

TRBOnet One

User Guide

Version 5.4

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1 Introduction

This document is intended for end users of the TRBOnet One software.

1.1 About TRBOnet

TRBOnet is a suite of professional applications for MOTOTRBO digital two-way radio networks. TRBOnet manages voice and data communication paths across network endpoints. It provides a unified graphical dispatcher workbench interface for the entire range of workforce fleet management tasks.

For more information about TRBOnet products, refer to our [website](#).

1.2 Contacts

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EMEA	+44 203 608 0598	info@trbonet.com — general and commercial inquiries
Americas	+1 872 222 8726	support@trbonet.com — technical support
APAC	+61 28 607 8325	http://kb.trbonet.com — online knowledge base

2 About TRBOnet One

TRBOnet One is a PC-based voice dispatch and data application for MOTOTRBO professional digital two-way radio systems. This application is a new generation of TRBOnet dispatch consoles that brings new features and capabilities.

2.1 Features

- Flexible Graphical User Interface
- Voice Dispatch
- Voice Recording
- Location Tracking
- Indoor Location, support for 3D Floor Plans
- Chats and File Transfer
- Visual Alerts and Notifications
- Online Video
- SCADA Support
- Telemetry Dashboard, support for MODBUS

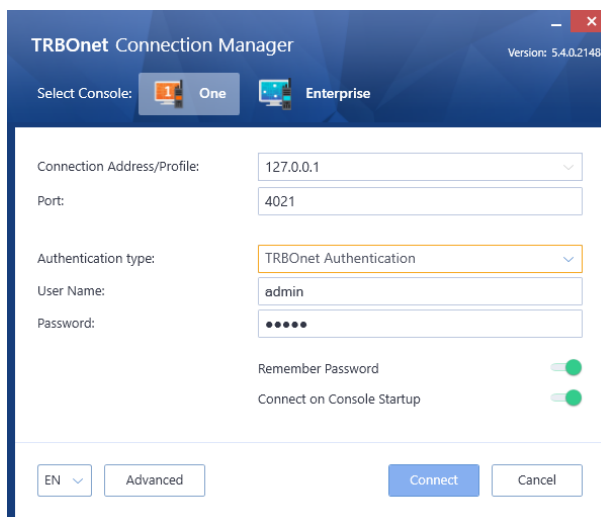
2.2 Prerequisites



- TRBOnet Server and Dispatch Console must be installed and configured. See *TRBOnet Enterprise/PLUS User Manual, section 4.3 Installing TRBOnet Enterprise/PLUS*.

3 Connecting to Server

Launch TRBOnet One using the desktop or Start menu shortcut.

The default Administrator credentials are **admin** for the login and **admin** for the password.

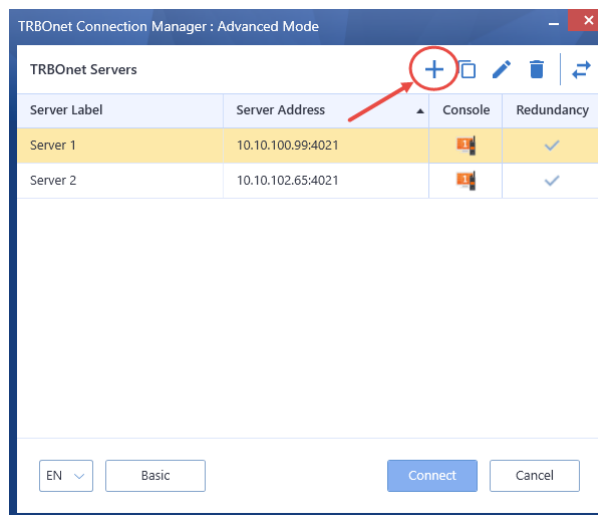


- Select . If you select , then TRBOnet Dispatch Console will be launched.
 - **Connection Address/Profile**
Enter the IP address of TRBOnet Server. Or, from the drop-down list, select the previously defined connection profile (see section [3.1, Creating Connection Profile](#)).
 - **Port**
Enter the local port of the TRBOnet Server PC.
 - **Authentication Type**
From the drop-down list, select the Authentication type:
 - **TRBOnet Authentication**
Select this method to log on as a user registered in the TRBOnet Dispatch Console users list.
 - **Windows Authentication**
Select this method to log on using the PC name. The system automatically shows the PC name as a user name.
- Note: The Windows user must be registered in the TRBOnet Dispatch Console users list.
- **User Name**
Enter the user name registered in the TRBOnet Dispatch Console users list.
 - **Password**
Enter the user password.

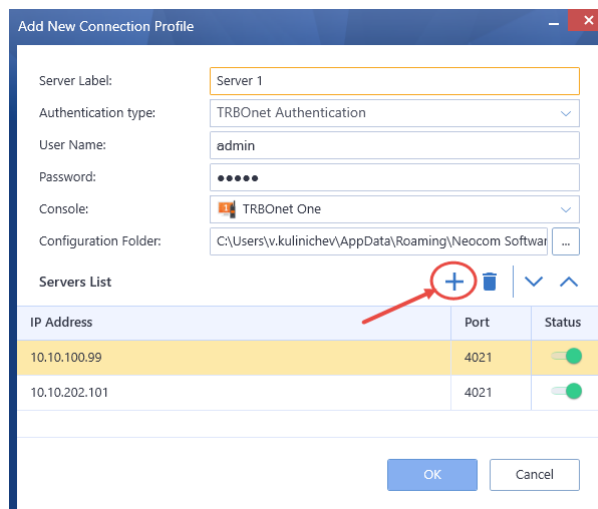
- **Remember Password**
Select this option if you want your password to be securely stored on your PC so that you can automatically connect to TRBOnet Server.
- **Connect on Console Startup**
Select this option to launch the dispatch console without having to type the user name and password every time. Use this option if you regularly connect to the same TRBOnet Server and your workstation is in a secure location.

3.1 Creating Connection Profiles

- Click the **Advanced** button at the bottom of the TRBOnet Connection Manager dialog box.



- To add a connection profile, click the plus sign button at the top of the dialog box.
As a result, the **Add Connection Profile** dialog box opens.




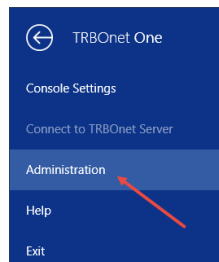
- Enter desired profile parameters and populate the list of servers.
- To add a server to the Servers List, click the plus sign button at the right. Enter the **IP Address** and **Port** of the server. You can also uncheck a server in the list, so it won't be used until checked again.

Note: The first checked server in the list will be used as the primary server, whereas the others will be used as redundant servers in their respective order.

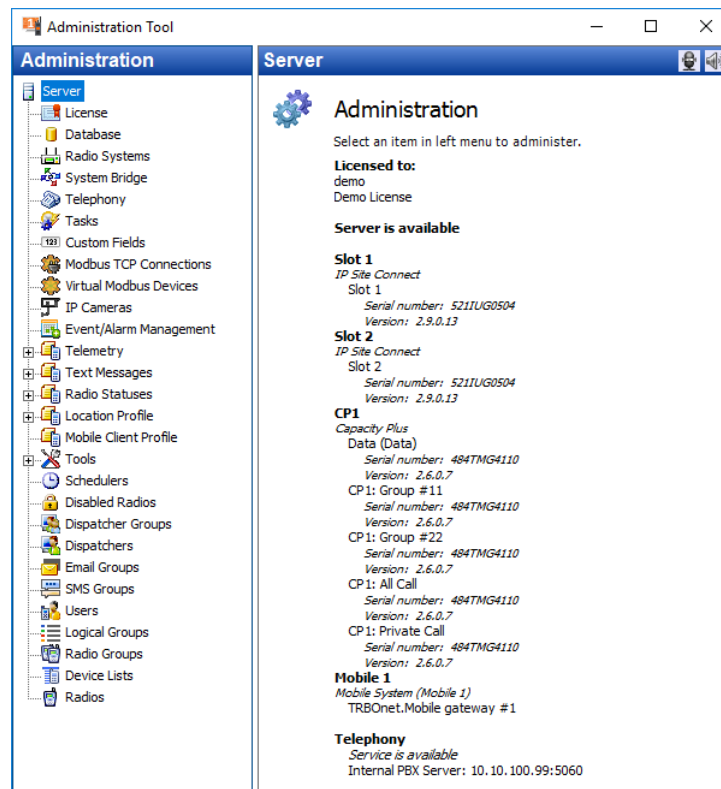
4 Administration Tool

A user that has administrative privileges can run the Administration Tool that will allow them to completely configure the radio system.


- Click the  button in the upper-left corner of the main window.
- On the slide-out menu, click **Administration**.

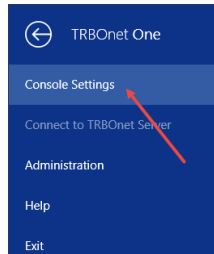


For more information on how to use the Administration Tool, see *TRBOnet Enterprise/PLUS User Manual, section 6.4, Administration*.



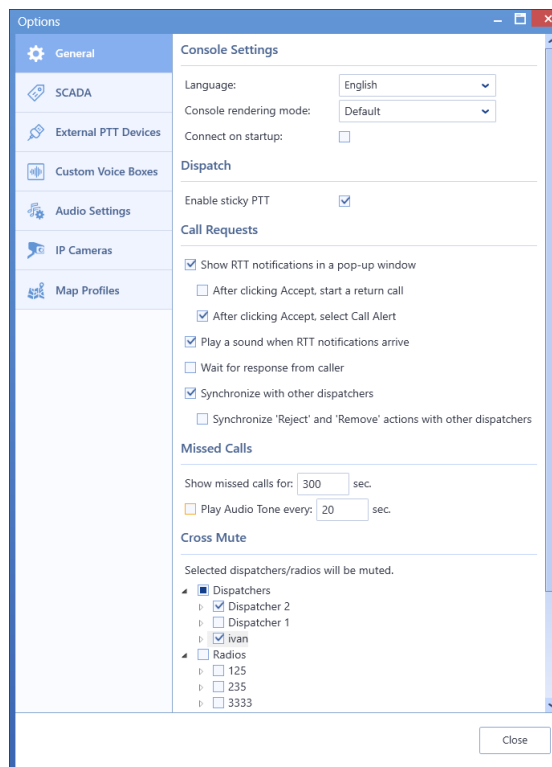
5 Console Settings

- Click the  button in the upper-left corner of the main window.
- On the slide-out menu, click **Console Settings**.



5.1 General

- Click the **General** tab.



Console Settings

- **Language**
From the drop-down list, select the interface language for TRBOnet One.
- **Console rendering mode**
From the drop-down list, select either 'Default' or 'Software rendering'. Use the latter option if your video adapter doesn't support the required graphics rendering.
- **Connect on startup**
Select this option to launch the dispatch console without having to type the user name and password every time. Use this option if you regularly connect to the same TRBOnet Server and your workstation is in a secure location.

Dispatch

- **Enable sticky PTT**

Select this option to start and finish voice calls by a short press of the PTT rather than holding the PTT down until the end of a voice call.

Call Requests

- **Show RTT notifications in a pop-up window**

Select this option so that incoming **Request to Talk** messages will pop up over the application window.

- **After clicking Accept, start a return call**

Select this option so that the call back starts as soon as the Accept button is clicked.

- **After clicking Accept, select Call Alert**

Select this option so that the Call Alert box gets selected in the Active Calls panel as soon as the Accept button is clicked.

- **Play a sound when RTT notifications arrive**

Select this option so that an alert tone will sound when a Request to Talk arrives.

- **Wait for response from caller**

Select this option so that a Request to Talk will be considered responded only if the radio has answered to the call back.

- **Synchronize with other dispatchers**

Select this option so that a Request to Talk sent to one dispatcher will automatically be forwarded to all dispatchers.

- **Synchronize 'Reject' and 'Remove' actions with other dispatchers**

Select this option to synchronize all actions performed upon requests to talk with other dispatchers.

Missed Calls

- **Show missed calls for**

Set the duration of displaying missed calls, in seconds.

- **Play Audio Tone every**

Select this option so that an audio tone will be played when a missed call occurs. In addition, specify the time interval, in seconds, for how often to repeat the audio tone.

Note: The audio tone will be played for the duration the missed call is displayed.

Cross Mute

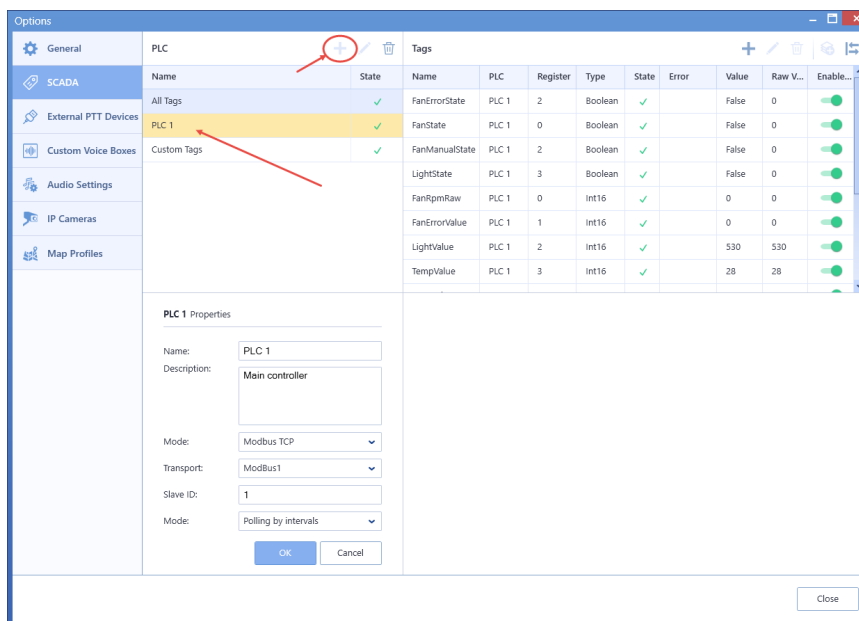
In the **General** tab, you can also select dispatchers and radios from whom to mute audio. Just select the corresponding check boxes in the Dispatchers and Radios lists.

5.2 SCADA

In the **SCADA** tab, you can add/edit PLC devices and tags that can be associated with telemetry elements. Programmable Logic Controllers (PLCs) must be connected to TRBOnet Server via a Modbus TCP/IP connection.

For instructions on how to create a Modbus TCP/IP connection to TRBOnet Server, see section 6.4.6, *Modbus TCP Connections* in *TRBOnet Enterprise User Manual*.

5.2.1 PLC Device



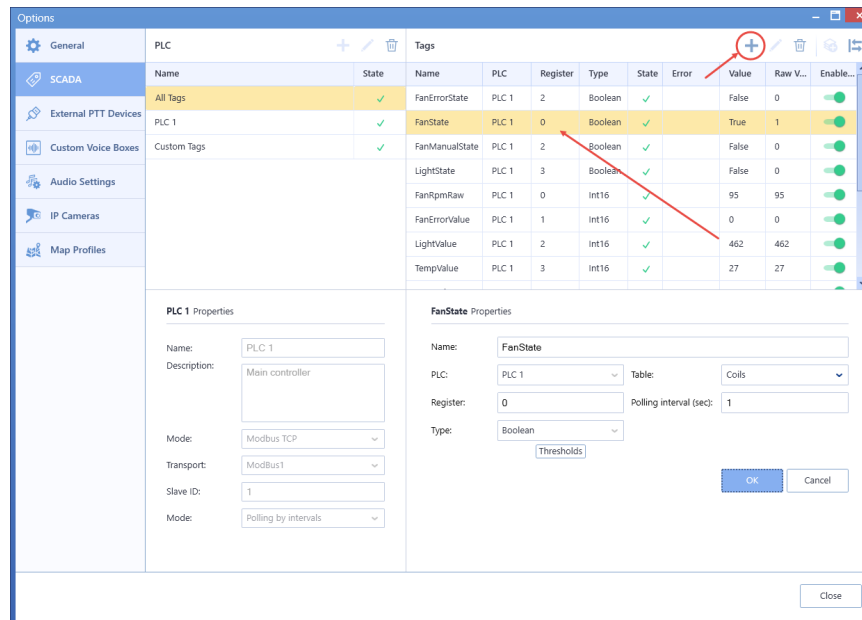
- In the **PLC** pane, click the plus sign button to add a PLC device, or double click the corresponding line in the list to edit the existing device.

In the **PLC properties** pane, specify the following parameters:

- **Name**
Enter a name of the PLC device.
- **Description**
Enter a description of the PLC device.
- **Mode**
From the drop-down list, select 'Modbus TCP'.
- **Transport**
From the drop-down list, select the appropriate Modbus TCP connection previously created in TRBOnet Dispatch Console.
- **Slave ID**
Enter the Slave ID of the PLC device.
- **Mode**
From the drop-down list, select one of the polling modes.
- **Preset**
From the drop-down list, select the predefined set of tags associated with the PLC device.

5.2.2 Tags

- In the **PLC** pane, select **All Tags**
- In the **Tags** pane, click the plus sign button to add a new tag, or double click the corresponding line in the list to edit the existing tag.



- In the **Tag Properties** pane, specify the desired tag parameters and click **OK**.

Importing a set of tags

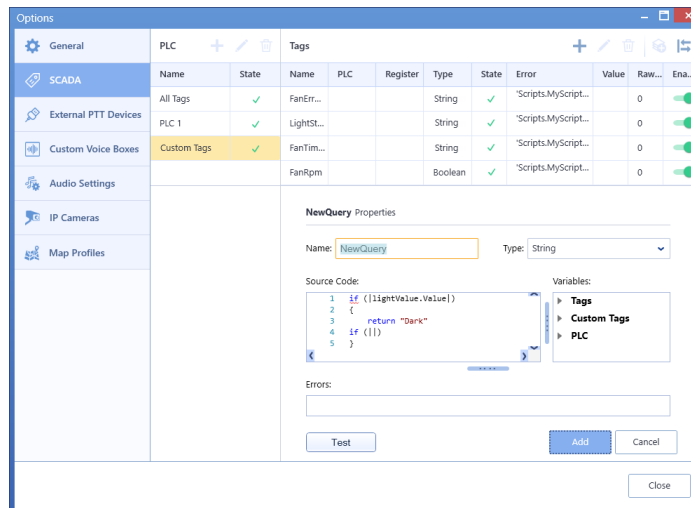
- In the **Tags** pane, click the button, and on the drop-down menu, choose **Import**.
- In the **Open** dialog box, navigate to the desired .csv file and click **Open**.

Exporting the current set of tags

- In the **Tags** pane, click the button, and on the drop-down menu, choose **Export**.
- In the **Save As** dialog box, locate the folder on the PC where you wish to store the file with tags and click **Save**.

5.2.3 Custom Tags

- In the **PLC** pane, select **Custom Tags**.
- In the **Tags** pane, click the plus sign button.

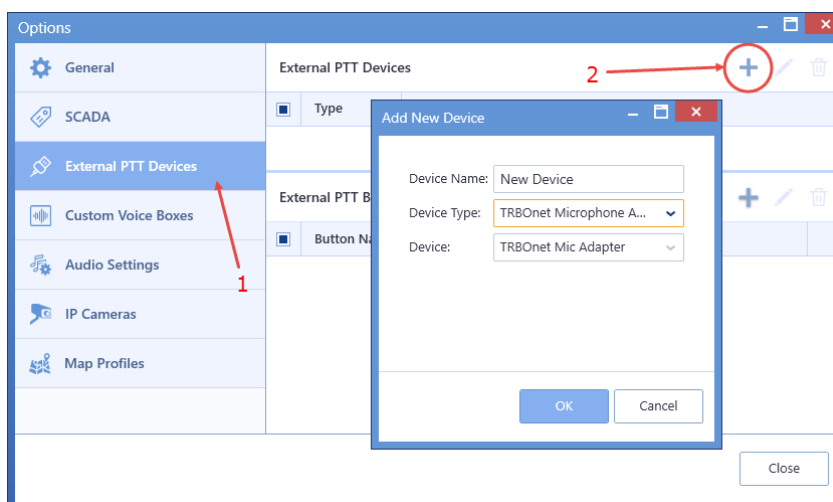


- In the **Tag Properties** pane, specify the desired tag parameters and click **OK**.

5.3 External PTT Devices

In the **External PTT Devices** tab, you can configure various devices to be used as PTT devices, such as a keyboard, footswitch, etc. Note that the connected external PTT buttons will be applied to selected voice boxes.

- Click the **External PTT Devices** tab (1).
- In the **External PTT Devices** pane, click the plus sign button (2).



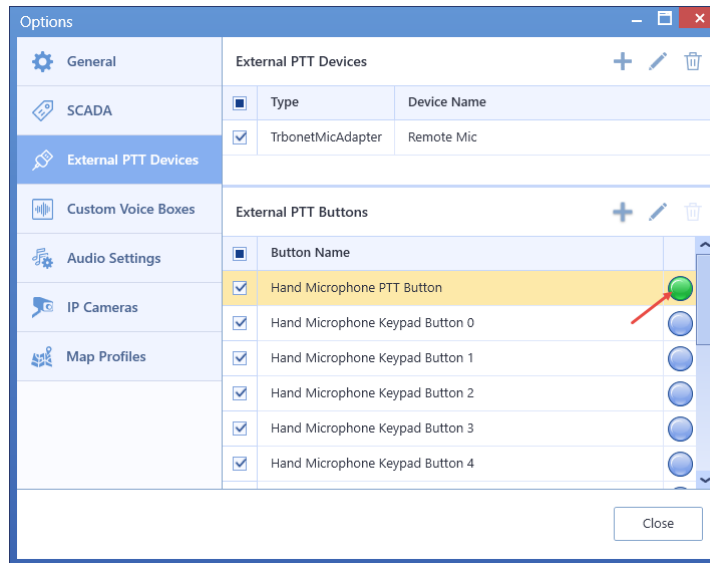
- In the **Add New Device** dialog box, specify the following settings:
 - **Device Name**
Enter a name for the device.

5.3.1 Adding Remote Microphone

The Motorola Remote Microphone is connected to the PC with the help of TRBOnet Swift Adapter M002.

- Connect the remote microphone to a USB-port of the PC by using the M002 adapter.
- From the **Device Type** drop-down list, select **TRBOnet Microphone Adapter**.

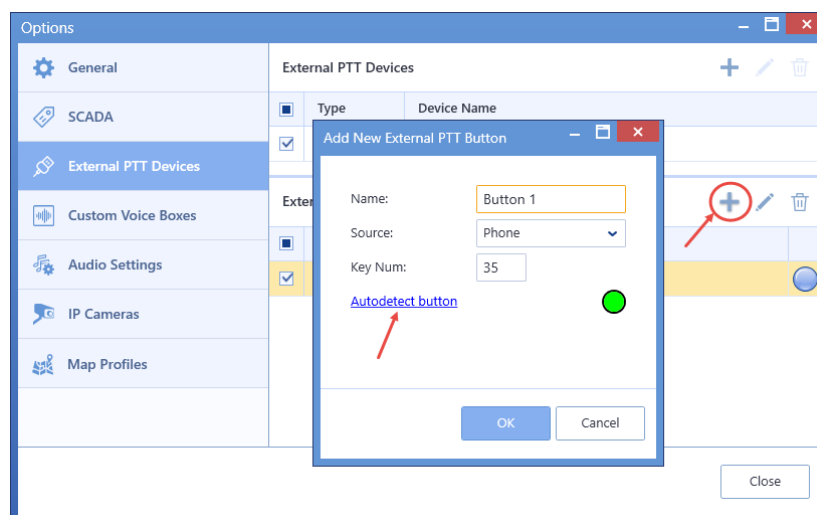
- Click **OK**.



- In the **External PTT Buttons** pane, select the required buttons.
- To test a button, press the corresponding key on the remote microphone device and see if the indicator circle on the right becomes green. Release the key and see if the indicator box returns to blue.

5.3.2 Adding TIPRO Speakerbox

- Connect the speaker box to a USB-port of the PC.
- From the **Device Type** drop-down list, select **Tipro**.
- Click **OK**.
- In the **External PTT Buttons** pane, click the plus sign button.



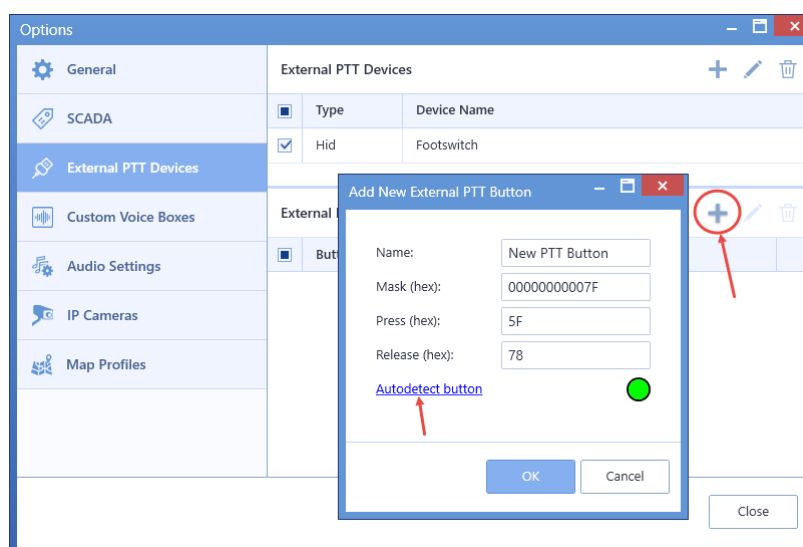
- In the dialog box that opens click the **Autodetect button** link.
- Press the key on the box you want to use as the PTT button and see how the dialog fields get populated.
- Click **OK**.

5.3.3 Adding TRBOnet Swift Footswitch

TRBOnet Swift Footswitch P001 is a device that can be used for hands-free PTT operation. The footswitch can be supplied with either the RS-232 or RJ-45 connector. To connect a footswitch to the PC via a USB port, use the footswitch with the RJ-45 connector and an additional TRBOnet Swift Adapter M002.

5.3.3.1 Adding TRBOnet Swift Footswitch connected to USB port

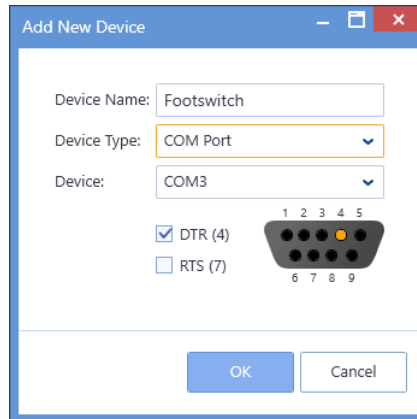
- Connect the footswitch to a USB-port of the PC by using the M002 adapter.
- From the **Device Type** drop-down list, select **HID**.
- From the **Device** drop-down list, select **TRBOnet Mic Adapter**.
- Click **OK**.



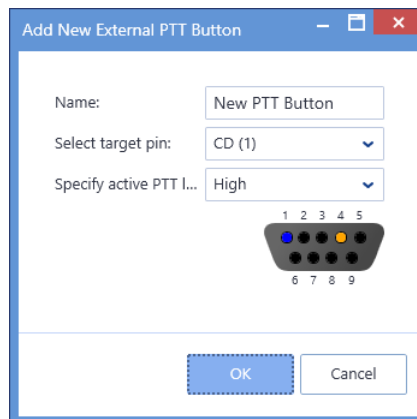
- In the **External PTT Buttons** pane, click the plus sign button and then **Add new button**.
- In the dialog box that opens click the **Autodetect button** link.
- Press the footswitch button and see how the dialog fields get populated.
- Click **OK**.

5.3.3.2 Adding TRBOnet Swift Footswitch connected to COM port

- Connect the footswitch to the PC via a COM-port.
- From the **Device Type** drop-down list, select **COM Port**.



- From the **Select Port** drop-down list, select **COM3**.
- Select **DTS (4)** check box.
- Click **OK**.
- In the **External PTT Buttons** pane, click the plus sign button and then **Add new button**.

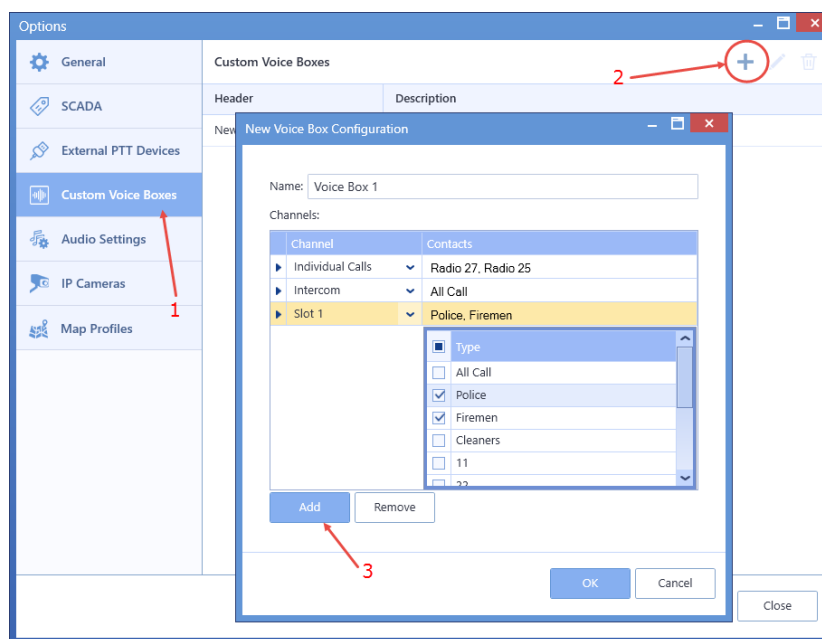


- In the dialog box that opens, click **OK**.

5.4 Custom Voice Boxes

In the **Custom Voice Boxes** tab, you can add/edit custom voice boxes that are associated with radio channels. You can then add a custom voice box to the Voice Box panel.

- Click the **Custom Voice Boxes** tab (1).
- In the **Custom Voice Boxes** pane, click the plus sign button (2).



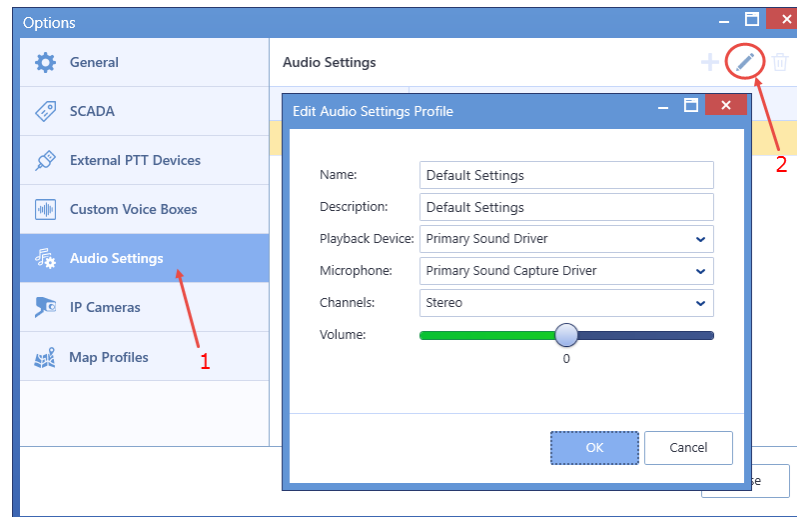
- In the **New Voice Box Configuration** dialog box, specify the following settings:
 - **Name**
Enter a name for the custom voice box.
 - Click **Add** (3) to add a channel to the custom voice box.
 - **Channels**
Select the channel(s). These could be All Call, Private Call, Intercom, Dispatcher Group, Radio Group, or Slot.
 - **Contacts**
Select the radio(s)/radio group(s) the selected channel will be associated with.

Note: Radios/radio groups, dispatchers/dispatcher groups must be registered in TRBOnet Dispatch Console.

5.5 Audio Settings

In the **Audio Settings** tab, the administrator can add custom audio profiles and/or edit the default audio profile.

- Click the **Audio Settings** tab (1).
- In the **Audio Settings** pane, click the pencil button (2).



In the **Edit Audio Settings Profile** dialog box, specify the following parameters:

- **Name**
Enter a name for the profile.
- **Description**
Enter a brief description for the profile.
- **Playback Device**
From the drop-down list, select the audio device to play incoming voice messages and playback voice recordings in the dispatch console.
- **Microphone**
From the drop-down list, select the recording device the microphone is connected to.

Note: If TRBOnet One is running on the same PC with TRBOnet Server connected to control stations via programming cable and sound card, the playback and recorder devices cannot be the same for TRBOnet One and TRBOnet Server.

- **Channels**
From the drop-down list, select the channels on the playback device (Stereo, Left, or Right).
- **Volume**
Move the slider to the right/left to increase/decrease the volume level.

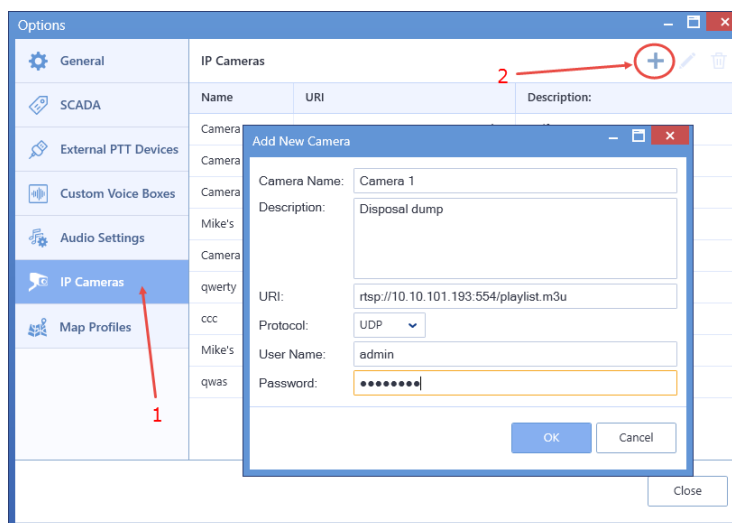
5.6 IP Cameras

In the **IP Cameras** tab, you can add new cameras and modify existing ones.

Note: The cameras you are adding must support the RTSP streaming protocol.

To add a camera:

- Click the **IP Cameras** tab (1).
- In the **IP Cameras** pane, click the plus sign button (2).



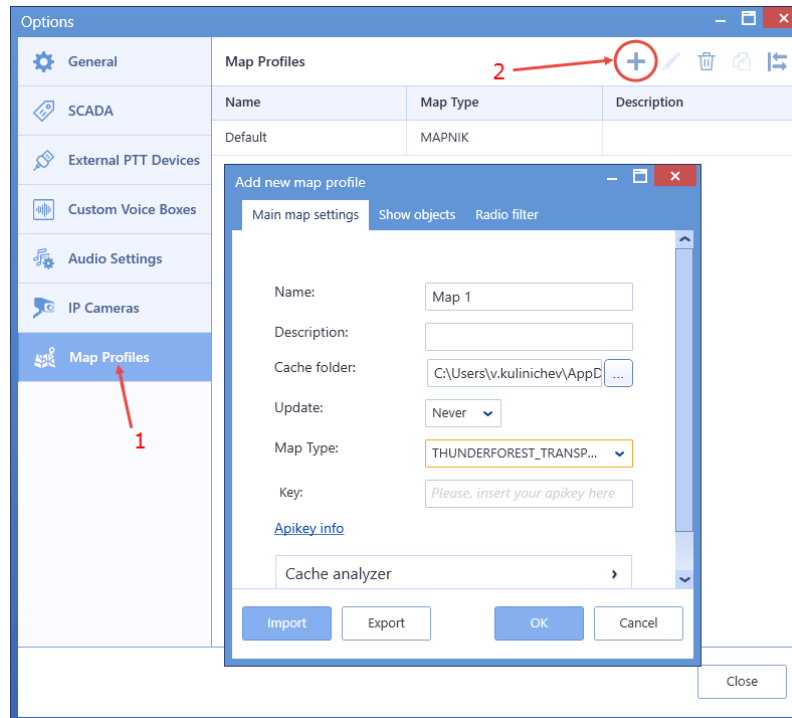
In the **Add New Camera** dialog box, specify the following parameters:

- **Camera Name**
Enter a name for the camera.
- **Description**
Enter a description for the camera.
- **URI**
Enter the URI for the camera. Note the use of the **RTSP://** prefix and port number **554**.
- **Protocol**
From the drop-down list, select **UDP**.
- **User Name**
Enter the user name for the authentication, if needed.
- **Password**
Enter the password for the authentication, if needed.

5.7 Map Profiles

In the **Map Profiles** tab, you can select the map to display in the Map pane.

- Click the **Map Profiles** tab (1).
- In the **Map Profiles** pane, click the plus sign button (2).

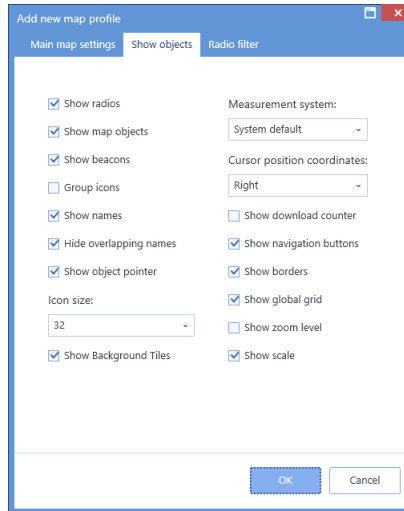


- **Name**
Enter a name for the map.
- **Description**
Enter a description for the map.
- **Cache folder**
Click the ellipsis (...) button and locate the folder on the PC where you want to store the map data.
- **Update**
Select the update interval ('Never', 'Immediately', or 'By period') for the map data stored in the specified Cache folder.
- **Map Type**
From the drop-down list, select the map type.
- **Key**
Enter the API key for the selected map type.

Note: To obtain the API key, click the **Apikey info** link below and follow the instructions.

5.7.1 Object Filter

- Click the **Show objects** tab.



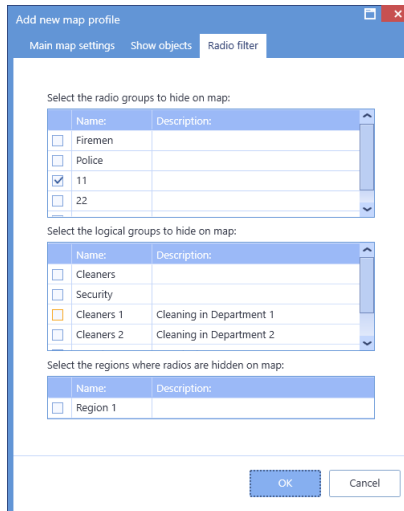
The 'Show objects' tab in the 'Add new map profile' dialog includes the following settings:

- Show radios
- Show map objects
- Show beacons
- Group icons
- Show names
- Hide overlapping names
- Show object pointer
- Icon size: 32
- Show Background Tiles
- Measurement system: System default
- Cursor position coordinates: Right
- Show download counter
- Show navigation buttons
- Show borders
- Show global grid
- Show zoom level
- Show scale

- In this tab, you can select what to show on the map by selecting the appropriate check boxes.

5.7.2 Radio Filter

- Click the **Radio filter** tab.



The 'Radio filter' tab in the 'Add new map profile' dialog includes the following sections:

Select the radio groups to hide on map:

Name:	Description:
<input type="checkbox"/> Firemen	
<input type="checkbox"/> Police	
<input checked="" type="checkbox"/> 11	
<input type="checkbox"/> 22	

Select the logical groups to hide on map:

Name:	Description:
<input type="checkbox"/> Cleaners	
<input type="checkbox"/> Security	
<input checked="" type="checkbox"/> Cleaners 1	Cleaning in Department 1
<input type="checkbox"/> Cleaners 2	Cleaning in Department 2

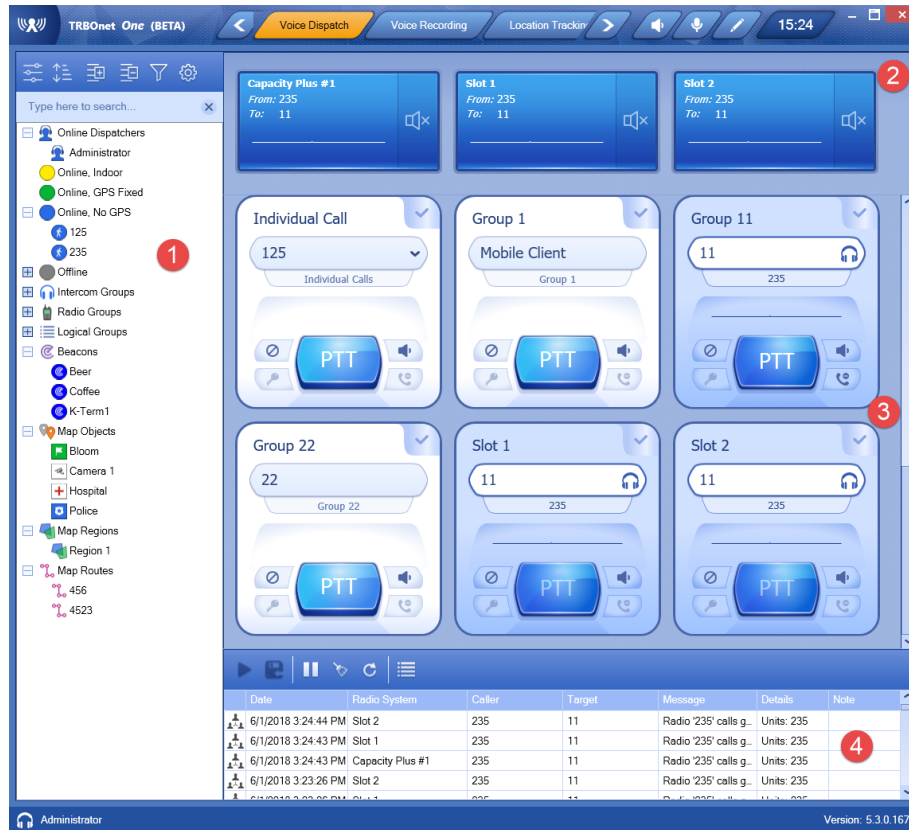
Select the regions where radios are hidden on map:

Name:	Description:
<input type="checkbox"/> Region 1	

- In this tab, you can hide radios belonging to certain groups/logical groups/regions by selecting the appropriate check boxes.

6 Voice Dispatch

When the **Voice Dispatch (Classic)** tab is selected, the dispatcher can make and receive radio calls, monitor recent calls and events, etc.



The typical elements of the **Voice Dispatch (Classic)** layout are as follows:

1. Radio List panel
2. Active Calls panel
3. Voice Box panel
4. Activity Monitor panel

In the **Voice Dispatch (Modern)** layout, the Radio List panel is missing.

In the **Voice Dispatch (Lite)** layout, only the Voice Box and Active Calls panels are present.


6.1 Radio List

6.1.1 View Options


The toolbar in the upper part of the Radio List panel provides buttons to change the appearance of the list:




6.1.1.1 Displaying the List

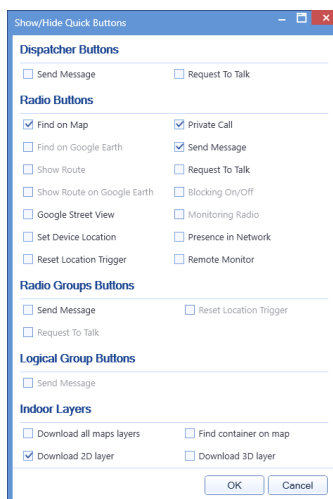
- Click the  button, and from the drop-down list, select one of the following items:
 - **Statuses**
Select this item to display radios grouped according to their statuses.
 - **List**
Select this item to display a plain list of groups, radios, and other objects.
 - **Logical Groups**
Select this item to display radios grouped according to the logical groups they belong to.
 - **Radio Groups**
Select this item to display radios grouped according to the radio groups they belong to.
 - **Users**
Select this item to display only users registered in TRBOnet Dispatch Console.

6.1.1.2 Sorting Order


- Click the  button, and from the drop-down list, select one of the following items:
 - **By Name**
Select this item to display radios sorted by name.
 - **By ID**
Select this item to display radios sorted by Radio ID.
 - **By Status**
Select this item to display radios sorted by status.

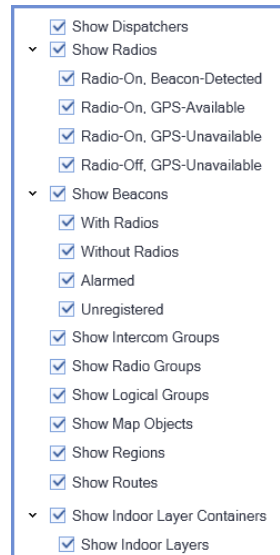
6.1.2 Quick Buttons

- On the Radio List toolbar, click , and in the **Show/Hide Quick Buttons** dialog box, specify which quick buttons to display in the Radio List panel.



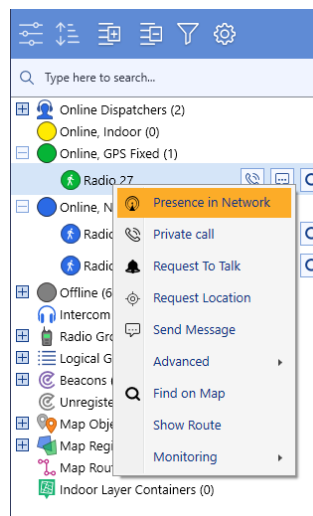
6.1.3 Radio List Filter

- On the Radio List toolbar, click , and on the drop-down menu select the check boxes beside the appropriate objects.



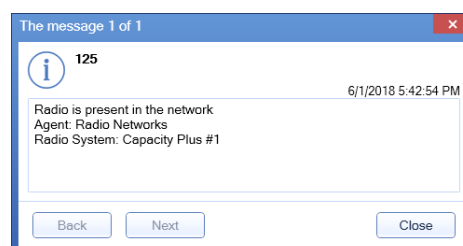
6.1.4 Radio Shortcut Menu

To open the radio's shortcut menu, right-click a radio in the Radio List:

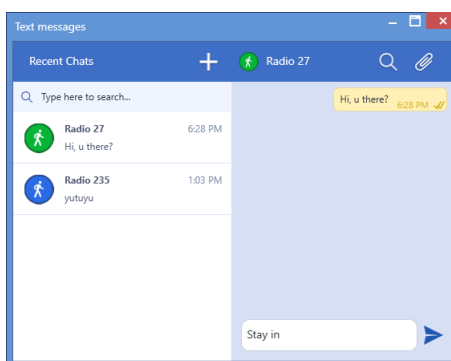


- Presence in Network**

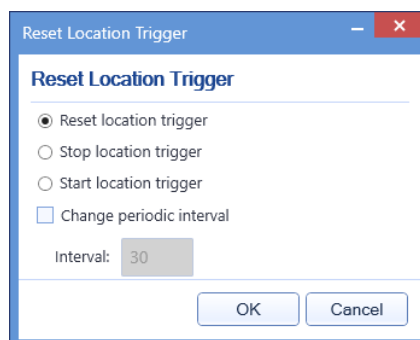
Choose this menu item to send a Check Radio command. If the radio is online and is located in the coverage area, the dispatcher will see a message like this:



- **Private Call**
Choose this menu item to initiate a private call to the selected radio.
- **Request to Talk**
Choose this menu item to send a talk request to the selected radio.
- **Request Location**
Choose this menu item to request the location of the selected radio (for radios with GPS module only).
- **Send Message**
Choose this menu item to open a text chat with the selected radio.



- Enter the text and click **Send**.
- To attach a file, click the paperclip icon, then locate the file you want to send, and click **Send**.
- **Advanced > Remote Monitor (Open mic)**
Choose this menu item to activate the radio microphone in hidden mode (remote monitor duration – 30 sec.)
- **Advanced > Reset Location Trigger**
Choose this menu item to customize the location trigger settings. When you reconnect to the Server or reassign a Location Profile to the radio, temporary settings will be updated to Location Profile settings.



- **Reset/Stop/Start location trigger**
Choose which command to send to the radio.
- **Change periodic interval**
Select this option and specify the new location trigger update interval.

- **Advanced > Enable Radio**
Choose this menu item to enable the selected radio.
- **Advanced > Disable Radio**
Choose this menu item to disable the selected radio.
- **Find on Map**
Choose this menu item to display the selected radio in the center of the map.
- **Show Route**
Choose this menu item to display a route traveled by the selected radio for the specified time period.
For more details, see section [7.1.9, Show Route](#).
- **Monitoring > Set Location > Set Location**
Choose this menu item to manually set the radio on the map.
- **Monitoring > Set Location > Set by Coordinates**
Choose this menu item, and in the dialog box that appears, enter the desired coordinates.
- **Monitoring > Google Street View**
Choose this menu item to open Google Street View with the latest location and direction of the selected radio.
- **Clear Emergency Call**
This menu item appears when the radio is in Alarm state.
 - Choose this item to clear the Alarm state.
 - Enter the note and click OK.

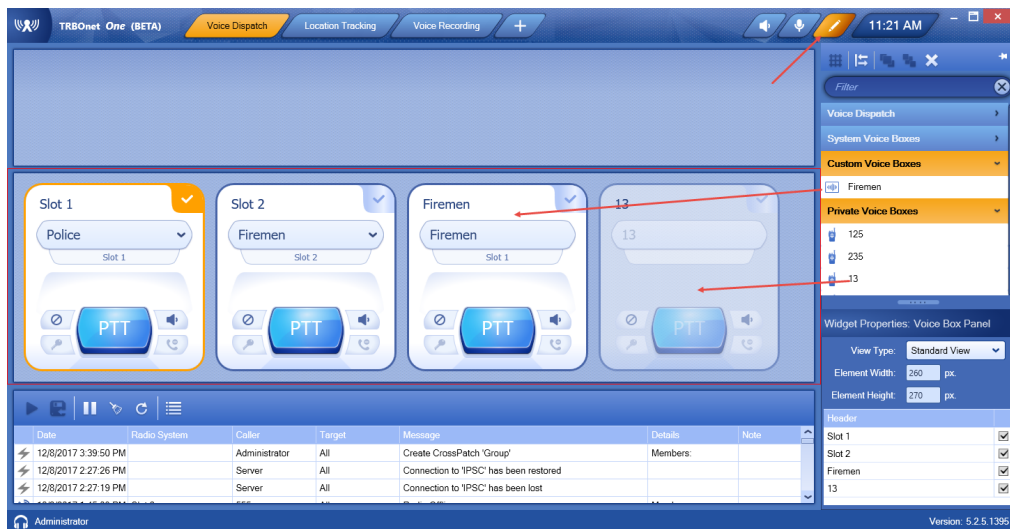
6.2 Customizing Voice Dispatch Layout

You can customize the Voice Dispatch layout, by adding custom and private voice boxes to the Voice Box panel (1).

- On the toolbar, click the pencil button.
- In the right pane, pull down **Custom Voice Boxes** and/or **Private Voice Boxes** menu(s).

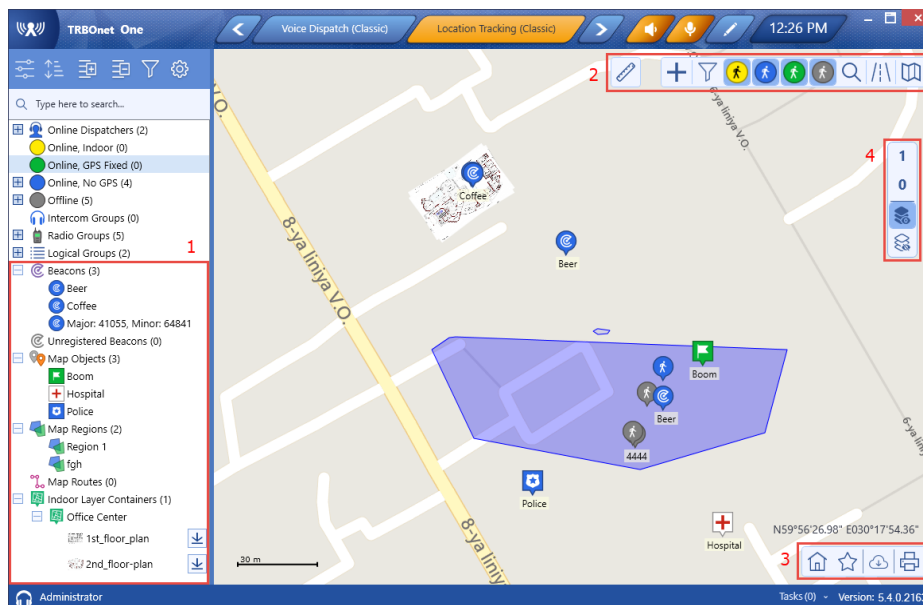
Note: Custom voice boxes must be previously added (see section [5.4, Custom Voice Boxes](#)).

- Select the required item and drag it to the Voice Box panel on the left.



7 Location Tracking

When the **Location Tracking (Classic)** tab is selected, the dispatcher can monitor selected radio location on supported maps. In addition, the dispatcher can view and edit the following objects (1): beacons, map objects, map regions, map routes, and indoor container layers.




Note that in the **Location Tracking (With Dispatch)** layout, you can also view the Voice Box panel.

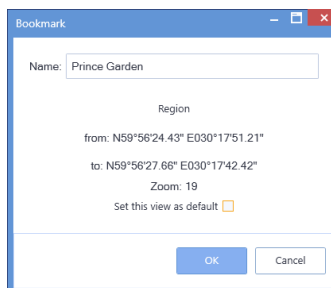
7.1 Map Tools

The map toolbars are located at the upper-right (2) and lower-right (3) corners of the map pane. In addition, you may see a separate toolbar (4) on the right side of the Map pane. The right-side toolbar (4) is associated with the indoor layer containers added to the map (see section [7.1.6, Add Building Indoor Plans](#)).

7.1.1 Bookmarks and Default View


To save a bookmark:

- Click  on the lower toolbar, and on the drop-down menu click **Save as Bookmark**.




- In the dialog box that opens, enter a name for the bookmark. To set the view as a default view, select the corresponding option. Click **OK**.


To open a bookmark:

- Click  on the lower toolbar, and select the bookmark in the list.


To save a bookmark as the default view:

- Click  on the lower toolbar, and on the drop-down menu click **Choose default view** and then click the bookmark you want to set as the default view.



To open the default view:

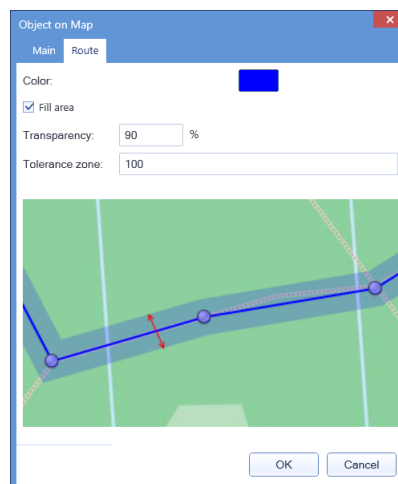
- Click  on the lower toolbar.

7.1.2 Ruler

- On the upper toolbar, click  to enable the tool to measure distances on the map.
- Left-click a point on the map to start measuring. Left-click intermediate points and see the distance displayed at the mouse pointer.

7.1.3 Create Route



- On the upper toolbar, click , and in the drop-down menu under **Special Objects**, click  **Route**.
- While in this mode, click successively on the map to create route waypoints.
- Once you have finished drawing the route, click **Complete** in the prompt popup.
- In the **Object on Map** dialog box, specify a name and description for the route.
- Click the **Route** tab.

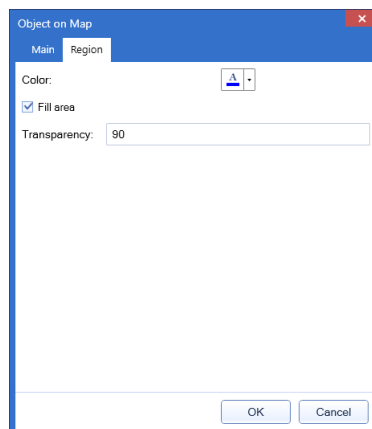


- **Color**
Select the color in which to display the route on the map.
- **Fill area**
Select this check box to display a transparent edge around the route line. The edge width is specified by the value of the **Tolerance zone** parameter.

- **Transparency**
Specify the transparency, in percent, for the line edge.
- **Tolerance zone**
Specify the corridor width, in meters. If a radio will pass out of this tolerance zone, the dispatcher will receive an alarm signal.

7.1.4 Create Region



- On the upper toolbar, click , and in the drop-down menu under **Special Objects**, click  **Region**.
- While in this mode, left-click points on the map to create a new map region.
- Once you have finished drawing the region, click **Complete** in the prompt popup.
- In the **Object on Map** dialog box, specify a name and description for the region.
- Click the **Region** tab.



- **Color**
Select a color to display the region on the map.
- **Fill area**
Select this check box to fill in the region area on the map.
- **Transparency**
Specify the transparency level (in percent) for the fill color.

7.1.5 Create Beacon



The dispatcher can place beacons on the map.

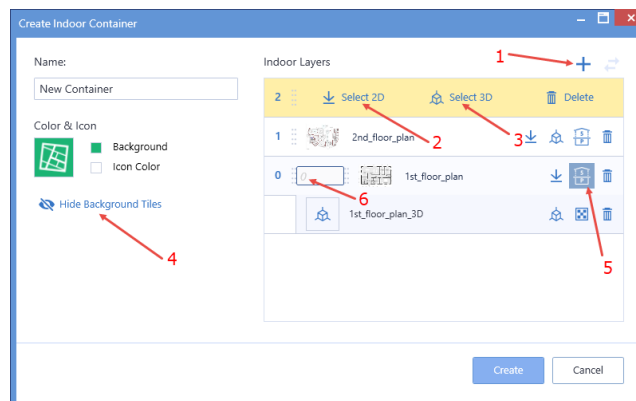
- On the upper toolbar, click , and in the drop-down menu under **Special Objects**, click  **Beacon**.
- While in this mode, click on the map where you want to place the beacon.
- Click **Complete** in the prompt popup.
In the **Beacon on Map** dialog box, specify the following parameters:

- **Type**
From the drop-down list, select the beacon type (**iBeacon** or **K-Term**).
- **Major ID** and **Minor ID**
Enter the beacon's major and minor ID exactly as specified on the iBeacon device.
- **Name**
Specify a name for the beacon.
- **Description**
Add a description for the beacon.

7.1.6 Add Building Indoor Plans

The dispatcher can add building indoor plans that will be displayed in the Map pane.

- On the upper toolbar, click , and in the drop-down menu under **Special Objects**, click .
- While in this mode, drag a rectangle on the map where you want to place the building.
- Click **Complete** in the prompt popup.




In the **Create Indoor Container** window that opens, enter the following information:

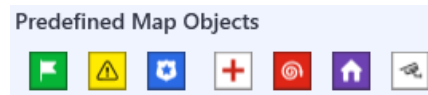
- **Name**
Enter a name for the building.
- To add a layer, click the plus sign button (1) and specify the 2D and 3D files by clicking **Select 2D** (2) and **Select 3D** (3), respectively.
In the **Open** dialog box, locate the desired file(s) and click **Open**.
 - As soon as you add a layer, you will see it displayed in the upper-left corner of the previously defined building area in the Map pane.
 - Stretch and rotate the layer image to fit the underlying map. If desired, you can hide the background map by clicking **Hide Background Tiles** (4).
 - To add a custom index to the layer, click the **Show/Hide Index** button (5) and in the in the text box that opens (6), enter the desired index number.

7.1.7 Create Map Object

The dispatcher can place predefined or custom objects on the map.

To place a predefined map object on the map:


- On the upper toolbar, click , and in the drop-down menu under **Predefined Map Objects**, click one of the predefined icons.

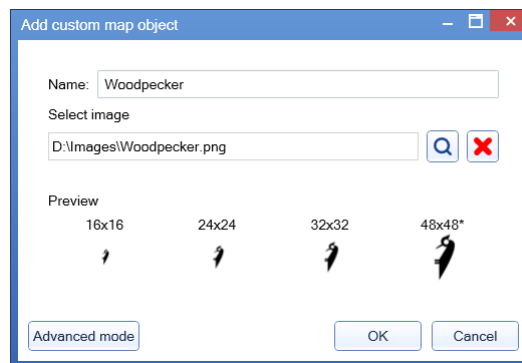



- Click on the map where you want to place the object.
- Click **Complete** in the prompt popup.

In the **Object on Map** dialog box, specify a name and description for the object and click **OK**.

To add a custom map object:

- On the upper toolbar, click , and at the bottom of the drop-down menu, click **Add Custom Object**.



- Name**
Specify a name for the object.
- Select image**
Click the  button and locate the image file you want to use as an icon for the object.

Note: You can also assign different images for different icon sizes. Click the **Advanced mode** button and select images for different sizes (16x16, 24x24, 32x32, 48x48).


After you create a custom object, the corresponding icon will appear along with other predefined icons under **Predefined Map Objects**.

- To delete a custom object, click **Delete Custom Object**.

7.1.8 Find on Map


The dispatcher can search for addresses as well as find radios on the map.

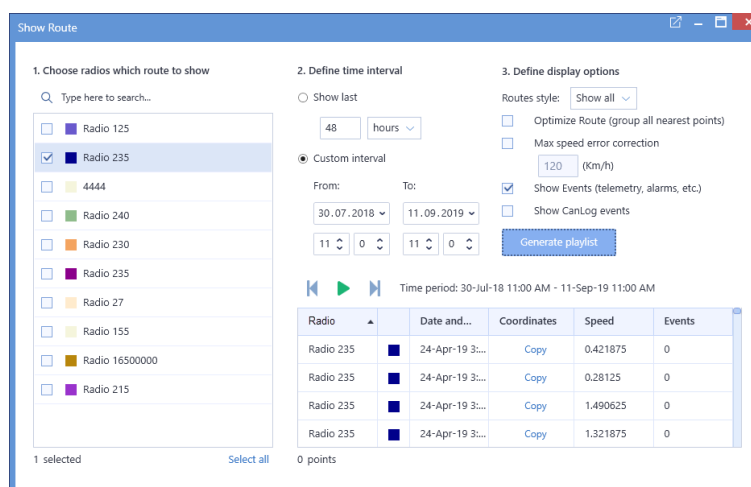
Note: For online maps, Internet access is required!

- On the upper toolbar, click .
 - On the drop-down menu, click **Address**.
 - In the **Search by Address** dialog box, type in the address and click the lens button on the right.
 - Click the address in the list below to display it on the map.
 - Or, on the drop-down menu, click **Radio**.
 - In the **Find Radio on Map** dialog box, select the radio to be displayed on the map.

7.1.9 Show Route

To show the route traveled by the radio(s) on the map:

- On the upper toolbar, click . Or, right-click a radio in the Radio List and, on the drop-down menu choose **Show Route**.
- In the **Show Route** window, enter the following information:



1. Choose radios which route to show

- In the list, select the radio(s) which route to show on the map.

2. Define time period



- **Show last**
Choose this item and enter the time period, in hours or minutes, for which to show the route.
- **Custom interval (From...To)**
Choose this item and enter the start and end dates of the time period for which to show the route.

3. Define display options

- **Optimize Route (group all nearest points)**
Select this option to group all points in a 100-meter radius.
 - **Max speed error correction**
Select the maximum possible speed for your vehicles.
 - **Show Events**
Select this option to display TRBOnet server events (telemetry, alarms, and other events).
 - **Show CanLog events**
Select this option to display events that occurred in a vehicle (door opening, and other events).
- Click **Generate playlist**.
 - Once the route is generated, the table below is populated with the route points, and the route is shown on the map. To play back the route on the map, click the **Play** button (▶).


7.1.10 Select Map Profile

To select the profile of the map to be displayed in the Map pane:

- On the upper toolbar, click , and in the drop-down menu, select the map profile you have previously defined in Console Settings. To edit a profile, click  to the right of the profile name (see also section [5.7, Map Profiles](#)).


7.1.11 Print Map

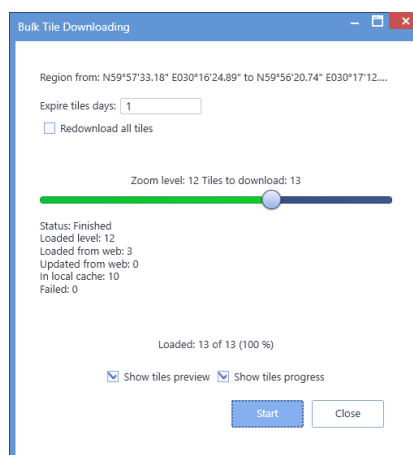
To print the map region currently displayed in the Map pane:

- Click  on the lower toolbar.

7.1.12 Download Map Tiles

To download the tiles of the map currently displayed in the Map pane:

- On the lower toolbar, click .




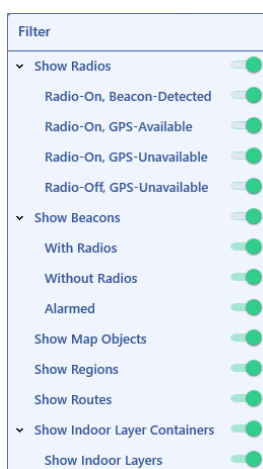
In the dialog box, specify the following parameters:

- **Expire tiles days**
Enter the time the saved offline map will be stored before it is automatically updated.
- **Redownload all tiles**
Select this option to re-download the map tiles before saving to your PC.
- **Zoom level**
Move the slider from left to right to increase the detail level of the map.
- **Show tiles preview**
Select this option to show how the map is divided into tiles.
- **Show tiles progress**
Select this option to show the progress bar while the online map is being saved.
- Click **Start** and wait for the system to save the files. This may take several minutes.

7.1.13 Map Filter

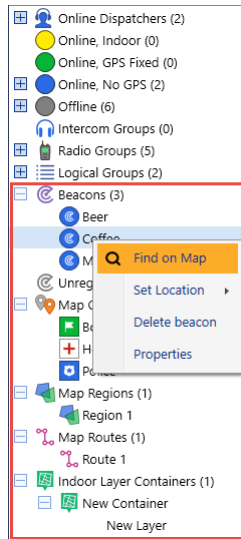
The dispatcher can set the filter to display all or only specific radios and objects on the map.

- On the upper toolbar, click , and on the drop-down menu select the check boxes beside the appropriate objects.



7.2 Objects List

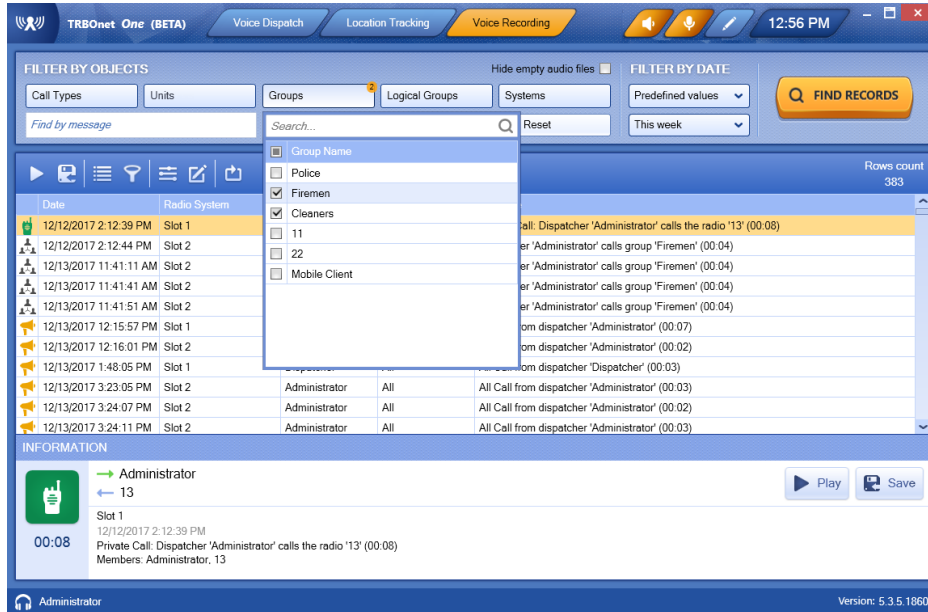
Beacons, map objects, regions, routes, and indoor layer containers are represented at the bottom of the Radio List panel, grouped by their type.




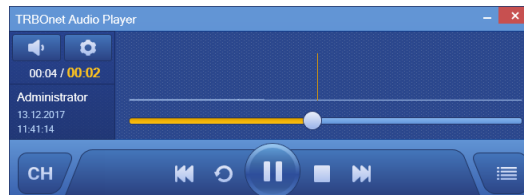
If you right-click on an object in the list, a shortcut menu will appear with commands related to the object.

8 Voice Recording

On the **Voice Recording** tab, the dispatcher can display the list of calls according to certain criteria, listen to the calls and save them to file.



- In the Filter by Objects panel, click the desired field, and on the drop-down list select the desired value(s).
- Click **Find Records**.
- To play back a record, select it in the list and click  on the toolbar.



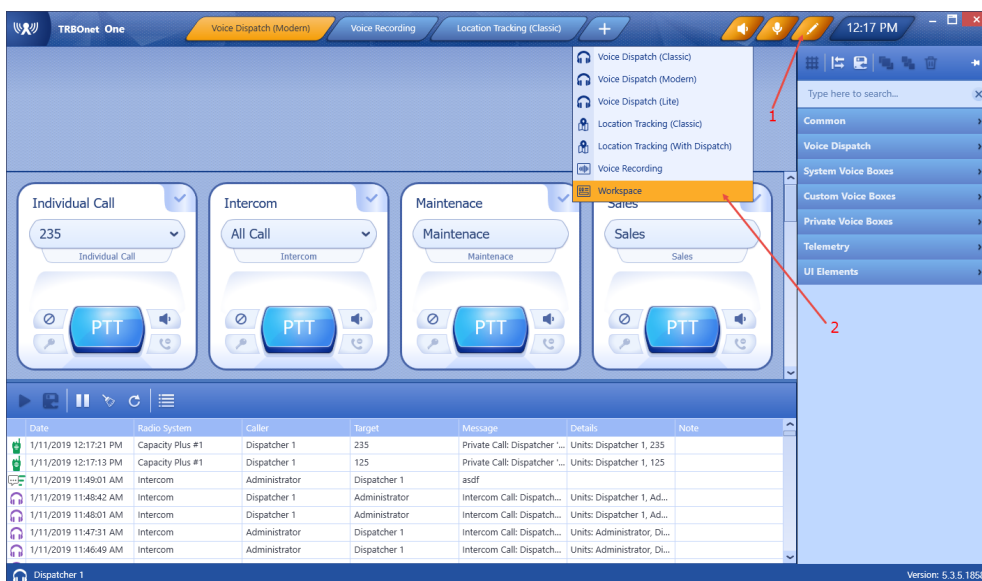
9 Custom Workspaces

In TRBOnet One, you can create your own workspaces and modify the existing [Voice Dispatch](#) and [Location Tracking](#) layouts.



9.1 Creating a Custom Workspace


- On the toolbar, click the pencil button (1).
- Click the plus button, and on the drop-down menu, click **Workspace** (2)

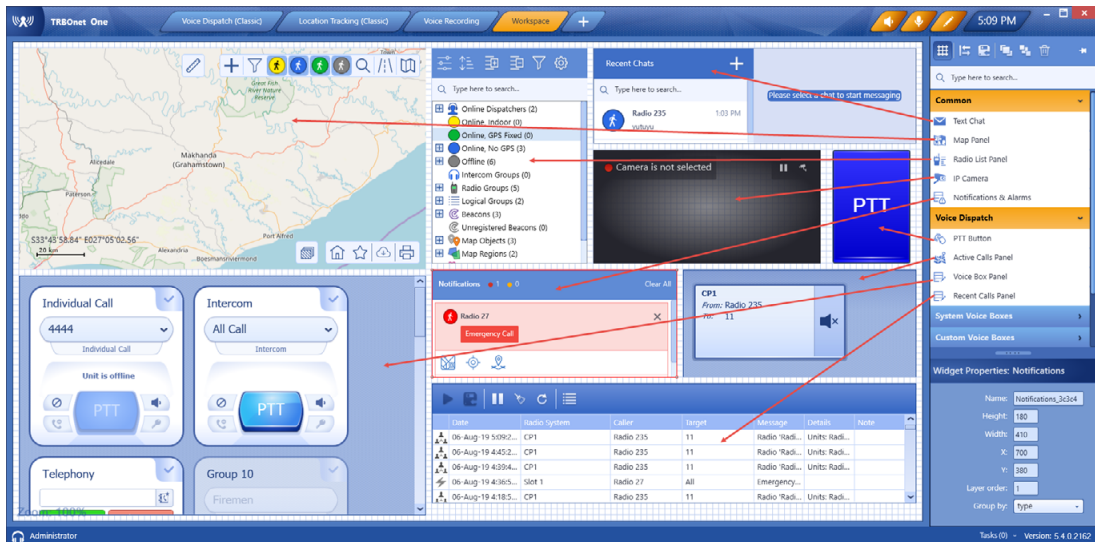


In the editing mode, you can populate your workspace with a variety of components related to your radio system.

9.2 Adding Common and Voice Dispatch Elements

- In the right pane, pull down the **Common** and **Voice Dispatch** menus.
- Select the required item and drag it to the left grid pane.

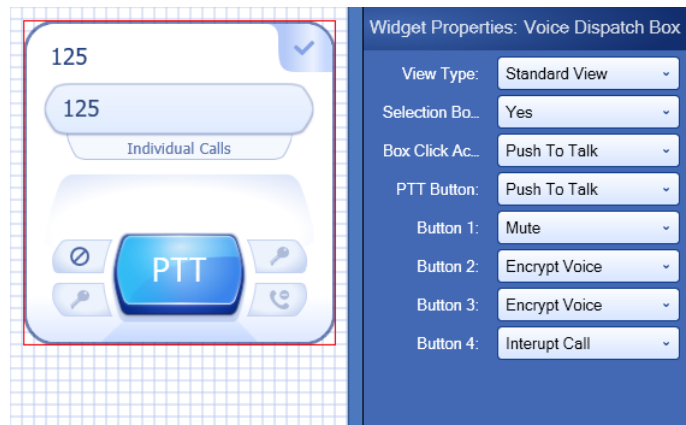
Note: The grid is shown over the workspace if the  button is pressed on the right pane toolbar.



- In the **Widget Properties** panel, specify the required properties.

9.3 Adding Voice Boxes

- In the right pane, pull down one of the **Voice Boxes** menus (**System**, **Custom**, or **Private**).
- Select the required voice box and drag it to the left grid pane.



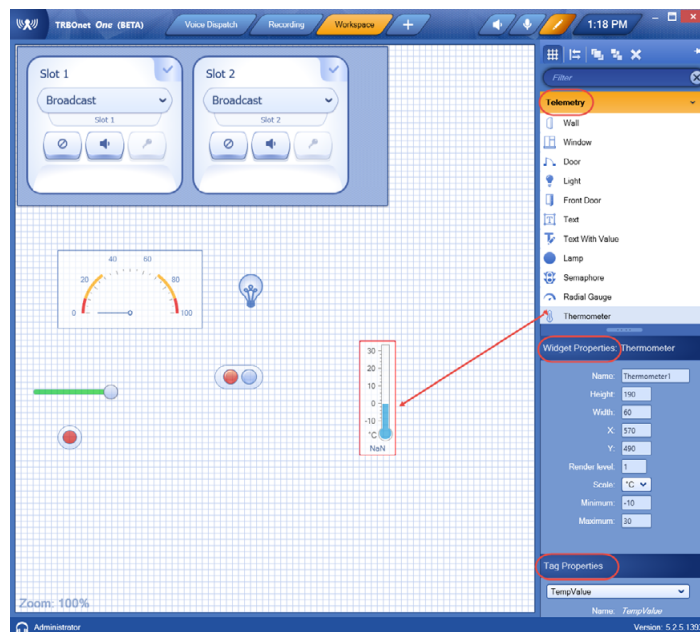
In the **Widget Properties** panel, specify the following voice box properties:

- **View Type**
Select the box type.
- **Selection Border**
Select 'Yes' to display a border around the box when it is selected.

- **Box Click Action**
Select the action to happen when you click on the voice box.
- **PTT Button**
Select the action to happen when you click the PTT button.
- **Button #**
Select the action to happen when you click the appropriate button. These buttons are located around the PTT button.

9.4 Adding Telemetry Elements

- In the right pane, pull down the **Telemetry** menu.
- Select the required item and drag it to the left grid pane.



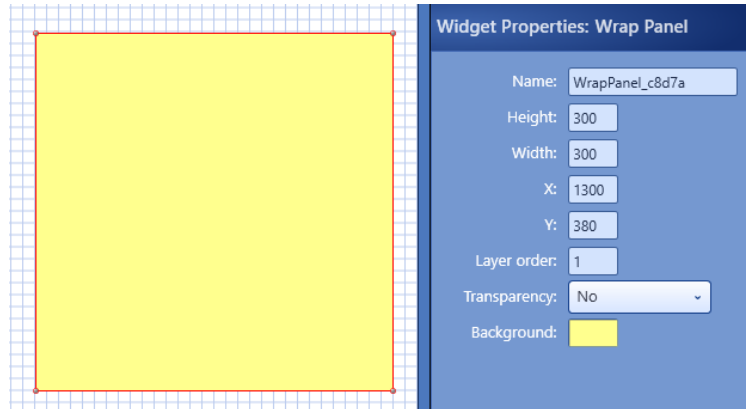
- In the **Widget Properties** panel, specify the desired widget parameters (name, height, width, minimum, maximum, etc.).
- In the **Tag Properties** panel, click the arrow on the right, and from the drop-down list select the appropriate tag.

Note: Telemetry tags must be previously created (see section [5.2.2, Tags](#)).

9.5 Adding UI Elements

This section describes how to add UI elements to your workspace. The UI elements include wrap panels, rectangles, and text labels.

- In the right pane, pull down the **UI Elements** menu.
- Select the required item and drag it to the left grid pane.



In the **Widget Properties** panel, specify the following properties:

- **Name**
Enter a name of the UI element.
- **Height/Width**
These are the dimensions, in pixels, of the element.
- **X/Y**
These are the screen coordinates of the upper-left corner of the element.
- **Layer order**
Specify the order in which the element will be drawn.
- **Transparency**
Select 'Yes' to make the element transparent.
- **Background**
Click and select the background color of the element. In addition, you can select a background image for the element.

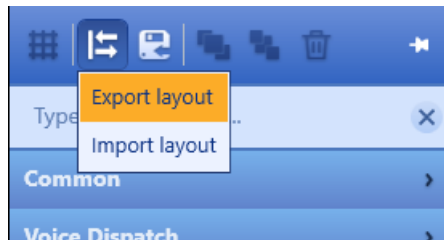
9.6 Exporting/Importing Layout

This section describes how to export and import TRBOnet One layouts.

9.6.1 Exporting Layout

You can export the current layout to an *.xml file. To do this:

- While in the Edit mode, click the  button on the right pane toolbar, and on the drop-down menu click **Export layout**.



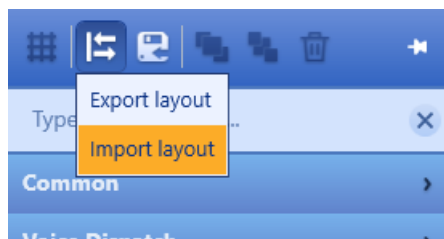
- In the **Save As** dialog box, locate the folder where you want to save the layout file (*.xml), type a filename, and click **Save**.

This file can later be used, for example, to import the required layout to TRBOnet One running on a different PC.

9.6.2 Importing Layout

You can import a previously exported layout to TRBOnet One. To do this:

- While in the Edit mode, click the  button on the right pane toolbar, and on the drop-down menu click **Import layout**.



- In the **Open** dialog box, locate the desired file (*.xml) and click **Open**.
As a result, the imported layout will be used in TRBOnet One.