers** (**2**) 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 (②)** 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 <u>SmartPTT Dispatcher</u> Event Log.

2.8.5.3 Accepting External Dispatcher Calls

Follow the procedure below to accept an incoming call from an external dispatcher.

Procedure:

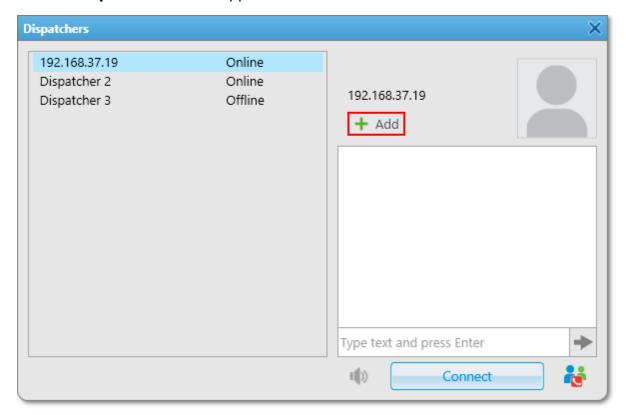
In the **Incoming call** window, click the **Accept** button.
 The **Dispatchers** window appears. The call starts.



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 <u>Custom Rules</u>.
- Configuring SmartPTT Dispatcher behavior in response to the radio system events related to the GPS and Indoor Tracking data.

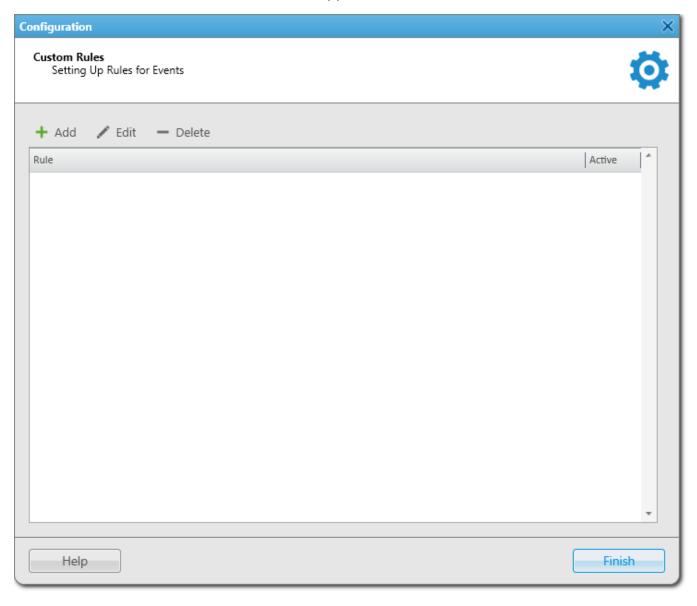
For details, see **Positioning Rules**.

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

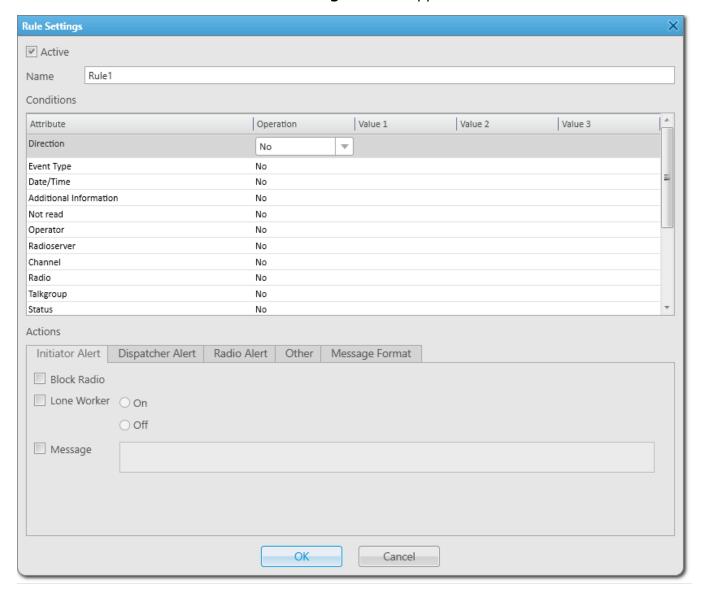
2.9.1 Custom Rules

You can set response rules for the events registered in SmartPTT system. Response rules may include automatic sending of messages, playing alerts in SmartPTT Dispatcher and on the radio, changing a radio or <u>WAVE user</u> status, etc.

To set rules, on the menu bar of the SmartPTT Dispatcher window, click **Settings ()** \rightarrow **Rules** \rightarrow **Custom Rules**. The **Custom Rules** window appears:



To add a new rule, click **Add**. The **Rule Settings** window appears:



Name: The name of the rule.

Active: Select this check box to make the rule enabled.

The following table presents conditions that can be used in rules.

Attribute	Operation	Value
Direction	No, Equal to	Incoming, Outgoing

Attribute	Operation	Value
Event type	No, Equal to, Not Equal to	Registration, Call, Message, Telemetry, Alarm, Status, Block radio, Job Ticket, User Authorization, Radio Check, Lone Worker, Radio Kill
Date/Time	No, Between	Time interval
Additional information	No, Equal to, Contains	You can leave the box empty, or depending on the event type, you can type the <u>corresponding information</u>
Not read	No, Equal to	Read, Not read
Operator	No, Equal to, Not equal to	Operator from list of operators
Radioserver	No, Equal to, Not equal to	Radioserver name
Channel	No, Equal to, Not equal to	Channel name
Radio	No, Equal to, Not equal to	A radio or a WAVE user from the list
Talkgroup	No, Equal to, Not equal to	Talkgroup name
Status	No, Equal to, Not equal to	Status from the list of statuses
Duration	No, Equal to, Not equal to, Greater than, Greater than or equal to, Less than, Less than or equal to, Between	Duration in seconds
Connection Type	No, Equal to, Not equal to	 Connection types used in SmartPTT: DMR: Over-the-air connection made via repeaters and control stations; PBX: Telephone connection IP: Dispatcher-Dispatcher connection

Attribute	Operation	Value
Repeater IP	No, Equal to, Not equal to	Available repeaters IP addresses
Destination	No, Equal to, Not equal to	Recipient from the list
Record	No, Equal to	Available audio records
User	No, Equal to, Not equal to	Radio user from the list
SCADA point	No, Equal to	SCADA point from the list of SCADA points added to SmartPTT Dispatcher
		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	No, Equal to	SCADA point parameter capable of indicating alarm states

NOTE

To interact with SCADA points, you need to instal the corresponding license and activate the SCADA module in SmartPTT Dispatcher settings. For details, see <u>Licenses</u> and <u>Activating SCADA Module</u>.

Attribute: Contains the list of existing events which the system can register.

Operation: List of possible system operations for this attribute.

Value: Values that can be selected for the attribute.

The rule is a combination of an attribute, operation and value. One rule can contain more than one such combinations.

When the system has registered an event matching the specified rule, the system performs predefined actions:

• Alerts addressed to the initiator

- · Alerts addressed to the dispatcher
- Alerts addressed to the radios
- Other actions

NOTE

If the conditions of the rule include *Incoming* (**Direction**), *Telemetry* (**Type**) and a selected talkgroup (**Talkgroup**), the rule will be triggered regardless of the talkgroup ID where the telemetry command was sent.

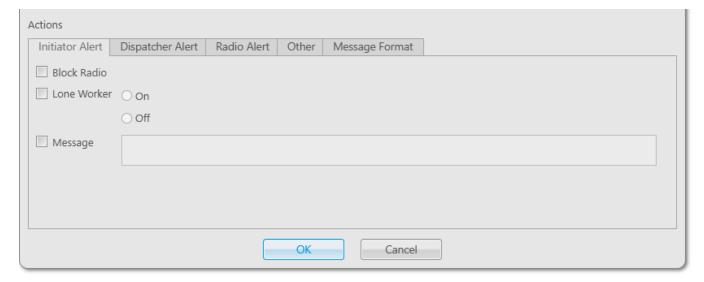
The **Message Format** tab allows you to set the format of the alert messages.

To save the rule, click **OK**. The created rule appears in the list of rules.

To edit the rule, 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

Open the **Initiator Alert** tab. In this tab you can set up actions that will be performed if the rule conditions are fulfilled.



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.

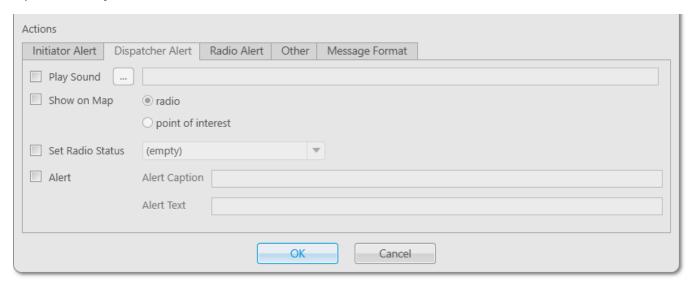
Message: A text message is sent to the initiator of triggering of the rule. You can specify message format settings in the <u>Message Format</u> tab.

NOTE

This action is unavailable to WAVE users.

Dispatcher Alert

Open the **Dispatcher Alert** tab.



Play Sound: Select .wav audio file to play.

Show on Map: Select the check box to show on a map an object that triggered the rule. You can select two options:

- Radio: When the rule is triggered, the radio appears on a map, and the map is centered on it.
- **Point of interest:** When the rule is triggered, the selected point of interest appears on a map, and the map is centered on it. While the SCADA alert is active, the point of interest on the map is highlighted.

NOTE

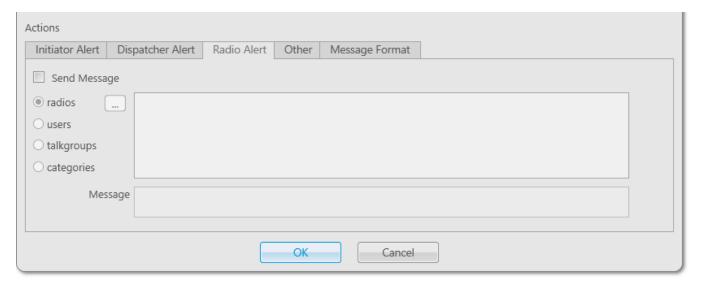
When SCADA alert is registered while the web-pages tab is not selected, the tab is highlighted red.

Alert: Notification with the event description is displayed in the **System Notification** window. You can define the title in the **Alert Caption** box, and the description in the **Alert Text** box.

Set Radio Status: The radio or WAVE user is assigned the predefined status. It is selected from the **Statuses** list (see <u>Statuses</u>).

Radio Alert

Open the **Radio Alert** tab.



Send Message: A text message is sent to the selected radios, users, talkgroups or categories. You can specify format settings of text messages in the <u>Message Format</u> tab of the **Actions** area.

NOTE

This action is unavailable to WAVE users.

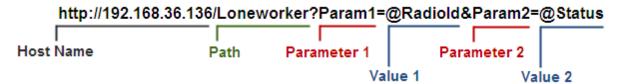
Other

Open the Other tab.



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 <u>Statuses</u> settings.

E-mail: Is used for specifying e-mail address where a message should be sent in case the rules specified earlier are fulfilled. To do this, the following boxes are to be filled:

Radioserver: Server name which is configured for e-mail sending. The name of the server is selected from the drop-down list.

E-mail: Electronic addresses to send messages.

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 fulfilled. To do this, the following boxes are to be filled:

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 to. 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.

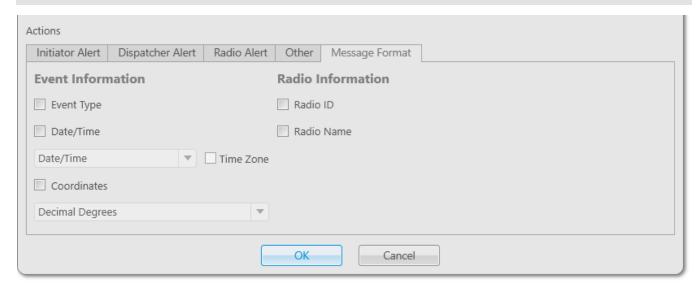
You can specify format settings of SMS or E-mail messages in the <u>Message Format</u> tab of the **Actions** area.

Message Format

You can specify message format (text messages, SMS, or E-mail) in the **Message Format** tab of the **Actions** area. These messages are sent to recipients, defined in the message recipient list in the **Radio Alert** or **Other** tab.

NOTE

The format settings for text messages are valid for specific messages, only if **Send Message** is selected in the **Radio Alert** tab; for SMS – if **SMS** is selected in the **Other** tab; for E-mail – if **E-mail** is selected in the **Other** tab.



Event Type: If selected, the message includes the type of the event, which triggered the rule.

Date/Time: If selected, the date and time of the event will be added to the text message. You can set the date format displayed in the message (date and time, or time only).

Time Zone: If selected, the message includes time in UTC.

Coordinates: If selected, the radio coordinates are displayed in the message. These are the latest coordinates stored in the database.

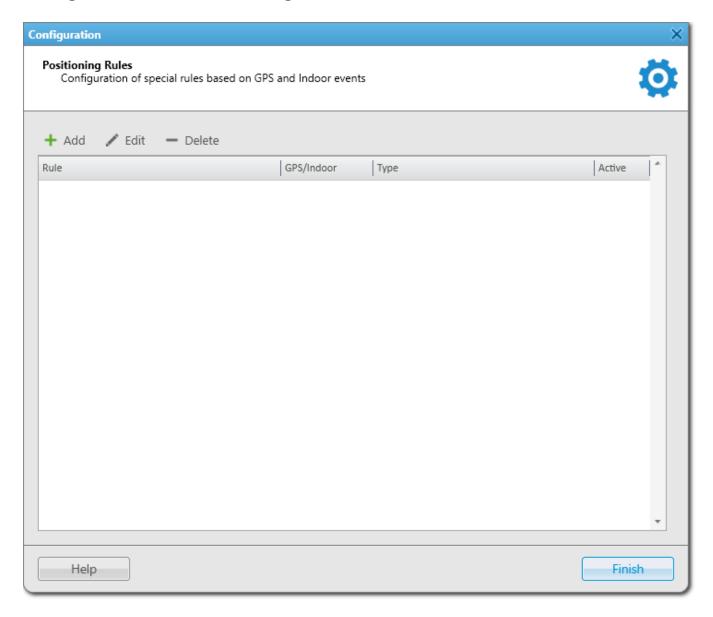
Radio ID: If selected, the radio ID, which has triggered the rule, will be added to the text message.

Radio Name: If selected, the name of the radio, which has triggered the rule, will be added to the text message.

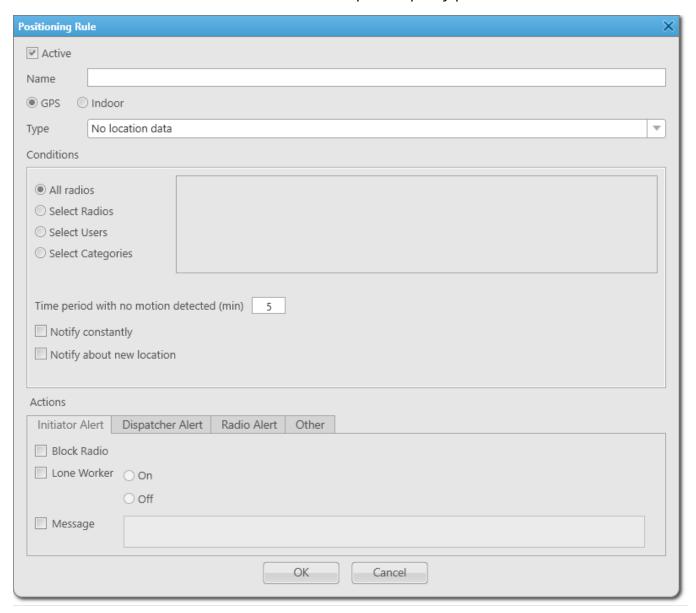
2.9.2 Positioning Rules

You can set response rules for GPS and Indoor events registered in SmartPTT system. GPS events include receiving or not receiving radio or <u>WAVE user</u> 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**.



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 predefined 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.

Attribute	Value
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 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

Open the **Initiator Alert** tab.



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 of triggering of the rule.

NOTE

This action is unavailable to WAVE users.

Dispatcher Alert

Open the **Dispatcher Alert** tab.



Play Sound: Select .wav audio file to play back.

Show on Map: Location of a radio or a <u>WAVE user</u> specified in the rule is shown on the map (with an icon).

Alert: Notification with the event description is displayed in the **System Notification** window. You can define the title in the **Alert Caption** box and the description in the **Alert Text** box.

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

Open the Radio Alert tab.



Send Message: A text message is sent to the selected radios, users, talkgroups or categories.

NOTE

This action is unavailable to **WAVE users**.

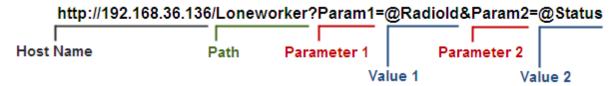
Other

Open the **Other** tab.



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 <u>Statuses</u> settings.

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 SmartPTT Radioserver Configurator Help under **Telephone**Interconnect and SMS Gateway.

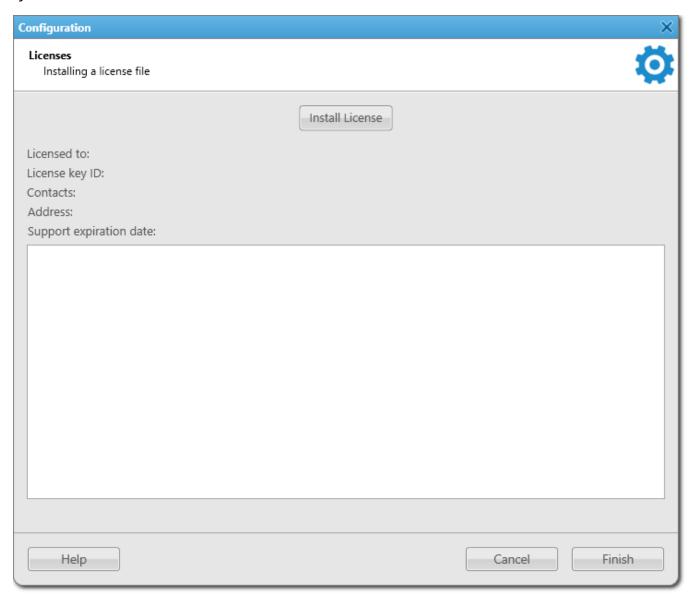
Settings Licenses

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 ()** \rightarrow **Licenses**.

In the opened **Licenses** window you can install the license that defines functions available in the system:

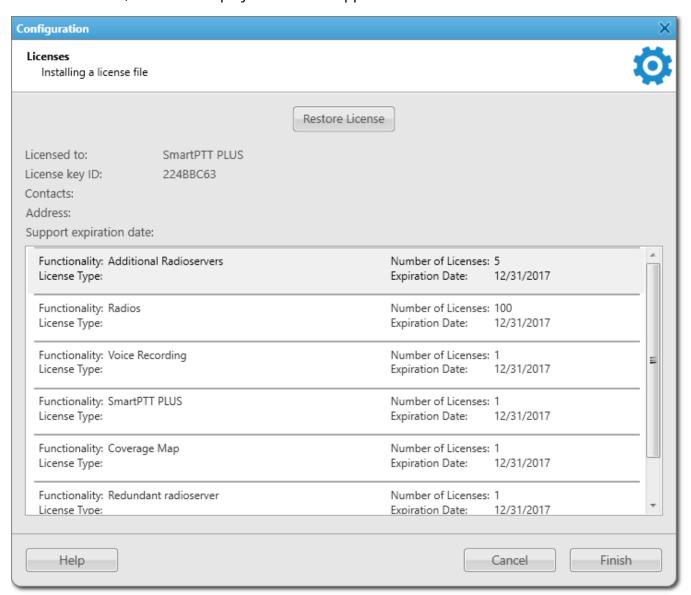


Click **Install License** and specify the license file location.

Settings Licenses

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.



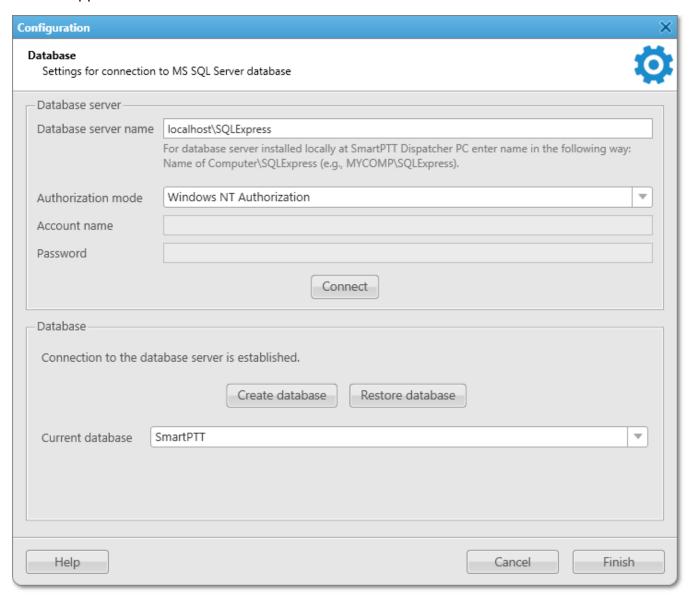
NOTE

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.

Settings Database

2.11 Database

To connect to the database, on the menu bar, click **Settings ()** \rightarrow **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.

Settings Database

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.

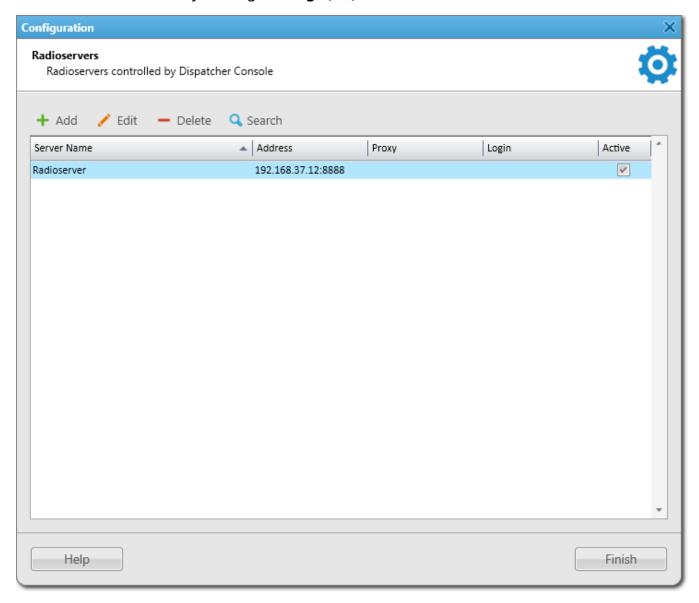
NOTE

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

In the **Radioservers** window you can add new radioservers, and manage existing radioservers.



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 information on adding radioserver, see Adding Radioservers.

IMPORTANT

If a redundant radioserver is used in the system, you should 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 one redundant radioserver.

Edit

Opens the <u>Radioserver</u> window for configuring the 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 the radioservers added to SmartPTT Dispatcher. The table consists of the following columns:

- The **Server Name** column contains a radioserver name.
- The **Address** column contains the radioserver IP address and port number.
- The **Proxy** column contains a proxy server IP address and port number.
- The **Login** column contains the operator login.
- The **Active** column 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.

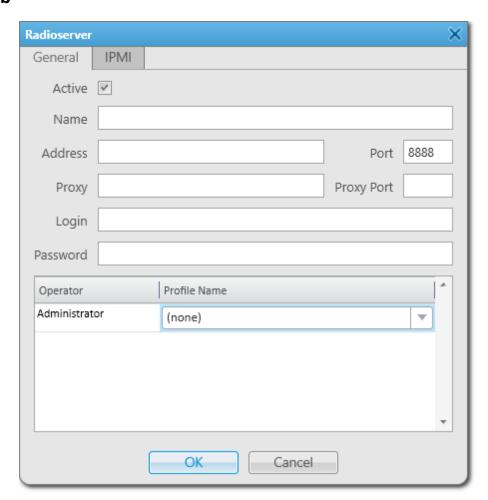
2.12.1 Radioserver Window

In the **Radioserver** window you can configure or edit the settings of a radioserver.

The window provides two tabs:

- The **General** tab
- The **IPMI** tab

General Tab



In the **General** tab, you can configure the radioserver settings. The tab provides the following elements:

Active

Makes the radioserver available for connections.

Name

The radioserver name which is displayed in the **Radioservers** window.

Address

The radioserver IP address. The IP address is used for establishing connection between the radioserver and SmartPTT Dispatcher.

Port

The radioserver port number. The default port number is 8888.

Proxy

An IP address of a proxy server. If no proxy server is used, leave the box empty.

Proxy Port

A port number of the proxy server. If no proxy server is used, leave the box empty.

Login and Password

Credential that are used for logging on SmartPTT Dispatcher using the *Windows* authentication. The boxes should be filled only if the *Windows* authentication is activated on the radioserver. For details, see "Radioserver" in *Radioserver Configurator User Guide*.

IMPORTANT

The **Login** and **Password** boxes must be empty when *No* authentication is selected in SmartPTT Radioserver Configurator. Otherwise the connection between the radioserver and SmartPTT Dispatcher cannot be established.

Profiles Assigning Table

Provides the list of operators to which you can assign the profiles added in SmartPTT Radioserver Configurator. For details, see "Profiles" in *Radioserver Configurator User Guide*.

The table consists of the following columns:

- The **Operator** column contains a list of all active operators added to SmartPTT Dispatcher.
- The **Profile Name** column contains the list of profiles that were added in SmartPTT Radioserver Configurator.

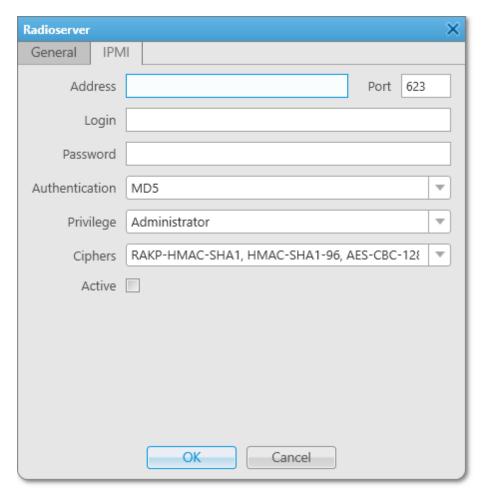
NOTE

If no profile is assigned, an operator can manage all radios, talkgroups, and services provided by the 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.



In the **IPMI** tab, you can configure IPMI settings for the radioserver. The tab provides the following elements:

Address

IP address of the radioserver computer 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 boxes for filling. They must match the login and password set in IPMI configuration settings on the radioserver computer.

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 *Administrator* 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

Select the check box to activate IPMI functionality for the radioserver.

NOTE

For information on managing a radioserver with using of IPMI, see <u>Topology</u>.

2.12.2 Adding Radioservers

Follow the procedure below to to add a radioserver.

Prerequisites:

- Obtain the radioserver IP address and port set in SmartPTT Radioserver Configurator.
- Obtain information on which type of authentication is used on SmartPTT Radioserver.

Procedure:

- 2. In the **Radioservers** window, click **Add**.

The **Radioserver** window appears.

- 3. In the **Radioserver** window, open the **General** tab.
- 4. In the **General** tab, perform the following actions:
 - a. Select the **Active** check box to activate the radioserver.
 - b. In the **Name** box, type the desired radioserver name.
 - c. In the **Address** and **Port** boxes, type the IP address and port number of the radioserver.
 - d. *Optional:* If you use proxy, in the **Proxy** and **Proxy Port** boxes, type the proxy server IP address and port number.
 - e. Depending on the authentication type, type the required **Login** and **Password** in the corresponding boxes:

If the Windows authentication is used on the radioserver, and the radioserver computer is connected to the domain,	in the Login and Password boxes, type the domain login and password.
If the Windows authentication is used on the radioserver, and the radioserver computer is not connected to the domain,	in the Login and Password boxes, type the login and password of the radioserver computer.
If no authentication is selected,	leave the Login and Password boxes empty.

- 5. Click **OK** to apply changes and close the window.
- 6. In the **Radioservers** window, click **Finish**.

Postrequisites:

- To edit the radioserver, in the **Radioservers** window, select it, and then click **Edit**.
- To remove the radioserver, in the **Radioservers** window, select it, and then click **Delete**.

2.12.3 Assigning Profile to Operators

Follow the procedure below to assign the profile to Administrator or Operator account on the desired radioserver.

Prerequisites:

Ensure at least one radioserver is added in SmartPTT Dispatcher.

- Ensure at least one operator account is added in SmartPTT Dispatcher.
- Ensure the desired profile is added in SmartPTT Radioserver Configurator.

Procedure:

- 2. In the **Radioservers** window, select the desired radioserver, and click **Edit**. The **Radioserver** window appears.
- 3. In the **Radioserver** window, open the **General** tab.
- 4. In the Profiles Assigning table, find the desired operator name.
- 5. From the **Profile Name** list, select the profile.
- 6. Click **OK** to apply changes and close the window.
- 7. In the **Radioservers** window, click **Finish**.

2.12.4 Configuring IPMI Settings

Follow the procedure below to to configure the radioserver IPMI settings.

Prerequisites:

Ensure at least one radioserver is added. For details, see Adding Radioservers.

Procedure:

- 2. In the **Radioservers** window, double-click the desired radioserver. The **Radioserver** window appears.
- 3. In the **Radioserver** window, open the **IPMI** tab.
- 4. In the **IPMI** tab, perform the following actions:
 - a. In the **Address** and **Port** boxes, type the IP address and port number of the radioserver computer that is used for establishing IPMI connection.
 - b. In the **Login** and **Password** boxes, type the login and password set in IPMI configuration settings on the radioserver computer.
 - 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. The following panels are available:

• **Calls** panel displays information on current calls and the call history in SmartPTT Dispatcher and provides controls for their handling.

For details, see <u>Calls</u>.

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**.

 Channels panel displays information on available control stations and provides controls for working with them.

For details, see **Channels**.

- **Radios** panel provides controls for monitoring and interacting with radios and WAVE users. For details, see <u>Radios</u>.
- Job Tickets panel provides controls for sending job tickets to radios and talkgroups and monitoring their status

For details, see **lob 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 and WAVE users that are currently in the Lone Worker mode.

For details, see Lone Workers.

 Recent Incoming Calls panel provides information on the recent calls in SmartPTT Dispatcher.

For details, see <u>Recent Incoming Calls</u>.

• **Notifications** panel provides information on the radio system alarms registered in SmartPTT Dispatcher.

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 preconfigured radio system objects and features.

For details, see Custom Consoles.

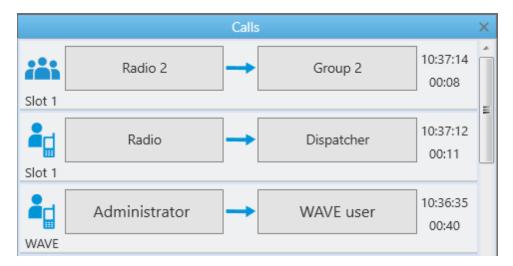
For information on these panels, see the corresponding sections below.

3.1 Calls

The **Calls** panel displays the ongoing call activity and call history in the radio network. The panel displays only calls that occur in the radio system: private, group calls, All Calls, and calls between radios and telephone subscribers.

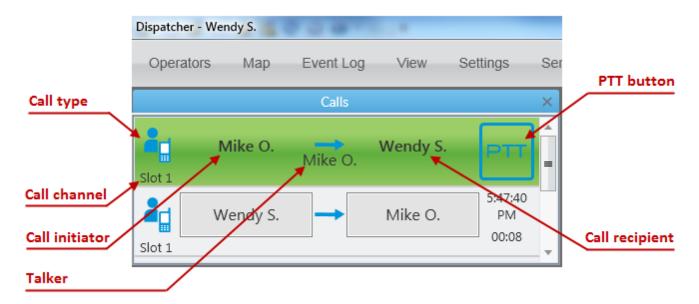
If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, the name of the user authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

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**.



If the **Calls** panel is empty, select a radio or a <u>WAVE user</u> in the **Radio Fleet** panel and click the **PTT** button to make a call. The corresponding call record will appear on the **Calls** panel and the call will be initiated.

A call record on the **Calls** panel contains several elements.



In the Capacity Max radio system, a call record on the **Calls** panel also contains the **Cross** button that is used to end the call during the hang time or to decline the call.



In the SmartPTT systems, six types of calls exist. Each type has its own indicating icon:



From the **Calls** panel the dispatcher can perform the following actions:

- Answer the ongoing call by clicking anywhere on the call record
- See the ongoing call activity. The call status can be determined by the color of the call record
- See history of all registered calls, time of call and its duration
- Make all types of call by clicking the button with the subscriber name
- Decline the incoming call by clicking the Cross button or right-clicking the call record (in the Capacity Max radio system only)
- End the call during the hang time by clicking the Cross button or right clicking the call record (in the Capacity Max radio system only)

Call status is determined by the color of the call record:

• **Light-orange:** An outgoing call attempt, or a call is in the queue (in conventional systems):



• Orange: All outgoing radio calls:



• **Green:** All incoming radio calls or radio monitoring:



• **Light-green:** Incoming call to SmartPTT Dispatcher in the Capacity Max radio system only:



• **Blue:** None of the parties transmit or receive voice (hang time). The radio or the dispatcher can continue the call by pressing the PTT button within hang time. After the hang time expires, pressing the PTT button will initiate a new call. In the Capacity Max radio system the dispatcher can end the call during the hang time by clicking the **Cross** button or right clicking the call record:



When you make a secured call, in the call record the corresponding indication appears. This indication is implemented in the following radio system:

Capacity Max:



• NAI IP Site Connect:



When an outgoing call is queued in Capacity Max radio system, the console displays the cause of a holding in the following areas:

• On the **Calls** panel on the call record:



• On the Radios or Custom Console panel at pointing to the Radio element:



• On the **Channels** or **Custom Console** on the **Channel** element:



• In other systems, the console keeps calling without any notifications:

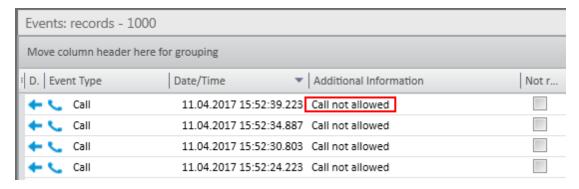


When an outgoing call is denied in Capacity Max radio system, the console displays the cause in the following areas:

• On the **Calls** panel on the finished call record:



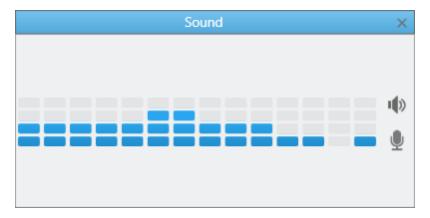
• In the **Additional Information** column of the Event Log:



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** \rightarrow **Sound**.



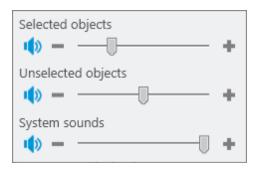
The **Sound** panel provides the following elements:

• The audio visualizer shows the volume of incoming and outgoing sound (voice, audio, tones) on audio frequencies supported by the codec.

Tools Sound

- The Speakers () button toggles sliders of speakers volume.
- The **Microphone** () button toggles sliders of microphone volume.

After you click the **Speakers** (**1**) 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

Tools Sound

- FOACSU call notification
- · Sound of the Call Alert command

After you click the **Microphone** (\P) 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 below to adjust the volume of selected/unselected objects or system sounds.

Procedure:

- 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.

Tools Sound

3.2.2 Adjusting Microphone Volume

Follow the procedure below to adjust the microphone volume.

Procedure:

- 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** (\(\bar{\mathbb{k}} \)) button.

3.3 Cross Patches

You can use cross patches for establishing connection between talkgroups from different bandwidths or network types.

All participants of the cross patch hear a call made to a cross patch. 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.

Tools Cross Patches

Cross patches are created in SmartPTT Dispatcher, and controlled by Operators. When the dispatch console is closed, all the created cross patches will be saved.

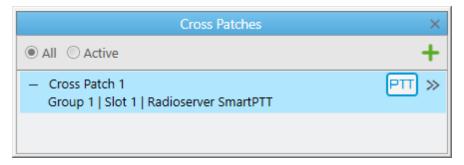
IMPORTANT

Cross patches become inactive when SmartPTT Dispatcher is closed.

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 <u>Cross Patch Window</u>.

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.

Tools Cross Patches

- PTT button that initiates a call to the cross patch.
- The Actions (») button that opens the Actions Menu for managing the cross patch.



The Actions Menu of a cross patch provides the following elements:

Disable (■) / Enable (▶)

Disables or enables the cross patch.

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.

Properties (🛂)

Opens the **Cross Patch** window for editing the cross patch. For details, see <u>Cross Patch</u> <u>Window</u>.

Delete (🗕)

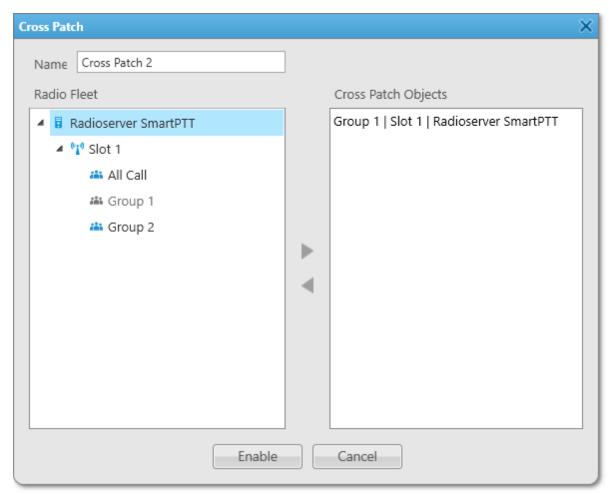
Deletes the cross patch.

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 <u>General Settings</u>) and in the audio settings of the control station in SmartPTT Radioserver Configurator.

3.3.2 Cross Patch Window

In the **Cross Patch** window, you can configure new, and edit the existing cross patches.



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.

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.

Cross Patch Objects

Displays elements that are included in the cross patch in the *<participant name>* | *<slot name>* | *<radioserver name>* format.

Add (▶) / Remove (◀)

Add or remove 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.

Enable

Enables the created cross patch. 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 <u>Creating Cross Patches</u> and <u>Editing Cross</u>
 Patches.
- Disable, enable and mute cross patches. For details, see <u>Disabling and Enabling Cross</u>
 <u>Patches</u> and <u>Muting Cross Patches</u>.
- Initiate calls to cross patches. For details, see <u>Initiating Cross Patch Calls</u>.

3.3.3.1 Creating Cross Patches

Follow the procedure below to create a cross patch.

Procedure:

- If the Cross Patches panel is closed, on the menu bar, click Tools → Cross Patches.
 The Cross Patches panel appears.
- 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 **Enable** 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 below to disable or enable a cross patch.

Procedure:

- 1. If the Cross Patches panel is closed, on the menu bar, click $Tools \rightarrow Cross$ 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 Muting Cross Patches

Follow the procedure below to to mute a cross patch.

Procedure:

- 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 (\gg) button of the cross patch, and then click **Unmute** (\clubsuit).

3.3.3.4 Editing Cross Patches

Follow the procedure below to edit a cross patch.

Procedure:

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 below to initiate a cross patch call.

Prerequisites:

- Ensure the Cross Patches panel is opened. For details, see <u>Cross Patches Panel</u>.
- Ensure the desired cross patch is added and enabled. For details, see <u>Managing Cross</u>
 Patches.
- Obtain the current settings of the pointing devices and hotkeys from 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:

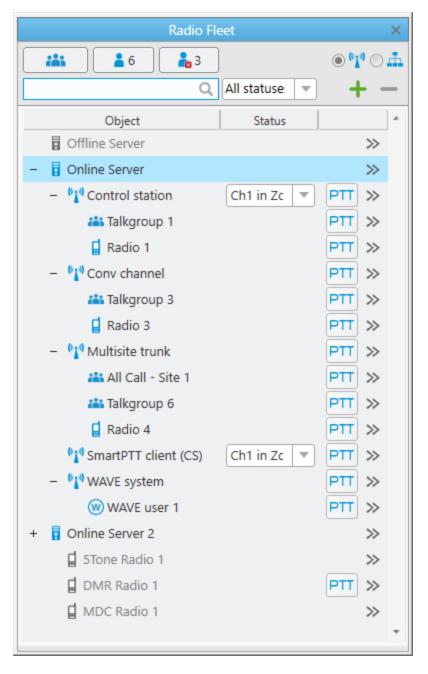
- Radios and WAVE users
 For details, see <u>Radios</u>.
- Talkgroups and site-specific group of radios
 For details, see <u>Talkgroups</u> and <u>Site All Calls</u>.
- Channel-specific objects:
 - Control stations
 - System wide and local channels of conventional radio systems
 - Single and multisite trunked radio systems

For details, see **Channels and Systems**.

SmartPTT Radioservers
 For details, see <u>Radioservers</u>.

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** \rightarrow **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 (2)

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 (11)

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 <u>Statuses</u>.

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 <u>call status</u>. 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, Talkgroup Call Window, or Channel 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 tile 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.

The following actions are available in SmartPTT Dispatcher:

Action	Description
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 "Radio Servers" in Radioserver Configurator User Guide. Available for DMR radios.
Unblock Radio (🗗)	Sends the command to the radio which is opposite to the Block Radio (î) command. Available for DMR radios.
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). Available only for Capacity Max talkgroups.
Call Telephone Subscriber (🖜)	Opens the Telephone Subscribers window, from which the call between the selected object and a telephone subscriber can be initiated. The action is available if telephone calls are enabled in the Telephone Interconnect window. For details, see <u>Telephone Interconnect Settings</u> . Available for DMR radios, talkgroups, site All Calls (only site All Call Window), control stations (only All Call Window), conventional channels (only All Call Window), and trunked systems (only All Call Window).

Action	Description
Configure Call Bridging Table (🗖)	Opens the Bridging Configuration window in which you can configure the bridging service. For information on bridging, see <u>Bridging Service</u> . Available for radioservers.
Create Deferred Action ()	Opens the Create Deferred Action window in which you can create a deferred action. For information on the window, see <u>Create Deferred Action Window</u> . 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. Available for all radios and WAVE users.
Exit Emergency Mode (!>)	Acknowledges an incoming Emergency Alarm on the channel or in the system. It turns off the Emergency Tone in SmartPTT Dispatcher and stops the Emergency indication. Available for DMR radios, talkgroups, control stations, conventional channels, and trunked systems.
Find on Map (🚳)	Shows an object on a map. If the action is selected for a category, members of the category are shown on the map. For proper work requires the selected GPS check box in the Location tab of the Radio Properties window. For details, see Radio Location Properties. Available for all radios, WAVE users, and categories.

Action	Description
Find on Indoor Map (🗟)	Shows the radio on the open building map. Available only if the Indoor Tracking check box is selected in the radio properties. For details, see <u>Radio Location Properties</u> . 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. Available for all radios and WAVE users.
Make Conference Call (🍪)	Opens the Conference Calls window from which the conference call can be initiated. For information on the window, see <u>Conference Calls</u> . Available for DMR radios and talkgroups.
Monitoring (Ω)	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.
Mute Others (🕬)	Mutes other objects except for the object from whose Actions menu the action was selected. Available for all control stations, conventional channels, and trunked systems.
Mute (**) / Unmute (**)	Mutes or unmutes the object. Muting of control stations, conventional channels, and trunked systems depends on the Mute Mode selected in the Sound Settings . For details, see Other Settings. Available for talkgroups, site All Calls, all control stations, conventional channels, and trunked systems.
Radio Check (😓)	Sends the Radio Check command to the desired radio. Available for DMR radios.

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.
Remove from Map (🗟)	Hides an object on a map. If the action is selected for a category, members of the category become hidden on the map.
	For proper work requires the selected GPS check box in the Location tab of the Radio Properties window.
	For details, see <u>Radio Location Properties</u> .
	Available for all radios, WAVE users, and categories.
Send Call Alert (🎏)	Sends the Call Alert command to the desired radio.
	Available for DMR radios.
Send Message (☑)	Opens the Send Message window in which you can type and send messages or manage message templates.
	For details, see <u>Send Message Window</u> .
	Available for DMR radios, talkgroups, and categories.
Show Address (🐿)	Shows the radio address in the log box of the open radio Call
	Window. Opens the window if it is closed.
	For proper work requires the selected GPS check box in the Location tab of the Radio Properties window.
	For details, see <u>Radio Location Properties</u> .
	The radio address is based on the current GPS coordinates. If the
	address is unavailable, the <i>No Coordinates</i> entry appears in the log box.
	If you reopen the Call Window, the address disappears from the
	log box.
	Available for all radios and WAVE users.

Action	Description
Show Server 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. Available for radioservers.
Show Track (<)	Shows the track of the radio for a specific period of time. For proper work requires the selected GPS check box in the Location tab of the Radio Properties window. For details, see Radio Location Properties. You can select the following periods to show the track: • For the last hour • For a day • Set period (a custom period) 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 Set period 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 all radios.
Selection of Audio Output Device (🌓)	Provides a list of audio output devices using which the sound of the object 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. Available for talkgroups, site All Calls, all control stations, conventional channels, and radioservers.</no>

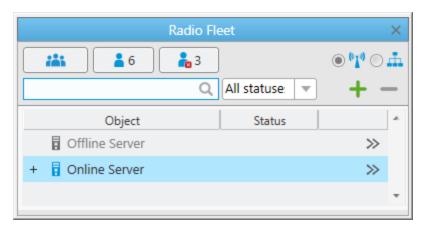
Action	Description
Set Location (🍨)	Provides the ability to set the location of a radio on a map manually. If no map panel is open in the main area, the action opens the Select Map window from which you can select the map to set the radio location.
	For proper work requires the selected GPS check box in the Location tab of the Radio Properties window. For details, see <u>Radio Location Properties</u> . If GPS is enabled, the manually set location has a validity period which is defined in the Positioning Systems window. For details, see <u>Positioning Systems</u> . If GPS is disabled, the manually set location is always valid. For information on the radio location setting, see <u>Setting Radio Location</u> .
	Available for all radios.
View Properties / View Radio Properties (🖺)	Opens the properties window of the object. Available for all objects except for categories.

See also:

- Radio Fleet
- <u>Channels</u>
- Radios
- Map Control Panel

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 <u>Radioservers</u>.



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 (1)

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 (>>>)

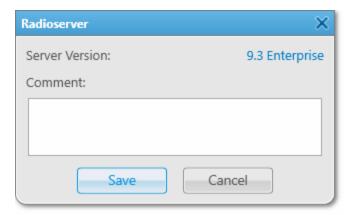
Opens the Actions menu of the radioserver.

For information on the actions, see Actions.

3.4.2.1 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

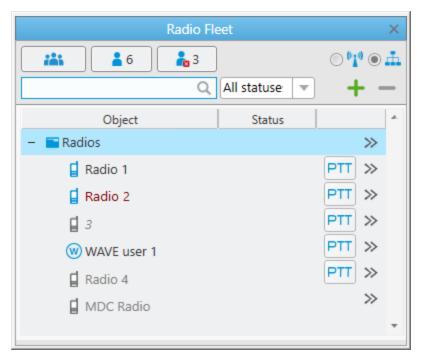
A box in which you can type any additional information about the radioserver. For example, that the radioserver is redundant.

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 grey (dimmed) indicates registered offline radios.
- Italic indicates deregistered online radios.
- · Dark red indicates radios in Emergency Mode.

Location status icon

The icon appears if geotracking is turned on for the radio. It appears as Valid Location Icon (or Invalid Location Icon ().

For information on radio geotracking, see <u>radio location settings</u>.

Status of the radio

A 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 button

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 <u>Calls Indication</u>. PTT button is unavailable for non-MOTOTRBO radios (those with MDC ID or 5 Tone ID).

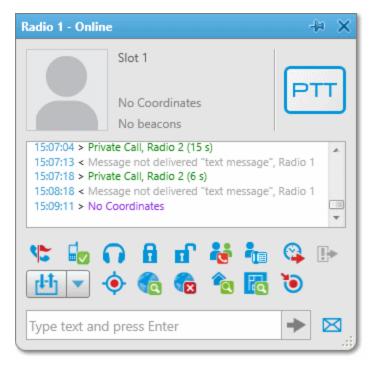
Actions button

The button opens the radio or WAVE user Actions menu.

For details, see Actions.

3.4.3.1 Call Window of Radio

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 Windows 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 tile 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 <u>Call Windows Settings</u>.

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 <u>Call Windows Settings</u>.

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 Calls Indication.

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 Actions.

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.

3.4.3.2 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:

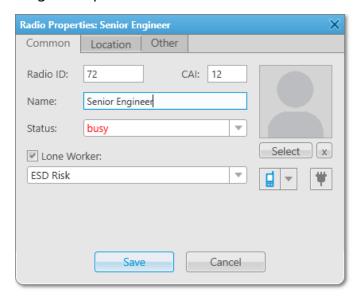
- The **Common** tab. For details, see <u>Common Radio Properties</u>.
- The **Location** tab. For details, see <u>Radio Location Properties</u>.
- The **Other** tab. For details, see <u>Radio Custom Properties</u>.

NOTE

The **Other** tab appears only if custom properties were created for radios. For details, see <u>Custom Radio Properties</u>.

3.4.3.2.1 Common Radio Properties

The **Common** tab provides general parameters of a radio.



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

Radio ID

The parameter appears only if the **CAI + Radio ID** option is selected in <u>General Settings</u>. It 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 or 5 Tone format. If you point to the box, the tooltip appears with the alternative identification format (IP address).

IP address

The parameter appears only if the **IP address** option is selected in <u>General Settings</u>. It refers to the one of the MOTOTRBO radio identification format. If you point to the box, the tooltip appears with the alternative identification format (using Radio ID and CAI).

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** or **IP address**. 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** or **IP address**. Permitted symbols are standard for 5 Tone. You cannot edit this parameter after you have added the radio.

CAI

The parameter appears only if the **CAI + Radio ID** option is selected in <u>General Settings</u>. It refers to as "common air interface" and is the part of the MOTOTRBO protocol.

For information on CAI, see "CAI Network" in *MOTOTRBO CPS Online Help*. This parameter is the decimal number.

Name

The parameter stores the name of the radio given by the dispatcher. If no name is given here, the Radio ID parameter or the alias from the SmartPTT Radioserver metadata database is used. For details, see "Metadata" in *Radioserver Configurator User Guide*.

WARNING

Metadata aliases are used until you edit the radio name in SmartPTT 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:

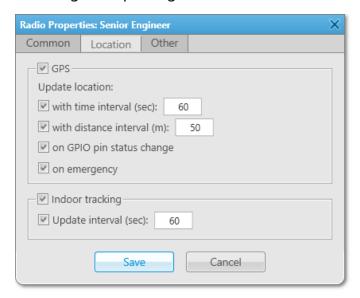
- File format is .ico with the single bitmap embedded.
- Resolution is 48 × 48 px.

Telemetry (♥)

Opens the **Telemetry for** window where you can assign the telemetry action to the radio. For details, see <u>Telemetry</u>.

3.4.3.2.2 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 "GPS" in Radioserver Configurator User Guide.

With time interval

The parameter sets the position update interval for the radio. This parameter should not be smaller than its equivalent in SmartPTT Radioserver. Contact your system administrator to receive the minimum update interval.

With distance interval

The parameter sets the condition for initiation of the immediate radio location request. The request necessity is determined based on the regular location updates set in SmartPTT Radioserver.

On GPIO pin status change

If selected, the immediate radio location request sends each time the assigned action is performed.

For details, see **Telemetry**.

On emergency

If selected, the immediate radio location request sends when Emergency Alarm or Emergency Call is received from the radio.

Indoor tracking

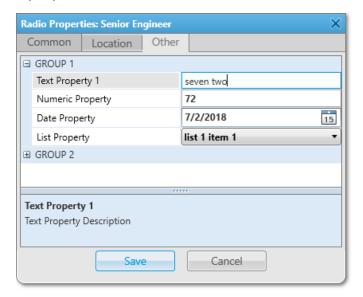
The check box unlocks the radio-specific update interval of indoor coordinates.

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.

3.4.3.2.3 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 <u>Custom Radio Properties</u>. 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 (is) in the right corner of the box opens the calendar for selecting the date.

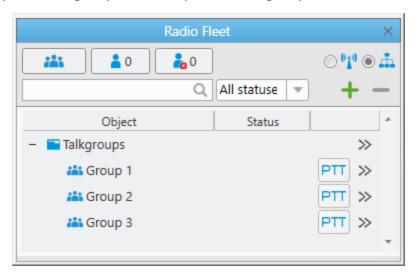
List

Provides a number of predefined 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.

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.

The same icon is used for site All Calls.

For information on site All Calls, see Site 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 statuses. PTT button always appears in the panel, even if voice calls are unavailable.

For information on voice call statuses, see **Calls Indication**.

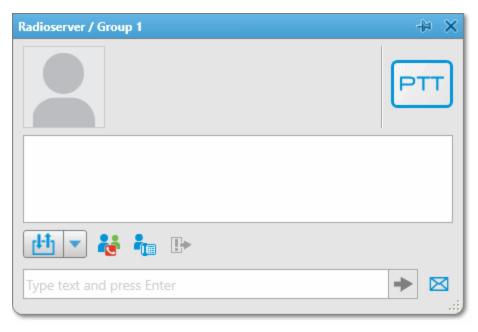
Actions (>>>)

Opens the Actions menu of a talkgroup.

For information on actions, see Actions.

3.4.4.1 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 <u>Call Windows Settings</u>.

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 <u>Call Windows Settings</u>.

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 <u>Call Windows Settings</u>.

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 **Calls Indication**.

Log Box

Displays all events connected with the talkgroup.

Outgoing Telemetry (41)

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**.

Actions

The set of action buttons that you can use to perform the corresponding actions involving the talkgroup.

For information on actions, see Actions.

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**.

3.4.4.2 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 (1)** 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 <u>Telemetry</u>.

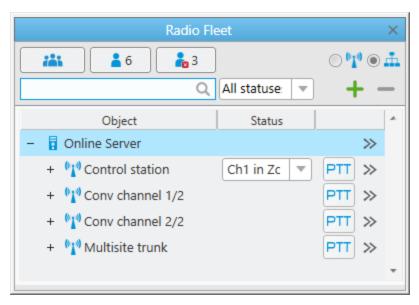
Save

Saves the comment typed in the **Comment** box.

3.4.5 Channels and Systems

Objects that visually group radios, talkgroups, and Site All Calls are access points to radio systems or radio channels.

Technically, these objects are control stations, system-wide and site-specific channels of IP Site Connect systems, trunked radio systems, and WAVE Server access points.



These objects are available only if you click **Filter by channel (11)** 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, and Site All Calls. If the connection to the system is lost, the control disappears and all sub-entries are hidden.

Channel icon (11)

All channels have the same icon that cannot be changed.

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)

Channel selector provides you with capability to change the radio 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.

PTT button

PTT button always appears for channels, even if voice calls are unavailable to SmartPTT Dispatcher. It is responsible for system-wide All Call feature. The button provides the standard indication of the call status.

For details, see Calls Indication.

NOTE

If voice calls are unavailable and you click PTT, the button will show the call establishment indication only.

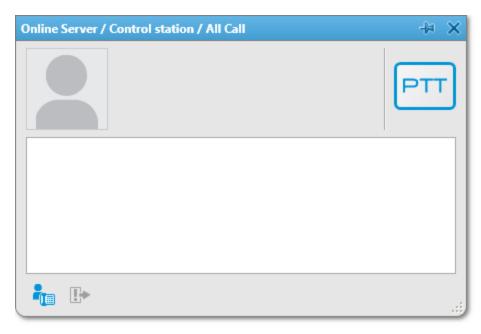
Actions button

The button opens the channel Actions menu.

For details, see Actions.

3.4.5.1 Channel Call Window

You can open the All Call window by clicking the channel entry in the **Radio Fleet** panel. The interpretation of the "All Call" name depends on the object name that must clearly explain what type of call is available.



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 <u>Call Windows Settings</u>.

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 <u>Calls Indication</u>. 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 (🔓)

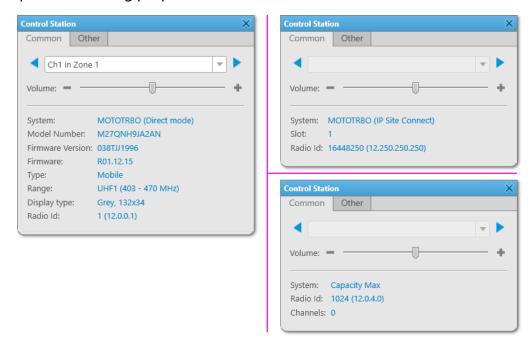
Opens the window with the list of telephone users and dial pad.

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.

3.4.5.2 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

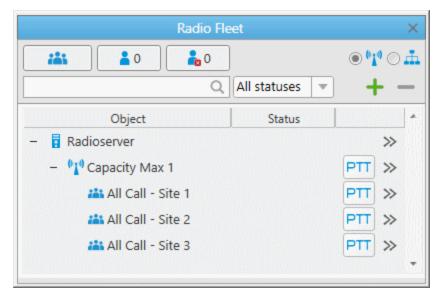
The volume slider adjusts the volume of the radio channel. It affects volume of radios and talkgroups which are associated with this channel.

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 about 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).

3.4.6 Site All Calls

In the **Radio Fleet** panel, site All Call entries represent site All Calls that were added on SmartPTT Radioserver for multisite trunked systems.



The site All Call entries are displayed only when the **Filter by channel (11)** view is active.

Each site All Call entry provides the following elements:

Site All Call Icon (🚢)

The icon that is used to display a site All Call in the Objects Table. You cannot change the icon.

The same icon is used for talkgroups.

For information on talkgroups, see <u>Talkgroups</u>.

Site All Call Name

The name that is set on SmartPTT Radioserver. You cannot change the name of the site All Call in SmartPTT Dispatcher.

PTT Button

Initiates a 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 <u>Calls Indication</u>.

Actions (>>>)

Opens the actions list of a site All Call.

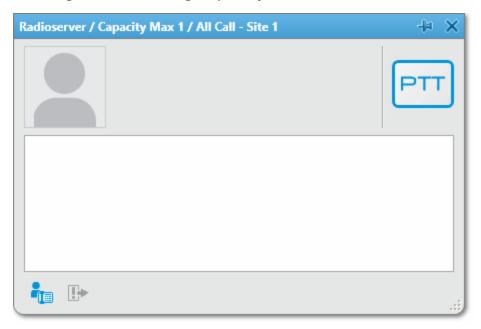
For information on actions, see Actions.

3.4.6.1 Site All Call Window

The site All Call window provides information on a site All Call, and controls for interacting with it.

Depending on the settings, the Call Window appears automatically at occurring events connected with the site All Call. For details, see <u>Call Windows Settings</u>.

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.



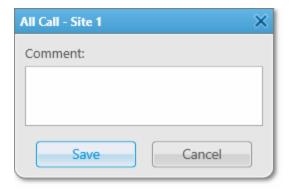
The window is identical to the channel Call Window.

For information on the channel Call Window, see Channel Call Window.

3.4.6.2 Site All Call Properties

In the properties window of a site All Call, you can leave comments for other users of SmartPTT Dispatcher.

You can open the window by right-clicking the desired site All Call entry or selecting the **View Properties (1)** from the Actions menu of the site All Call.



The window provides the following elements:

Comment

A box in which you can type comments for other users of SmartPTT Dispatcher.

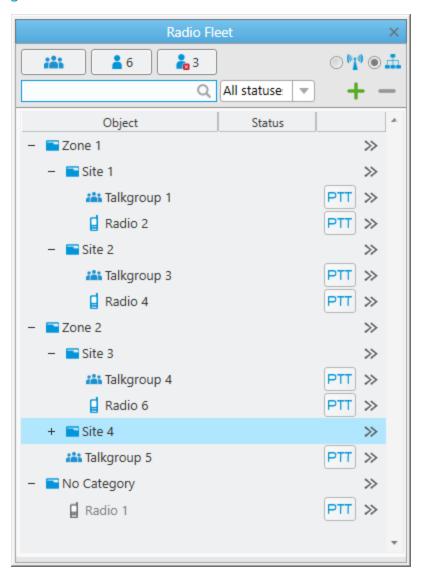
Save

Saves the comment typed in the **Comment** box.

3.4.7 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.

3.4.8 Calls Indication

In the **Radio Fleet** panel and objects Call Windows, the call indication is represented by PTT buttons in various colors.

The indication can be the following:

Indication	Description
Light orange (<u> </u>	Establishing connection with the called radio, talkgroup, etc.
Orange(💴)	Transmission to the radio, WAVE user, talkgroup, etc.
Light green (💷)	Waiting for the radio to accept the call from the dispatch system. Available in Capacity Max systems only.
Green (🔤)	Transmission from radios and <u>WAVE users</u> , or a radio or WAVE user remote monitoring process.
Blue (💴)	None of the parties transmit or receive voice (hang time). The radio, WAVE user or the dispatcher can continue the call by pressing the PTT button within the hang time. After the hang time expires, pressing the PTT button will initiate a new call. In Capacity Max systems the dispatcher can end the call during the hang time by pressing the hotkey which is assigned to the End Call action, or by right-clicking the call entry in the Calls panel. For details, see <u>Control Devices</u> and <u>Calls</u> .

See also:

- Radio Fleet
- Call Window of Radio
- Talkgroup Call Window
- Site All Call Window
- Channel Call Window
- Radios
- <u>Channels</u>
- Voice Calls

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 below 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 T	Table, perform the following actions:
To activate the channel view,	click Filter by channel (11) .
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 below 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:

- Log on to SmartPTT Dispatcher as administrator.
- Obtain the Radio identification parameter (Radio ID and CAI, or IP address, or MDC ID, or 5 Tone ID).

Procedure:

- 1. If closed, open the **Radio Fleet** panel.
- In the Radio Fleet panel, click Add Radio (+).
 The Radio Properties window opens.
- 3. In the **Radio Properties** window, select the **Common** tab.

4. Select the **Radio ID** format:

To add a DMR radio,	perform the following actions:
	 Click the underlined parameter in the upper-left corner of the tab.
	In the Radio ID type window, select Radio ID or IP address.
	3. In the box next to the selected format, type the IP address of the radio or the radio ID.
	 If appears, in the CAI box, type the CAI parameter of the radio.
To add an MDC radio,	perform the following actions:
	 Click the underlined parameter in the upper-left corner of the tab.
	2. In the Radio ID type window, select MDC ID .
	3. In the box next to the selected format, type the radio ID.
To add a 5 Tone radio,	perform the following actions:
	 Click the underlined parameter in the upper-left corner of the tab.
	2. In the Radio ID type window, select 5 Tone ID .
	3. In the box next to the selected format, type the radio ID.

- 5. Configure the general radio parameters. For details, see <u>Configuring General Radio Parameters</u>.
- 6. Configure the radio location update settings. For details, see <u>Setting Up Radio Location Update Settings</u>.
- 7. Configure the custom radio properties. For details, see <u>Configuring Custom Radio Properties</u>.

Postrequisites:

To cancel the procedure, in the **Radio Properties** window, click **Cancel**.

3.4.9.2.1 Configuring General Radio Parameters

Follow the procedure below 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, select the **Common** tab.
- 3. If no metadata is configured for the radio, in the **Name** box, type the radio name.

WARNING

This name overrides the metadata name that can be set in SmartPTT Radioserver. The action cannot be reversed.

- 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.

3.4.9.2.2 Setting Up Radio Location Update Settings

Follow the procedure below to set up the rules of the radio position update using outdoor and indoor coordinates received from SmartPTT Radioserver.

Prerequisites:

Determine the following:

- Outdoor position necessity and update interval.
- Indoor position necessity and update interval.

Procedure:

- 1. Open the **Radio Properties** window. For details, see <u>Radio Properties Window</u>.
- 2. In the **Radio Properties** window, select the **Location** tab.
- 3. To update the outdoor position of the radio, perform the following actions:
 - a. Select the **with time interval (sec)** check box.
 - b. In the box next to the **with time interval (sec)** check box, type the update interval.

4. To update the outdoor position when the radio moves too far from the current position on map, perform the following actions:

- a. Select the **with distance interval (sec)** check box.
- b. In the box next to the **with distance interval (sec)** check box, type the distance.

NOTE

This mode does not change the parameters of the location request from SmartPTT Radioserver.

- 5. To update the outdoor position on the telemetry signal reception, select the **on GPIO pin status change** check box.
- 6. To update the outdoor position on Emergency Alarm or Call reception from the radio, select the **on emergency** check box.
- 7. 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 box next to the **Update interval (sec)** check box, type the update interval.

3.4.9.2.3 Configuring Custom Radio Properties

Follow the procedure below to configure the custom radio properties.

Procedure:

- 1. Open the **Radio Properties** window. For details, see <u>Radio Properties Window</u>.
- 2. In the **Radio Properties** window, select 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 box appears, type the relevant information.

NOTE

Numeric property box does not allow you to enter any characters except decimal digits.

- 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 <u>AdapTel</u> on SmartPTT website.

IMPORTANT

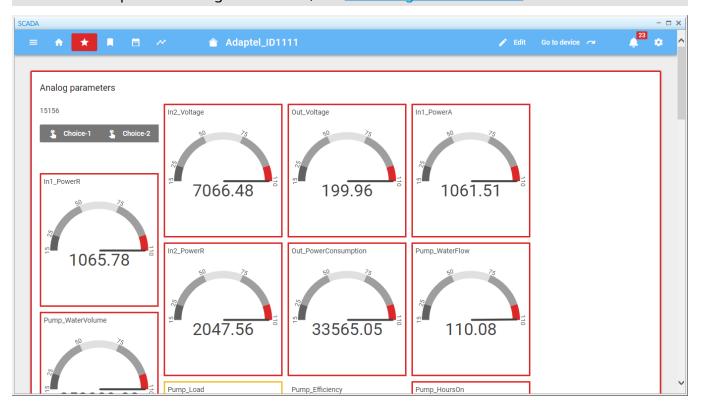
Access to the SCADA module functionality requires installing the SCADA license. For details, see <u>Licenses</u>.

Tools SCADA Module

You can open the **SCADA** panel by clicking **Tools** → **SCADA** on the menu bar.

NOTE

The **SCADA** option appears in the **Tools** menu only after the SCADA module activation in SmartPTT Dispatcher settings. For details, see <u>Activating SCADA Module</u>.



The SCADA module in SmartPTT Dispatcher provides the ability to perform the following actions:

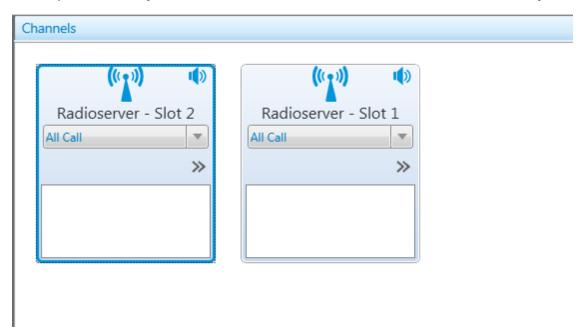
- Monitor, gather, and process real-time telemetry data.
- · Control parameters of SCADA points.
- Configure response rules for events registered in the connected SCADA system.
 For information on setting rules, see <u>Custom Rules</u>.

For information on the SCADA module functionality in SmartPTT Dispatcher, see "SCADA Module" in *SCADA Module Setup and User Guide*.

Tools Channels

3.6 Channels

The **Channels** panel allows you to see all the active control stations available in the system.



In this panel you can do the following:

- Make an All Call or a group call depending on the selected type of call.
- Mute or unmute the channel. If the channel is muted, the dispatcher won't hear the talkers on the channel.
- View information about the current call on the channel: the call state, the called party and the call originator.
- Perform other actions from the Actions Menu which can differ depending on whether the channel is physical or virtual.

For information on the Actions Menu of control stations, see Actions.

If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, during a call the name of the user authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

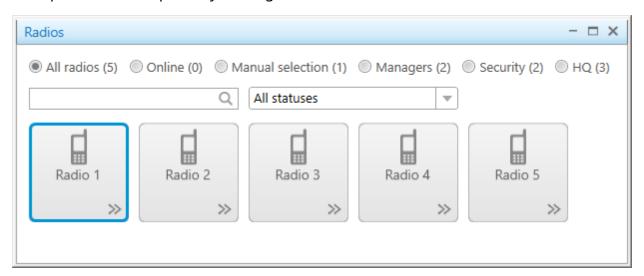
3.7 Radios

The **Radios** panel provides controls for monitoring and interacting with radios and WAVE users 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 or WAVE user Actions menu by clicking the Actions (>>>) button in the bottom right corner of the tile. For details, see Actions.
- Open the radio or WAVE user Call Window by right-clicking the tile. For details, see <u>Call</u> Window of Radio.
- Initiate a private voice call to the radio or WAVE user. For details, see <u>Initiating Private Voice</u> Calls.
- Initiate a multiselect call to multiple radios and/or WAVE users. For details, see <u>Initiating</u>
 Multiselect Calls.

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 and WAVE users displayed in the **Radios** panel by default and customizable criteria. The following filtering options are available:

• **All Radios** displays all radios and WAVE users registered in SmartPTT Dispatcher (both online and offline).

- **Online** displays the radios and WAVE users that are currently online.
- Manual selection displays the radios and WAVE users 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 and WAVE user 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 and WAVE users that belong to it. For details, see <u>Categories</u>.

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 and WAVE users that will be displayed after selecting this filtering option.

Search Box

Provides the ability to display only the radios and WAVE users 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 (\times) in the right part of the box.

Statuses

Provides the ability to display only the radios and WAVE users with the status selected from the list. For details, see <u>Statuses</u>.

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 and WAVE users 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.

Radio Object Tile

The element representing a radio or WAVE user registered in the radio system. The tile contains the name or ID of the radio object specified in the radio or WAVE user properties. For details, see Radio Properties Window.

NOTE

If the **Show radio user name** check box is selected in **General Settings**, the user authorization service is activated on SmartPTT Radioserver, and users are added, the name of the user that is currently authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

The radio and WAVE user tiles provide the following indication:

- The Missed Call () icon indicates that there are missed calls from the radio or WAVE user. Next to the icon, the number of missed calls is displayed.
- The Valid Coordinates () and Outdated Coordinates () icons indicate that the radio or WAVE user GPS coordinates are valid or outdated/missing. The icons appear only if the GPS service is activated and the coordinates update parameters are specified in the radio location settings. For details, see <u>Radio Location Properties</u>.
- The color of the tile indicates the current status of the radio or WAVE user. The following table contains description of available color indication options:

Tile Color	Description
Radio >>>	The Grey tile color indicates that the object is currently offline (the device is turned off or out of the network coverage).
Radio >>>	The Light blue tile color indicates that the object is online.
Radio	The Light orange tile color indicates the ongoing process of establishing connection to the object.
Radio	The Orange tile color indicates an outgoing transmission from SmartPTT Dispatcher to the object.

Tile Color	Description
Radio	The Green tile color indicates an incoming transmission from the object to SmartPTT Dispatcher, including remote monitoring transmissions. The Light green tile color indicates the period of waiting for the object to answer the SmartPTT Dispatcher call. Applicable to Capacity Max systems only.
Radio >>>	The Blue tile color indicates the ongoing hang time, during which none of the parties transmit or receive voice. The radio, WAVE user or dispatcher can resume the call by pressing the PTT button. After the hang time expires, pressing the PTT button will initiate a new call. In Capacity Max systems dispatchers can end the call during the hang time by pressing the hot key that is assigned to the End Call action, or by right-clicking the call entry in the Calls panel. For details, see <u>Control Devices</u> and <u>Calls</u> .

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.

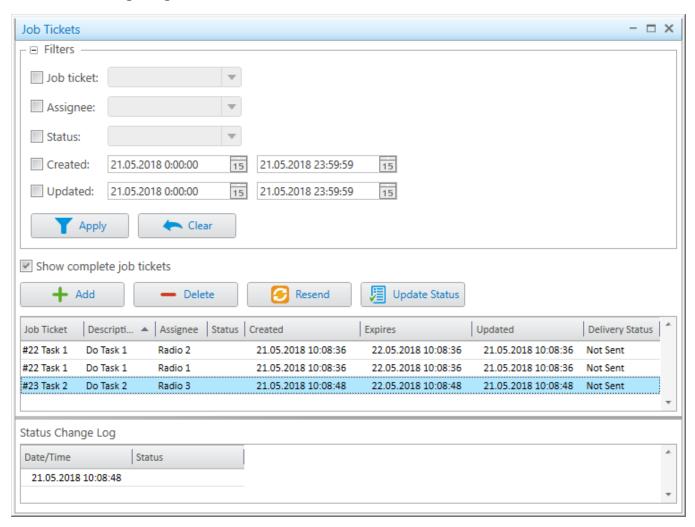
NOTE

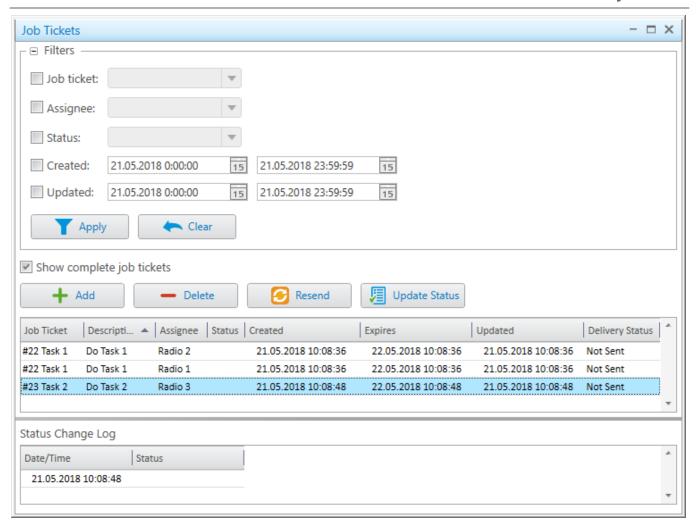
Only radios equipped with a display can receive job tickets. The radios that do not support the **Job Tickets** functionality but have a display receive job tickets as messages, for example *<JTS> Job Ticket? 1 Create weekly report*. To check whether the radio supports this functionality, contact your 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



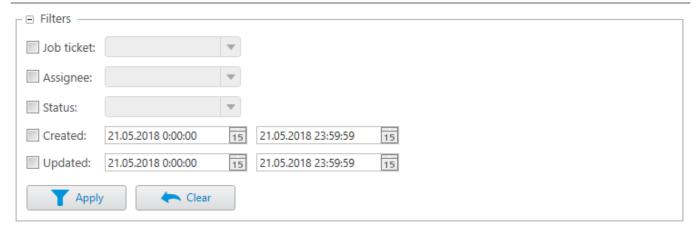


For information on managing job tickets, see the sections below.

3.8.1 Filters Area

In the **Filters** area, you can filter the job tickets displayed in the <u>Job Tickets Table</u> by one or multiple parameters.

By default, the filters area is collapsed. You can expand it by clicking the Expand button (\blacksquare) located in the upper-left corner of the panel, to the left of the **Filters** area name.



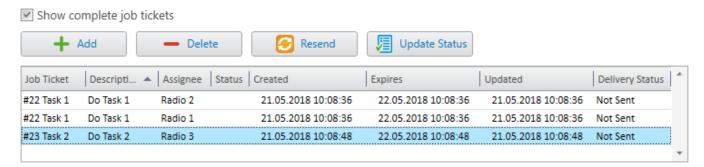
The **Filters** area provides the following controls for filtering the entries in the Job Tickets Table:

- 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 <u>Management Area</u>.
- 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 complete job tickets

If selected, displays all entries in the <u>Job Tickets Table</u> irrespective of their status. 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 <u>Job Tickets Table</u>. For details, see <u>Adding Job Tickets</u>.

If the **Send notification to radio when uncompleted job ticket was deleted by dispatcher** check box is selected in the <u>Job Ticket Statuses</u> window, the assignees of the deleted job tickets receive a text message with information on the job ticket cancellation.

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 <u>Job Ticket Statuses</u>.

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 <u>automatic numbering</u> functionality and the job ticket name that is set during the <u>Adding Job Tickets</u> procedure.
Description	The job ticket description that is set during the Adding <u>lob Tickets</u> procedure.
Assignee	The radio or talkgroup to which the job ticket was sent. The parameter is set during the <u>Adding Job Tickets</u> 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 performed by members of the talkgroup are available in the Status Change Log table.

Column Name	Description
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 <i>Delivered</i> .
	• 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

Column Name	Description
	not receive the job ticket if it appears online after the validity period expiration.
	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 <u>Job Tickets Table</u> is selected. It provides information on the selected job ticket updates and displays the history of the status changes in the table format.

Status Change Log



The Status Change Log Table consists of the following columns:

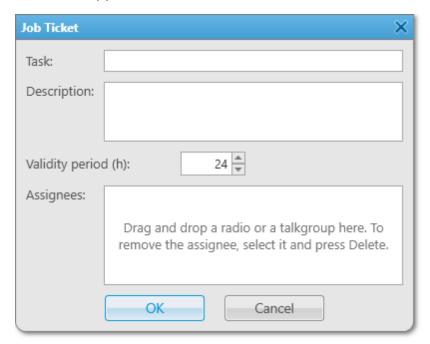
- The **Date/Time** column contains date and time of the selected job ticket status update.
- The **Status** column contains the status that the selected job ticket acquired after the current update.

3.8.4 Adding Job Tickets

Follow the procedure below 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** \rightarrow **Job Tickets**.
- 2. In the Management area, click the **Add** button. The **Job Ticket** window appears.



- 3. In the **Task** box, type the name of the job ticket.
- 4. In the **Description** box, type a short description of the job ticket. The maximum description length is 200 symbols.
- 5. In the **Validity period (h)** 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 below to filter the job tickets in the Job Tickets Table. For information on Job Tickets Table, see <u>Management Area</u>.

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:

 Monitoring panel provides graphical representation of the voice and data received from MOTOTRBO repeaters.

For details, see **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**.

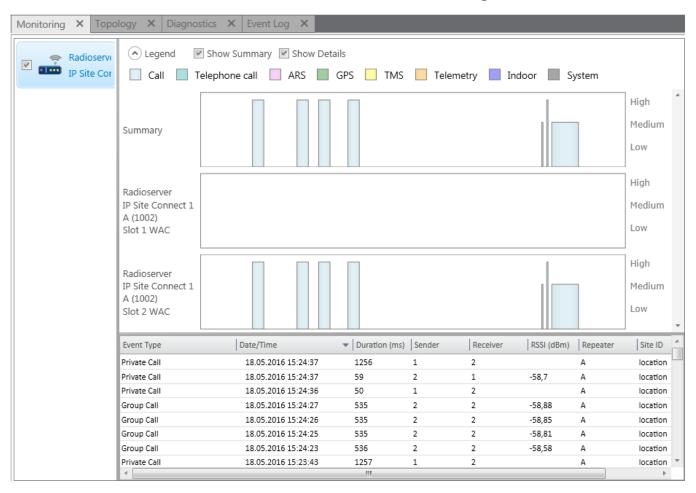
For information on these features see the corresponding sections below.

3.9.1 Monitoring

Monitoring is a graphical representation of data and voice received from MOTOTRBO repeaters, which allows observing the ongoing system operation.

Each logical channel has a section for displaying transmitted packets in the form of colored vertical bars. The height of the bar corresponds to the level of the received signal; and the color corresponds to the event type according to the legend.

In order to see the radioserver and its network in the **Monitoring** tab, ensure that the Monitoring service is enabled for this radioserver in SmartPTT Radioserver Configurator.



To use Monitoring in SmartPTT Dispatcher you should activate it in the SmartPTT Radioserver Configurator program. You can learn how to activate and configure it from *Radioserver Configurator User Guide*.

Graphical representation of data packets is displayed only for the selected network.

NOTE

The list on the left shows only active networks of SmartPTT Radioserver. If a network becomes inactive, it disappears from the list.

Show Summary: When selected, events from different slots appear in one block.

Show Details: When selected, events from different slots appear in separate blocks.

When checking both parameters, all the three blocks are displayed.

Data is displayed in blocks:

Name	Description	
Call	All Call, Group, Private, and Emergency Calls	
Phone Call	Phone Private and Phone Group Calls	
Registration	Information on the radio availability in the network (ARS service)	
Location	Radio and WAVE user GPS coordinates (GPS service)	
Message	Text messages (TMS service), job tickets and job ticket statuses	
Telemetry	Telemetry commands and signals	
Indoor	Information on the radio location inside buildings that is received from beacons (Indoor Tracking)	
System	System events from and to MOTOTRBO equipment (data confirmation, private call confirmation, alarms, remote monitoring (only a command), Radio Check and other system events)	
Monitoring	Remote monitoring of a radio. If the Monitoring command is sent successfully, a private call is automatically initiated after it.	
Call Alert	Notifications of an incoming call	

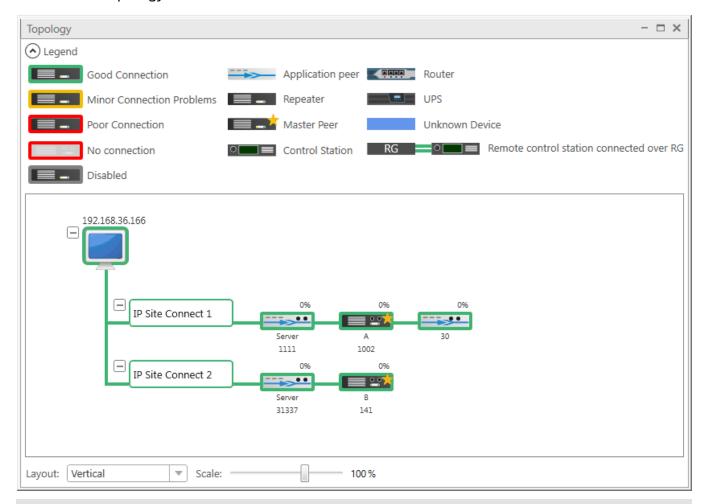
Levels displayed on the right to the blocks (*High*, *Medium*, *Low*) correspond to the RSSI level ranges: -80 or more (*High*), -80 to -100 (*Medium*) and -100 or lower (*Low*).

The event log at the bottom of the screen gives more detailed information, namely the type of transmitted data (ARS, GPS, Message, Emergency Call, etc.), date and time of the event, its duration, initiator's and addressee's IDs, repeater ID and RSSI level, site ID (applied to LCP systems only), network name.

3.9.2 Topology

Topology is a schematic representation of active networks. A network topology is set in SmartPTT Radioserver Configurator and displayed in SmartPTT Dispatcher.

If network configuration is not set in SmartPTT Radioserver Configurator, the network topology will be generated automatically based on the information received from the available network repeaters. 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.



NOTE

In order to see the radioserver and its network in the **Topology** tab, ensure that the **Monitoring** service is enabled for this radioserver in SmartPTT Radioserver Configurator.

The **Topology** tab displays objects of a network depending on their type or condition.

Topology Objects

Topology Object	Description
	SmartPTT Radioserver
IPSC 1	Network in folded state
0.00	Repeater is not connected
•••	Virtual repeater (i.e., SmartPTT Radioserver), or MNIS
	Slave hardware repeater
	Master hardware repeater
	Master virtual repeater
	Repeater is not connected, but it is included in the peer map
	Repeater is connected, but it is not in the peer map
	Location in a folded state
Tomsk new new router	Location in an unfolded state

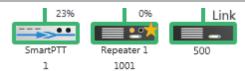
Topology Object	Description
-	UPS (Uninterruptible Power Supply)
ė inin	Router
	Control station
RG <u></u> □□■	Remote control station connected over RG
	Unknown device (any other device)

The **Topology** tab indicates link types between objects of a network.

Link Types

Link Type	Description	Visual Element	Example
Wireline connection	Connection to repeater is wireline	Solid line	
Wireless connection	Connection to repeater is wireless	Dashed line	
Normal link (no alarms)	Device is connected or no alarms registered on device	Green line	
Minor alarms	Minor alarm is registered on device or there are more than 5 packets lost or corrupted	Yellow line	
Major alarms	Major alarm on device or no connection	Red line	
Dead link	Repeater is turned off	Gray line	

Repeater loading on both logical channels is displayed above each repeater. If you use a repeater to link one site to another site in Backhaul Systems, 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, the maximum value is 100%, when only one logical channel is used – 50%.

Repeater ID is displayed at the bottom of the repeater name.

A busy channel is represented by a yellow LED on the repeater.



Application peer ID is specified in SmartPTT Radioserver Configurator (Peer ID).

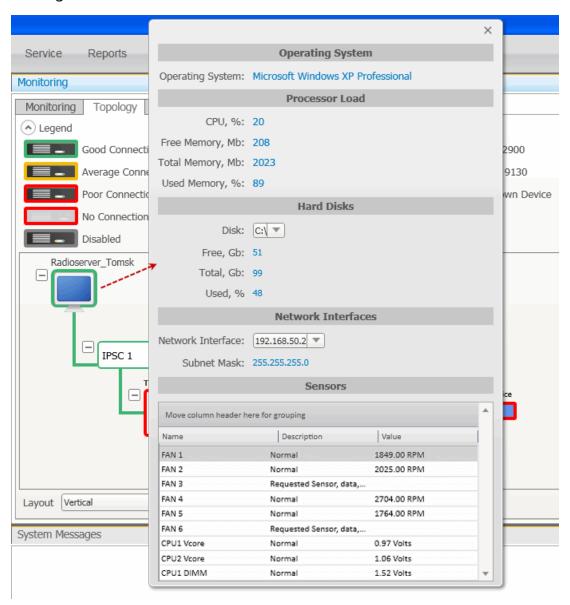
NOTE

All the repeaters used in one network should have unique ID's.

Radioserver

To fold and unfold the network, right-click on the radioserver and select **Fold** or **Unfold** respectively. To fold and unfold the desired node, click Fold (\oplus) or Unfold (\bigcirc) respectively.

To view radioserver parameters and the ongoing performance information, right-click on the radioserver image and select **Information**.



Operating System: Provides information on the OS used on the server.

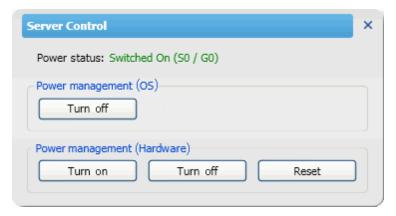
Processor Load: Displays current CPU load and other information about PC memory.

Hard Disks: Provides information on the available hard disks of the PC and their characteristics.

Network Interfaces: Displays the network interface and the sub network mask of the PC.

Sensors: Displays platform status (for example, system temperatures, voltages, fans, power supplies and chassis intrusion).

To operate remotely, right-click on the radioserver image and select **Control**. To be able to control the radioserver remotely, make sure that IPMI parameters are set in the settings of the radioserver. If the IPMI settings are correct, the following window will open:



Power Status: Shows the current status of the radioserver. There can be three statuses:

- Switched On
- Switched Off
- N/A Unknown (in this case check that <u>IPMI settings</u> are correct)

Power Management (OS): Allows to turn off the radioserver at the OS level.

Power Management (Hardware): Allows to turn on/off or to hard reset the radioserver computer at the hardware level.

NOTE

If the radioserver computer is blocked, you can turn off the radioserver computer only at the hardware level.

If you have more than one radioserver, you can arrange them in the **Topology** tab either vertically or horizontally.

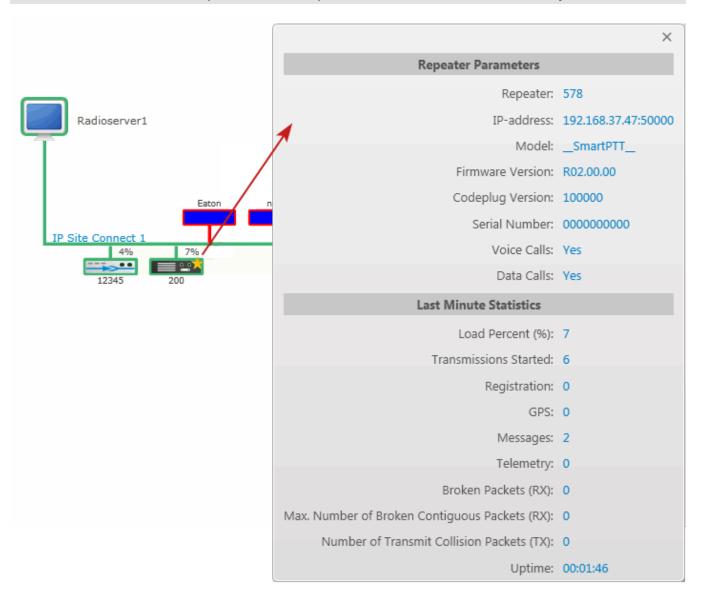
The layout can be selected in the **Layout** list at the bottom of the **Topology** tab. The selected layout is applied not only to radioserver elements, but to all elements, which can be folded and unfolded.

Repeater

To view repeater parameters and statistics, right-click the repeater element, and select **Information**.

NOTE

Parameters of backhaul repeater chains repeater include its ID and model only.



Repeater parameters

Name	Description
Repeater	Repeater ID
IP-address	Repeater IP address
Model	Repeater model number
Firmware Version	Version of firmware used in repeater
Codeplug Version	Repeater parameter block version
Serial Number	Repeater serial number
Voice Calls	Ability to transmit voice (Yes, No)
Data Calls	Ability to transmit data (Yes, No)

Statistics

Name	Description
Load Percent (%)	Channel loading on repeater for the last 10 seconds
Transmissions Started	Number of times the PTT button was pressed
Registration (ARS)	Number of registration packets transmitted for the last minute
GPS	Number of GPS coordinates transmitted for the last minute
Messages	Number of text messages transmitted for the last minute
Telemetry	Number of telemetry packets transmitted for the last minute

Name	Description
Broken Packets (RX)	Number of packets (Rx) with errors, received for the last minute
Maximum Number of Broken Contiguous Packets (RX)	Maximum number of broken packets (Rx) in a row
Number of Transmit Collision Packets (TX)	Number of not transmitted packets due to collisions on the channel
Uptime	The time during which the repeater is available in the network

To operate remotely, right-click the repeater element and select **Control**. The **Repeater Control** window appears.



NOTE

You cannot operate virtual repeaters remotely, therefore, the **Repeater Control** window is available only for hardware repeaters connected to the radioserver.

Current Channel: Channel used by the repeater. Channels are set in repeater settings with the help of *MOTOTRBO CPS*.

Power, TX: Transmitter power of repeater. There are high and low modes. Bands for both modes are specified in *MOTOTRBO CPS*.

State: Allows switching the repeater to **active** or **not active** mode. When in the **not active** mode, repeater does not transmit any signals. To switch the repeater to the **active** mode, select *On* in the **State** box.

Restart: Allows restarting repeater remotely.

Apply: Applies settings specified in the **Repeater Control** window.

Close: Closes the **Repeater Control** window without making changes in the repeater settings.

Uninterruptible Power Supply (UPS)

Currently, you can select between Eaton, UPS ATS-Convers and Apc 5000 and any other UPS if you select *Unknown* in the **Type** box.

To view parameters and status information of a UPS, right-click on its symbol and select **Information**.

Identification

Name	Description
Model	UPS model
Serial Number	Device serial number
Firmware	Firmware version
IP-address	IP-address
Network Mask	Network mask

State

Name	Description
Alarm Details	Informs about issues in UPS operation
Input Power Source	Input Power Source
Output Power Source	Output Power Source
Last Battery Replacement	Date and time when battery was replaced last time

Parameters

Name	Description
Input Voltage (V)	Input voltage level (V)
Input Frequency (Hz)	Input frequency level (Hz)
Output Voltage (V)	Output voltage level (V)
Output Frequency (Hz)	Output frequency level (Hz)
Output Current (A)	Output current level (A)
Output Power (W)	Output power level (W)
Load (%)	UPS loading in percent
Battery Charge (%)	Battery charge left in percent
Charge Left (hh:mm)	Battery charge left in hours and minutes

Router

Currently, you can select between Cisco and Huawei routers and any other router if you select *Unknown* in the **Type** box.

To view parameters and other information of the router, right-click on the element and select **Information**.

Identification

Name	Description
Model	Router model
Serial Number	Router serial number

Alarms: Gives information about issues in the router operation.

Unknown Device

Unknown device is any kind of device.

To view information on the device, right-click on the element and select **Information**.

Parameters

Name	Description
System Name	Name of the device
System Description	Description of the device
Alarm Details	Informs about issues in the device operation

Location

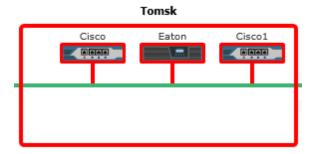
To change the way **Location** is displayed, right-click on the **Location** element, or click on the **Plus/Minus** icon. There are two display modes:

- Folded
- Unfolded

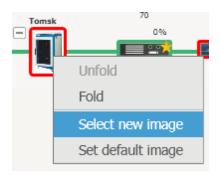
Folded: Location is displayed as an image inside a box.



Unfolded: Displays which devices, repeaters and routers are used in this location.



To change the default image of **Location**, right-click on the object. The drop-down list appears where you can either upload your own image or set the default image.



Control Station

You can open the control station menu by right-clicking the control station element. The menu provides the following elements:

- The **Information** option opens the window with information on the control station statistics and properties.
- The **Reset control station** option sends the command for the control station to turn off and then turn on automatically. This option is available for the MOTOTRBO control stations only.

NOTE

The **Reset control station** option is available only to operators who have the corresponding right. Otherwise, the option is not displayed. For details, see <u>Operators</u>.

The control station information window consists of two sections:

- Statistics
- Properties

The **Statistics** section provides information on the following aspects of the control station operation:

Name	Description
Transmissions started	Number of transmissions processed by the control station
Registration	Number of transmitted registration packets
Location	Number of transmitted location data packets
Messages	Number of transmitted text messages
Telemetry	Number of transmitted telemetry packets
Broken packets	Number of received broken packets
Max. number of broken contiguous packets (RX)	Maximum number of broken packets received in a row

Name	Description
Number of transmit collision packets (TX)	Number of packets not transmitted due to collisions on the channel
Lost Packets	Number of packets lost during the audio data transmit
Repeater load (%)	Percentage of the control station uptime during which it was busy with data transmit

The **Properties** section provides information on the control station parameters. The parameters displayed in this section depend on the control station model. For details, see "Control Stations" in *Radioserver Configurator User Guide*.

This section provides information on the following parameters:

Name	Description
Name	Name of the control station
Description	Supplemental information
Model Number	Number of the control station model
Serial Number	Serial number of the control station
Radio ID	ID of the control station in the radio system
Firmware Version	Version of the software used on the control station

RG

The RG element appears if the control station (MOTOTORBO or I/O) is connected over the RG-1000e gateway.

To view information on the RG-1000e, right-click the gateway element, and then click **Information**.

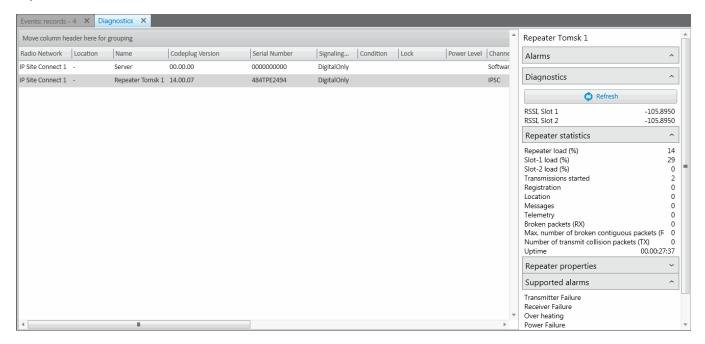
The window that appears contains information on the RG-1000e parameters on SmartPTT Radioserver. For details, see "Configuring Control Station Monitoring" in *Radioserver Configurator User Guide*.

The window provides information on the following parameters:

Name	Description
Name	Name of the gateway
Description	Supplemental information

3.9.3 Diagnostics

The **Diagnostics** panel provides information on the current state of connected MOTOTRBO repeaters and control stations.



To customize the columns displayed in the **Diagnostics** table, right-click the menu bar with the column names. The following list appears:

For repeaters used in the backhaul communication, the following additional information is provided:

Master: Shows the name of the master repeater in Backhaul Repeater Chain (BRC).

Role in Backhaul Chain: Shows if the repeater provides SmartPTT Dispatcher with access to BRC (proxy) for communicating with other sites (link), or for managing transmissions in BRC (drop).

Proxy relay: Shows the name of the proxy repeater of BRC.

NOTE

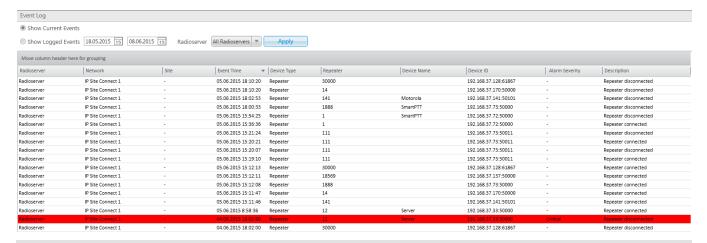
By default, all available columns are displayed in the table.

The panel to the right displays technical information on the repeater or control station that is currently selected in the table, including statistics, properties, and alarms (if there are any).

For some of the device parameters, such as the RSSI level per slot, you can obtain their current values by selecting the desired repeater or control station, and then clicking the **Refresh** button.

3.9.4 Event Log

The event log of monitoring is one of the best ways to learn about hardware alarms, for example, it informs about repeater connection or about the states of connected routers and UPS.



NOTE

Events with severity **Critical**, **Major** and **Minor** are highlighted with red, pink and yellow respectively.

Besides reviewing current events, **Event Log** provides the ability to view saved events for the particular time period.

To review events for a time period, select **Show Logged Events**, define the period limits by using the calendars for start and end dates, select the radioserver from the drop-down list and click **Apply**.

Tools Lone Workers

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:** The lone worker did not violate the rule
- Yellow: Rule violation: the event, described by the rule, has occurred. Alert Timer starts
- Red: The lone worker did not react in a specified way after Alert Timer expired

NOTE

For more information how to set rules for lone workers, see Lone Worker Rules.

To turn off the **Lone Worker** mode, click the cross button.

If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, the name of the user authorized on the radio 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 open the panel, on the **Tools** menu click **Recent Incoming Calls**.



If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, the name of the user authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

To call a radio, click it in the panel. This opens the **Call Window** of the radio.

To change the number of radios in the panel, change the <u>Recent Incoming Calls</u> settings.

3.12 Notifications

The **Notification** window informs the dispatcher that the set of rules were not fulfilled and the alarms were activated.

The following rules are displayed in the **Notifications** window:

- Rules and Alerts
- GPS Rules
- Lone Worker Rules

When the specified event happens and one of the rules triggers, the notification window appears automatically to display the alarm notification.

The usual notification is composed of the following parts:

- Caption
- Radio or <u>WAVE user</u> name and time

Tools Notifications

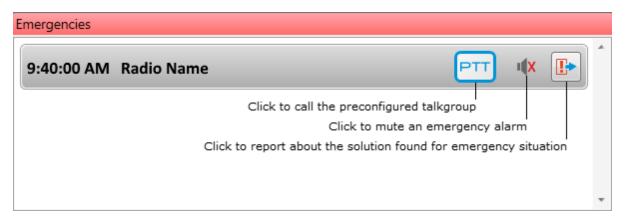
Text of the alarm



If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, the name of the user authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

3.12.1 Emergencies

The **Emergencies** panel appears in SmartPTT Dispatcher when a radio sends an emergency alarm.



Operator can perform the following actions:

- Call the talkgroup which is preconfigured in the radio via the MOTOTRBO CPS program. To start the call it should click **PTT**.
- Mute the emergency alarm by clicking **Mute** •.
- Report about the solution found for the situation. When operator clicks **Close Emergency !...**, the panel closes. However, the emergency mode of the radio stops only when it is turned off on the radio.

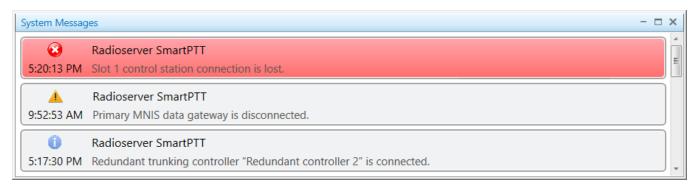
Tools System Messages

3.13 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 you select **System Messages** from the **Tools** menu on the menu bar.
- When events selected in the **Notifications Panels** window occur.
 For details, see <u>Notification Panels</u>.



You can see three types of system messages:

• Error messages (②) 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 (
 <u>h</u>) indicating minor functionality failures, which are not critical for the current system operation.
- Information messages (0) indicating functionality restoration after its failure.

A system message contains the following information:

- · Icon which specifies the system message type
- Time when the event was registered

Tools System Messages

 Name or type of the event source (a server, a database, or a radio network and its components)

• Commentary on the event

3.14 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.



4 Map

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 and <u>WAVE users</u>. You can open the Call Window by double-clicking on a radio or a WAVE user displayed on the map, or open the Actions Menu by clicking with the right mouse button.

If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, on the radio label the name of the user authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

Maps also provide the ability to set SCADA point coordinates, display them on the map and monitor their alarm states in real time.

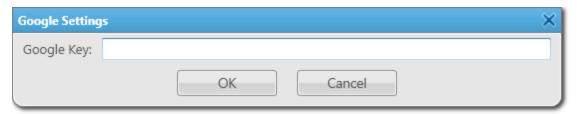
NOTE

To interact with SCADA points, you need to instal the corresponding license and activate the SCADA module in SmartPTT Dispatcher settings. For details, see <u>Licenses</u> and <u>Activating SCADA Module</u>.

Google Maps

To open Google Maps in SmartPTT Dispatcher, expand the **Map** menu on the menu bar, and then click **Google Maps** → **Open Map**.

Access to Google Maps requires a valid Google API key. The key must be specified in the **Google Key** box in the **Google Settings** window (**Google Maps** \rightarrow **Settings**).



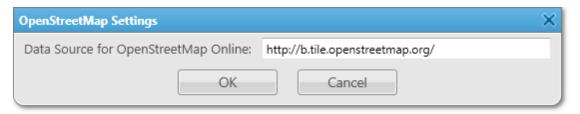
To obtain the API key, contact your system administrator.

OpenStreetMap

To open the online OpenStreetMap, expand the **Map** menu on the menu bar and click **OpenStreetMap** → **Open Online Map**.

To open an offline OpenStreetMap, expand the **Map** menu on the menu bar and click **OpenStreetMap** → **Open Map from File**. In the window that appears select a map file in the .osm or .tilesurl format.

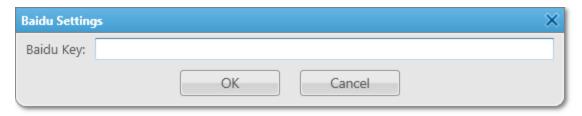
To open an OpenStreetMap from a local server, expand the **Map** menu on the menu bar and click **OpenStreetMap** → **Settings**. In the **Data Source for OpenStreetMap Online** box specify the path to the local server. If you want to get back to the default address, leave the **Data Source for OpenStreetMap Online** empty and click **OK**.



Baidu Maps

To open Baidu Maps in SmartPTT Dispatcher, expand the **Map** menu on the menu bar, and then click **Baidu Maps** \rightarrow **Open Map**.

Baidu Maps are available in SmartPTT Dispatcher only if you have a valid Baidu API key. The key must be specified in the **Baidu Key** box in the **Baidu Settings** window (**Baidu Maps** \rightarrow **Settings**).



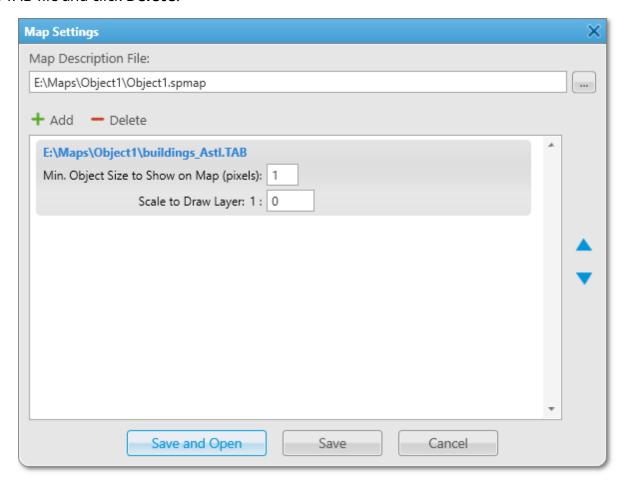
To obtain the API key, contact your system administrator.

Maps in Polish Format

To open a map in Polish format, expand the **Map** menu on the menu bar of SmartPTT Dispatcher and click **Map in Polish Format**. In the window that appears select the desired map file in the .mp format.

MapInfo

To set a MapInfo map for SmartPTT Dispatcher, expand the **Map** menu on the menu bar and click **MapInfo** → **New Map**. 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**.



Min. Object Size to Show on Map (pixels): Minimum size of the object displayed on the 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.

In the **Map Description File** box specify the path to the map file. Click **Save** when you are finished. The file will be saved in the .spmap format. To open the map right after you saved it, click **Save and Open**.

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).

Raster Maps

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 create a map based on a map image, see the <u>Raster Maps</u> section.

How to Use Maps

To move the map press and hold the left mouse button, and move where necessary. Or use arrow keys to move (this is applicable to the offline map).

To zoom in scroll the mouse wheel forward. To zoom out scroll the mouse wheel back. You can also use the keys "+"and "-" to zoom in and zoom out.

Majority of maps allow you to display the object address. To do this, right-click at any place on the map. The object address appears.

Certain types of maps may have the additional functions such as a context menu. Right-click the map. The context menu appears.



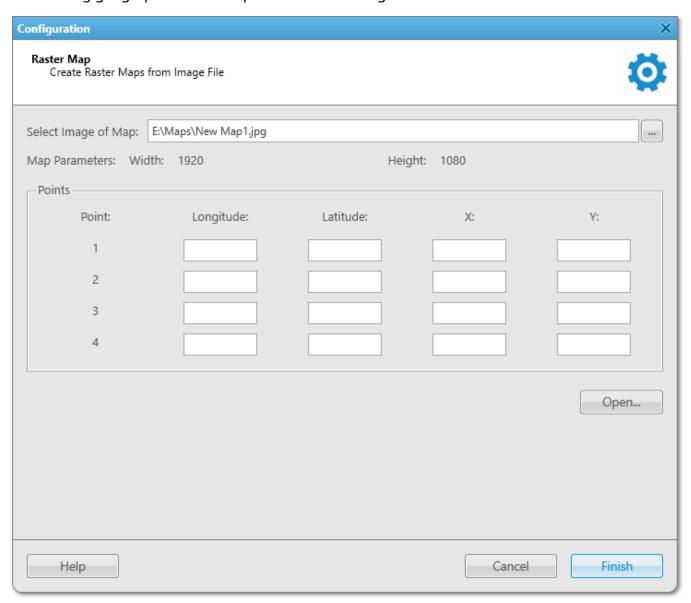
Using this menu you can:

- Search on the map
- Select elements to be labeled on the map
- Change the map appearance
- Select the map rendering type
- Display the object address at any place on the map, where the given menu is opened

Map Raster Map

4.1 Raster Map

To configure raster map settings, expand the **Map** menu on the menu bar of the SmartPTT Dispatcher window and click **Raster Map** \rightarrow **New Map**. The configuration window is displayed for creating geographic raster maps based on an image.



To create a map, select the map image using the browse button (\square).

Map Raster Map

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:

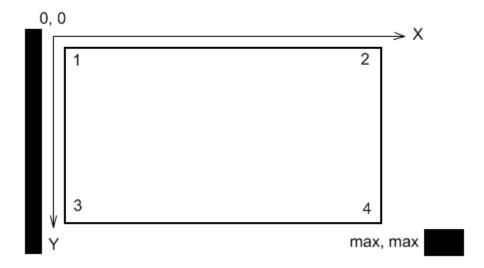
Longitude and Latitude = Degree + ((Minute * 60) + Second) / 3600 (this is a conversion from degrees, minutes and seconds into normal values), where X and Y are corresponding coordinates (in pixels) on the image.

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 <u>WAVE user</u> 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



Map Raster Map

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.

4.2 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 <u>technical support service</u> 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).

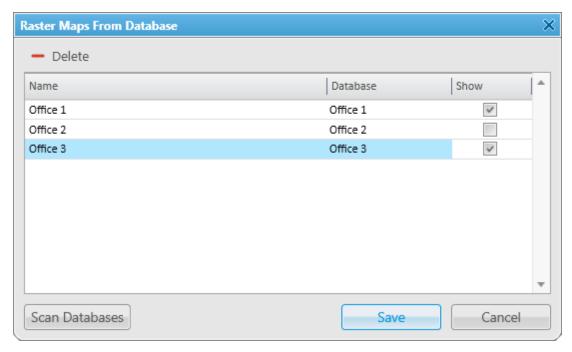
Geographical positions are necessary to anchor image points to the geographical coordinates. The list of geographical positions must contain four points at the corners of the map. In response to your request our technical support specialist will provide you the database backup of the map in the .bak 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 <u>Restore Dispatcher Settings</u>.

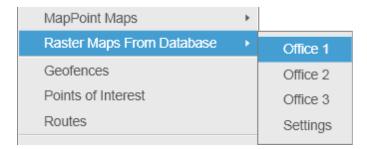
After the database is restored, expand the **Map** menu on the menu bar and click **Raster Map From Database** → **Settings**. Click **Scan Databases** in the window that appears, and you will see a list of all available maps stored in the databases of the selected server (see <u>Database Settings</u>, the **Database Server Name** box).



Name: Name of the map stored in the database. To change the name of the map, double-click on the name in the **Name** box 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 required map under **Raster 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**.

4.3 Indoor Tracking

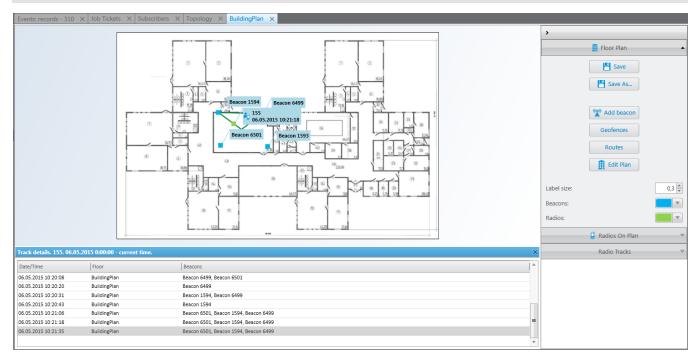
Big organizations with huge premises require constant control over their employees' displacement inside buildings. For this purpose Indoor Tracking system was implemented. Indoor Tracking system allows getting data from special beacons and transmitting it to SmartPTT Dispatcher or any other client application 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)

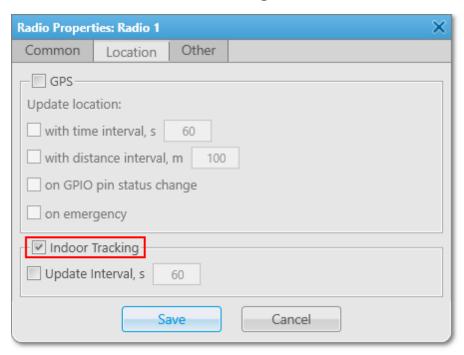
NOTE

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 required settings for SmartPTT Radioserver are described in the **Indoor Tracking** section of the SmartPTT Radioserver Configurator help file.



If the **Show radio user name** check box is selected in the **General Settings** window, the user authorization service is activated, and users are added on SmartPTT Radioserver, on the radio label the name of the user authorized on the radio is displayed next to the radio name in the parentheses. For details, see <u>General Settings</u>.

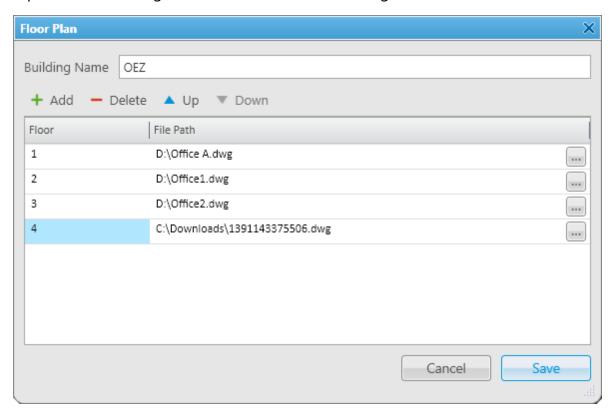
To enable Indoor support for a radio in SmartPTT Dispatcher, open the <u>Properties</u> window of the radio and in the **Location** tab select **Indoor Tracking**.



NOTE

If you use the *Motorola* source (iBeacon technology), the **Update Interval** box must be selected and specified together with the **Indoor Tracking** 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** box 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 required 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 boxes 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** box 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** box. If the beacon name is not specified in the **Beacon Name** box, the value from the **Beacon Number** box will be displayed as the beacon name on the building plan. To remove the beacon from the plan, double-click on 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 <u>Indoor Tracking</u> feature. Select the check box, to display the radio labels on the building plan.

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 drop-down 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 on 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.



4.4 Coverage Map

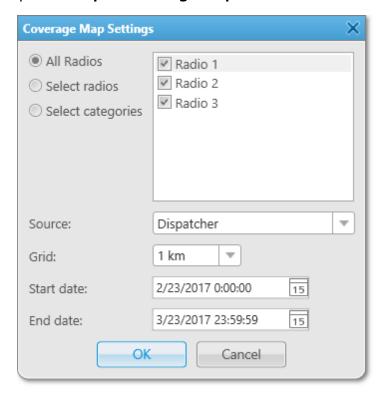
Coverage maps give you information about signal strength (RSSI) of a particular radio in a particular place. To build a coverage map for a radio, make sure that it has <u>GPS enabled</u>, and there is GPS data in the database.

WARNING

SmartPTT 9.0 supports the Coverage Map function in systems with MOTOTRBO Network Interface Service 2.60 or earlier. Support for newer MOTOTRBO Network Interface Service versions is implemented in SmartPTT 9.1.

Map Coverage Map

To build a coverage map, click $Map \rightarrow Coverage map \rightarrow Show$.



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.

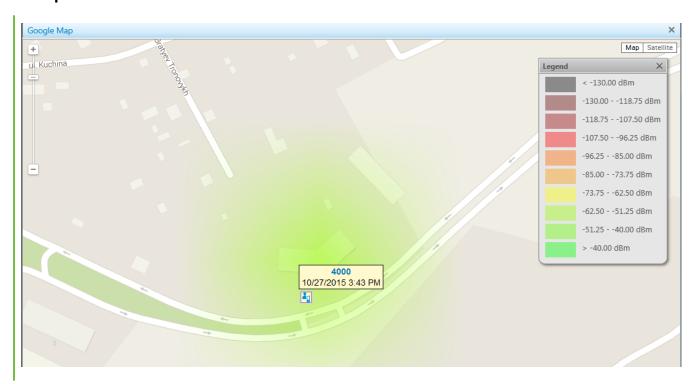
Select categories: Select this option to build a coverage map for all the radios of the selected category.

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.

Start date/End date: Defines over which period the data will be used for the map.

Map Coverage Map

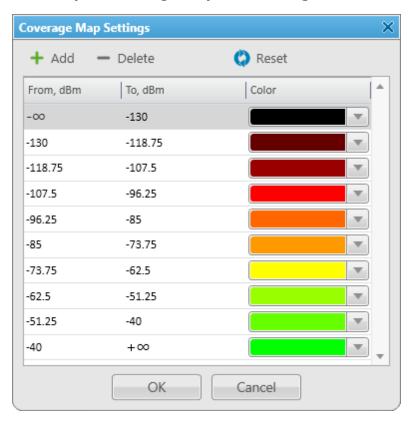
Example



Map Coverage Map

Coverage Map Settings: Window identifies the colors used for different RSSI ranges in the 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 $Map \rightarrow Coverage \ map \rightarrow RSSI \ ranges$.



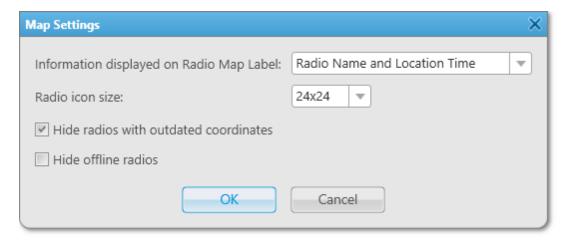
To clean the map, select $\mathbf{Map} \to \mathbf{Coverage} \ \mathbf{map} \to \mathbf{Hide}.$

4.5 Configuring Map Settings

Follow the procedure below to configure the settings of displaying radios or WAVE users on a map.

Procedure:

1. On the menu bar of the SmartPTT Dispatcher, click $Map \rightarrow Map$ Settings. The Map Settings window appears.



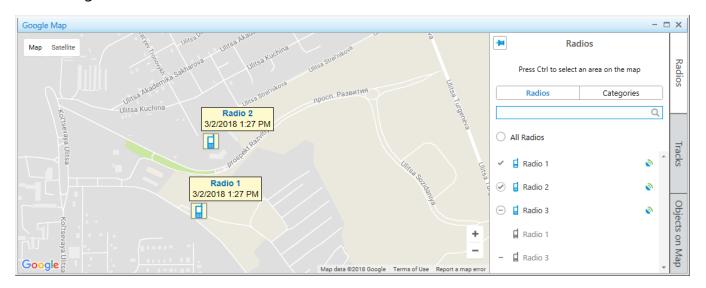
- 2. In the **Map Settings** window, from the **Information displayed on Radio Map Label** list, select the information to be displayed on a radio or a <u>WAVE user</u> map label:
 - To show radio name and coordinates time on the map, select *Radio Name* and *Location Time*.
 - To show on the map radio name only, select *Radio Name*.
 - To show any radio data, select *None*.
- 3. From the **Radio icon size** list, select the size of a radio or WAVE user icon on the map.
- 4. *Optional:* Select the **Hide radios with outdated coordinates** check box to hide map labels for radios and WAVE users with outdated GPS coordinates.

NOTE

- 5. *Optional:* Select the **Hide offline radios** check box to hide a map label when a radio or a WAVE user goes offline.
- 6. Click **OK** to apply changes and close the window.

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, <u>WAVE users</u>, and other objects on maps. 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.
- · Configure geofences for radios.
- Configure routes for radios.



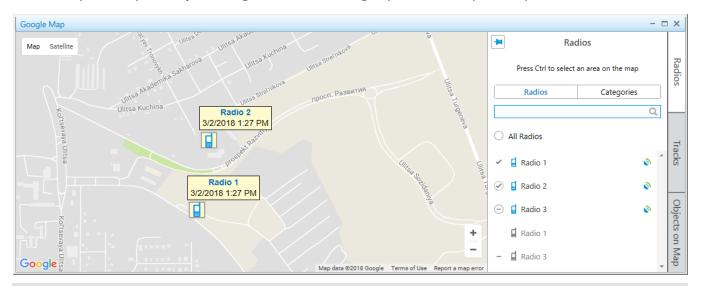
By default, the expanded control panel is not pinned, and it automatically collapses by clicking on a map. The Pin () button pins the expanded panel, and in this state you can collapse it only by clicking **Radios**, **Tracks**, or **Objects on Map** buttons.

For information on using the control panel, see the sections below.

4.6.1 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.



NOTE

For information on configuring radios displaying on a map, see Managing Radios on 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 box

You can search a radio in the list of radios by entering 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 <u>Positioning Systems</u>.

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: 1) radio is online, and the **Hide offline radios** check box is cleared in the <u>Configuring Map Settings</u> window. 2) database has up-to-date location of the radio, and the **Hide radios with outdated coordinates** check box is cleared in the <u>Configuring Map Settings</u> 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 the map.

The indicator can be set by right-clicking when the following conditions are met: 1) radio is offline, and the **Hide offline radios** check box is selected in the <u>Configuring Map Settings</u> window. 2) database has only outdated location of the radio, and the **Hide radios with outdated coordinates** check box is selected in the <u>Configuring Map Settings</u> window.

Mixed state (○)

The indicator appears in the following conditions: 1) 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. 2) next to the radio categories names when radios in the categories are in mixed states.

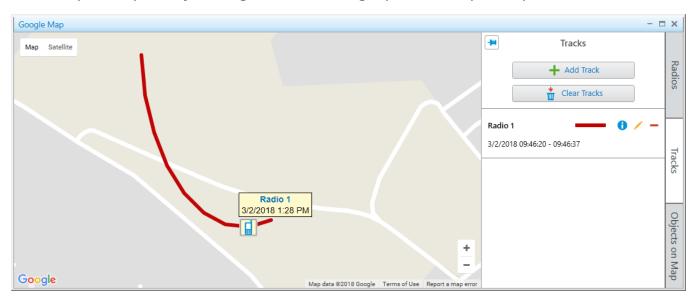
On any open map, users can select an area by pressing Ctrl and left mouse button to find radios in the area. The **Radios** panel with radios in the selected area opens. You can cancel the selection, by clicking the **Cancel Selection** button.

For details, see **Displaying Radios in Area**.

4.6.2 Tracks

In the **Tracks** panel you can manage radios tracks, display them, and track radio movements on a map.

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 (0)

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.

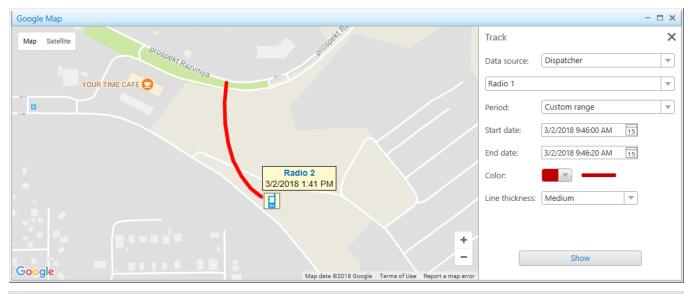
Delete (-)

Deletes the track from the map and from the **Tracks** panel.

4.6.2.1 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 <u>Tracks</u> panel.



NOTE

For information on displaying a track on a map, see <u>Displaying Tracks</u>.

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 Actions.

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 boxes 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 boxes you also may enter the desired time manually in the *hh:mm:ss* format.

Hours

The box appears when in 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 box.

Show

Shows the track on the current map, and adds the track entry to the <u>Tracks</u> panel.

4.6.2.2 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** (**1**) of the track entry in the **Tracks** panel. For details, see <u>Tracks</u>.



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 <u>Track</u> panel when the track is added.
- **Date and time** displays a track period set in the <u>Track</u> panel when the track is added.
- Track playback controls:
 - Start Playback (>) starts the track animation.
 - Pause Playback (II) 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:
 - The **Date and time** column displays date and time for each track point.
 - The **Distance** column displays the distance between the track points.
 - The Stop duration column displays the duration when the radio stops moving.
 - The **Speed** column displays the radio movement speed in the each track point.
 - The **Precision** column displays the coordinates precision.

You can double-click a table line to show a track on the map in the desired moment of time.

4.6.3 Objects on Map

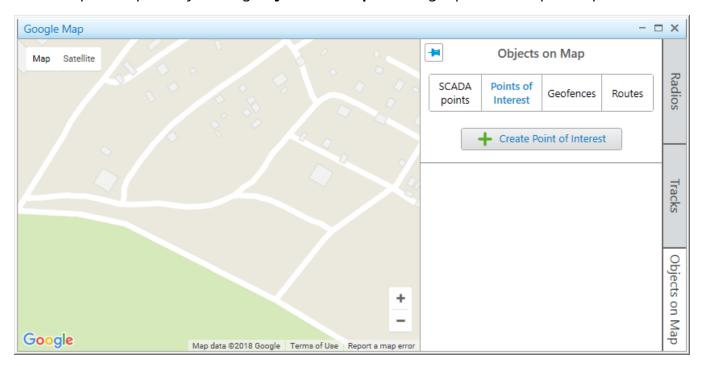
In the **Objects on Map** panel you can add the following elements to a map:

- Points of interest to mark important objects
- · Geofences to select areas
- Routes to connect key points
- SCADA points to display and monitor state of the points configured in the SCADA system.

NOTE

To interact with SCADA points, you need to instal the corresponding license and activate the SCADA module in SmartPTT Dispatcher settings. For details, see <u>Activating SCADA Module</u> and <u>Licenses</u>.

You can open the panel by clicking **Objects on Map** in the right part of the open map.



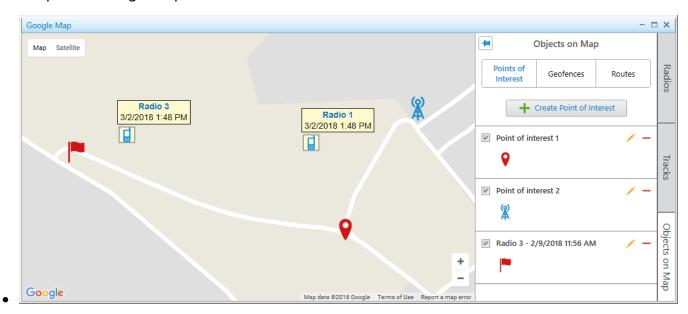
You can manage objects on maps in the corresponding tabs.

NOTE

The tabs with added points of interest, geofences, routes, and SCADA points are the same for all maps.

4.6.3.1 Points of Interest

In 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.



NOTE

For information on adding a point of interest on map, see Adding Points of Interest.

When you start working with a map, only one control is available in the tab:

Create Point of Interest

Opens the **Point of Interest** panel for adding a new point of interest on the 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.

4.6.3.1.1 Point of Interest

In the **Point of Interest** panel you can configure parameters of a new point of interest, or edit the existing points of interest.

The panel opens when you create a new point of interest, or edit the existing. For details, see Adding Points of Interest and Editing Objects.



The **Point of Interest** panel contains the following controls and elements:

Name

In the box you should type a name of a point of interest. 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. The icon is used as the point of interest marker.

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.

4.6.3.2 Geofences

In the **Geofences** tab you can go to the panel for managing the existing geofences on maps, or adding new geofences.



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 in 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.

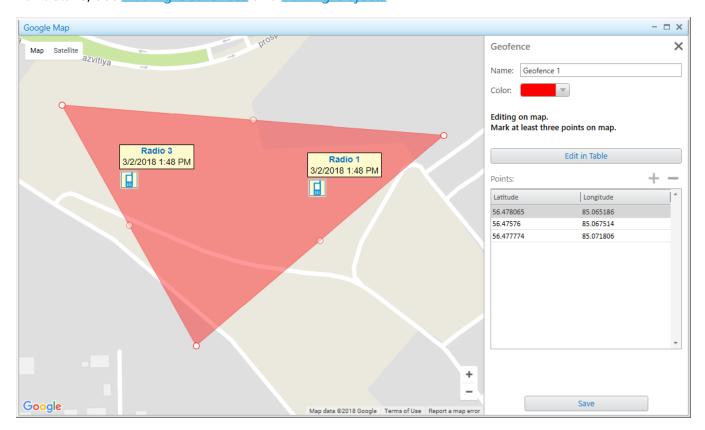
For details, see **Positioning Rules**.

4.6.3.2.1 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 and Editing Objects.



The **Geofence** panel contains the following controls and elements:

Name

In the box you should type a name of a geofence.

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** (\blacksquare) 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.

4.6.3.3 Routes

In the **Routes** tab you can go to the panel for managing the existing routes on maps, or adding new routes.



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 in the tab:

Create Route

Opens the **Route** panel for adding a new route on the 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 <u>Route</u> panel. When you click the route line, the map is centered on it.

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.

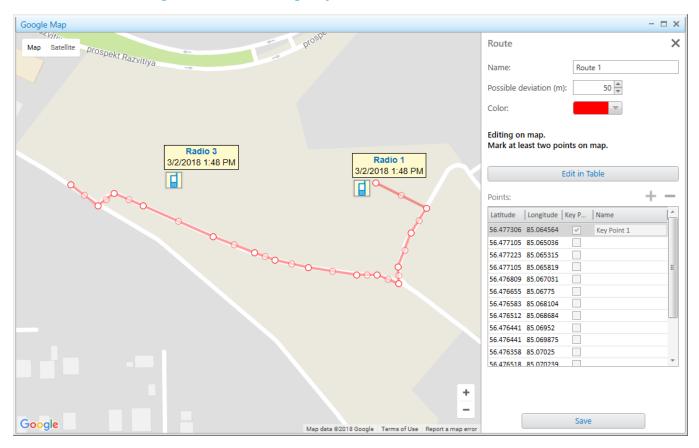
For details, see **Positioning Rules**.

4.6.3.3.1 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 and Editing Objects.



The **Routes** panel contains the following controls and elements:

Name

In the box you should type a name of a route.

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 <u>Radio Location</u> reports.

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 the map, the key point name set in the **Name** column appears.

Edit on Map

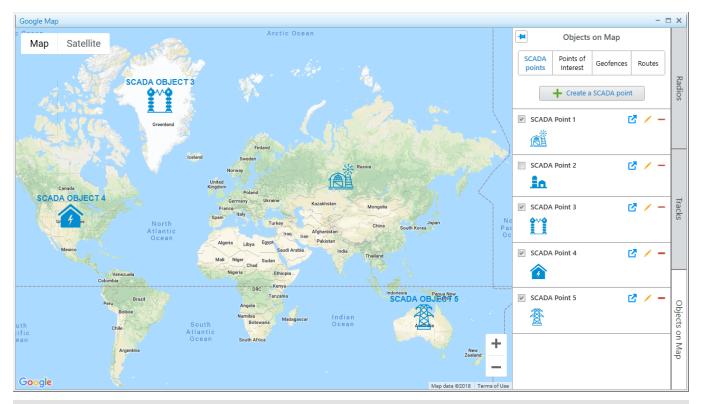
Activates adding or editing the existing route points on a map. To add a route, click at least two points on the desired locations of a map.

Save

Adds the route to the route list which is available on all maps.

4.6.3.4 SCADA Points

On the **SCADA points** tab, you can add new or edit and delete existing SCADA points.



NOTE

To add a SCADA point to the 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 to the 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 the map by selecting or clearing this check box.

SCADA point Name

Name of the SCADA point that is displayed on the 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 the map.

SCADA point Marker

Icon of the SCADA point that is displayed on the 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 the 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

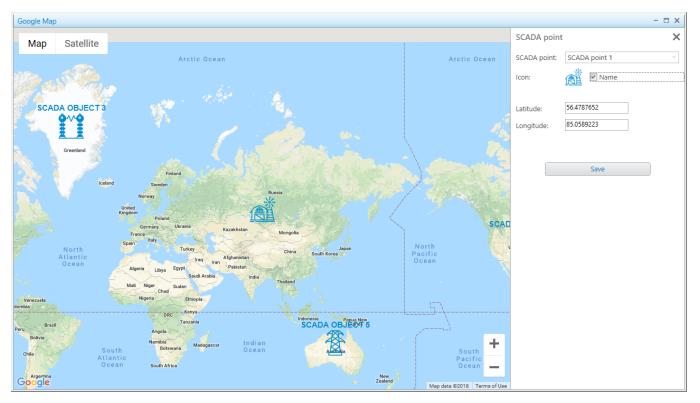
If a point is deleted from the SCADA system, it is not automatically deleted from SmartPTT Dispatcher. The name of the deleted SCADA point is displayed in gray color. The rules that affect the point are not deleted, and the point settings remain editable.

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 <u>SCADA Point Indication</u>.

4.6.3.4.1 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 <u>Adding SCADA Points</u> and <u>Editing Objects Using Panel</u>.



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 the map. Icons are set in the SCADA system and cannot be changed from 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 the map.

Save

Adds the new SCADA point to the map or saves changes in the settings of the existing point.

4.6.3.4.2 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 at 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.
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.

4.6.4 Managing Radios on Map

Managing radios on maps includes the following actions:

- Showing or hiding radios. For details, see <u>Displaying Radios</u>.
- Showing or hiding radio categories. For details, see <u>Displaying Radio Categories</u>.
- Displaying radios in the selected area. For details, see <u>Displaying Radios in Area</u>.
- Setting locations for radios. For details, see <u>Setting Radio Location</u>.

4.6.4.1 Displaying Radios

Follow the procedure below to configure displaying radios on the map.

Prerequisites:

Determine the radios to display or hide on the map.

NOTE

For information on all radio state indicators and other elements of the **Radios** panel, see <u>Radios</u> on <u>Map</u>.

Procedure:

- 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 the 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.

NOTE

Radios are hidden or displayed on a map depending on the map settings. For details, see <u>Configuring Map Settings</u>.

Postrequisites:

• 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 ().

4.6.4.2 Displaying Radio Categories

Follow the procedure below to configure displaying radio categories on the map.

Prerequisites:

Determine the radio categories to display or hide on the map.

NOTE

For information on all radio state indicators and other elements of the **Radios** panel, see <u>Radios</u> on <u>Map</u>.

Procedure:

- 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 the 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.
- 5. *Optional:* Select the desired category and configure displaying of the desired radios:
 - To display or hide the radio, click the indicator next to the radio name, until the desired state appears.

NOTE

Radios are hidden or displayed on a map depending on the map settings. For details, see <u>Configuring Map Settings</u>.

Postrequisites:

• 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 ().

4.6.4.3 Displaying Radios in Area

Follow the procedure below to display the list of radios located on the selected area of the map.

Prerequisites:

Determine the desired area on the 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.

4.6.4.4 Setting Radio Location

Follow the procedure below 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 <u>Actions</u> and <u>Call Window of Radio</u>.

- 2. Set the radio location in one of the following ways:
 - Click the desired place on the map.
 - In the Set Location panel, in the Latitude and Longitude boxes, type the desired coordinates.
- Click **Save** to save changes.The radio appears on the map.

Postrequisites:

To remove the radio from the map, in the Actions Menu or call window of the radio, click **Remove from Map**.

4.6.5 Managing Tracks

Managing of tracks includes the following actions:

- Displaying radio tracks on maps. For details, see <u>Displaying Tracks</u>.
- Animating radio tracks on a current map. For details, see Animating Tracks.

4.6.5.1 Displaying Tracks

Follow the procedure below to display a radio track on the 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 <u>Positioning Systems</u>.

NOTE

Track can be shown on map when the radio has a least one coordinate.

Procedure:

- 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** box, enter the desired amount of hours.
 - If from the **Period** list the *Custom range* is selected, in the **Start Date** and **End Date** boxs, set the desired date and time.
- 7. From the **Color** palette, select the track line color on the map.
- 8. From the **Line Thickness** list, select the desired thickness of the track line.
- Click **Show** to display the track on the 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**.

4.6.5.2 Animating Tracks

Follow the procedure below to animate a radio track on the map.

Prerequisites:

Ensure the desired radio track is in the list of tracks.

Procedure:

- 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 (1)**. The **Track Details** panel opens.

In the Track Details panel, click Start Playback (▶).
 The track starts animating on the map. The button Start Playback (▶) changes to Pause Playback (II).

NOTE

You can control the animation speed of the track with the corresponding controls. For details, see <u>Track Details</u>.

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** ().

4.6.6 Managing Objects on Map

Managing objects on maps includes the following actions:

- Adding points of interest. For details, see Adding Points of Interest.
- Adding SCADA points. For details, see <u>Adding SCADA Points</u>.
- Adding geofences. For details, see <u>Adding Geofences</u>.
- Adding routes. For details, see <u>Adding Routes</u>.
- Editing and deleting objects. For details, see <u>Editing Objects</u> and <u>Deleting Objects</u>.

4.6.6.1 Adding Points of Interest

Follow the procedure below to add a point of interest on the map.

Prerequisites:

Ensure the operator has the rights to configure points of interest. For details, see Operators.

Procedure:

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. On 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** box 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 the map.

NOTE

You can download the image by clicking the button (\blacksquare). 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 the map.
 - In the **Latitude** and **Longitude** boxes, type the desired coordinates.
- Click Save to save the point of interest.
 The added point appears on the map, and in the list of the Points of Interest tab of the Object on Map panel.

Postrequisites:

- To display or hide the point of interest on the 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 <u>Deleting Objects</u>.

4.6.6.2 Adding SCADA Points

Follow the procedure below to add a SCADA point to the 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:

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. On 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 the map, select the **Name** check box.
- 7. Specify the point location on the map in one of the following ways:
 - Click the desired location on the map.
 - In the **Latitude** and **Longitude** boxes, type the desired coordinates.

The point icon appears in the specified point on the 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 the map, on the **SCADA points** tab, select or clear the **Show on Map** check box.
- To edit the SCADA point, see <u>Editing Objects Using Panel</u> or <u>Editing Objects Using Map</u>.
- To delete the SCADA point, see <u>Deleting Objects</u>.

4.6.6.3 Adding Geofences

You can add a geofence to the selected map in one of the following ways:

- From a map. For details, see Adding Geofences Using Map.
- Using a table for entering coordinates. For details, see <u>Adding Geofences Using Table</u>.

4.6.6.3.1 Adding Geofences Using Map

Follow the procedure below to add a geofence to the 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. On 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** box of the **Geofence** panel, type the name of the geofence.
- 6. From the **Color** palette, select the color for the geofence on the map.
- 7. Set the geofence location on the map by clicking at least three desired points on the map. Double-click the last point to finish drawing.
- Click Save to save the geofence.
 The added geofence appears on the 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 <u>Deleting Objects</u>.

4.6.6.3.2 Adding Geofences Using Table

Follow the procedure below to add a geofence to the map.

Prerequisites:

Ensure the operator has the rights to configure geofences. For details, see Operators.

Procedure:

- 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. On 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** box of the **Geofence** panel, type the name of the geofence.
- 6. From the **Color** palette, select the color for the geofence on the map.
- 7. Click the **Edit in Table** button.

The **Points** table becomes active.

- 8. Add at least three points by clicking the **Add coordinate** (\blacksquare) 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 <u>Deleting Objects</u>.

4.6.6.4 Adding Routes

You can add a route to the selected map in one of the following ways:

- From a map. For details, see <u>Adding Routes Using Map</u>.
- Using a table for entering coordinates. For details, see Adding Routes Using Table.

4.6.6.4.1 Adding Routes Using Map

Follow the procedure below to add a route to the map.

Prerequisites:

Ensure the operator has the rights to configure routes. For details, see <a>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. On 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** box of the **Route** panel, type the name of the route.
- 6. In the **Possible deviation (m)** box, enter the possible deviation from the route.
- 7. From the **Color** palette, select the color for the route on the map.
- 8. Set the route location on the map by clicking at least two desired points on the map. Double-click the last point to finish drawing.
- 9. Click **Save** to save the route.
 - The added route appears on the map, and in the list in the **Routes** tab of the **Object on Map** pane.

Postrequisites:

- To show or hide a route, in the **Routes** tab, select or clear the **Show on map** check box.
- To edit a route, see <u>Editing Objects Using Panel</u> or <u>Editing Objects Using Map</u>.
- To remove a route, see <u>Deleting Objects</u>.

4.6.6.4.2 Adding Routes Using Table

Follow the procedure below to add a route to the map.

Prerequisites:

Ensure the operator has the rights to configure routes. For details, see Operators.

Procedure:

- 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. On 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** box of the **Route** panel, type the name of the route.
- 6. In the **Possible deviation** box, enter the distance the radio can deviate from the route line.
- 7. From the **Color** palette, select the color for the route on the map.
- 8. Click the **Edit in Table** button.

The **Points** table becomes active.

9. Add at least two points by clicking the **Add coordinate** (\blacksquare) 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 box, enter 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, in 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 <u>Deleting Objects</u>.

4.6.6.5 Editing Objects

You can edit an object in one of the following ways:

- Edit an object from a map. For details, see Editing Objects Using Map.
- Edit an object using a table for entering coordinates. For details, see <u>Editing Objects Using</u>
 Panel.

4.6.6.5.1 Editing Objects Using Map

Follow the procedure below to edit a point of interest, geofence, route, or SCADA point on the map.

Prerequisites:

Ensure at least one desired object is added on the map.

Map Control Panel

Procedure:

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. On 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 the desired changes:
 - To edit a point of interest or a SCADA point, click the desired place on the 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 the map, click (🔄).
 - To cancel changes and close the panel, in the upper-right corner of the panel, click (\boxtimes). The panel changes to the **Objects on Map** panel.
- 7. If the **Point of interest**, **Geofence**, **Route**, or **SCADA point** panel is open, click **Save**. The changes are applied and the panel changes to the **Objects on Map** panel.

See also:

- Map Control Panel
- Objects on Map
- Managing Objects on Map

4.6.6.5.2 Editing Objects Using Panel

Follow the procedure below to edit a point of interest, geofence, route, or SCADA point in the **Objects on Map** panel.

Prerequisites:

Ensure that at least one desired object exists in the list.

Map Control Panel

Procedure:

- In the right part of the open map, click **Objects on Map**.
 The **Objects on Map** panel opens.
- 2. *Optional:* Click Pin (Ⅎ) to pin the panel.
- 3. Select the tab with the desired object in the **Objects on Map** panel.
- 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 the desired changes.
- Click the Save button.
 The current panel changes to the Objects on Map panel.

4.6.6.6 Deleting Objects

Follow the procedure below to remove a point of interest, geofence, or a route.

Prerequisites:

Ensure that at least one desired object is on the list.

Procedure:

- In the right part of the open map, click **Objects on Map**.
 The **Objects on Map** panel opens.
- 2. *Optional:* Click Pin (\blacksquare) to pin the panel.
- 3. On the **Objects on Map** panel, select the tab with the desired object.
- 4. 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 <u>SmartPTT Dispatcher Event Log</u>.
- All dispatch systems connected to the radioserver. For details, see <u>SmartPTT Radioserver</u> <u>Event Log</u>.

For information on the Event Log functionality, see the sections below.

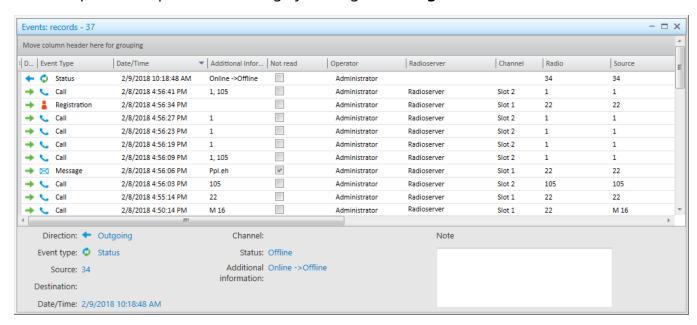
5.1 SmartPTT Dispatcher Event Log

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 <u>Configuring Event Logging for SmartPTT Dispatcher</u>.

You can open the Dispatcher Event Log by clicking **Event Log** \rightarrow **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 <u>Dispatcher Event Log Table</u>.

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.

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 <u>Records</u>.

- · 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 <u>Window of Call Records</u>
 <u>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>.
- 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 <i>Incoming</i> or <i>Outgoing</i> direction.

Column Name	Description	Filter
Event Type	Shows the type of the event:	
	Registration:	
	• Online (👗)	
	• Offline (👗)	
	• Power down (👗)	
	• Call (\(\))	
	• Message (⊠)	
	• Telemetry (🛅)	
	• Alarm ([!])	
	• Status (🗘)	Can be filtered by event types.
	Block radio:	can be intered by evene types.
	• Block (1)	
	• Unblock (🗗)	
	• Job Ticket (🗏)	
	User Authorization:	
	• Sign In (€)	
	• Sign Out (►)	
	• Radio Check (😓)	
	• Lone Worker (👂)	
	• Radio Kill (🔓)	
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.	Can be filtered by values containing in
	For details, see <u>Additional Information</u>	the column.
	<u>Column</u> .	
Operator	Shows the operator who registered the event. Can be filtered by operator n	

Column Name	Description	Filter
Radioserver	Shows the radioserver on which the event was registered.	Can be filtered by radioserver names.
Channel	Shows the channel on which the event was registered. Can be filtered by channel na	
Radio	Shows the radio or <u>WAVE user</u> that can be a source or target of the event. 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 <u>Status Column</u> .	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 <i>IP</i> , <i>PBX</i> , or <i>Radio</i> 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 in the **General Settings** window the **Show radio user name** check box is selected, and on SmartPTT Radioserver the user authorization service is activated and users are added, then 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
Registration	Empty column.
Call	Identifiers of call initiators, or operator name, or cause of a call denial.
Message	Message text.
Telemetry	Description of telemetry action set in telemetry settings. For details, see <u>Telemetry</u> .
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.
Status	Changing of radio status. For information on radio statuses, see <u>Statuses</u> .
Block radio	Empty column.
Job Ticket	Job ticket number, name, and its description.
User Authorization	Empty column.
Lone Worker	Empty column at activating/deactivating lone worker profile. The column is filled when the profile changes.

Event Type	Information in the column
Radio Check	Empty column.
Radio Kill	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
Registration	OfflineOnlinePower down
Call	 Group Call Private Call All Call Call Alert Monitoring Emergency Call Call Alert not delivered
Message	 Message delivered Message not delivered Message accepted Message sent Message not sent
Telemetry	Outgoing telemetryIncoming telemetry
Alarm	 <empty> until the alarm is not acknowledged.</empty> Emergency accepted

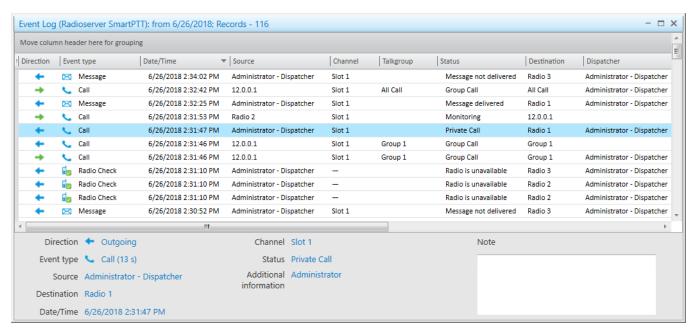
Event Type	Information in the column
	NOTE For alarms on SCADA points, the <i>Emergency accepted</i> status appears only when the emergency is eliminated on the point. Acknowledging SCADA alarms does not affect the alarm status, and the column is left empty until the parameter regains a normal value.
Status	<radio status=""> For details, see <u>Statuses</u></radio>
Block radio	 Unblocked Blocked Block failed Unblock failed Undelivered Target did not respond
Job Ticket	Status changeDeliveredNot deliveredSentNot sent
User Authorization	 User Authorization Sign Out User Authorization Sign In
Lone Worker	Profile changedOnOff
Radio Check	Radio is availableRadio is unavailableTarget did not respond
Radio Kill	DeliveredNot delivered

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 "Event Log" in *Radioserver Configurator User Guide*.

For information on opening the Radioserver Event Log, see <u>Displaying SmartPTT Radioserver</u> <u>Event Log</u>.



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 <u>Radioserver Event Log Table</u>.

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.

- Playing call records.
- For information on the **Downloading audio files** window, see <u>Window of Call Records</u>
 <u>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 Playing Call Records.

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 <i>Incoming</i> or <i>Outgoing</i> direction.
Event Type	Shows the type of the event:	Can be filtered by event types.

Column Name	Description	Filter
	Registration:	
	• Online (🏜)	
	• Offline (🛔)	
	• Power down (🔓)	
	• Call (\(\))	
	• Message (☑)	
	• Telemetry (🛅)	
	• Alarm ([!])	
	• Status (O)	
	Block radio:	
	• Block (🙃)	
	• Unblock (🜓)	
	• Job Ticket (🗏)	
	• User Authorization:	
	• Sign In (➡)	
	• Sign Out (🔁)	
	• Radio Check (🖆)	
	• Lone Worker (💆)	
	SCADA Alarm	
	• Radio Kill (🔓)	
Date/Time	Shows the date and time of the event.	Can be filtered by date and time.
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.

Column Name	Description	Filter
Status	Shows the event status. For information on possible event statuses, see <u>Status Column</u> .	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 <u>Additional Information</u> <u>Column</u> .	Can be filtered by values containing in the column.
Record	Shows whether the call was recorded. All event types except for Call always have <i>No</i> 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 in the **General Settings** window the **Show radio user name** check box is selected, and on SmartPTT Radioserver the user authorization service is activated and users are added, then 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

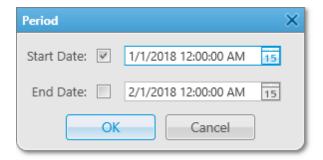
Follow the procedure below to open the Radioserver Event Log panel.

Prerequisites:

Ensure the radioserver event log is activated in SmartPTT Radioserver Configurator. For details, see "Event Log" in *Radioserver Configurator User 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 (is) 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 <u>Configuring Event Logging for SmartPTT Dispatcher</u>.
- Viewing unread messages. For details, see <u>Viewing Unread Messages</u>.
- Managing event log entries. For details, see <u>Managing Event Log Entries</u>.

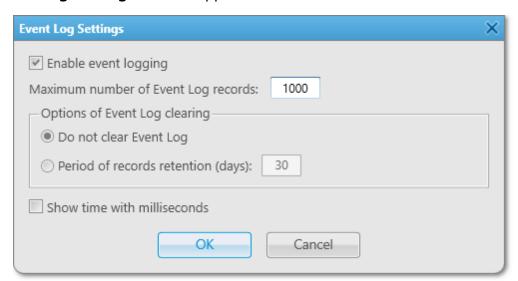
Managing of Event Log elements (sorting, grouping, filtering, etc.) is applicable both to Dispatcher and Radioserver Event Log. For details, see <u>Managing Event Log Elements</u>.

5.3.1 Configuring Event Logging for SmartPTT Dispatcher

Follow the procedure below to enable event logging for SmartPTT Dispatcher.

Procedure:

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*.
- 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

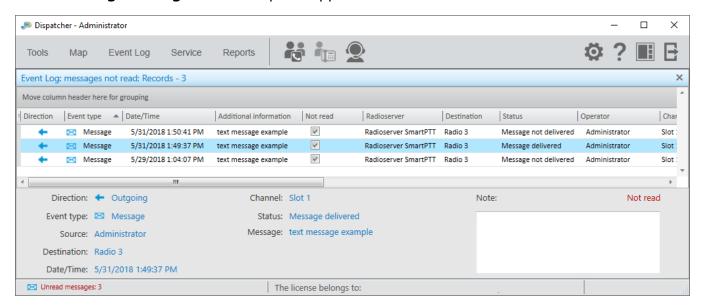
Follow the procedure below to view unread messages in the SmartPTT Dispatcher Event Log.

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 <u>Displaying All Events</u>.
- displaying events for a certain period. For details, see <u>Displaying Events for Period</u>.
- removing all event log entries added before the specific date. For details, see <u>Clearing Event Log</u>.

5.3.3.1 Displaying All Events

Follow the procedure below to display all events of SmartPTT Dispatcher.

Procedure:

On the menu bar, click **Event Log** \rightarrow **All Events**.

The Dispatcher Event Log panel with all events appears.

NOTE

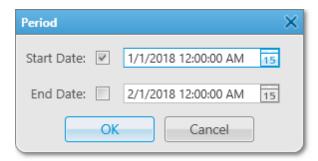
Alerts and events initiated in the emergency mode are displayed in the Event Log in red.

5.3.3.2 Displaying Events for Period

Follow the procedure below to display events of SmartPTT Dispatcher for a certain period.

Procedure:

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 (is) 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.

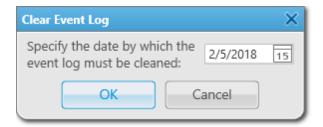
 If events for the specified period exist in the database, they are displayed in the open Radioserver Event Log.

5.3.3.3 Clearing Event Log

Follow the procedure below to remove all event log entries added before the specific date in the SmartPTT Dispatcher Event Log.

Procedure:

- 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 (5 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 <u>Grouping Events</u>.
- filter column contents by specific values. For details, see Filtering Events.
- hide, show, or change the order of columns. For details, see <u>Displaying Columns</u> and <u>Moving Columns</u>.
- keep the columns position independently of scrolling. For details, see <u>Keeping Column</u>
 <u>Positions</u>.

5.3.4.1 Sorting Events

Follow the procedure below 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.

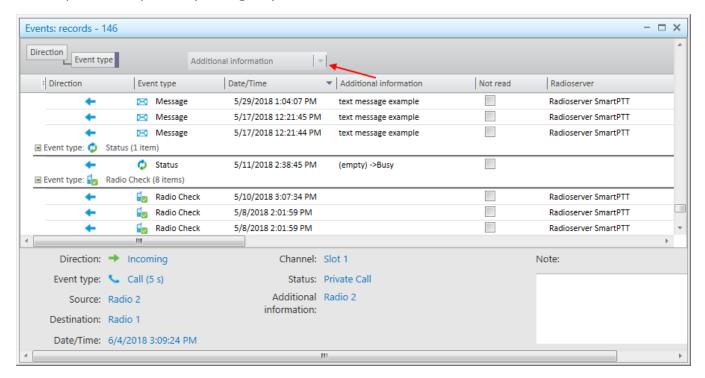
5.3.4.2 Grouping Events

Follow the procedure below 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 (\times) appears.

5.3.4.3 Filtering Events

Follow the procedure below 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 below to hide or show columns.

Procedure:

Right-click any column header, and select the desired titles from the list.

√ Event Type √ Date/Time √ Additional Information √ Not read √ Operator √ Radioserver √ Channel ✓ Radio √ Source √ Talkgroup √ Status ✓ Duration √ Connection Type √ Repeater IP √ Destination ✓ Record ✓ Lone Worker ✓ Note

User

NOTE

By default, all the columns are displayed in the event log.

5.3.4.5 Moving Columns

Follow the procedure below 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 below 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 <u>Playing Call Records</u>.
- Download call records. For details, see <u>Downloading Call Records</u>.
- Open call records location. For details, see Opening Call Records Location.

5.4.1 Play Records Window

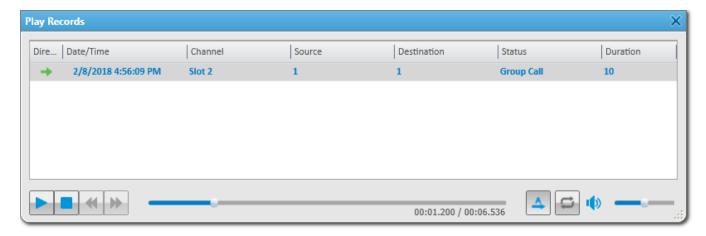
In the **Play Records** window you can play call records, download them, or open their location.

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 <u>Dispatcher Event Log Table</u> or <u>Radioserver Event Log Table</u>.

Start Playback (▶) / Pause Playback (Ⅱ)

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 (4)

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.

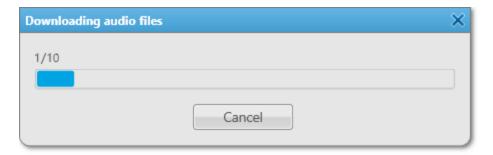
If more than one record is in the call record table and the **Play All Records** button is pressed, the records in the table are replayed one by one.

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.

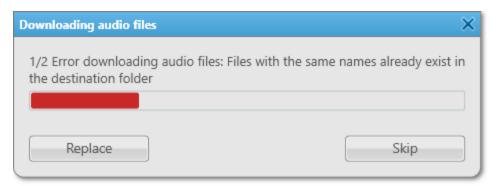
If a call or call records are downloaded successfully, the *Complete* message appears, and the **Cancel** button changes to the **Open folder** and **Close** buttons.

Using these buttons, you can open the destination folder of downloaded call records or close the window.



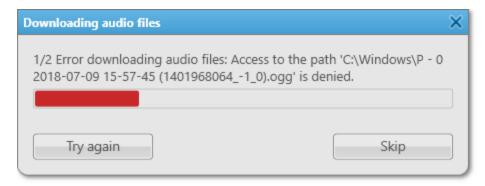
When multiple call records are downloaded and the destination folder contains audio files with the same names as the downloaded call records, the corresponding error occurs. The **Cancel** button changes to the **Replace** and **Skip** buttons.

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 below 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:

t-click the desired call record, and then click audio file.
orm the following actions: Select the desired records. Right-click any of the selected records, and

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 below 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:

- Select the desired records.
- 2. Right-click any of the selected records, and then click **Download audio files**.
- 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 below 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: Select the desired records. 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 <u>Calls Priority</u>.
- Sending audio messages to talkgroups.
 For details, see <u>Voice Notifications</u>.
- Sending audio and text messages to offline radios automatically on their appearance in the network.

For details, see **Deferred Actions**.

- Managing files received by SmartPTT Radioserver via SmartPTT File Transfer.
 For details, see Received Files.
- Blocking radios irreversibly.
 For details, see Radio Kill.
- Viewing system information related to the radioserver or SmartPTT Dispatcher operation. For details, see System Information.
- Exporting the list of registered radios and WAVE users to files in the XML, XLS, or CSV format. For details, see Export Radio List.
- Importing the list of registered radios and WAVE users from files in the XML, XLS, or CSV format.

For details, see **Import Radio List**.

- Exporting current radio and WAVE user coordinates to KML files.
 For details, see <u>Upload to KML</u>.
- Importing logs from Connect Plus radio systems.
 For details, see <u>Import Connect Plus Logs</u>.

- Saving current SmartPTT Dispatcher settings, layout, and database. For details, see <u>Save Dispatcher Settings</u>.
- Importing SmartPTT Dispatcher settings, layout and database from the previously created files.

For details, see Restore Dispatcher Settings.

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

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 if the radio does not respond, or if you want to check its status manually before the Radio Inactivity Timeout expires.

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 online.
- The Radio is unavailable status means that the checked radio is offline.

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 <u>Sending Radio Check from Dispatcher Panels</u>.
- Using the IP address or the ID of the target radio. This method is recommended in the following cases:
 - If the target radio is not displayed in SmartPTT Dispatcher.

Service Radio Check

- If you use the IP Address radio ID input format.
- If you use the CAI + radio ID input format and each radio in the dispatched radio systems has a unique ID.

For information on radio ID input format, see **General Settings**.

NOTE

If you use the *CAI* + *radio ID* radio ID input format, and 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 details, see <u>Sending Radio Check from Dispatcher Panels</u>.

For information on sending the Radio Check command, see the sections below.

Service Radio Check

6.1.1 Sending Radio Check from Dispatcher Panels

Follow the procedure below 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 (\gg) button on the desired radio tile, and then click Send Message ($\stackrel{\bullet}{•}$) .
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 (1 2 2). For information on Call Windows, see <u>Call Window of Radio</u> .

The target radio status is displayed in the **Event Log** and the log box of the target radio Call Window. For details, see <u>Dispatcher Event Log Table</u> and <u>Call Window of Radio</u>.

6.1.2 Sending Radio Check Using Radio ID

Follow the procedure below to send the Radio Check command using the target radio IP address or radio ID.

Prerequisites:

Depending on the selected radio ID input format, obtain the IP address or radio ID of the desired radio.

For information on radio ID input format, see General Settings.

Service Radio Check

Procedure:

On the menu bar, click Service → Radio Check.
 The Radio Check window appears.

2. Depending on the selected radio ID input format, perform one of the following actions:

If the <i>IP Address</i> input format is selected,	in the IP box, type the radio IP address.
If the CAI + Radio ID input format is selected,	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 <u>Dispatcher Event Log Table</u> and <u>Call Window of Radio</u>.

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 system.

The Call Priority feature is available in SmartPTT Dispatcher when Administrator or Operator has the proper profile assigned. The profile must have the **High priority of calls** or **Allow priority increasing** check boxes selected for the Capacity Max systems in which the Call Priority feature is required.

For information on profile configuring, see *Radioserver Configurator User Guide*. For information on profile assigning, see <u>Assigning Profile to Operators</u>.

Service Call Priority

Depending on which check box is selected in the profile settings, the Call Priority feature affects dispatcher calls in the following ways:

- If the **High priority of calls** is selected, the call interrupts normal priority call by default.
- If the Allow priority increasing is selected in the profile, you can increase priority of a call
 from normal to high by clicking Services → Increase call priority before initiating the call.

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 Initiating High Priority Calls

Follow the procedure below to initiate a high priority call.

Prerequisites:

Ensure **Increase call priority** is available in the **Services** menu.

Procedure:

- 1. Increase the priority of a call:
 - Select the object or objects to which you want to initiate the high priority call.
 - On the menu bar, click Services → Increase call priority.
- 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 *Radioserver Configurator User 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.

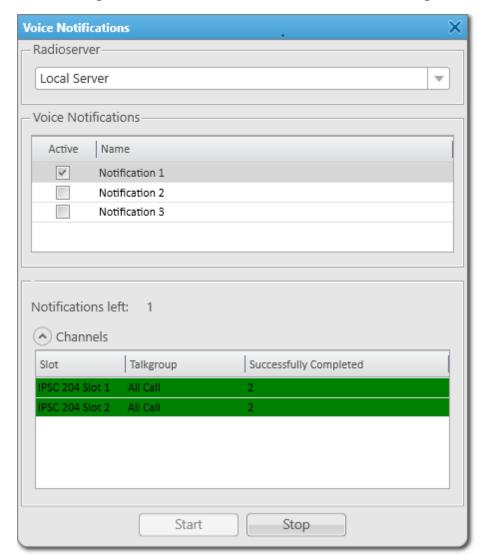
NOTE

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 <u>Playing Voice Notifications</u>.
- From the Voice Notification element in Custom Consoles. For details, see <u>Custom Consoles</u>.
- Automatically, when triggered by a rule configured in SmartPTT Radioserver Configurator. For details, see "Rules" in *Radioserver Configurator User 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 *Radioserver Configurator User 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 below to send a voice notification from the **Voice Notification** window.

Procedure:

- 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 **Voice Notifications** 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)

NOTE

Deferred Actions can be created by Administrators, or Operators with the corresponding rights. For information on operator rights, see <u>Operators</u>.

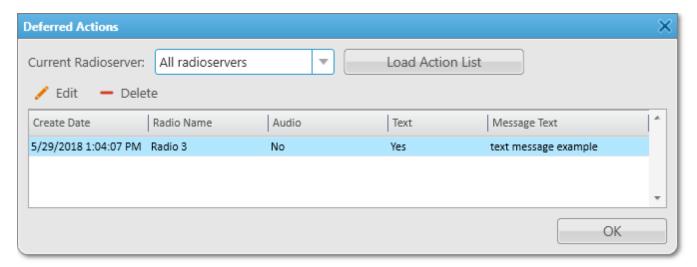
For information on using deferred actions, see the sections below.

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 <u>Create Deferred Action Window</u>.



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 <u>Create Deferred Action Window</u>.

Delete

Deletes the selected deferred action.

Deferred Actions Table

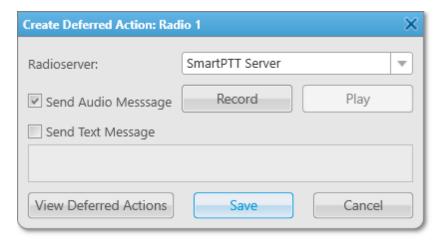
Displays all existing incomplete actions.

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>Call Window of Radio</u>.

• By clicking **Create Deferred Action** () in the Call Window of the desired radio. For information on the Call Window, see Call Window of Radio.

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 <u>Deferred Actions Window</u>.

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 <u>Creating Deferred Audio</u> <u>Messages</u>, <u>Creating Deferred Text Messages</u> and <u>Creating Deferred Combined Messages</u>.

• Edit and delete deferred actions. For details, see Managing Deferred Actions.

6.4.3.1 Creating Deferred Audio Messages

Follow the procedure below 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 (\gg) button, and then click Create Deferred Action (\cong) .
To open the window from the Radios panel,	click the radio Actions (>>) button, and then click Create Deferred Action (\(\bigsip \)).
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 Call Windows, see <u>Call Window of Radio</u> .

- 2. In the **Create Deferred Action** window, from the **Radioserver** list, select the desired radioserver.
- 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 to 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.
- 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 below 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	click the radio Actions (») button, and then click
Fleet panel,	Create Deferred Action (🧣).
To open the window from the Radios	click the radio Actions (>>>) button, and then click
panel or the Custom Console panel,	Create Deferred Action (🗣).
To open the window from the Maps	on the map or in the expandable Radios panel, right-
panel,	click the desired radio, and then click Create
	Deferred Action (👊).
To open the window from	in the radio Call Window, click Create Deferred
the radio Call Window,	Action (🥯).
	For information on on Call Windows, see Call Window
	of Radio.

- 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 below 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 (\gg) button, and then click Create Deferred Action (\clubsuit).
To open the window from the Radios panel or the Custom Console panel,	click the radio Actions (\gg) button, and then click Create Deferred Action (\clubsuit).
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 Call Windows, see <u>Call Window</u> <u>of Radio</u> .

- In the Create Deferred Action window, record the sound message.
 For details, see steps 3-7 of the <u>Creating Deferred Audio Messages</u> procedure.
- 3. In the **Create Deferred Action** window, type the text message. For details, see steps 4-5 of the <u>Creating Deferred Text Messages</u> procedure.
- 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 below 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.
- 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	n:
To edit the deferred action,	perform the following actions:
	 Click Edit. The Create Deferred Action window appears.
	In the Create Deferred Action window, perform the desired changes.
	 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.

Service Received Files

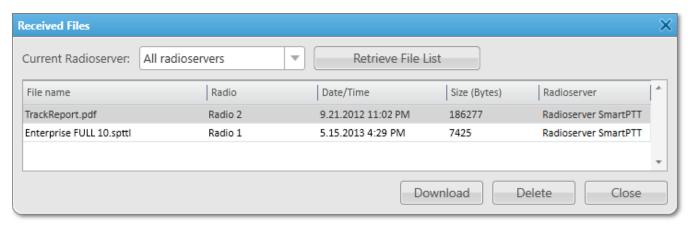
6.5 Received Files

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 "File Receive" in *Radioserver Configurator User 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** \rightarrow **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.

Service Received Files

- 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 doubleclicking 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 below to view, download received files, or delete them from the list.

Procedure:

- 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.

Service Received Files

4	Perform	the	desired	action.
┰.	1 (1101111	uic	ucsii cu	action.

To download the file,	perform the following actions:
	 Select the desired file, and then click Download or double-click the file. The window for downloading appears.
	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.

WARNING

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.

The Radio Kill command can be performed by Administrators and Operators that were granted required permissions in SmartPTT Dispatcher **General Settings**. For details, see <u>Operators</u>.



Service Radio Kill

The Radio Kill window contains the single **Radio ID** box 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 <u>Converting Radio IP Address to Radio ID</u>.

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 below to send the Radio Kill command to the radio.

WARNING

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 <u>Converting Radio IP Address to Radio ID</u>, 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.

Service Radio Kill

Procedure:

- On the menu bar, click Service → Administration → Radio Kill.
 The Radio Kill window appears.
- In the Radio ID box, type the desired radio ID.
 To the right of the Radio ID box, 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 below 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 <u>Radio Properties Window</u>.

Procedure:

1. Multiply the third octet of the IP address by 256.

Service Radio Kill

- 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:

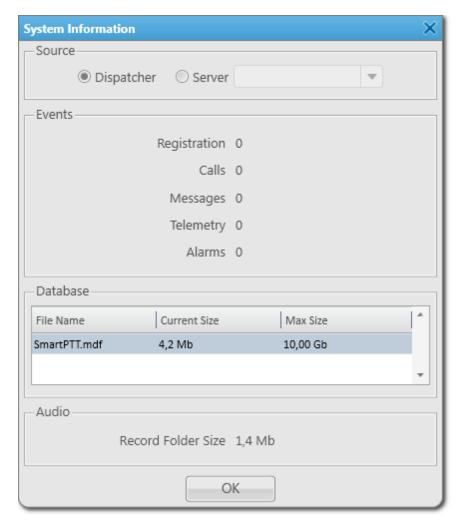
- 1. $101 \times 256 = 25,856$
- 2. $200 \times 65,536 = 13,107,200$
- 3. 162 + 25,856 + 13,107,200 = 13,133,218

13133218 is the Radio ID.

Service System Information

6.7 System Information

The **System Information** window provides the summary of system information stored in SmartPTT Dispatcher and on SmartPTT Radioserver.



The **System Information** window contains the following areas:

Source

Provides controls for selecting the source of system information displayed below. The following options are available:

- The **Dispatcher** option displays information on the current SmartPTT Dispatcher.
- The **Server** option displays information on the SmartPTT Radioservers to which the current SmartPTT Dispatcher is connected.

Service System Information

If more than one SmartPTT Radioserver is available, you can select the desired radioserver in the box on the right.

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.
- **Calls** 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.
- Alarms the number of the logged system alarms.

Database

Contains the table with information on the size of SmartPTT system databases. The table consists of the following columns:

- The **File Name** column displays the name of the database.
- The **Current Size** column displays the current size of the database.
- The **Max Size** column displays 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.

You can sort the database entries in the table by columns and arrange the entries in ascending or descending order by clicking the name of the desired column.

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.

Service System Information

Audio

Provides information on the size of the folder where the selected SmartPTT program stores audio records.

For information on viewing system information, see the section below.

6.7.1 Viewing System Information

Follow the procedure below to view information on the desired component of the SmartPTT system.

Procedure:

- On the menu bar, click Service → System Information.
 The System Information window appears.
- 2. In the **Source** area, select the desired component:

To view information on SmartPTT Dispatcher,	click Dispatcher .
To view information on SmartPTT Radioserver,	 perform the following actions: Click Server. Optional: If the console computer is connected to
	multiple radioservers, from the list in the Server box, select the desired radioserver.

Information on the selected system component appears below the **Source** area.

3. To close the window, click **OK**.

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 1997-2003 (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	MDCID	lcon	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.

Column Name	Description
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.
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.

Column Name	Description
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

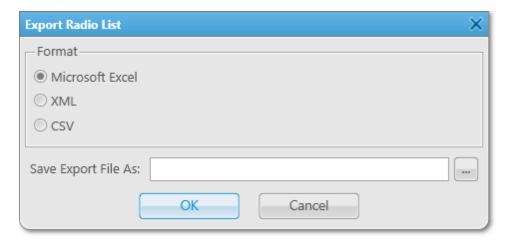
Follow the procedure below to export the list of radios and WAVE users to a file.

Prerequisites:

Ensure that you have access rights to the desired export destination folder.

Procedure:

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** box, 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 box, type the name for the exported file, and then click Save .
To export the radio list to an existing file,	 perform the following actions: Select the file that you want to replace, and then click Save. In the Confirmation window, click OK.

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 1997-2003 (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

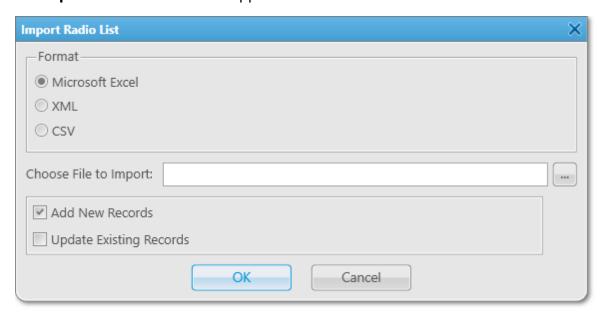
Follow the procedure below to import the list of radios and WAVE users from a file.

Prerequisites:

Obtain the format of the file that you want to import. For details, see Import Radio List.

Procedure:

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** box, 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 .

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 <u>Radio Location</u> <u>Properties</u>.

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 <u>Positioning Systems</u>.

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 below to export radio and WAVE user coordinates to a local KML file.

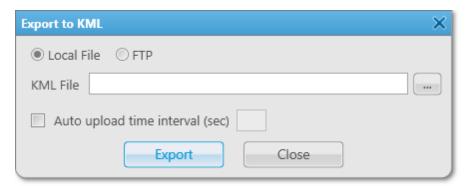
Prerequisites:

Ensure the following conditions are met:

- Desired radios and WAVE users are displayed on the map in SmartPTT Dispatcher. For details, see <u>Radio Location Properties</u>.
- You have access rights to the desired export destination folder.

Procedure:

- 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** box, 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 box, type the name for the exported file, and then click Save .
To export radio and WAVE user coordinates to an existing file,	perform the following actions:1. Select the file that you want to replace, and then click Save.
	2. In the Confirmation window, click OK .

- 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** 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**.

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 below to export radio and WAVE user coordinates to a KML file on an FTP server.

Prerequisites:

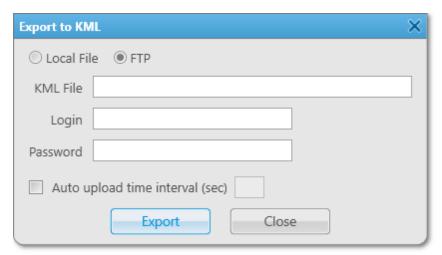
• Ensure that the desired radios and WAVE users are displayed on the map in SmartPTT Dispatcher.

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:

- 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 (x) or press Esc.

6.11 Import Connect Plus Logs

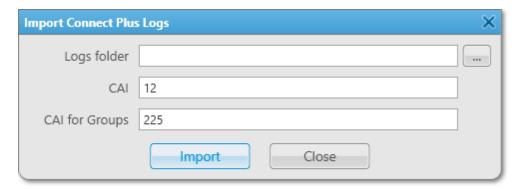
The **Import Connect Plus Logs** feature provides the ability to import event logs from Connect Plus radio systems to the SmartPTT Dispatcher Event Log.

The imported logs are generated by the XRC Controller and can be used to provide new dispatchers with information on the dispatched radio system activities that occurred before they joined it.

In the **Import Connect Plus Logs** window you are prompted to specify the **CAI** and **CAI for Groups** parameters that must be provided by your System Administrator.

The **CAI** value can range from 1 to 126. The default and recommended value is 12.

The **CAI for Groups** value can range from 225 to 239. The default and recommended value is 225.



For information on importing Connect Plus logs to the SmartPTT Dispatcher Event Log, see the section below.

6.11.1 Importing Connect Plus Logs

Follow the procedure below to import Connect Plus logs to the SmartPTT Dispatcher Event Log.

Prerequisites:

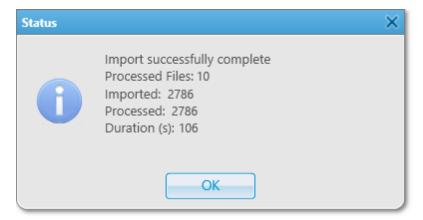
- Obtain the following information from your System Administrator:
 - Path to the folder where the log files are stored.
 - CAI of the desired radio system.
 - Group CAI of the desired radio system.
- Ensure that you have access rights to the folder where the log files are stored.

Procedure:

- On the menu bar, click Service → Import Connect Plus Logs.
 The Import Connect Plus Logs window appears.
- 2. To the right of the **Logs folder** box, click Browse (\square).
- 3. In the **Browse For Folder** window, specify the folder where the log files are stored, and then click **OK**.
- 4. In the **Import Connect Plus Logs** window, in the **CAI** box, type the radio system CAI.
- 5. In the **CAI for Groups** box, type the radio system Group CAI.

6. Click Import.

When the import is complete, the **Status** window with the import summary appears.



7. In the **Status** window, click **OK**.

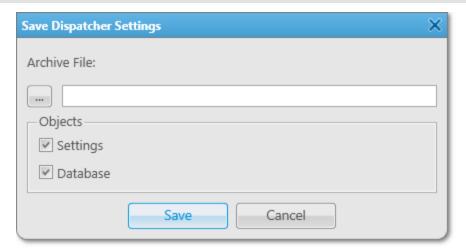
6.12 Save Dispatcher Settings

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 <u>Restore Dispatcher Settings</u>.

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.

6.12.1 Saving Dispatcher Settings

Follow the procedure below 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:

- 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** 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 <u>Restoring Dispatcher</u> <u>Settings</u>.

6.13 Restore Dispatcher Settings

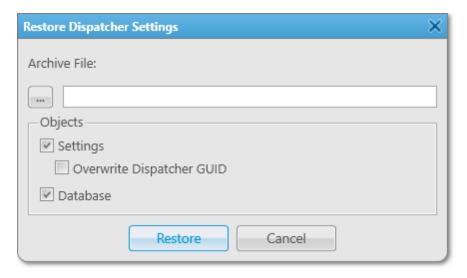
The **Restore Dispatcher Settings** feature provides the ability to import the SmartPTT Dispatcher database and settings from the same or another SmartPTT Dispatcher. For details, see <u>Save Dispatcher Settings</u>.

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.

6.13.1 Restoring Dispatcher Settings

Follow the procedure below 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:

- 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 **Save**.
- 4. In the **Objects** area, depending on the desired import parameters, select the **Settings** and/or **Database** check boxes, and then click **Restore**.
- 5. *Optional:* To replace your GUID with the GUID from the exported file, perform the following actions:
 - a. In the **Objects** area, select the **Settings** check box.
 - b. Select the **Overwrite Dispatcher GUID** check box, and then click **Restore**.

WARNING

Do not select the **Override Dispatcher GUID** check box if you want to keep using the SmartPTT Dispatcher from which the settings were exported. If two SmartPTT Dispatchers with the same GUID operate in the radio system at the same time, it may lead to errors and malfunctioning.

- 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 reporting tools for monitoring various aspects of the SmartPTT Dispatcher and SmartPTT Radioserver operation during a desired period of time. It provides the following reporting options:

- Building a report on the basis of SmartPTT Dispatcher or SmartPTT Radioserver Event Logs. For details, see Report Wizard.
- Viewing the number of All Calls and group calls.

For details, see Radio Activity Report.

• Displaying GPS coordinates of selected radios and WAVE users.

For details, see Radio Locations.

• Building a report on the movement of selected radios and WAVE users on the basis of the GPS data received from them.

For details, see Radio Movement.

Viewing registered and non-registered online radios and WAVE users.
 For details, see Online Radios.

- Generating reports based on the data provided by the SmartPTT monitoring feature. For details, see <u>Monitoring Reports</u>.
- Viewing information about events reported by radios and WAVE users in the Lone Worker mode.

For details, see Lone Workers.

• Building a report on the movement of selected radios and WAVE users inside buildings based on the data received from connected beacons.

For details, see **Indoor Tracking**.

For information on these reporting tools, see the corresponding sections below.

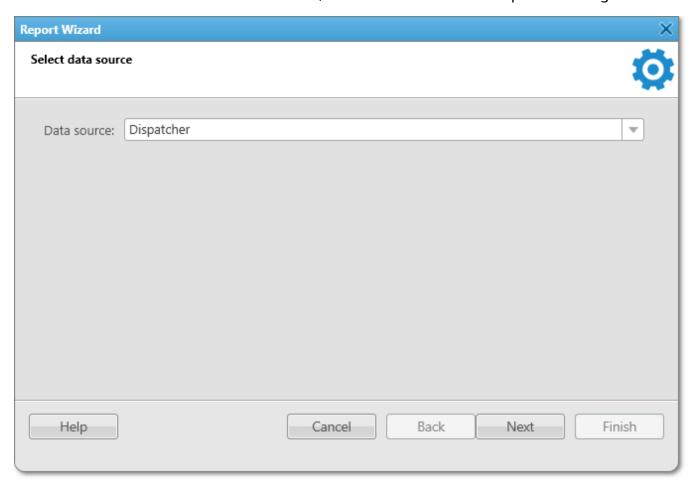
7.1 Report Wizard

Report Wizard functionality provides flexible report creation based on the information stored in the SmartPTT Dispatcher **Event Log**.

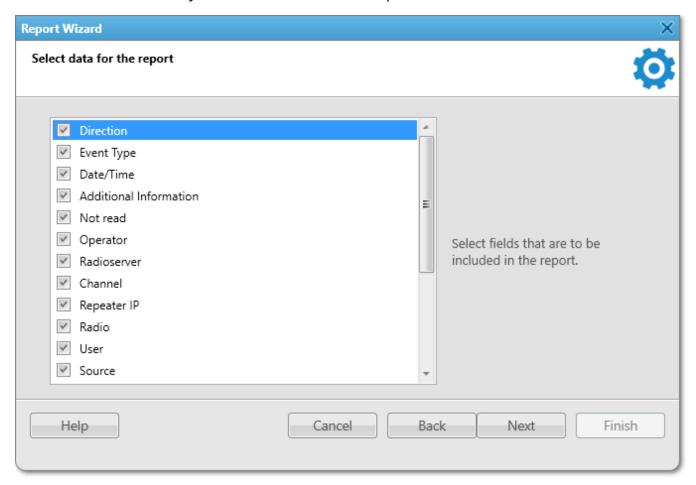
Using the **Report Wizard** it is possible to select the necessary boxes for the report, specify grouping and sorting boxes, specify filtering criteria. Reports generated by the **Report Wizard** are exported to Microsoft Excel.

To use the **Report Wizard**, expand the **Reports** menu on the menu bar of the SmartPTT Dispatcher window and click **Report Wizard**. The **Report Wizard** window appears:

1. In the **Report Wizard** window select the data source of the future report. You can select between the database of the dispatch console and the database of the radioserver. To be able to select the radioserver database, ensure the radioserver is up and running.



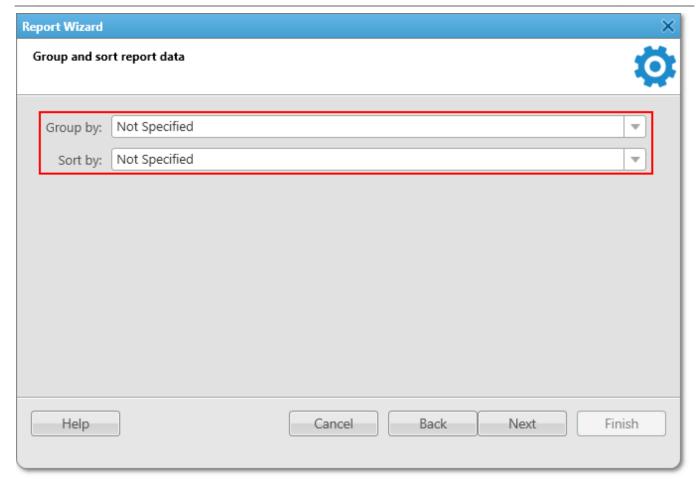
2. Select boxes which you want to include in the report and click **Next**.



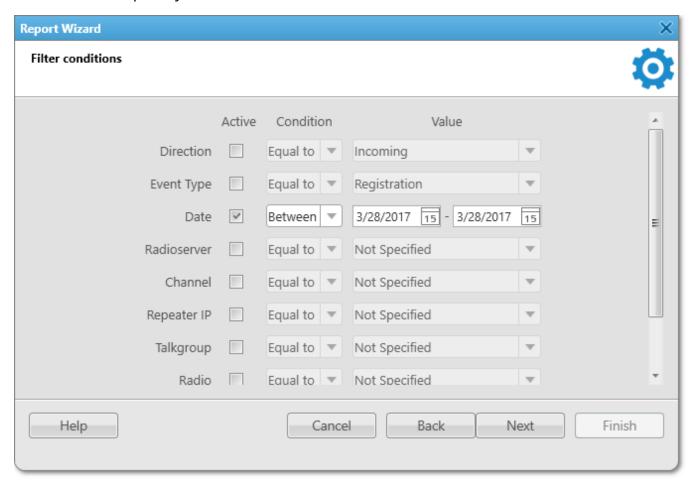
3. Define the structure of the report – its grouping and sorting and click **Next**.

NOTE

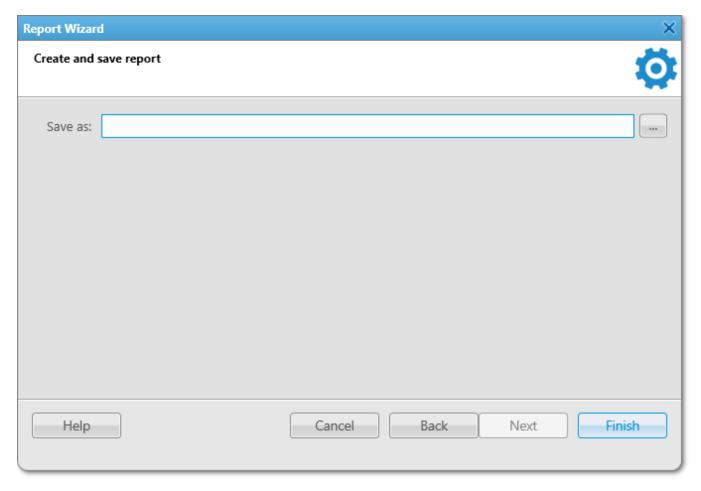
If both boxes are not specified, the report will be grouped and sorted by default.



4. Filter the report by values. Click **Next** to continue.



5. Specify the file name of the report. To complete the process, click **Finish**. The report can be saved in .html, .mht, .xls, .xlsx, .csv, and .txt formats.

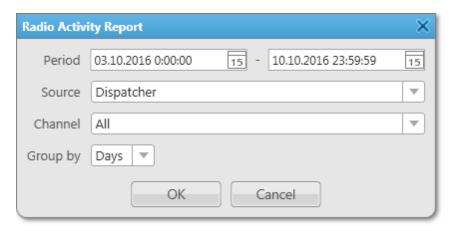


Reports Radio Activity Report

7.2 Radio Activity Report

Radio Activity Report gives information about quantity and duration of All Calls and Group Calls with a breakdown into hours or days.

To create the report, expand the **Reports** menu and select **Radio Activity Report**. The **Radio Activity Report** window appears:



Period: Defines the time frame for the report data.

Source: Defines the source, which database will be used for the report. If *Dispatcher* is selected, the data is taken from the local database. Apart from *Dispatcher*, any available radioserver can be chosen as a data source. In that case all data is taken from the database of the chosen radioserver.

Channel: Allows to build a report for a particular channel or for all control stations.

Group by: Defines the level of detail, whether you want to see the report information divided into days, hours or minutes.

The report can be saved in .pdf, .html, .mht, .rtf, .xls, .xlsx, .csv, .txt, .image or .xps formats.

Example

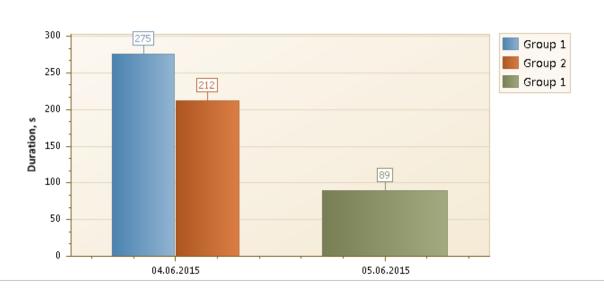
Radio Activity Report

from 04.06.2015 0:00:00 to 08.06.2015 23:59:59

	Amount of Calls	Duration, hh:mm:ss
Total Calls	25	00:09:36
Group 1	21	00:06:04
Group 2	4	00:03:32

Hourly Details

	Amount of Calls	Duration, hh:mm:ss	Period
Total Calls	9	00:08:07	04.06.2015 17:00 - 04.06.2015 18:00
Group 1	5	00:04:35	04.06.2015 17:00 - 04.06.2015 18:00
Group 2	4	00:03:32	04.06.2015 17:00 - 04.06.2015 18:00
Total Calls	16	00:01:29	05.06.2015 15:00 - 05.06.2015 16:00
Group 1	16	00:01:29	05.06.2015 15:00 - 05.06.2015 16:00

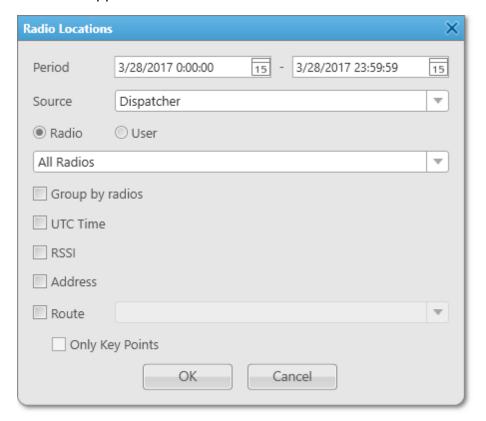


Reports Radio Locations

7.3 Radio Locations

SmartPTT Dispatcher allows creating a report on radio and <u>WAVE user</u> locations. The report can be saved in .pdf, .html, .mht, .rtf, .xls, .xlsx, .csv, .txt, .image or .xps formats.

To create the report, expand the **Reports** menu on the menu bar and click **Radio Locations**. The **Radio Locations** window appears:



Period: Defines the time frame of the report.

Source: Defines the source, whose database will be used for the report. If *Dispatcher* is selected, the data is taken from the local database. Apart from *Dispatcher*, any available radioserver can be chosen as a data source. In that case the data is taken from the database of the chosen radioserver. To build a report based on the radioserver database, make sure that **Event Log** is enabled and connected in SmartPTT Radioserver Configurator.

Radio: Defines a radio or WAVE user for which the report is generated. The list of radios is taken from the current database. When *All Radios* is selected, the report will be generated for all radios and WAVE users which have GPS coordinates in the database.

Reports Radio Locations

User: Defines a radio user for whom the report is generated. The list of users is taken from the current database. When *All Users* is selected, the report will be generated for all users which have GPS coordinates in the database.

Group by radios: Groups data in the report by radios or WAVE users.

UTC Time: If selected, the report period time and the event time in the report are shown in UTC (UTC+00:00). If **UTC Time** is not selected, the report period time and the event time in the report are shown according to the time zone set on the computer of dispatcher (for example, UTC+05:00).

RSSI: If selected, the signal strength of the received signal (RSSI) is displayed in the report.

Address: Allows displaying address information based on the received coordinates. The addresses are received from one of the two services Google Maps or OpenStreetMap. The service is selected in **Settings () Positioning Systems Address Data Provider. If the Address** check box is not selected, there will be a link **Find on Map** instead of the address. You can use the link to see the address.

Route: Defines the route on the basis of which the **Radio Locations** report is to be generated.

Reports Radio Locations

Only Key Point: Displays only the key points of the route in the report.

Click **OK** to create the report.

Example

Radio Location Report

from 01.03.2015 0:00:00 to 12.05.2015 23:59:59

Date	Radio	Latitude	Longitude	Speed	Precision	RSSI (dBm)	Address
Dute	radio	Latitude	zongituae	m/s	(ft)	noor (abm)	, iddiess
04.03.2015 17:10:11	4000	56,47897	85,06805	0,38	33,12	-58,64	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:08:57	4000	56,47897	85,06808	0,24	57,72	-58,71	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:08:39	4000	56,47897	85,06808	0,15	51,83	-58,68	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:08:23	4000	56,47897	85,06808	0,05	58,72	-58,62	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:08:07	4000	56,47897	85,06808	0,39	53,80	-58,57	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:07:55	4000	56,47897	85,06806	1,19	108,91	-58,65	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:07:47	4000	56,47898	85,06811	0,23	104,32	-58,72	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:07:03	4000	56,47898	85,06811	0,10	48,55	-58,63	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:06:51	4000	56,47898	85,06811	0,05	316,60	-58,55	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:05:37	4000	56,47898	85,06812	0,49	100,37	-58,65	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:05:15	4000	56,47899	85,06812	0,23	144,66	-58,71	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055
04.03.2015 17:04:59	4000	56,47899	85,06810	0,48	119,75	-58,70	ulitsa Bratyev Tronovykh, Nauka, Tomskaya oblast', Russia, 634055

To set up the format of **Latitude**, **Longitude**, **Speed** and **Precision** columns of the **Radio Location Report**, see <u>Positioning Systems</u>, the **GPS tab**, in SmartPTT Dispatcher.

NOTE

The Universal Transverse Mercator Coordinate System format is not applicable to this report. If it is selected, Latitude and Longitude are displayed in Decimal degrees format.

NOTE

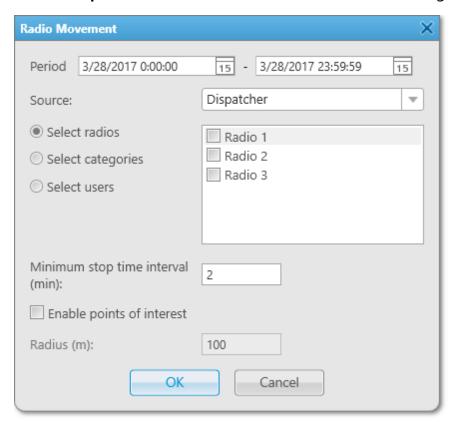
The **Precision** column does not provide data for GPS batches and shows empty.

Reports Radio Movement

7.4 Radio Movement

The **Radio Movement** report provides information about the radio and <u>WAVE user</u> movement on the basis of received GPS data.

To create a report, on the **Reports** menu, click **Radio Movement**. The following window appears:



Period: Defines the time frame for the report data.

Source: Defines the source, whose database will be used for building the report for selected radios, WAVE users, categories or radio users. 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.

Select radios: Select the radios or WAVE users whose GPS data will be used to build the report.

Select categories: Select the categories of radios or WAVE users whose GPS data will be used to build the report.

Select users: Select the radio users whose GPS data will be used to build the report.

Reports Radio Movement

Minimum stop time interval (min): Used to define the time when the radio or the WAVE user stops. If it stays at the same place longer than the specified time interval, the it is supposed to be parked.

Enable points of interest: Select to use <u>the points of interest</u> when building the report.

NOTE

When **Enable points of interest** is selected, in the **Radio Movement** report the **Location** box will contain only the name of the point of interest.

Radius (m): Specify the allowed distance deviation from the point of interest.

NOTE

The **Radius** box is available only if **Enable points of interest** is selected.

Reports Radio Movement

To build the report, click **OK**. To cancel this action, click **Cancel**.

After clicking **OK**, the report opens automatically. The report can be saved in the .pdf, .html, .mht, .rtf, .xls, .xlsx, .csv, .txt, .image or .xps formats.

Example

Radios Movement Report

Period: 05.08.2016 0:00:00 - 02.09.2016 23:59:59 (UTC+7)

Start time	Stop time	Moving time	Distance, km	Maximum speed, km/h	Location	Stop time interval	Idle time
Radio: 1							
24.08.2016							
-	-	-	-	-	ElcomPlus	00:10:24	00:10:24
12:24:46	12:28:22	00:03:36	0,07	0,42	ElcomPlus	00:02:00	00:02:00
12:30:22	12:33:07	00:02:45	0,02	1,49	ElcomPlus	00:50:35	00:01:07
13:23:42	13:25:12	00:01:30	0,14	6,33	ElcomPlus	00:12:24	-
13:37:36	13:44:36	00:07:00	0,42	7,79	ElcomPlus	00:07:48	-
13:52:24	13:56:24	00:04:00	0,03	0,06	ElcomPlus		00:01:00
Total for 24.08.2016		00:18:51	0,68			01:23:11	00:14:31
Total for period		00:18:51	0,68			01:23:11	00:14:31
Radio: 2							
05.08.2016							
11:37:26	11:49:16	00:11:50	0,21	1,66	ElcomPlus	00:12:42	00:03:25
12:01:58	12:35:58	00:34:00	0,74	2,11	ElcomPlus	-	-
Total for 05.08.2016		00:45:50	0,95			00:12:42	00:03:25
08.08.2016							
10:05:58	10:15:23	00:09:25	0,23	1,83	ElcomPlus	00:10:27	00:02:33
10:25:50	10:33:52	00:08:02	0,19	2,00	ElcomPlus	-	00:00:30
Total for 08.08.2016		00:17:27	0,42			00:10:27	00:03:03
Total for period		01:03:17	1,37			00:23:09	00:06:28
Radio: 3							
08.08.2016							
13:26:56	13:30:26	00:03:30	0,19	6,64	ElcomPlus	00:04:58	00:01:04

Reports Online Radios

7.5 Online Radios

SmartPTT allows exporting online radios and <u>WAVE users</u> (registered and not registered) in no time by means of the **Online Radios** report.

To create the report, expand the **Reports** menu on the menu bar of the SmartPTT Dispatcher window, and click **Online Radios**. The following window appears:



All: Select this radio button to include all registered and not registered online radios and WAVE users in the report.

Radio ID range: Select this radio button to limit the radio and WAVE user IDs in the report.

Click **OK**. The report opens. The report can be exported to .pdf, .html, .mht, .rtf, .xls, .xlsx, .csv, .txt, .image or .xps formats.

The report contains three columns: **Radio ID**, **Channel Type** and **Name**. The **Channel Type** column can have three values: MOTOTRBO, Analog, Select 5.

Example

	Online Radios (3)	
Radio ID	Channel Type	Name
3	MOTOTRBO	Radio 1
4	MOTOTRBO	Radio 2
5	MOTOTRBO	Radio 3

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 information on the the radio system calls, such as repeater IDs, IDs of the call participants, event duration and type, RSSI, and and other related call parameters.
 For details, see <u>Monitoring Report</u>.
- 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 statistics based on the radio system call and event types and the load caused by them in the graphical representation.
 - For details, see **Analytic Report**.
- Displaying information on the system load, uptime, downtime, and other related radio system parameters.
 - For details, see **System Usage Report**.

NOTE

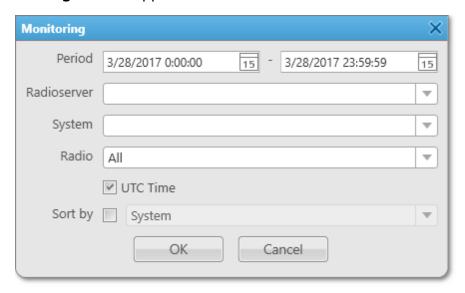
The reporting functionality is available only if the Monitoring feature is activated in SmartPTT Radioserver Configurator. For details, see "Monitoring" in *Radioserver Configurator User Guide*.

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

7.6.1 Monitoring Report

Monitoring Report gives such information as repeater ID, ID's of the calling and receiving parties, duration of the event and its type, RSSI and many other.

To create the report, expand the **Reports** menu on the menu bar, and under **Monitoring** select **Report**. The **Monitoring** window appears.



Period: Defines the time frame of the report.

Radioserver: Defines the radioserver, whose database you want to use as a data source.

System: Defines the radio system for which you want to build a report. In the drop-down list you can find both existing and removed radio systems. Network IDs are used for outdated radio systems, and names – for existing ones.

Radio: Selects the radio or the <u>WAVE user</u> for which the report is to be generated. If you select *All*, the report will be generated for all registered radios and WAVE users.

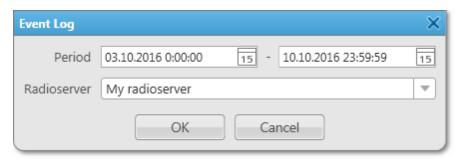
UTC Time: If **UTC Time** is selected, the report time and report start date and end date are shown in UTC (UTC+00:00). If **UTC Time** is not selected, the report time and report start date and end date are shown according to the time zone set on the computer of dispatcher (for example, UTC+05:00).

Sort By: You can select the column by which you want to sort the report data: network, repeater, slot, protocol, sender, receiver, duration, RSSI.

7.6.2 Event Log Report

Event Log Report shows information about available devices in the system (e.g., repeaters, routers, uninterruptible power supplies) and alarms registered on these devices.

To create the report, expand the **Reports** menu on the menu bar, and under **Monitoring** select **Event Log**. The **Event Log** window appears.



Period: Defines the time frame of the report.

Radioserver: Defines the radioserver whose database you want to use as a data source.

After clicking **OK**, the report opens automatically:

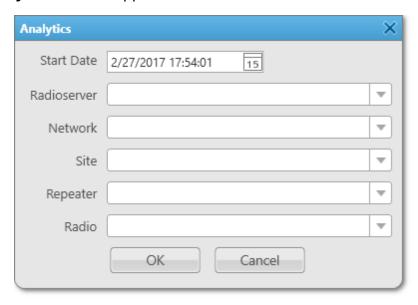
Example

Radioserver	g All Radioservers							
)14 00:00:00 to 13.	11.2014 00:00:00						
Radioserver	Network	Site Event Time	Device Type	Repeater	Device Name	Device ID	Importance	Description
71		12.11.2014 15:31:05	Router		Cisco	192.168.37.72:161	High Alarm	No response from the device
71		12.11.2014 15:30:58	UPS		Eaton	192.168.37.73:161	High Alarm	No response from the device
71	IP Site Connect 1	12.11.2014 15:30:52	Repeater	141	Motorola	192.168.37.141:50101	Information	Repeater connected
71	IP Site Connect 1	12.11.2014 15:30:47	Repeater	31220		192.168.37.128:50001	Information	Repeater connected
71	IP Site Connect 1	12.11.2014 15:30:45	Repeater	71	SmartPTT	192.168.37.71:50000	Information	Repeater connected
71	IP Site Connect 1	12.11.2014 15:30:29	Repeater	31220	SmartPTT	192.168.37.128:50001	Information	Repeater disconnected
71	IP Site Connect 1	12.11.2014 15:30:29	Repeater	188		192.168.37.137:50000	Information	Repeater disconnected
71	IP Site Connect 1	12.11.2014 15:30:27	Repeater	141	Motorola	192.168.37.141:50101	Information	Repeater disconnected
71		12.11.2014 15:29:56	Router		Cisco	192.168.37.72:161	High Alarm	No response from the device
71		12.11.2014 15:29:49	UPS		Eaton	192.168.37.73:161	High Alarm	No response from the device
71	IP Site Connect 1	12.11.2014 15:29:43	Repeater	141	Motorola	192.168.37.141:50101	Information	Repeater connected
71	IP Site Connect 1	12.11.2014 15:29:38	Repeater	31220		192.168.37.128:50001	Information	Repeater connected
71	IP Site Connect 1	12.11.2014 15:29:38	Repeater	188		192.168.37.137:50000	Information	Repeater connected
71	IP Site Connect 1	12.11.2014 15:29:36	Repeater	71	SmartPTT	192.168.37.71:50000	Information	Repeater connected

7.6.3 Analytic Report

Analytic Report is a graphical representation of the data received during a monthly monitoring process.

To build a report, expand the **Reports** menu on the menu bar, and under **Monitoring** select **Analytics**. The **Analytics** window appears.



Start Date: Specify the start date of the report. This is a monthly report, so the end date is calculated automatically.

Radioserver: Select the available radioserver whose database will be used as a data source.

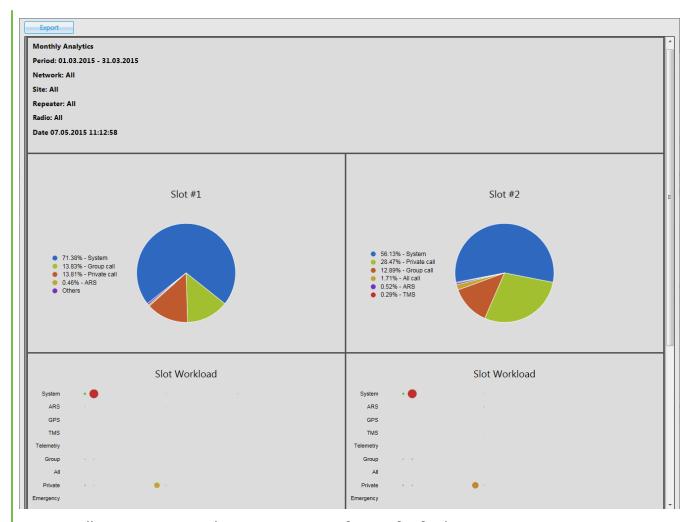
Network: Select the radio system for which you want to build a report. The drop-down list contains all radio systems which have been ever used. Network ID's are used for old networks, and names – for existing ones.

Site: Select a site. This is used for Linked Capacity Plus networks. You can also build a report for all existing sites, or select no sites at all.

Repeater: Select the particular repeater. You can also build a report for all repeaters.

Radio: Select the radio or the <u>WAVE user</u> for which the report is to be built. You can build a report on all radios and WAVE users from the drop-down list.

Example

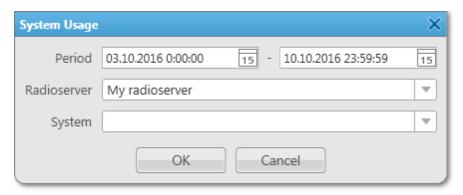


Export: Allows you to save the report in HTML format for further use.

7.6.4 System Usage Report

System Usage Report provides information on the system load, uptime, downtime, and other information.

To build the report, expand the **Reports** menu on the menu bar, and under **Monitoring** select **System Usage**. The **System Usage** window appears.



Period: Defines the time frame of the report.

Radioserver: Select the available radioserver whose database will be used as a data source.

System: Defines the radio system for which you want to build a report. In the drop-down list you can find both existing and removed radio systems. Network IDs are used for outdated radio systems, and names – for existing ones.

After setting the parameters, click **OK** and the report will open in a new window.

The following limitations are applied to repeaters that provide the backhaul repeater chain (BRC) functionality in the radio system:

- For link repeaters, no information presents in the report.
- For drop repeaters, no information on channel loading presents.

For details on repeater roles, see <u>Diagnostics</u>.

NOTE

Calls on all drop repeaters of a backhaul chain are treated as the calls on a proxy repeater of the backhaul chain.

If a radio is not registered by a drop-repeater of a backhaul chain, the **Subscribers** table of the report will show that the radio is registered by the proxy repeater of the backhaul chain, or is registered on the site of the proxy repeater.

Example

Report: System Usage

Period: 10.11.2014 0:00:00 - 11.11.2014 0:00:00

System: IP Site Connect 1

Sites: 3

Site	Number of Channels	Number of Radios	Online, h:mm:ss	Offline, h:mm:ss
SmartPTT	2	0	0:10:44	9:39:43
Radioserver 77	2	3	0:23:52	9:26:35
Repeater Tomsk 1	2	0	0:10:50	9:39:37
System Total	6	3	0:23:52	9:26:35

Channels Loading

Site	Number of Channels	Duration, h:mm:ss,ms
SmartPTT	1	-
	2	-
	Total	0:00:00
Radioserver 77	1	0:01:07,54
	2	-
	Total	0:01:07,54
Repeater Tomsk 1	1	-
	2	-
	Total	0:00:00
System Total	1	0:01:07,54
	Total	0:01:07,54

Subscribers: 3

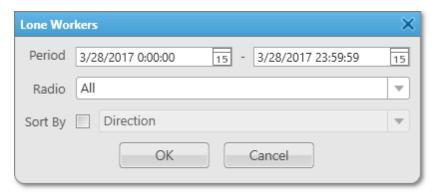
#	Radio ID	Name	Sites
1	1	1	Radioserver 77
2	77	77	Radioserver 77
3	4000	Alex O.	Radioserver 77

Reports Lone Workers

7.7 Lone Workers

The **Lone Workers** report provides information about the radio events when a radio or a <u>WAVE</u> <u>user</u> is in the lone worker mode, for example, registration on the network, the incoming or outgoing calls and messages.

To create the report expand the **Reports** menu on the menu bar of the SmartPTT Dispatcher window and select **Lone Workers**. The **Lone Workers** window appears.



Period: Defines the time frame for the report data.

Radio: Defines the radio or the WAVE user for which the report is to be generated. The list of radios and WAVE users is taken from the connected database.

Sort By: Defines the sorting box for the report events. Sorting parameters: direction, event type, date and time, additional information, operator, control station, radio (includes WAVE users), group, status, duration, repeater IP address, receiver.

The report can be saved in .pdf, .html, .mht, .rtf, .xls, .xlsx, .csv, .txt, .image or .xps formats.

Example

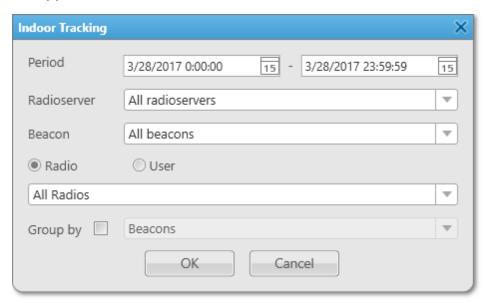
						Lone Wo	rkers						
Period 3/28/2	2017 0:00:00 -	3/28/2017 23:	59:59										
Radio: All													
Direction	Event Type	Date/Time	Additional Information	Operator	Radioserver	Channel	Radio	Talkgroup	Status	Duration	Repeater IP	Destination	Source
Outgoing	Message	3/28/2017 18:21:16	text message		SmartPTT Server	Slot 1	Radio 1		Message not delivered			Radio 1	1
Incoming	Call	3/28/2017 18:21:05			SmartPTT Server	Slot 1	Radio 2		Private Call	10		1	Radio 2
Incoming	Call	3/28/2017 18:21:01	Radio 1		SmartPTT Server	Slot 1	Radio 1	Group 1	Group Call	13		Group 1	Radio 1
Incoming	Call	3/28/2017 18:21:01	Radio 3		SmartPTT Server	Slot 1	Radio 3	Group 2	Group Call	13		Group 2	Radio 3
Incoming	Call	3/28/2017 18:20:50			SmartPTT Server	Slot 1	Radio 2		Private Call	15		1	Radio 2
Incoming	Call	3/28/2017 18:20:36			SmartPTT Server	Slot 1	Radio 2		Private Call	15		1	Radio 2
Incoming	Call	3/28/2017 18:20:36	Radio 3		SmartPTT Server	Slot 1	Radio 3	Group 2	Group Call	25		Group 2	Radio 3
Incoming	Call	3/28/2017 18:20:36	Radio 1		SmartPTT Server	Slot 1	Radio 1	Group 1	Group Call	26		Group 1	Radio 1
Incoming	Call	3/28/2017 18:20:23	Radio 2		SmartPTT Server	Slot 1	Radio 2	Group 2	Group Call	14	·	Group 2	Radio 2

Reports Indoor Tracking

7.8 Indoor Tracking

The **Indoor Tracking** report was designed to provide the dispatcher with consolidated information on radio movements inside buildings, based on beacon data.

To create the report expand the **Reports** menu, and select **Indoor Tracking**. The **Indoor Tracking** window appears.



Period: Defines the time frame for the report data.

Radioserver: Selects the available radioserver, whose database will be used as a data source.

Beacon: Selects the particular beacon or all beacons.

Radio: Defines the radio for which the report is to be generated. The list of radios is taken from the connected database.

User: Defines the radio user for which the report is to be generated.

Reports Indoor Tracking

Define the structure of the report by grouping it by beacons or radios.

Then click **OK** to build the report.

Example

Indoor Tracking

from 6/19/2014 12:00:00 AM to 6/19/2014 11:59:59 PM

Radio	Beacons	Radioserver	Date/Time	Message
12.0.0.155				
12.0.0.155	6499	Radioserver_Tomsk	6/19/2014 4:45:49 PM	Signal active
12.0.0.155	6501	Radioserver_Tomsk	6/19/2014 4:45:49 PM	Signal active
12.0.0.155	1594	Radioserver_Tomsk	6/19/2014 4:45:49 PM	Signal active
12.0.0.155	6499,1594,6501	Radioserver_Tomsk	6/19/2014 4:45:49 PM	Radio position
12.0.0.155	6499,1594,6501	Radioserver_Tomsk	6/19/2014 4:45:49 PM	Radio position
12.0.0.155	6499	Radioserver_Tomsk	6/19/2014 4:43:47 PM	Signal active
12.0.0.155	6499,1594,6501	Radioserver_Tomsk	6/19/2014 4:41:50 PM	Radio position
12.0.0.155	6501	Radioserver_Tomsk	6/19/2014 4:41:50 PM	Signal active
12.0.0.155	1594	Radioserver_Tomsk	6/19/2014 4:41:50 PM	Signal active
12.0.0.155	6499	Radioserver_Tomsk	6/19/2014 4:41:50 PM	Signal active
12.0.0.155	6499,1594,6501	Radioserver_Tomsk	6/19/2014 4:41:38 PM	Radio position
12.0.0.155	6499,1594,6501	Radioserver_Tomsk	6/19/2014 4:39:56 PM	Radio position
12.0.0.155	6499	Radioserver_Tomsk	6/19/2014 4:39:56 PM	Signal active
12.0.0.155	1594	Radioserver_Tomsk	6/19/2014 4:39:56 PM	Signal active
12.0.0.155	6499,1594,6501	Radioserver_Tomsk	6/19/2014 4:39:56 PM	Radio position
12.0.0.155	6501	Radioserver_Tomsk	6/19/2014 4:39:56 PM	Signal active
12.0.0.155	1594	Radioserver_Tomsk	6/19/2014 4:39:02 PM	Signal active
12.0.0.155	6501	Radioserver_Tomsk	6/19/2014 4:39:02 PM	Signal active
12.0.0.155	1594	Radioserver_Tomsk	6/19/2014 2:19:10 PM	Signal detected
12.0.0.155	6499	Radioserver_Tomsk	6/19/2014 2:18:57 PM	Signal active
12.0.0.155	6501	Radioserver_Tomsk	6/19/2014 2:18:57 PM	Signal active

NOTE

Under the high load conditions of a repeater, the report may contain corrupted beacon IDs.

To resolve the problem of corrupted beacon ID's, it is recommended to follow these steps:

- Increase the number of acknowledgments sent from the beacon to the radio. In order to do
 that, increase the values in the Beacon Sign On count and the Beacon Sign Off count
 boxes in the K-Term CPS settings.
- In the Indoor Tracking settings of SmartPTT Radioserver Configurator select the **Specify** list
 of allowed beacons check box and specify beacon IDs which data must be processed by
 SmartPTT Radioserver.

If the previous steps do not solve the problem, send your query to our <u>technical support service</u>.

Reports Indoor Tracking

NOTE

N/A is displayed in the **Beacons** column of the report, if a radio leaves the coverage area of a beacon.

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.

NOTE

The Connect Plus, NAI Extended Range Direct Mode, and radio systems based on analog control stations do not support conference calls.

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.

To organize a conference call, dispatchers need to have the **Make conference calls** operator permission. For details, see <u>Operators</u>.

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.

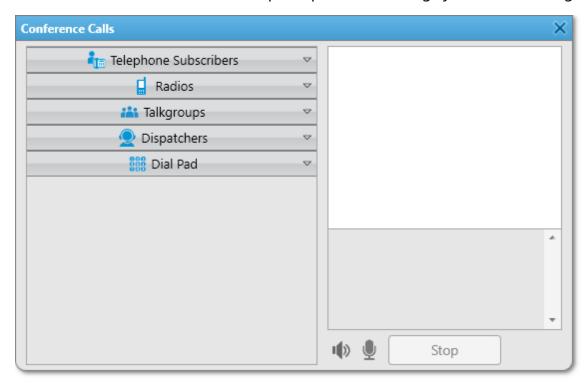
The conference call initiates automatically when you add a participant to the Participants box in the **Conference Calls** window.

The conference call finishes automatically when the **Conference call idle session timeout** period set in SmartPTT Radioserver Configurator expires. For details, see "Phone Calls" in *Radioserver Configurator User 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 <u>Telephone Subscribers Settings</u>.

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 "Networks" in the *Radioserver Configurator User 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 (9)

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 <u>Initiating Calls from the Conference Calls Window</u>.
- By inviting a specific participant to the conference using the following SmartPTT Dispatcher elements:
 - SmartPTT Dispatcher panels. For details, see <u>Initiating Calls from Dispatcher Panels</u>.
 - The **Dispatchers** window. For details, see <u>Initiating Calls from the Dispatchers Window</u>.
 - The **Telephone Subscribers** window. For details, see <u>Initiating Calls from the Telephone Subscribers Window</u>.

8.2.1 Initiating Calls from the Conference Calls Window

Follow the procedure below to initiate a conference call using the **Make Conference Call (** *) button.

Prerequisites:

Ensure that the desired radio, WAVE user, or dispatcher is online.

Procedure:

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:

- 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 (\(^{\scrt{b}}\)) 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** (**1 1 1**
- To turn off your microphone and keep listening to the conference participants, click **Turn off microphone** (10).
- To finish the conference call for all participants, click **Stop**.

8.2.2 Initiating Calls from Dispatcher Panels

Follow the procedure below 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 tile, 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 <u>Call Window of Radio</u> .

The **Conference Calls** window with information on the initiated conference call appears.

Postrequisites:

- For information on adding more participants to the conference call, see <u>Initiating Calls from the Conference Calls Window</u>.
- 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** (**9**).

- 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 below 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:

- On the menu bar, click **Dispatchers (②)**.
 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 <u>Initiating Calls from</u> 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** (**9**).
- 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 below 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:

- On the menu bar, click Telephone Subscribers (im).
 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 <u>Initiating Calls from</u>

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** (**9**).
- 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 <u>Sending Messages to Dispatchers</u>.

The Text Messaging feature is available only if the **Send text messages** check box is selected in the **Operators** settings.

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 <u>Sending Messages from the Send Message Window</u> and <u>Managing Message Templates</u>.
- From the Call Window of a radio or talkgroup.
 The Call Window is normally used for sending quick messages. For details, see <u>Sending Messages from the Call Window</u>.
- 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 <u>Sending Messages Using the TMS element</u>.
- 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 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 but no information on its delivery is available.
Message was not sent	The message was not sent due issues with the SmartPTT Dispatcher connection to the server.

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 <u>Call Windows Settings</u>.

When a message from another dispatcher is received, the Dispatchers window appears. For details, see <u>Dispatchers</u>.

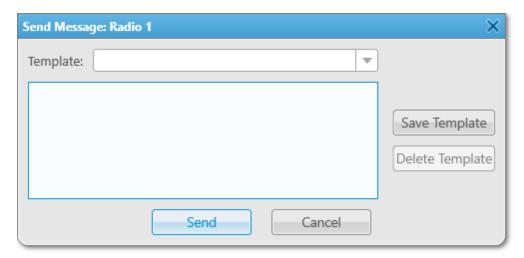
An audio file can be set to play to inform you of a new incoming message. For details, see "Rules" in *Radioserver Configurator User Guide*.

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 <u>Sending</u>
 <u>Messages from the Send Message Window</u>.
- 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 below to send a text message from the **Send Message** window to a radio or a talkgroup.

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 (\gg) button on the desired radio or talkgroup tile, and then click Send Message (\bowtie) .
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 <u>Call Window of Radio</u> .

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:
	 From the Template list, select the name of the desired template. The text of the message appears in the text box below.
	2. <i>Optional</i> : 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:

- To close the window without sending the message, click **Cancel**.
- For information on working with message templates, see Managing Message Templates.

9.3 Sending Messages from the Call Window

Follow the procedure below to send a quick message from the Call Window of a radio or a talkgroup.

Prerequisites:

Ensure that the Call Window of the desired radio or talkgroup is open. For information on ways to access the Call Window, see <u>Call Window of Radio</u>.

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 left of the text box.
	 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 below to to configure message templates for frequently sent messages.

Procedure:

1. Open the **Send Message** window. For details, see <u>Send Message Window</u>.

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
- Group voice calls
- All calls
- Multiselect calls
- · Cross patch calls

For information on initiating voice calls, see the sections below.

10.1 Initiating Private Voice Calls

Follow the procedure below to initiate a private call.

Prerequisites:

- Obtain the current settings of the pointing devices and hotkeys from administrator.
- Ensure the desired radio is online.

Procedure:

1. Initiate a private call in one of the following ways:

perform one of the following actions:Press and hold, or click the PTT button of the
desired radio.
 Select the radio, and then press and hold, or press the PTT button hotkey.
perform one of the following actions:
 Press and hold, or click the PTT button.
• Press and hold, or press the PTT button hotkey.
perform one of the following actions:
 Press and hold, or click the desired Radio Tile.
 Select the desired Radio Tile, and then press and hold, or press the PTT button hotkey.

The PTT button or Radio Tile becomes light-orange, and three dots appear on it.

- 2. When the PTT button or Radio Tile becomes orange, speak to your microphone.
- 3. To end the transmission, release or click again the PTT button, hotkey, or Radio Tile. The PTT button or Radio Tile becomes blue, and a hangtime starts.
- 4. During the hangtime, perform one of the following actions:
 - To listen to the radio transmission, wait until the PTT button or Radio Tile becomes green, and audio is heard from the speakers or headsets.

- To transmit again, repeat steps 1–3.
- To end the call, wait until the blue color disappears, and the hangtime is over.

10.2 Initiating Private Calls in Capacity Max

Follow the procedure below to initiate a private call in Capacity Max radio system.

Prerequisites:

- Obtain the information on the call type settings (FOACSU or OACSU) in Capacity Max from administrator.
- Obtain the current settings of the pointing devices and hotkeys from administrator.
- Ensure the desired radio is online.

Procedure:

1. Initiate a private call in one of the following ways:

To initiate the private call from the Radio Fleet panel,	perform one of the following actions:	
	 Press and hold, or click the PTT button of the desired radio. 	
	 Select the radio, and then press and hold, or press the PTT button hotkey. 	
To initiate the private call from the radio Call Window,	 perform one of the following actions: Press and hold, or click the PTT button. Press and hold, or press the PTT button hotkey. 	
To initiate the private call from the Radios panel,	 perform one of the following actions: Press and hold, or click the desired Radio Tile. Select the desired Radio Tile, and then press and hold, or press the PTT button hotkey. 	

The PTT button or Radio Tile becomes light-orange, and three dots appear on it.

2. Depending on the call type settings, perform one of the following actions:

If OACSU type is used,

perform the following actions:

- 1. When the PTT button or Radio Tile becomes orange, speak to your microphone.
- To end the transmission, release or click again the PTT button, hotkey, or Radio Tile.
 The PTT button or Radio Tile becomes blue, and a hangtime starts.

If FOACSU type is used,

perform the following actions:

- When the PTT button or Radio Tile becomes green, listen to the radio transmission.
 The PTT button or Radio Tile becomes blue, when the radio finishes the transmission.
- 2. Initiate the transmission again.
- 3. When the PTT button or Radio Tile becomes orange, speak to your microphone.
- To end the transmission, release or click again the PTT button, hotkey, or Radio Tile.
 The PTT button or Radio Tile becomes blue, and a hangtime starts.
- 3. During the hangtime, perform one of the following actions:
 - To listen to the radio transmission, wait until the PTT button or Radio Tile becomes green, and audio is heard from the speakers or headsets.
 - To transmit again, repeat steps 1–2.
 - To end the call, wait until the blue color disappears, and the hangtime is over.

10.3 Initiating Group Voice Calls

Follow the procedure below to initiate a group call.

Prerequisites:

- · Obtain the current settings of the pointing devices and hotkeys from administrator
- Determine the group call type you want to initiate: standard or broadcast. For information on group call types, see <u>Actions</u>.

Procedure:

1. Initiate a group call in one of the following ways:

To initiate the group call from the Radio Fleet panel,	 Press and hold, or click the PTT button of the desired talkgroup. Select the talkgroup, and then press and hold, or press the PTT button hotkey.
To initiate the group call from the Call Window of the talkgroup,	 perform one of the following actions: Press and hold, or click the PTT button. Press and hold, or press the PTT button hotkey.
To initiate the group call from the Channels panel,	 perform the following actions: From the list of the desired Channel Tile, select the group. Initiate the call: Press and hold, or click the desired Channel Tile. Press and hold, or press the PTT button hotkey.

The PTT button or Channel Tile becomes light-orange, and three dots appear on it.

2. When the PTT button or Channel Tile becomes orange, speak to your microphone.

- 3. To end the transmission, release or click again the PTT button, hotkey, or Channel Tile. The PTT button or Channel Tile becomes blue, and a hangtime starts.
- 4. During the hangtime, perform one of the following actions:
 - To listen to the call participant transmission, wait until the PTT button or Channel Tile becomes green, and audio is heard from the speakers or headsets.
 - To transmit again, repeat steps 1–3.
 - To end the call, wait until the blue color disappears, and the hangtime is over.

Voice Calls Initiating All Calls

10.4 Initiating All Calls

Follow the procedure below to initiate an All Call.

Prerequisites:

Obtain the current settings of the pointing devices and hotkeys from administrator.

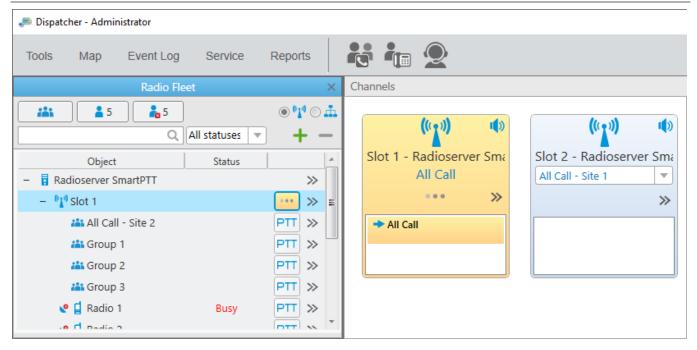
Procedure:

1. Initiate an All Call in one of the following ways:

To initiate the All Call from the Radio Fleet panel,	 Press and hold, or click the PTT button of Site All Call or of the desired channel ().
	 Select the desired channel () or Site All Call (), and then press and hold, or press the PTT button hotkey.
To initiate the All Call from the Channels panel,	perform the following actions: 1. From the list of the desired Channel Tile, select the desired All Call.
	2. Initiate the call:
	 Press and hold, or click the desired Channel Tile.
	 Press and hold, or press the PTT button hotkey.
To initiate the All Call from the All Call window,	perform one of the following actions:
	 Press and hold, or click the PTT button.
	 Press and hold, or press the PTT button hotkey.

The PTT button or Channel Tile becomes light-orange, and three dots appear on it.

Voice Calls Initiating All Calls



- 2. When the PTT button or Channel Tile becomes orange, speak to your microphone.
- 3. To end the transmission, release or click again the PTT button, hotkey, or Channel Tile. The PTT button or Channel Tile becomes blue, and a hangtime starts.
- 4. During the hangtime, perform one of the following actions:
 - To listen to the call participant transmission, wait until the PTT button or Channel Tile becomes green, and audio is heard from the speakers or headsets.
 - To transmit again, repeat steps 1–3.
 - To end the call, wait until the blue color disappears, and the hangtime is over.

10.5 Initiating Multiselect Calls

Follow the procedure below to initiate a multiselect call to several radios.

Prerequisites:

- Obtain the current settings of the pointing devices and hotkeys from administrator.
- Ensure the desired radios are online.

Procedure:

1. If the **Radios** panel is closed, on the menu bar, click **Tools** \rightarrow **Radios**.

- 2. *Optional:* In the **Radios** panel, in the upper part, select the desired view.

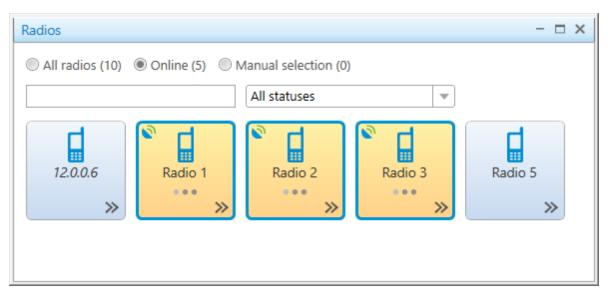
 If **Manual selection** is clicked and no radios are in the panel, drag the desired radios from the **Radio Fleet** panel to the **Radios** panel.
- 3. Select the desired Radio Tiles in one of the following ways:
 - Press and hold Ctrl, and then click the desired radios.
 - Press and hold Shift, and then click the desired radios or range of radios.

The blue frames appear on the Radio Tiles.

NOTE

The same actions are performed to deselect the Radio Tiles.

Press and hold, or press the PTT button hotkey.
 The Radios Tiles become light-orange, and three dots appear on them.



- 5. When the Radio Tiles become orange, speak to your microphone.
- 6. To end the transmission, release or press the PTT hotkey. The Radio Tiles become blue, and a hangtime starts.

NOTE

If the selected radios are from different radio system, the hangtime duration can also be different.

- 7. During the hangtime, perform one of the following actions:
 - To listen to the radio transmission, wait until the PTT button or Radio Tile becomes green, and audio is heard from the speakers or headsets.
 - To transmit again, repeat steps 4–6.
 - To end the call, wait until the blue color disappears, and the hangtime is over.

10.6 Reinitiating Voice Calls

Follow the procedure below to reinitiate a voice call.

NOTE

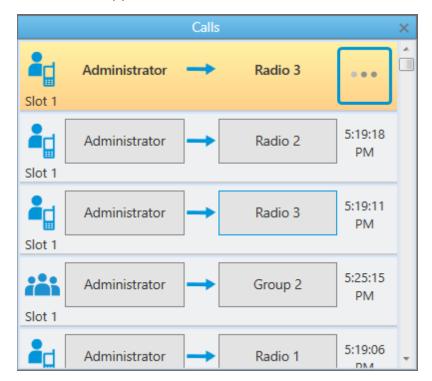
You can re-initiate a private call, a group call, an All Call, or a call initiated between radio and telephone subscriber.

Procedure:

1. If the **Calls** panel is closed, on the menu bar, click **Tools** \rightarrow **Calls**.

- 2. Depending on the pointing devices and PTT button hotkey settings, reinitiate a call:
 - Select the Call Initiator or Call Recipient name, and then press, or press and hold the hotkey.
 - Click the Call Initiator or Call Recipient name.

A new 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.



- 3. When the call entry becomes orange, and the PTT button appears, speak to your microphone.
- 4. To end the transmission, release or press the PTT hotkey, click the call participant name or the PTT button.
 - The call entry becomes blue, and a hangtime starts.
- 5. During the hangtime, perform one of the following actions:
 - To listen to the call participant transmission, wait until the call entry becomes green, and audio is heard from the speakers or headsets.

- To transmit again, repeat steps 2–4.
- To end the call, wait until the blue color disappears, and the hangtime is over.

NOTE

In Capacity Max, in the **Calls** panel, you can end the call at any time by clicking the Cross (\times) icon or right-clicking the corresponding call entry or PTT button.

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

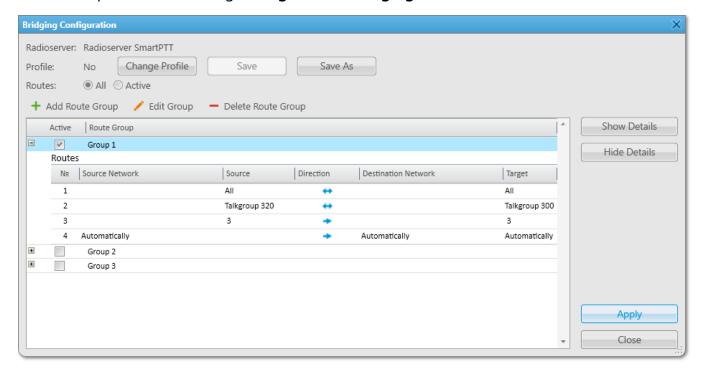
The main idea of bridging configuration in SmartPTT Dispatcher is using of profiles and route groups. Profiles contain information on the bridging rules, which are specified in routes and route groups.

In the **Bridging Configuration** window you can create <u>routes</u> and <u>route groups</u>, and add them to <u>profiles</u>. Bridging settings can be configured individually for each SmartPTT Radioserver.

NOTE

The **Bridging Configuration** window is available to Administrators, or to Operators with the rights to manage bridging settings. For more information on operator rights, see <u>Operators</u>.

You can open the window by clicking the Action button (>>>) next to SmartPTT Radioserver in the Radio Fleet panel, and selecting **Configure Call Bridging Table**.



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 <u>Bridging Profiles Window</u>.

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 <u>Adding Profiles</u>.

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

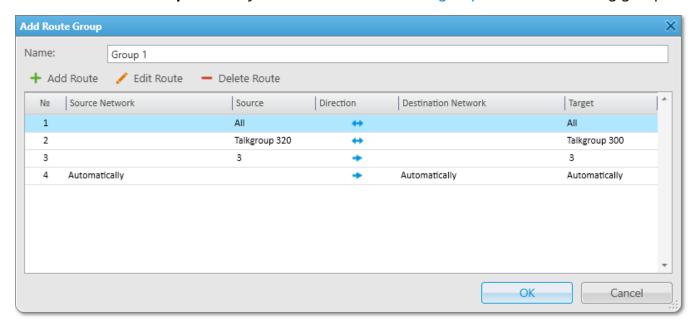
When the group is expanded, it contains the routes added in the <u>Add Route Group Window</u> window.

- 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.

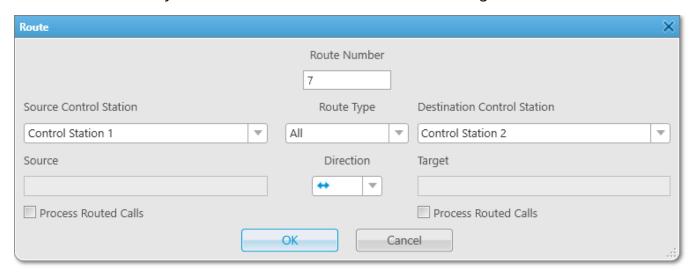
Routes Table

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.

Destination Control Station

Provides the list of available destination channels for the route. In the Routes Group tables it calls as **Destination Network**.

Source

Contains a source ID for the route (radio ID, talkgroup ID, or all IDs for All Calls).

Direction

Provides the list of directions for the route.

If one-way direction is selected, only source network can route calls. If two-way direction is selected, both source and destination networks can route calls.

Target

Contains the target ID of the route (radio ID, talkgroup ID, or all IDs for All Calls).

Process Routed Calls

When selected, it provides routing of incoming calls of the channel by another route.

For 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

 O4 slot 01
- IPSC 02 slot 01

 → IPSC 03 slot 01
- IPSC 02 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

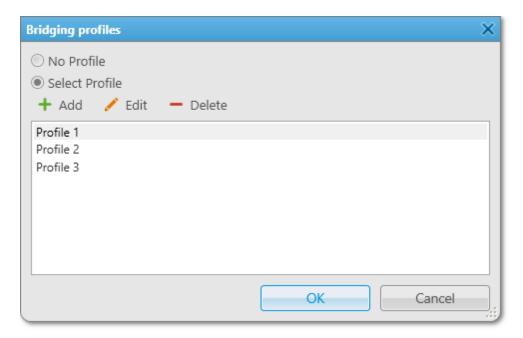
WARNING

Do not use round routes. They can cycle all routes and lead to unstable system operation (for example, IPSC 01 slot 01 \leftrightarrow IPSC 04 slot 01).

11.1.3 Bridging Profiles Window

You can use profiles for quick switching between predefined 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 <u>manage profiles</u> (add, rename, delete, and switch between them). 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

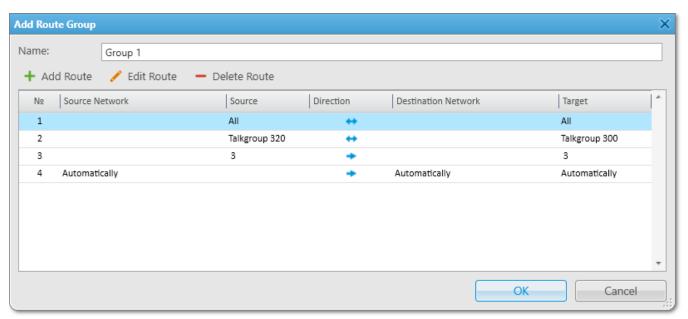
Removes the selected profile.

11.2 Adding Route Groups

Follow the procedure below to add a route group.

Procedure:

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 **Configuring Non-Private Routes**.
 - 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 below 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:

- 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.

Postreguisites:

- 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 below 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:

- 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 below to route group calls or All Calls.

Prerequisites:

- Ensure that the desired networks are configured in SmartPTT Radioserver Configurator.
- Obtain the desired source and destination talkgroup IDs.

Procedure:

- 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. Depending on the call type, in the **Source** box, type the source ID:
 - To route a group call, type the source talkgroup ID.
 - To route All Call, type 0.
- 8. Repeat <u>step 7</u> for the destination ID in the **Target** box.
- 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 below 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 "Radio Groups" in *Radioserver Configurator User Guide*.

NOTE

Do not confuse radio groups (created in SmartPTT Radioserver Configurator) and talkgroups (radio system entities which are set in radio codeplugs).

Procedure:

- 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, because connection between subscribers occurs within the subscriber group.

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 <u>Managing Profiles</u>.

Bridging Service Configuring Profiles

11.3.1 Adding Profiles

Follow the procedure below to to save the current configuration as a new profile.

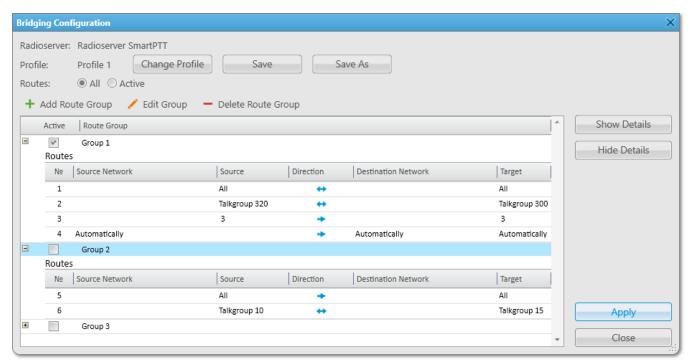
Prerequisites:

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:
 - In the Bridging Configuration window, click Save As.
 The Enter Profile Name window appears.

Bridging Service Configuring Profiles

- 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 below 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.

Bridging Service Configuring Profiles

3. If **Select Profile** is selected, in the **Bridging Profiles** window, perform one of the following actions:

To switch between profiles,	perform the following actions:
	1. Select the desired profile from the list.
	2. Click OK .
	The selected profile configuration opens.
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:

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.

Check for Updates

Opens the **Dispatcher Application Update** window to check any available updates for SmartPTT Dispatcher.

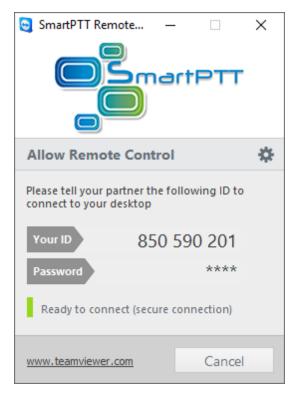
For information on configuring downloading updates, see **General Settings**.

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, follow these steps:

- 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** (**N**).



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