



TRBOnet One User Guide

Version 5.4

World HQ

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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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Americas	+1 872 222 8726	<u>support@trbonet.com</u> — technical support
АРАС	+61 28 607 8325	<u>http://kb.trbonet.com</u> — 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.

RBOnet Connection N		rsion: 5.4.0
Select Console: 1 One	Enterprise	
Connection Address/Profile:	127.0.0.1	
Port:	4021	
Authentication type:	TRBOnet Authentication	~
User Name:	admin	
Password:	••••	
	Remember Password	
	Connect on Console Startup	
EN V Advanced	Connect	Cancel

Select One If you select Enterprise , 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 <u>3.1, Creating Connection</u> <u>Profile</u>).

• 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.

TRBOnet Connection Manager :	Advanced Mode		- ×
TRBOnet Servers		+ • •	* ∎ ≠
Server Label	Server Address	Console	Redundancy
Server 1	10.10.100.99:4021	8	~
Server 2	10.10.102.65:4021		~
EN 🗸 Basic	Co	nnect	Cancel

• 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.

Add New Connection Profile							
Server Label:	Server 1						
Authentication type:	TRBOnet Authentication	RBOnet Authentication ~					
User Name:	admin	dmin					
Password:	•••••						
Console:	🌉 TRBOnet One		\sim				
Configuration Folder:	C:\Users\v.kulinichev\AppData\Roaming\	Neocom Soft	war				
Servers List		₽∎∣∙	~ ^				
IP Address		Port	Status				
10.10.100.99		4021					
10.10.202.101		4021					
	ОК	Ca	ncel				

- 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 work 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.

			-	∃ ×
‡ G	eneral	Console Settings		^
🤣 so	CADA	Language: Console rendering mode:	English	
🔊 Ex	cternal PTT Devices	Connect on startup:		
🔶 Cu	ustom Voice Boxes	Dispatch		
h Au	udio Settings	Enable sticky PTT		
🦻 IP	Cameras	Show RTT notifications in a	pop-up window	_
₩ М	lap Profiles	After clicking Accept, star		
		After clicking Accept. sel Play a sound when RT not Wait for response from call Synchronize with other disp Synchronize with other disp Synchronize "Reject" and Missed Calls Show missed calls for: 300 Play Audio Tone every: 20 Cross Mute Selected dispatchers/radios wi O bispatchers Dispatcher 2	fications arrive er atchers Remove' actions with other dispate sec. sec.	:hers
		b M Dispatcher 1 b Dispatcher 1 b M Nan adios A Radios b 125 235 b 3333 A	c	Close

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

Optio	ns												– 🖬 🗙
۵	General	PLC	PLC								+		8 I 4
0		Name			Name	PLC	Register	Туре	State	Error	Value	Raw V	Enable
<u> </u>		All Tags			FanErrorState	PLC 1	2	Boolean	~		False	0	-
ø	External PTT Devices	PLC 1		v	FanState	PLC 1	0	Boolean	~		False	0	-
	Custom Voice Boxes	Custom Tags		~	FanManualState	PLC 1	2	Boolean	~		False	0	-
杨	Audio Settings				LightState	PLC 1	3	Boolean	~		False	0	-
-					FanRpmRaw	PLC 1	0	Int16	~		0	0	-
P	IP Cameras				FanErrorValue	PLC 1	1	Int16	~		0	0	-
100	Map Profiles				LightValue	PLC 1	2	Int16	~		530	530	-
					TempValue	PLC 1	3	Int16	~		28	28	•
		PLC 1 Properties Name: Description: Mode: Transport: Slave ID: Mode:	PLC 1 Moin controller ModBus TCP ModBus 1 1 Pelling by intervals OK Ca	v v ncel									
													Close

• 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.

Options													– 🗖 🗙
🔅 General	PLC		- 🖊 🗹	Tags							,	/ 🗇	⊗ 5
	Name		State	Name	PLC	Register	Туре	State	Error	/	Value	Raw V	Enable
<u>^</u>	All Tags		~	FanErrorState	PLC 1	2	Boolean	~			False	0	-
🔊 External PTT Devices	PLC 1		~	FanState	PLC 1	0	Boolean	~			True	1	-
Custom Voice Boxes	Custom Tags		~	FanManualState	PLC 1	2	Boolean	~			False	0	-
s Audio Settings				LightState	PLC 1	3	Boolean	~			False	0	-
				FanRpmRaw	PLC 1	0	Int16	>			95	95	-
Difference IP Cameras				FanErrorValue	PLC 1	1	Int16	~			0	0	-
Map Profiles				LightValue	PLC 1	2	Int16	~			462	462	-
				TempValue	PLC 1	3	Int16	~			27	27	•
	PLC 1 Properties Name: Description: Mode: Transport: Slave ID: Mode:	PLC 1 Main controller Modbus TCP Modbus1 1 Polling by intervals	v v	FanState Pro Name: PLC: Register: Type:	Perties FanSt PLC 1 0 Boolea		~ ~ \$	Table: Polling i	interval (s	sec):	Coils 1	q	v
													Close

• 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.



Options										- E	×
🔅 General	PLC +		Tags					+			I≒
SCADA	Name	State	Name	PLC	Register	Туре	State	Error	Value	Raw	Ena
A	All Tags	~	FanErr			String	1	'Scripts.MyScript		0	-
Sector External PTT Devices	PLC 1	~	LightSt			String	~	'Scripts.MyScript		0	-
Custom Voice Boxes	Custom Tags	~	FanTim			String	~	'Scripts.MyScript		0	-
💑 Audio Settings			FanRpm			Boolean	~	'Scripts.MyScript		0	-
IP Cameras	Nucleur Provide							-			
Kap Profiles			Name	NewQu	ery		Т	ype: String		~]
			Source	e Code:				Variables:			
			3 ±f (11ightValue, Value)) > > Tags 3 return "Dark" 4 ±f (11) > > > Cuttom Tags >								
			Errors:]	
	1		1						[Clos	e

• 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).

Options		- 🗆 🗙
🔅 General	External PTT Devices	2
SCADA	Add New Device	- 🗆 ×
🔊 External PTT Devices	Device Name:	New Device
Ustom Voice Boxes	External PTT B Device Type:	TRBOnet Microphone A 🗸
👫 Audio Settings	Device:	TRBOnet Mic Adapter
JP Cameras		
Map Profiles		
		OK Cancel
		Close

- 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.

ptions				- 🗆 🗖
🔅 General	Ext	ernal PTT Devices		+ 🖊 🖻
SCADA		Туре		
S External PTT Devices		TrbonetMicAdapter	Remote Mic	
Sy External PTT Devices				
Custom Voice Boxes	Ext	ernal PTT Buttons		+ / 🗈
🙀 Audio Settings		Button Name		
IP Cameras		Hand Microphone PT		
IF Calleras		Hand Microphone Ke	ypad Button 0	
Map Profiles		Hand Microphone Ke	ypad Button 1	\bigcirc
	\checkmark	Hand Microphone Ke	ypad Button 2	\bigcirc
		Hand Microphone Ke	ypad Button 3	\bigcirc
		Hand Microphone Ke	ypad Button 4	\bigcirc
				Close

- 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.

Options					- 🗆 💌			
🔅 General	External PTT Devices			External PTT Devices				
SCADA		Туре	Device Name	- 🗆 ×				
🔊 External PTT Devices		Add New Ext	ernal PTT Button					
W Custom Voice Boxes	Exter		Name: Source:	Butto				
🙀 Audio Settings		-	Key Num: 35 Autodetect button					
D Cameras		Autodete		\bigcirc				
Map Profiles								
			ОК	Cancel				
					Close			

- 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.

Options						- 8
🔅 General	Ext	External PTT Devices				+ 🖊 t
SCADA		Туре		Device Nan	10	
🔗 External PTT Devices		Hid		Footswitch		
			Add Nev	v External PT1	Button – 🗖 🕨	
Custom Voice Boxes	Ext	ernal I				
🛵 Audio Settings		But	Nam	ie:	New PTT Button	
	_		Mas	k (hex):	0000000007F	1
IP Cameras			Pres	s (hex):	5F	
Map Profiles			Rele	ase (hex):	78	
			Auto	detect button	\bigcirc	
				1		
					OK Cancel	
						Close
						L

- 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**.



Add New Device	- 🗆 🛃	<
Device Name: Device Type: Device:	Footswitch COM Port COM3 ✓ DTR (4) RTS (7)	
	OK Cancel]

- 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**.

Add New External PTT B	utton – 🗖 🗙
Name: Select target pin:	New PTT Button
Specify active PTT I	
	6 7 8 9
	OK Cancel

• 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).

Options		- 🗖 🗙
🔅 General	Custom Voice Boxes	2 + 1
SCADA	Header Description	
🔗 External PTT Devices	New Voice Box Configuration	- 🗖 🗙
Custom Voice Boxes	Name: Voice Box 1 Channels:	
🙀 Audio Settings	Channel Contacts	
Difference IP Cameras	Individual Calls Radio 27, Radio 25 Intercom All Call	
1 Map Profiles	► Slot 1 Police, Firemen	
	All Call Firemen Cleaners 11 Add Remove	
	`3	Cancel Close

- 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).



Options		- 🗖 🗙
🔅 General	Audio Settings	+ 🖉 🖻
SCADA	Edit Audio Settings Profile — E	
🔊 External PTT Devices	Name: Default Settings	2
Custom Voice Boxes	Description: Default Settings	
🙀 Audio Settings	Playback Device: Primary Sound Driver Microphone: Primary Sound Capture Driver	✓✓
🥦 IP Cameras	Channels: Stereo	~
Map Profiles 1	Volume:	-
	OK Car	icel

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).

Options			- 🗖 🗙
🔅 General	IP Camera	IS	2
SCADA	Name	URI	Description:
Sexternal PTT Devices	Camera	Add New Camera	- E ×
>> External PTT Devices	Camera		
Custom Voice Boxes	Camera	Camera Name:	Camera 1
🖡 Audio Settings	Mike's	Description:	Disposal dump
Autio Settings	Camera		
🗩 IP Cameras	qwerty	URI:	rtsp://10.10.101.193:554/playlist.m3u
Map Profiles	CCC	Protocol:	UDP 🗸
	Mike's	User Name:	admin
	qwas	Password:	••••••
1			OK Cancel
			Close

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).

Options	- 🗖 🗡
General	Map Profiles 2
SCADA	Name Map Type Description
🔊 External PTT Devices	Default MAPNIK
Custom Voice Boxes	Add new map profile – L X
🙀 Audio Settings	Î
Di IP Cameras	Name: Map 1
နွှန့် Map Profiles	Description: Cache folder: C:\Users\v.kulinichev\AppD
	Update: Never 🗸
`1	Map Type: THUNDERFOREST_TRANSP V
	Key: Please, insert your apikey here
	Apikey info
	Cache analyzer >
	Import Export OK Cancel
	Close

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.

• Мар Туре

From the drop-down list, select the map type.

Key

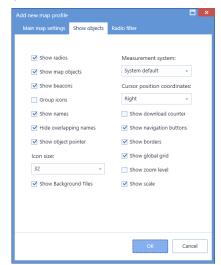
Enter the API key for the selected map type.

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.



 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.

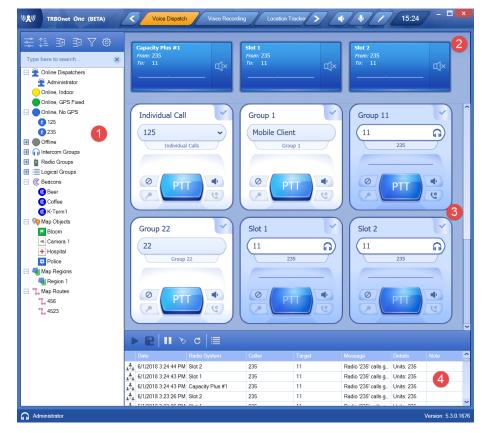
new m	ap profile				Ē
			Radio filter		
Selec	t the radio	groups to hide (on map:		
	Name:	Descript	ion:		^
	Firemen				
	Police				
	11				
	22				~
Selec	t the logica	I groups to hide	on man:		
Selec	Name:				^
	Cleaners	Descript	1011:		
	Security				
H	Cleaners 1	Cleaning	in Department	1	
	Cleaners 2		, in Department		
					~
Selec			are hidden on n	nap:	
	Name:	Descript	ion:		
	Region 1				
				ОК	Cance

 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.

Show/Hide Quick Buttons	- 🗆 ×
Dispatcher Buttons	
Send Message	Request To Talk
Radio Buttons	
Find on Map	Private Call
Find on Google Earth	Send Message
Show Route	Request To Talk
Show Route on Google Earth	Blocking On/Off
Google Street View	Monitoring Radio
Set Device Location	Presence in Network
Reset Location Trigger	Remote Monitor
Radio Groups Buttons	
Send Message	Reset Location Trigger
Request To Talk	
Logical Group Buttons	
Send Message	
Indoor Layers	
Download all maps layers	Find container on map
Download 2D layer	Download 3D layer
	OK Cancel



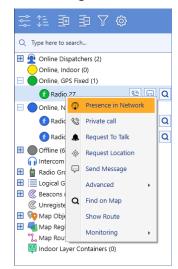
6.1.3 Radio List Filter

• On the Radio List toolbar, click \bigtriangledown , 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:

The message 1 of 1	×
(i) ¹²⁵	6/1/2018 5:42:54 PM
Radio is present in the network Agent: Radio Networks Radio System: Capacity Plus #1	
Back Next	Close



• 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.

Text messages			- 🖬 🗙
Recent Chats	+	🚯 Radio 27	Q 🖉
Q Type here to search			Hi, u there? 6:28 PM 🖋
Radio 27 Hi, u there?	6:28 PM		
Radio 235 yutuyu	1:03 PM		
		Stay in	
		,,	

- 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 Location Trigger – 🗙				
Reset Location Trigger				
Reset location trigger				
 Stop location trigger 				
 Start location trigger 				
Change periodic interval				
Interval: 30				
OK Cancel				

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 <u>5.4, Custom Voice Boxes</u>).

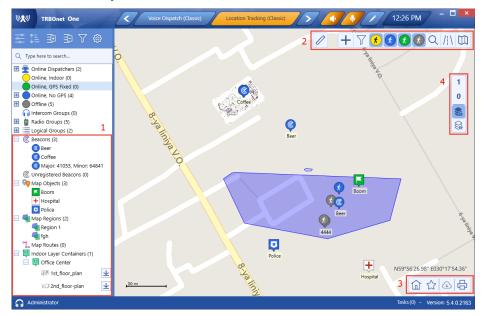
• Select the required item and drag it to the Voice Box panel on the left.





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 <u>7.1.6, Add Building Indoor Plans</u>).

7.1.1 Bookmarks and Default View

To save a bookmark:

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

Bookmark	- 🗖 🗙
Name:	Prince Garden
	Region
	from: N59°56'24.43" E030°17'51.21"
	to: N59°56'27.66" E030°17'42.42"
	Zoom: 19
	Set this view as default
	OK Cancel

• 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 \square on the lower toolbar, and select the bookmark in the list.

To save a bookmark as the default view:

Click in 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 应 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 .
- 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

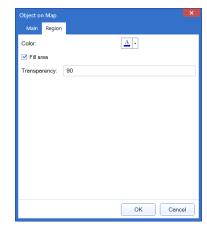
Specify the transparency, in percent, for the line edge.

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 .
- 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 .
- 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:



• Туре

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.

Create Indoor Container		- 🗖 🗙
Name:	Indoor Layers 1 -	→+ 2
New Container	2 🗄 🔟 Select 2D 🔬 Select 3D	🛅 Delete
Color & Icon Background	1 2nd_floor_plan 2	3⊻ & 🕀 🛍
Icon Color	0 0 1st_floor_plan	* 🔒 🛍
Ride Background Tiles	6 1st_floor_plan_3D	à 🛛 🖬
4		5
		5
	Creat	e Cancel

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.

Predet	ined i	viap O	bjects			
F			+	6	$\pmb{\pitchfork}$	R

- 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.

Add custon	n map objec	:t		– 🗖 🗙
Name:	Woodpeck	er		
Select i	mage			
D:\Ima	ges\Woodpe	cker.png		
Preview	v			
10	6x16	24x24	32x32	48x48*
	7	1	1	2
			,	,
Advanced	mode		ОК	Cancel

Name

Specify a name for the object.

Select image

Click the Q 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.

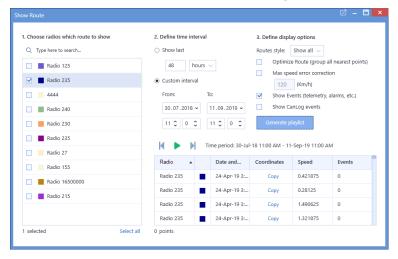
Note: For online maps, Internet access is required!

- On the upper toolbar, click \bigcirc .
 - 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 🕰.

Bulk Tile Downloading – 🗖 🗙
Region from: N59*57'33.18* E030*16'24.89* to N59*56'20.74* E030*17'12 Expire tiles days: 1 Redownload all tiles
Zoom level: 12 Tiles to download: 13
Status: Finished Loaded level: 12 Loaded from veb: 3 Updated from veb: 0 In local cache: 10 Failed: 0
Loaded: 13 of 13 (100 %)
Show tiles preview Show tiles progress
Show thes preview Show thes progress
Start Close

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.

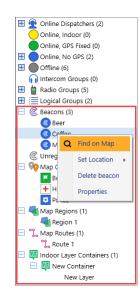
• On the upper toolbar, click $\overleftarrow{\nabla}$, and on the drop-down menu select the check boxes beside the appropriate objects.



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.

ILTER BY OBJECTS Call Types Units	G	roups	Logical Groups		mpty audio files	FILTER BY DATE Predefined values		
Find by message		Search		Q	Reset	This week 🗸		
12/12/2017 2:12:39 PM Sk 12/12/2017 2:12:44 PM Sk 12/12/2017 2:12:44 PM Sk 12/13/2017 11:41:11 AM Sk 12/13/2017 11:41:41 AM Sk 12/13/2017 11:41:51 AM Sk 12/13/2017 12:15:57 PM Sk 12/13/2017 12:16:01 PM Sk 12/13/2017 3:24:07 PM Sk 12/13/2017 3:24:07 PM Sk 12/13/2017 3:24:11 PM Sk	do System at 1 at 2 at 2 at 2 at 2 at 1 at 1 at 2 at 1 at 2 at 1 at 2 at 2 at 1 at 2 at 2 at 2 at 2 at 2 at 2 at 2 at 2	Group Name Police Police Police Cleaners In In Zeaners Mobile Client Administrator Administrator	Ali Ali Ali	All Call fi All Call fi	er 'Administrator' calls er 'Administrator' calls er 'Administrator' calls	istrator' (00:02) cher' (00:03) istrator' (00:03) istrator' (00:02)	8)	Rows cou 383
FORMATION → Administra ← 13 Slot 1 12/12/2017 2:12: Private Call: Disp Members: Admin	39 PM batcher 'Administrator'	calls the radio '13' (00	9:08)				Play	Save

- 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 **D** on the toolbar.

TRBOnet Audio Play	or I	- ×
00:04 / 00:02		
Administrator 13.12.2017 11:41:14		
СН	₩ ○ II = ₩	



9 Custom Workspaces

In TRBOnet One, you can create your own workspaces and modify the existing <u>Voice</u> <u>Dispatch</u> and <u>Location Tracking</u> 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)

リ TRBOnet One	Voi	ce Dispatch (Modern)	Voice Recording	Location Tracking (Classic)			· Į	12:17 PM -	•
					Voice Dispatch (C		/	# \$2 %%0	
					Voice Dispatch (L			Type here to search	
					Location Tracking	8	í	Common	
					Location Tracking			Voice Dispatch	
					-	(with Dispatch)			
					Voice Recording			System Voice Boxes	
Individual Call		Intercom	Maint	enace	Workspace Solles			Custom Voice Boxes	
225		1.0.1						Private Voice Boxes	
235 Individual Cal		All Call		Maintenace	Sales	Sales		Telemetry	
Individual Ca		Intercom		Maintenace		Sales		UI Elements	
PTT		O PTT		PT		PTT (e)		2	
	e ≣								
Date	Radio System	Caller	Target		Details	Note			
/11/2019 12:17:21 PM	Capacity Plus #1	Dispatcher 1	235	Private Call: Dispatcher '					
I/11/2019 12:17:13 PM	Capacity Plus #1	Dispatcher 1	125	Private Call: Dispatcher '	Units: Dispatcher 1, 125				
I/11/2019 11:49:01 AM	Intercom	Administrator	Dispatcher 1	asdf					
/11/2019 11:48:42 AM	Intercom	Dispatcher 1	Administrator	Intercom Call: Dispatch					
/11/2019 11:48:01 AM	Intercom	Dispatcher 1	Administrator	Intercom Call: Dispatch Intercom Call: Dispatch					
/11/2019 11:47:31 AM	Intercom Intercom	Administrator Administrator	Dispatcher 1 Dispatcher 1	Intercom Call: Dispatch					
/11/2019 11:46:49 AM									

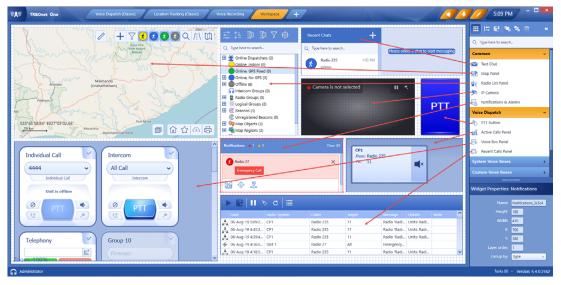
In the editing mode, you can populate your workspace with a variety of components related to your radio system.



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.

	Widget Properti	es: Voice Dispatch Box
125	View Type:	Standard View 🗸
(125)	Selection Bo	Yes 🗸
Individual Calls	Box Click Ac	Push To Talk 🛛 🗸
	PTT Button:	Push To Talk 🛛 🗸
	Button 1:	Mute ~
	Button 2:	Encrypt Voice -
	Button 3:	Encrypt Voice -
	Button 4:	Interupt Call 🗸

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

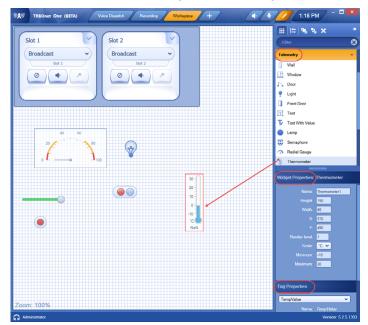
Select the action to happen when you click the PTT button.

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 dropdown list select the appropriate tag.

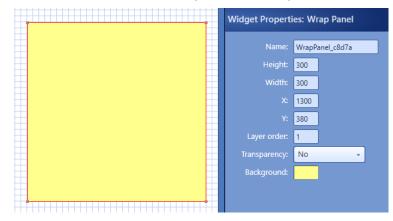
Note: Telemetry tags must be previously created (see section <u>5.2.2, Tags</u>).



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.



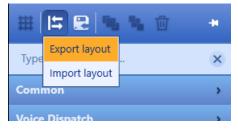
9.6 Exporting/Importing Layout

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**.

₩		1	-14
Туре	Export layout		×
	Import layout	-	~
Com	non		>
Voice	Dispatch		

• 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.