



TRBOnet PLUS Administrator's Guide

Version 5.1

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1 Introduction

1.1 About This Guide and Related Documentation

This document is intended for MOTOTRBO radio network administrators responsible for the dispatch operations. It provides guidance on the installation, configuration, and maintenance of the **TRBOnet Server** and **Dispatch Console** applications.

1.2 About TRBOnet PLUS

The TRBOnet is a suite of professional applications for MOTOTRBO digital two-way radio networks. The TRBOnet manages voice, text, and data communication paths across network endpoints and provides a unified graphical dispatcher workbench interface for the whole set of messaging and workforce orchestration tasks.

1.3 Contacts

Region	Phone	Email & Support
EMEA	+44 203 608 0598	info@trbonet.com — general and commercial inquiries
Americas	+1 872 22 28 726	<u>support@trbonet.com</u> — technical support
АРАС	+61 28 6078325	<u>http://kb.trbonet.com</u> — online knowledge base



2 Hardware and Software Requirements

TRBOnet Server/Agent with IP connection only					
Voice Channels	4	8	16	24	24+
CPU	Intel Core i3	Intel Core i5	Intel Core i7, 4 Cores	Intel Core i7, 6 Cores	Contact
Memory	2 GB	4 GB	4 GB	8 GB	technical
HDD	300 MB for installation files, +1 MB per 1 minute of voice recording				
Sound Card	No				
Supported OS	ed OS Windows 7/8.x/10, Windows Server 2008, Windows Server 2012, Windows Server 2014				
Software	.NET Framework 4.6.x, MS SQL Server 2008 R2 or higher				

TRBOnet Server /Agent with Control Stations				
Control Stations	1	2+		
CPU	Intel Core i5			
Memory	2 GB			
HDD	300 MB for installation files, +1 MB per 1 minute of voice recording			
Sound Card	Integrated sound card can be used.	Multi-channel Sound Card required; Recommended: 1. <u>M-Audio Delta 1010 LT</u> 2. <u>Roland OCTA CAPTURE Hi-SPEED USB</u> <u>Audio Capture</u>		
Additional Devices	Cable connector Motorola PMKN4016			
Supported OS	Windows 7/8.x/10			
Software	.NET Framework 4.6.x, MS SQL Server 2008 R2 or higher			

Dispatch Console			
CPU	Intel Core i3		
Memory	4 GB		
HDD	70 MB for installation files		
Sound Card	Yes		
Display	1280x1024 minimum resolution, 1600x900 recommended resolution		
Additional Devices	Speakers and microphone, or headset; Imtradex devices are recommended		
Supported OS	Windows 7/8.x/10		
Software	.NET Framework 4.6.x		

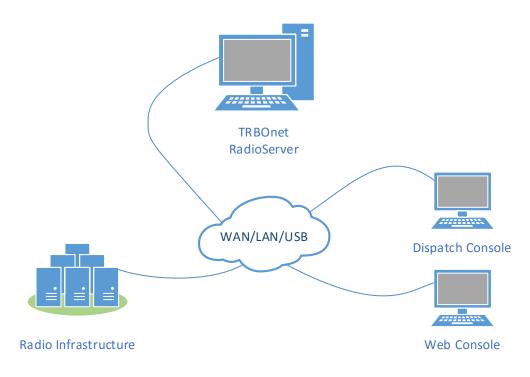


3 System Architecture Overview

3.1 TRBOnet Server and Console

The TRBOnet Dispatch Console is a PC-based voice dispatch and AVL software application for MOTOTRBO[™] professional digital two-way radio systems.

The software has a client-server architecture: TRBOnet Server runs as a Windows service on the server machine, stores data in an MS SQL database, and allows client connections from Web Console and Dispatch Console. In addition, remote software and/or hardware agents can be connected to provide voice and data from remote sites.





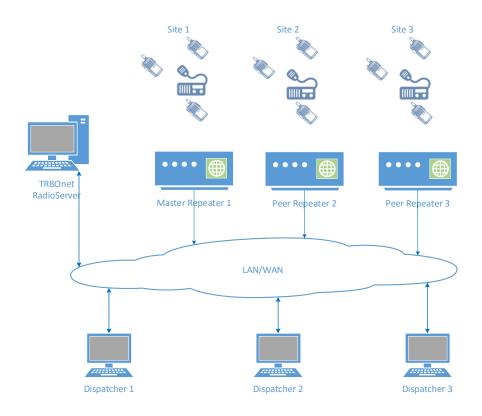
3.2 MOTOTRBO Radio Systems

3.2.1 Single Site conventional system

A Single Site conventional system is a digital conventional two-way MOTOTRBO system that includes one digital repeater and allows you to transmit voice and data via two conventional channels. Radio groups and radio units are assigned to radio channels.

3.2.2 IP Site Connect

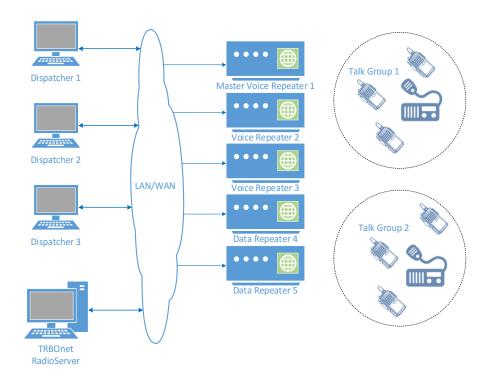
An IP Site Connect (IPSC) system is a digital conventional two-way MOTOTRBO system that allows you to increase the RF coverage area of your communications, providing two wide-area channels. It is possible to connect up to 15 repeaters (each geographical location of a repeater is called a "site") to one system using IP connection, which allows increasing the coverage area for voice and data transmissions. The main objective of IPSC systems is to provide a stable connection between the radio units and control centers regardless of the distance.





3.2.3 Capacity Plus

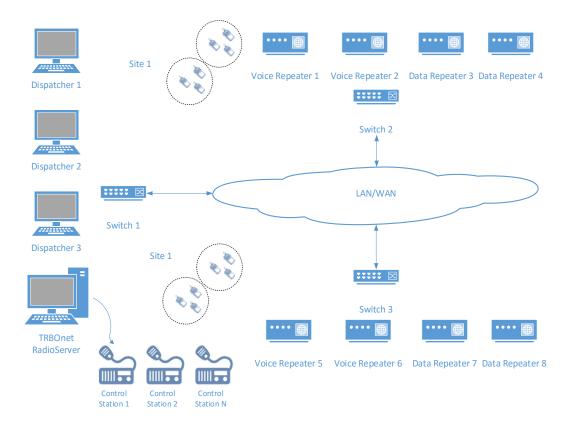
Capacity Plus (also known as Capacity Plus Single Site) is a digital trunked two-way MOTOTRBO system that allows you to accommodate high volume communication. It is designed to provide a stable connection between a few groups within one building or a set of buildings. This system type allows you to increase the number of channels for voice and data transmission between the radio units and control centers. The radio units are always automatically forwarded to a free channel. The main objective of Capacity Plus is to support more simultaneous voice and data transmissions within one capacious system.





3.2.4 Linked Capacity Plus

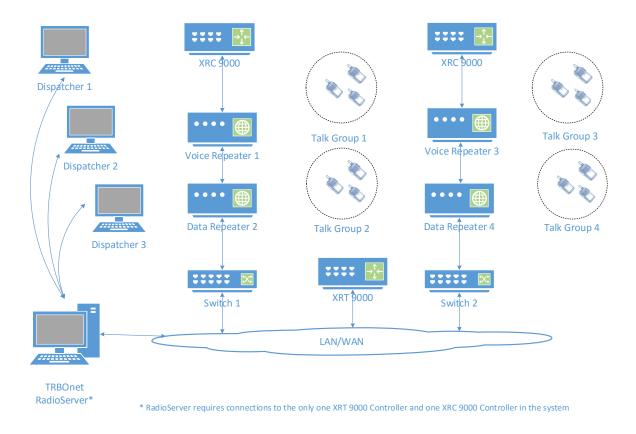
Linked Capacity Plus (also known as Capacity Plus Multi Site) is a digital trunked multisite two-way MOTOTRBO system that enables you to accommodate high volume and wide area communication that is required for your business allowing you to connect via IP up to 15 single Linked Capacity Plus sites located in one place or in separated territories. This system type allows you to increase the RF coverage area and the number of channels for voice and data transmission between the radio units and control centers. The main objective of Linked Capacity Plus is to support more simultaneous voice and data transmissions regardless of the distance.





3.2.5 Connect Plus

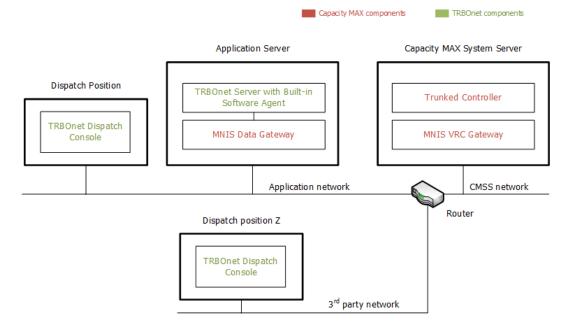
Connect Plus is a digital trunked multisite two-way MOTOTRBO system that enables you to accommodate high volume, wide area communication that's required for your business allowing you to connect via IP multiple sites located in one place or in separated territories. This system type allows you to increase the RF coverage area and the number of channels for voice and data transmission between the radio units and control centers. The radio units are always automatically forwarded to the control channel. The main objective of Connect Plus is to support more simultaneous voice and data transmissions regardless of the distance as well as to provide a more structural addressing of the transmissions provided by XRC and XRT controllers.





3.2.6 Capacity Max

Capacity Max is MOTOTRBO's next-generation trunking solution. Built on the DMR Tier III Mode of Operation, it delivers smooth scalability, low cost of ownership and reliable operation.



3.3 IP Backend Network Requirements

Before planning any of IP connected MOTOTRBO systems, read System Planner (chapter 4.6.3.2 Characteristics of Backend Network).

• Delay/Latency

The amount of time it takes for voice to leave the source repeater and reach the destination repeater. The delay should be less than 60 ms. It can be up to 90 ms, but requires changes in CPS for both radio units and repeaters.

• Jitter

The variation of the packet inter-arrival time. It should be less than 60 ms.

• Packet Loss

In the case of voice, the ongoing call ends if six consecutive packets do not arrive within 60 ms of their expected arrival time. In the case of data, the repeater waits for the expected number of packets (as per the data header) before ending the call.

• Bandwidth

Refer to System Planner for bandwidth calculations, but roughly, it requires 96 kbps for each repeater connection and should be summed up for all repeaters.

If the IP backend network does not satisfy MOTOTRBO requirements, it will degrade audio quality significantly up to dropped voice calls.



3.3.1 Linked Capacity Plus Specific Requirements

• Addresses and Ports

A static IP Address and UDP Port for the master repeater must be made available to all peer devices on the Linked Capacity Plus system.

 When a peer device registers with the master repeater, the network supplies the return IP address and UDP port of the peer device to the master repeater. The IP address and UDP port must then be made available to all other MOTOTRBO[™] LCP devices on the system.



4 TRBOnet PLUS Software and Dependencies Installation

4.1 Preparing and Updating the Base OS

For all platforms, we recommend that before installing TRBOnet you upgrade your OS to the latest Service Pack and install critical updates available from Windows Update.

4.2 Installing Microsoft SQL Server

Download and install Microsoft SQL Server 2008 R2 or higher.

You can download and install either a full-featured MS SQL Server or an Express edition of MS SQL Server. The Express edition of MS SQL Server is free, however, it has some technical restrictions (maximum database size, RAM usage, etc.).

For example, Microsoft SQL Server 2008 R2 SP2 - Express Edition (which is free) is available at:

http://www.microsoft.com/en-us/download/details.aspx?id=30438

Note: We recommend that you download a version of SQL Server with Tools.

Select the 32-bit or 64-bit version depending on the underlying OS. Accept the defaults for the setup.

4.3 Installing .NET Components

Windows 8 and later, as well as Windows Server 2012 and later, include the required .NET 4.6 components as part of the operating system.

For the TRBOnet PLUS Compatibility Table, see <u>http://kb.trbonet.com/public.pl?Action=PublicFAQZoom;ItemID=73</u>

The .NET Framework redistributables are available from Microsoft at: https://www.microsoft.com/en-us/download/search.aspx?q=.net%20framework

4.4 Installing TRBOnet PLUS

- Contact **Neocom Software** to obtain the latest installation package of the TRBOnet PLUS software, unzip, and run the setup file as a local administrator.
- When the **TRBOnet PLUS Setup** wizard opens, click **Next**.
- On the **End User License Agreement** page, accept the terms of the license, and then click **Next**.



Choose Setup T Choose the set	ype up type that best suits your needs	TRBOD®É
17	TRBOnet Dispatch Console This is a dispatcher computer and only Dispatc	ch Console must be installed
1	TRBOnet Server and Dispatch Console This is a Server computer and you need to ins Dispatch Console	tall Server software and
	Custom Allows users to choose which program feature they will be installed.	s will be installed and where
Neocom Software —	< Back	Next > Cancel

• On the **Choose Setup Type** page, click one of the following options:

TRBOnet Dispatch Console

Choose this option to install only TRBOnet Dispatch Console on your computer.

TRBOnet Server and Dispatch Console

Choose this option to install both TRBOnet Server and TRBOnet Dispatch Console at once on your computer.

Custom

Choose this option to select from the list one or more components to be installed.

Custom Setup Select the way you want features to be installed.	TRBO DO DE
Click on the icons in the tree below to change the v	way features will be installed.
Dispatch Console Server Instance Agent Instance	TRBOnet Enterprise 5.2 Agent
	This feature requires 199MB on your hard drive.
Location: C:\Program Files (x86)\Neocom Soft Enterprise \	ware\TRBOnet Browse
leocom Software Reset Disk Usage < E	Back Next > Cancel

For example, you may install only TRBOnet Server:



Custom Setup Select the way you want features to be installed.	TRBO DOL Expert Technologies
Click on the icons in the tree below to change the v	vay features will be installed.
X Dispatch Console Server Instance X Agent Instance	TRBOnet Enterprise 5.2 Server
	This feature requires 209MB on your hard drive.
Location: C:\Program Files (x86)\Neocom Soft\ Enterprise\	ware\TRBOnet Browse
Neocom Software	ande Navet S. Conneal
Reset Disk Usage < B	lack Next > Cancel

• Accept the defaults for the rest of the setup and complete the installation.



5 TRBOnet Server

To start TRBOnet Server, click the corresponding shortcut on the desktop, or click **Start > All Programs > Neocom Software > TRBOnet Server x.x**

5.1 License Information

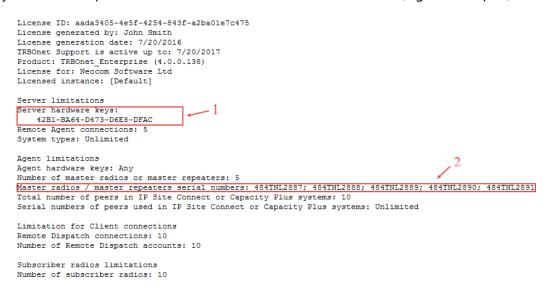
The TRBOnet software requires a valid license.

5.1.1 License Types

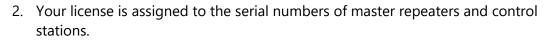
There are three license types available for TRBOnet PLUS:

License Type	Demo	Trial	Commercial	
Validity	60 days	By Request	Permanent (non-expiring)	
Quantity of Control Stations and Radio Units	Up to 2 control stations or 1 IP repeater connection 10 Radio Units	By Request	According to Customer order	
Features	Limited functionality	By Request	According to Customer order	
How to obtain	It can be downloaded from the web page.	Assigned to server's Hardware ID. For more details on Hardware ID, see the <u>article</u> .	Assigned to server's Hardware ID. For more details on Hardware ID, see the <u>article</u> . Assigned to the serial numbers of master repeaters and control stations. To retrieve serial numbers, use Control Station CodePlug (do not rely on a serial number printed on the device's label).	
For more information on the license and renewals, contact our technical support at info@trbonet.com				

To see how the Hardware ID and control stations and/or repeaters are assigned in your license, open the INFO file delivered with the license file (e.g., in Notepad):



1. Your license is assigned to the Hardware ID.



5.1.2 Moving TRBOnet Server to a Different Server PC

In case you need to use TRBOnet Server on a different server PC, please contact your **Neocom** sales representative for further instructions.

5.1.3 Using Spare Repeaters

oftware

In case you are planning to use spare repeaters, for example, as replacement for damaged ones, you need to mention all of them when ordering a license.

For example, you have 3 repeaters to use with TRBOnet Server and 1 spare repeater. In this case, mention the following repeaters limitation: 3, and send the serial numbers of 4 repeaters when placing an order (including the spare repeater's serial number).

5.1.4 License Manager

• In the **Configuration** pane on the left, select **License**. In the right pane, you can see the text of your current license.

Configuration	License	
Service Service Network Redundancy Database	License is valid License ID: 6b6b2281-c761-4747-9eec-8b61260d Hardware ID: 4281-8A64-D473-D6E8-DFAC License generated by: Marina Eidelman License generation date: 03-Nov-2016	782b
Reports Service Management Advanced settings Servers Radio Networks	TRBOnet Support is active up to: 20-Jul-2017 Product: TRBOnet_Enterprise (4.0.0.138) License for: demo Active instance: [Default] Licensed instance: [Default]	
Remote Agents Friendly Servers Telephony	Demo License Expiration date: 20-Jul-2017 Server limitations	
 ↓² Data Sources [★] Modbus TCP ★ Email 	Server hardware keys: 4281-8A64-D473-D6E8-DFAC Remote Agent connections: 5 System types: Unlimited	
SMS	Agent limitations Agent hardware keys: Any Number of master radios or master repeaters: 5	Total Facil County Clickered
Set Defaults	License Manager Apply	Send Email Copy to Clipboard

To apply the new license:

- Click the **License Manager** link in the right pane. The **License Manager** wizard opens.
- Click Next.
- Click ... on the right-hand side of the License file box. The **Open** dialog box opens.
- Locate the license file you received from our technical support and click **Open**. The full path of the license file appears in the **License file** box.
- Click Next.
- Click **Finish** to close the wizard.
- Click **Apply** and then confirm to restart TRBOnet Server.



Note: To use a single license for multiple TRBOnet software instances, you need **TRBOnet License Server**. For detailed instructions on how to use TRBOnet License Server, see *TRBOnet License Server Configuration Guide*.

5.2 Creating TRBOnet Server Database

• In the Configuration pane, select Database.

Configuration	Database		
🔗 Service			
S Network	SQL Server:	(local)\SQLEXPRESS	
Redundancy	Database:	TRBOnet 🔹	
Database Reports	Authentication:	Windows	
Service Management	Login:		
X Advanced settings	Password:		
Geocoding Servers			
👩 Radio Networks	Specify the path for database archives		
Remote Agents			
Friendly Servers	Path:	D:\Temp\TRBOnet ····	
Telephony	☑ Use custom folder for audio files		
Ψ Data Sources	Path:	D:\Temp\Audio ····	
🍀 Modbus TCP	rau.	or (remp youro	
🔀 Email			
NG SMS	Test Conne	ction	
📮 License	Upgrade Data	pase 🔻	
	Create Datab	ase 🔻	
Set Defaults		Apply OK Cancel	

- In the **Database** pane, specify the following database-related settings:
 - SQL Server

Enter the location of the Microsoft SQL Server name and instance. For example, in the screenshot above, the default instance name of Microsoft SQL Server Express installed on the local computer is shown.

Database

Enter the preferred name of the TRBOnet database.

Authentication

Select the authentication method for the TRBOnet database. The default method is Windows Authentication. See also the <u>Database Authentication</u> section.

Login and Password

Enter a valid SQL Server login and password if the <u>SQL Server</u> <u>Authentication</u> is selected for the database;

Specify the path for database archives

Select this option, and in the corresponding **Path** box enter the full path of the custom folder for database backups.

 Use custom folder for audio files
 Select this option, and in the corresponding Path box enter the full path of the custom folder for audio recordings of the talk sessions.



Note: If you don't specify folder paths for the database archives and audio files, TRBOnet Server will use the following default paths: %ProgramData%\Neocom Software\TRBOnet PLUS\Backups - for database archives. %ProgramData%\Neocom Software\TRBOnet PLUS\Audio = for

%ProgramData%\Neocom Software\TRBOnet PLUS\Audio - for audio.

- When you finish configuring the required database parameters, click **Create Database**.
- After you create or upgrade a database, click **Apply** and then confirm to restart TRBOnet Server.

5.2.1 Database Authentication Methods

5.2.1.1 Windows Authentication

• From the Authentication drop-down list, select Windows.

Configuration	Database		
	(local) \SQLEXPRESS		
 ↓² Data Sources Modbus TCP Kemail SMS License 	Path: Test Conn Upgrade Dat Create Data	abase 🔻	
Set Defaults		Apply OK	Cancel

To provide access permissions for TRBOnet Server to connect to SQL Server, create an account with **sysadmin** privileges.

During the installation process, MS SQL Server 2008 automatically grants **sysadmin** privileges to the **NT Authority\SYSTEM** account.

In the case of MS SQL Server 2012 and higher versions, add the

NT Authority\SYSTEM account to the Administrators group during the installation process. If the DB owner privileges are required to work with TRBOnet Database, you need to assign the **sysadmin** role to the **Local System** account. For instructions on how to install and configure MS SQL Server 2012, see http://kb.trbonet.com/public.pl?Action=PublicFAQZoom;ItemID=72

5.2.1.2 SQL Server Authentication

• From the Authentication drop-down list, select SQL Server.



Configuration	Database	
Service Service Network Redundancy Database Reports Service Management Advanced settings Service Management Service Management Service Management Service Management Service Management Modbus TCP	SQL Server: Database: Authentication: Login: Password: Specify the path for Path: Use custom folder Path:	D:\Temp\TRBOnet ····
Email SMS License	Test Conner Upgrade Datab Create Datab	base v
Set Defaults		Apply OK Cancel

To connect to SQL Server using **SQL Server Authentication**, create an SQL login with **sysadmin** privileges in the SQL Server in use. For detailed instructions on how to create an SQL login, see

http://technet.microsoft.com/en-us/library/aa337562.aspx

5.3 Installing TRBOnet Server Service

• In the **Configuration** pane, select **Service**.

Configuration	Service
Service Service Service Network Redundancy Database Reports Service Management Service Management Advanced settings Service Management Telephony Data Sources Modbus TCP Service	The TRBOnet Server service is not installed! It is recommended to run TRBOnet Server as a Windows service: it will start automatically after a reboot and run even when no user is logged on. Click the Install Service button below to install the TRBOnet Server service. Service logon type: Logon as Local System (Recommended) Logon as User User name: Password: Install Service
NS SMS	
	View Log Entries Export Configuration Import Configuration
Set Defaults	Apply OK Cancel

- In the Service pane, specify the following service-related parameters:
 - Choose the required logon type:

Logon as Local System

Choose this option to use an account with local system administrator privileges to run the service as a Windows service (Recommended);

Logon as User

Choose this option to use a different account to run the service as a Windows service. This account must allow the user to run services in Windows, have read and write access to the **Neocom Software** folder and subfolders in the "**%ProgramFiles%**" and "**%ProgramData%**" folders. For example, using such an account may be required in the following cases:



- 1. An Active Directory domain network is used, and the current Windows user is not allowed to use a **Local System** account to launch services on the local PC due to domain policy restrictions.
- 2. MS SQL Server is installed on a remote PC, and **Windows Authentication** (see section 5.2.1) has been selected to connect to the database.
- Click **Install Service**.
- Click the **Start Service** link that appears in the right pane.

5.4 **Configuring Network Parameters**

• In the **Configuration** pane, select **Network**.

Configuration	Network		
Service Service Service Advanced settings Service Management Advanced settings Service Management Advanced settings Service Management Advanced settings Service Management Service Management Advanced settings Service Management Service M	Network interface: Command port: First VoIP port: VoIP protocol: Data protocol: Use broadcast mode for audio Broadcast port: Use proxy server <u>Configure</u> Encrypt data over network	System Default 4021 4022 Tcp 5000	* \$3 * * *
Set Defaults		Apply	OK Cancel

• In the **Network** pane, specify the following network-related parameters:

Network interface

Select the network interface from the drop-down list. Click ²⁴ to refresh the list of network interfaces available on your PC.

Command port

Enter the port number to be used by Dispatch Console to connect to the server (4021, by default).

First VolP port

Enter the number of the first VoIP port for audio communications (4022, by default). Each additional Dispatch Console will establish a connection on the next available port number.

VoIP protocol

Select the VoIP protocol type from the drop-down list:

- All UDP will be used first; if unavailable, TCP will be used;
- TCP slower but more reliable (set by default);
- **UDP** faster but packets can be lost; some routers may drop UDP packets.



Data protocol

From the drop-down list, select the protocol to exchange data other than voice (TCP, by default).

Use broadcast mode for audio

Select this option to optimize voice transmission quality and minimize transmission delay. Note that when the broadcast mode is set, Dispatch Console cannot run on the same machine as TRBOnet Server, and a warning message will appear when you select this option.

Broadcast port

Enter the port number to be used to broadcast audio (5000, by default).

Use proxy server

Select this option to enable an alternative proxy server for TRBOnet Dispatch Software to access Internet.

• Click the **Configure** link to specify the alternative server settings:

Configure the proxy server	×
Use an alternative server Settings	
Address: 177.71.134.70	
Port: 80 🜲	
Authentication	
Login: User	
Password: •••••	
OK Canc	el

Use an alternative server

Select this option to enable an alternative proxy server.

Address

Enter the proxy server IP address.

Port

Enter the proxy server port number.

Use authentication

Select this option to use an individual login and password to connect to the alternative proxy server.

Login

Enter the login for the authentication.

Password

Enter the password for the authentication.

• After you configure the proxy server settings, click **OK**.



Encrypt data over network

Select this option to guarantee the security of data transfer between TRBOnet Server and Dispatch Console, and/or TRBOnet Agent. It is recommended that this option be used when a connection between system components is established via the Internet or other public networks.

5.4.1 Configuring Backup Configuration

TRBOnet Server supports backup configuration, which allows smooth switching between the working servers in case of a failure for the Dispatch Consoles.

• In the **Configuration** pane, select **Redundancy**.

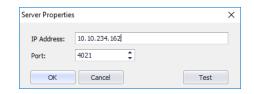
Configuration	Redundancy	
Service Network Redundancy Database Reports	Redundant server mode Redundancy Mode: Passive Main servers:	•
Service Management	IP Address	Port
X Advanced settings	1 🚺 10.10.234.162	4021
Constraints Const		
	Add Edit Delete	Test 🔺 🔻
Set Defaults	Apply	OK Cancel

• In the **Redundancy** pane, select the **Redundant server mode** option.

• Redundancy Mode

Select the mode for a backup server from the drop-down list.

• To add a main server, click Add.



• IP Address

Type the IP address of the main server.

• Port

Enter the same port number as specified for the Command port.

5.5 Service Management

The Service Management pane allows you to specify various parameters for the Check Radio, Location, Telemetry, TMS, and Indoor services.

• In the Configuration pane, select Service Management.



10 fb			
🔆 TRBOnet Enterprise 5.2 / Se	rver		- 🗆 X
Configuration	Service Management		
💣 Service			
S Network	Automatic "Check Radio" ser	vice	_
🕸 Redundancy	Auto request presence timeout:	5	minutes
Database	ARS refresh interval:	1440	minutes
Reports	Ignore unregistered Radios		
Advanced settings			
Geocoding Servers	Location service		
Radio Networks	Dispatch Console update interval:	5	seconds
Remote Agents	Automatic error correction		
Friendly Servers	Configure		
🔞 Telephony	Send the latest GPS data to dis	patchers on alert	
↓ Data Sources	For the last:	10	minutes
🗱 Modbus TCP 🔀 Email	GPS points:	10	
SMS			
License	Telemetry service		
-	Request for the status of GPIO	when a radio unit is	powered on
	Text Messaging service		
	Text Message Format:	Sender and Text	•
	Custom Format:	{Sender} {Text}	
	Max. message length:	140	chars
	Split long message into multiple	messages	
	Indoor service		
	Remove offline radios from an I	indoor map	
	Ignore beacon position on alarn		K TEDM)
	ignore beacon position on alarn	in GPS is lixed (only	
Set Defaults		Apply	OK Cancel

• In the **Service Management** pane, specify the following service-related parameters:

5.5.1 Automatic "Check Radio" Service

The **Automatic "Check Radio" service** group includes the following registrationrelated parameters:

• Auto request presence timeout

Enter the time interval that will be used to regularly check a radio unit for inactivity. A radio is considered inactive (or, offline) if it does not send any GPS, Text, ARS, or Voice messages. If you do not have a dedicated channel for data revert, use the following table:

Number of radio units	ARS request presence timeout (minutes)	Number of radio units	ARS request presence timeout (minutes)
up to 10	5	30 to 40	17
10 to 20	9	40 to 50	21
20 to 30	13	over 50	120

• ARS refresh timeout

Enter the value of the parameter that determines how often a radio unit will send ARS packets. It is recommended that a value of 30 minutes be used for this interval.

• Ignore unregistered Radios

Select this option so that unregistered radio units will be ignored and thus won't appear in Dispatch Console.

5.5.2 Location Service

The Location Service group includes the following location-related parameters:



• Dispatch Console update interval

Enter the time interval that will be used to send GPS data packages to the Dispatch Consoles.

• Automatic error correction

Select this option to enable automatic error correction to detect and correct invalid GPS data.

Click the **Configure** link to specify the GPS correction parameters:

n some real world situations, speed a eceiver may be erratic or unreliable. I		
automatic error correction to the GPS		
Discard GPS data if		
Speed greater than:	120	🗘 km/h
🗹 Location accuracy worse than:	50	meters
GPS time error greater than:	30	minutes
Coordinates have duplicates		
Consider speed zero if less than:	0	🐥 km/h

Discard GPS data if

Speed greater than

Select this option and enter the maximum possible speed of your vehicles. As a result, the coordinates falling out of the appropriate speed range will be discarded.

Location accuracy worse than

Select this option and enter the maximum accuracy of your GPS receivers so that the coordinates falling out of the acceptable range will be discarded.

GPS time error greater than

Select this option and enter the time, in minutes, that will be used to discard the coordinates falling out of the appropriate time range.

Coordinates have duplicates

Select this option to remove duplicate coordinates from GPS data.

Consider speed zero if less than

Select this option and enter the low-speed threshold, below which the speed will be considered as zero by the server.

• Send the latest GPS data to dispatchers on alert

Select this option so that dispatchers receive the latest GPS data when alert happens. Then choose one of the following options:

For the last X minutes

Choose this option and enter the time, in minutes, to be used as the last time period for the latest GPS data.

GPS points

Choose this option and enter the number of GPS points to be used for the latest GPS data.



5.5.3 Telemetry Service

The **Telemetry Service** group includes the following telemetry-related parameters:

• **Request for the status of GPIO when a radio unit is powered on** Select this option to enable the server to request for the status of a radio unit telemetry when a radio is powered on.

5.5.4 Text Messaging Service

The **Text Messaging Service** group includes the following message-related settings:

• Text Message format

From the drop-down list, select one of the pre-defined formats for text messages, or select the Custom format.

Custom Format

Enter your own format for text messages in this box, if you have selected 'Custom' from the list above.

Max. message length

Enter the maximum number of characters allowed in a text message.

• Split long message into multiple messages Select this option to allow long messages to be split into multiple smaller messages.

5.5.5 Indoor Service

The **Text Messaging Service** group includes the following indoor-related parameters:

- Remove offline radios from an Indoor map Select this option so that offline radios are not shown on the 2D/3D floor plans.
- Ignore beacon position on alarm if GPS is fixed (only K-TERM) Select this option so that beacon positioning is ignored in case of alarm when a radio has a detected GPS position.

Note: This feature relates only to K-TERM beacons.

5.6 Advanced Settings

• In the Configuration pane, select Advanced Settings.



Configuration	Advanced settings		
🗬 Service			
🕤 Network	Language:	English	•
🛱 Redundancy	Logging level:	Normal	-
Database			
🔒 Reports	Audio Recording format:	WAV - Waveform Audio File	•
Service Management	Audio Recording codec:	PCMU/8000	-
🗶 Advanced settings			
Geocoding Servers	Measurement system:	Metric	•
👩 Radio Networks	Latitude/Longitudeformat:	Degrees, Minutes, Seconds	•
Remote Agents			
Friendly Servers	TX Passive timeout:	Unlimited 🗘 hours	
Telephony	Voice Mail timeout:	Unlimited 🗘 hours	
🖞 Data Sources	Text Message Passive timeout:	Unlimited 2 hours	
K Modbus TCP	rext messager assive timesati		
🔀 Email			
SMS			
⋥ License			
Set Defaults		Apply OK	Cancel

• In the Advanced Settings pane, specify the following advanced parameters:

Language

From the drop-down list, select the interface language for TRBOnet Server.

Logging level

From the drop-down list, select the logging level, which determines the amount of data stored in the System Log.

Note: This information is used by technical support for troubleshooting purposes, so it is recommended that this value be kept unchanged (Normal).

Audio Recording format

From the drop-down list, select the format to be used to store audio recordings. The available formats are WAV and TNA.

Note: The TNA format is a proprietary audio format that contains additional information about radio calls, such as radio ID, start time, end time, etc. This format provides more details about call participants and allows easy navigation within recorded audio files.

Audio Recording codec

From the drop-down list, select the audio codec to be used to compress audio files.

Measurement system

From the drop-down list, select either the Metric or the US unit system.

Latitude/Longitude format

From the drop-down list, select the format of Latitude/Longitude pairs.

TX Passive timeout

Enter the time period, in hours, that will be used to store messages while the transmission channel is unavailable ('Unlimited' recommended).



Voice Mail timeout

Enter the time period, in hours, during which TRBOnet Server will keep trying to deliver the voice mail message to the recipient ('Unlimited' recommended).

Text Message Passive timeout

Enter the time period, in hours, during which TRBOnet Server will keep trying to deliver the text message to the recipient ('Unlimited' recommended).

5.6.1 Geocoding Servers

Geocoding servers resolve GPS coordinates to street addresses for reporting purposes and other needs, for example, for reports, such as 'GPS activity for period' reports. Online geocoding services, such as Google or Nominatim, can be used. However, their use may be limited by the number of requests. Furthermore, you can add custom geocoding servers to the system.

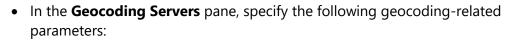
You can configure geocoding servers in three various ways depending on whether the Server and/or Dispatch Console have Internet access and on your local geocoding server settings:

- 1. The Dispatch Console has Internet access and the Server has no Internet access. The Dispatch Console can connect to preconfigured (Google and Nominatim) and/or local corporate geocoding servers via the Dispatch Console.
- 2. The Server has Internet access and Dispatch Console has no Internet access. The Dispatch Console can connect to preconfigured (Google and Nominatim) and/or local corporate geocoding servers via the Server (follow the instructions below).
- 3. You have your own Geocoding server in the local network. In this case, you can configure data resolving in both the Server and the Dispatch Console.

5.6.1.1 Configuring Geocoding Servers

• In the Configuration pane, select Geocoding Servers.

Configuration	Geocoding Servers		
 Service Network 	Use MapPoint location reso	lving	
🛱 Redundancy	MapPoint Application ID:	MapPoint (Default)	Ψ.
Database			
Reports			Test
Service Management			
X Advanced settings	Server Name		
	Google		
👩 Radio Networks	Nominatim		
📑 Remote Agents			
Friendly Servers			
78 Telephony			
↓ Data Sources			
🍀 Modbus TCP			
🔀 Email			
SMS			
📮 License	Add Delete		
	Request address when G	rs coordinates has been	received
Set Defaults		Apply	OK Cancel



Use MapPoint location resolving

Select this option to get street addresses from MapPoint, and enter the **MapPoint Application ID**. MapPoint is a service from Microsoft that is used to transform coordinates into street addresses.

Google and Nominatim

These are pre-configured geocoding servers, which allow resolving GPS coordinates to street addresses and street addresses to GPS coordinates.

Note: These geocoding servers can't be deleted from the system.

Click Add to add a geocoding server to the system.

Map Server for Geocoding	X
Server Name: MyGeocodingS	erver
Get address by coordinates	
http://127.0.0.1/reverse?format=	xml⪫={lat}&lon={lon}&zoom=18&adressdetails=1
	Test
Get coordinates by address	
http://127.0.0.1/search?q={addr	ess}&format=xml
	Test
	OK Cancel

• Server Name

Enter the name of your geocoding server.

• Get address by coordinates

Select this option to resolve GPS coordinates to street addresses. In the box below, enter the server address with the appropriate parameters.

Note: Keep in mind that the {lat} and {lon} variables are mandatory to allow TRBOnet Dispatch Console to retrieve GPS coordinates from the radio unit.

Click **Test** to check the connection to the geocoding server. Enter a pair of GPS coordinates and see if the resolved street address appears.

Get coordinates by address
 Select this option to resolve street addresses to GPS coordinates (for example, for the Search By Address feature).
 In the box below, enter the server address with the appropriate parameters.

 Note: Keep in mind that the {address} variable is mandatory to

allow TRBOnet Dispatch Console to search map objects by address.



Click **Test** to check the connection to the geocoding server. Enter an address and see if you get the list of map objects corresponding to the address entered.

Use the Up () and Down () buttons to move the selected geocoding server up and down in the priority list of geocoding servers. When requesting GPS data via the geocoding servers configured in TRBOnet Server, it requests GPS data from the geocoding servers according to the priority level. The first geocoding server in the list has the highest priority level. In case the first geocoding server is unavailable, data will be requested from the second geocoding server in the list, and so forth down the list of geocoding servers.

The administrator must ensure that the geocoding servers in the list are able to resolve GPS data.

 Request address when GPS coordinates are received Select this option to resolve GPS coordinates to street addresses immediately by a GPS event. Note that street addresses and GPS coordinates are stored in the TRBOnet database to optimize the response time for street address requests (for example, GPS reports) and to reduce geocoding server load.

5.7 Radio Networks

The Agent is a gateway between the radio network and the IP network. Enable 'Local Agent' to connect TRBOnet Server to a radio system. Otherwise, you should use Remote agents.

- In the Configuration pane, select Radio Networks.
- In the Radio Networks pane, select Enable Radio Networks.
 Or, in the Configuration pane, right-click Radio Networks and choose Use Radio Networks.

Configuration		Radio Networks
💣 Service	^	
S Network		🗹 Enable Radio Networks
🛱 Redundancy		
Database		
😪 Reports		
Service Management		
💥 Advanced settings		
Geocoding Servers		
📱 Radio Networks		
Services		
Analog Control Stations		
🔂 Remote Agents		
Friendly Servers		
Telephony		
Data Sources		
🍀 Modbus TCP		
🔀 Email	¥	
Set Defaults		Apply OK Cancel

• In the Configuration pane, select Digital Systems.



• In the **Digital Systems** pane, select or make sure **Enable Digital Systems** is selected.

Configuration		Digita	l Systems			
P Service	^					
🦻 Network		\checkmark	Enable Digital Systems			
Redundancy						
Database		CA	I Network:	12		÷
Reports		CA	I Group Network:	22	5	+
🕻 Service Management						•
Advanced settings		Re	gistered Digital Systems	5		
🦾 🤾 Geocoding Servers			Name		IP Address	Radio ID
Radio Networks			Repeater #1		10.10.102.131	64250
Digital Systems			Control Station #1		192.168.98.2	64250
- O Services			TRBOnet Swift Agent#1		10.10.110.191	64250
			_			
TRBOnet Swift Agent#1						
Analog Control Stations						
Remote Agents						
Friendly Servers						
👸 Telephony						
🕴 Data Sources						
			Add Delete			Test
K Modbus TCP						
🗱 Modbus TCP 🏹 Email	~					

• In the **Digital Systems** pane, specify the following parameters:

CAI Network

The CAI Network is a value that is combined with the Radio ID to produce the individual radio's air interface network IP address. All radios must use the same CAI Network ID to be able to exchange data. It is recommended that the default value of 12 is used.

CAI Group Network

The CAI Group Network is a value that is combined with the Group ID to produce the group's air interface network IP address. The CAI Group Network ID forms the first or most significant byte of each group's network IP address. All radios must use the same CAI Group Network ID to be able to exchange data (225, by default).

Note: The values of these two parameters must match those configured for the radio units via the MOTOTRBO CPS.



5.7.1 Digital System Elements

Configuration	Digit	tal Systems		
 Redundancy Database 	^	Enable Digital Systems		
Reports				
🔅 Service Management	c	CAI Network:	12	+
🔀 Advanced settings	c	CAI Group Network:	225	\$
Geocoding Servers				
Radio Networks	R	Registered Digital Systems		
		Name	IP Address	Radio ID
Services	5	🗸 Repeater #1 🛛 📉	10.10.102.131	64250
Repeater #1	5	Control Station #1	192.168.98.2	64250
Advanced settings	5	TRBOnet Swift Agent#1	10.10.110.191	64250
DDMS service			1	
MNIS data service	•	Add Delete	2	Test
MNIS data service Advanced settings Control Station #1 Advanced settings Control Station #1 Advanced settings TRBOnet Swift Agent#1 Advanced settings		Add Delete Add MOTOTRBO System Add Control Station Add Capacity MAX	1 2 С ок	Test
MNIS data service Advanced settings Control Station #1 Advanced settings Advanced settings TRBOnet Swift Agent #1 Advanced settings W Advanced settings		 Add MOTOTRBO System Add Control Station 	^1 2	
MNIS data service Advanced settings Control Station #1 Advanced settings Advanced settings TRBOnet Swift Agent #1 Advanced settings W Advanced settings		 Add MOTOTRBO System Add Control Station Add Capacity MAX 	1	
MNIS data service Advanced settings Control Station #1 Advanced settings Advanced settings TRBOnet Swift Agent #1 Advanced settings W Advanced settings		Add MOTOTRBO System Add Control Station Add Capacity MAX Add TRBOnet Swift Agent	1 2 Ск	
MNIS data service Advanced settings Control Station #1 Advanced settings Advanced settings TRBOnet Swift Agent #1 Advanced settings W Advanced settings		Add MOTOTRBO System Add Control Station Add Capacity MAX Add TRBOnet Swift Agent Add Friendly FS-1000 Station	1 2	

All radio system elements based on MOTOTRBO services are represented in the **Registered Digital Systems** table, including their type (Control Station, Repeater, etc.), IP Address, and Radio ID (1):

• To add an element to the system, click **Add** and select the element type from the drop-down menu (2).

5.7.2 MOTOTRBO Services

• In the **Configuration** pane, under **MOTOTRBO**, select **Services**:



Advanced settings	🗹 Text Messaging s	ervice (TMS)		
×	Text Messaging s	ervice (TMS)		
Geocoding Servers	Port:	4007	, 		
Radio Networks			-		
Services	Location service ()		
Repeater #1	Port:	4001	- -		
Advanced settings	Text Messaging s	ervice DMR			
Privacy	Port:	5016	* *		
DDMS service	Indoor service (K	-TERM)			
MNIS data service	Port:	3022	A		
Advanced settings			Ŧ		
Audio Paths	Indoor LAN Service	ce (K-TERM)			
Advanced settings	Port:	3001	÷		
TRBOnet Swift Agent#1	Tallysman Sprite s	service			
Advanced settings	Port:	4004	<u>له</u>		
Redundancy			7		
💼 Analog Control Stations	E FS 5000 location		5)		
Remote Agents	Port:	4004	÷		
Friendly Servers	Swift.Tracker v. 1	service			
Telephony	Port:	4004	<u>له</u>		
Data Sources Modbus TCP					
Email	Swift.Tracker v.1		M channel)		
SMS	Port:	4080	÷		
License	🗹 Swift.Tracker v.2	service			
	Port:	4104	÷		
	Swift.Tracker v.2	service (GS	M channel)		
	Port:	4180			
	Extended Text M	essaging se	rvice		
	Port:	4010	*		
	Telemetry service		· · ·		
	Requests port:	8090	*		
	Events port:	8091	×		
			Ψ		
	G4S RS232 servic	e			
	Port:	4004	* *		
	Zebra printer serv	/ice			
	Port:	4072	* *	Configure	
	E Forward Data ser	vice			
	Port:	4011			

• In the **Services** pane, specify the following MOTOTRBO Services-related parameters:

Automatic Registration Service (ARS)

Select this option to enable the ARS service for the radios. When the radio powers up, the radio automatically registers with the server. This feature is used with data applications, i.e. any data traffic on this channel that is associated with an application server such as MOTOTRBO Text Messaging or MOTOTRBO Location Services.

• Port

Enter the local port number for the ARS service (4005, by default).

Telemetry service (TLM)

Select this option to enable the Telemetry service, which is the wireless transmission and reception of measured quantities for remotely monitoring environmental conditions or equipment parameters.



• Port

Enter the local port number for the Telemetry service (4008, by default). 4008 set by default.

Text Messaging service (TMS)

Select this option to enable the Text Messaging service which is used to exchange text messages between the radios and the dispatchers.

• Port

Enter the local port number for the Text Messaging service (4007, by default).

Location Service (GPS / Indoor)

Select this option to enable the Location service. The radio can send its coordinates when it is in Global Positioning or iBeacon coverage area.

• Port

Enter the local port number for the Location service (4001, by default).

Text Messaging service (DMR)

Select this option to enable the DMR-based Text Messaging service.

• Port

Enter the local port number for the DMR-based Text Messaging service (5016, by default).

Indoor Service (K-TERM)

Select this option to enable the Indoor Location service.

• Port

Enter the local port number for the Indoor service (3022, by default).

Tallysman Sprite service

Select this option to enable the service for autonomous event and aggregated event reporting to provide significant reduction in GPS data overhead.

• Port

Enter the local port number for the Tallysman Sprite service (4004, by default).

FS 5000 location service (GPS)

Select this option to enable the FS 5000 location service, which is a service for transmitting GPS data packages. This service uses FS 5000 Option Board.

• Port

Enter the local port number for the FS 5000 location service (4004, by default).

Swift.Tracker service

Select this option to enable the service to transmit coordinates and data packages via a radio channel using the Swift.Tracker TR001.M1 device.

• Port

Enter the local port number for the Swift.Tracker service (4004, by default).



Swift.Tracker service (GSM channel)

Select this option to enable the service to transmit coordinates and data packages via a radio channel and a reserved GSM channel using the Swift.Tracker TR001.M1 device.

• Port

Enter the local port number for the Swift.Tracker service (4080, by default).

Extended Text Messaging service

Select this option to enable the Extended Text Messaging service to include sending detailed preconfigured templates with the help of TRBOnet Dispatch Software.

• Port

Enter the local port number for the Extended Text Messaging service (4010, by default).

Telemetry service NOVOX

Select this option to enable the Telemetry service based on NOVOX devices.

• Requests port

Enter the local port number to listen for requests (8090, by default).

• Events port

Enter the local port number to listen for events (8091, by default).

G4S RS232

Select this option to enable the custom developed G4S RS232 service.

• Port

Enter the local port number for the G4S RS232 service (4004, by default).

Zebra printer service

Select this option to enable the service for printing Job Tickets. A Zebra printer is connected to a radio via Bluetooth. The radios should be Bluetooth-enabled.

• Port

Enter the local port number for Zebra printer service (4072, by default).

5.7.3 Adding a Control Station

• In the **Digital Systems** pane, click **Add**. Or, in the **Configuration** pane, right-click **Digital Systems**.

• In the drop-down menu, click Add Control Station.



Configuration		Control Station #1		
		Control Station #1		
Service	^			
S Network		Name:	Control Station #1	
🔅 Redundancy		Radio ID:	64250	
Database				
😪 Reports		IP Address:	192.168.98.2 • Ø	st
Service Management		Mode:	Single Control Station	•
💥 Advanced settings		System Identifier:	Department 1	
Geocoding Servers		bystem identifier i	Department	
Radio Networks		Use the radio for RX D	ata only (GPS Revert or Data Revert)	
		Discipants destines	Primary Sound Driver	- ¢
Services		Playback device:	Frinary Sound Driver	· •
Control Station #1		Recorder device:	Primary Sound Capture Driver	- ¢
Advanced settings				
Analog Control Stations				
Remote Agents				
Friendly Servers				
7 Telephony				
Data Sources				
🍁 Modbus TCP				
🔀 Email	۷.			
Set Defaults			Apply OK	Cancel

- In the **Control Station** pane, specify the following control station-related parameters:
 - Name

Enter a name for the control station. This name will be displayed in the Dispatch Console.

Radio ID

This is the Radio ID of the radio unit connected as a control station. (for Capacity Plus and Linked Capacity Plus systems, the maximum value is 65535).

Note: This box is populated automatically once you have successfully tested the control station by clicking the **Test** button.

IP Address

Enter the IP Address of the control station network interface;

Test

Click this button to check the connection to the control station. If the test succeeds, you'll see information on the control station you are connected to, such as radio ID, serial number, firmware version, etc.

Mode

From the drop-down list, select the connection mode for the control station being configured. For more details, see section 5.7.3.1, Control Station Connection Modes.

System Identifier

Enter the system identifier if the control station is used with a Capacity Plus or Linked Capacity Plus system. Note that the system identifier should be the same for all control stations used in the radio system.

Use the radio for RX data only (GPS Revert or Data Revert) Select this option to configure the radio channel so that it will only receive data, thus having no any transmission capability.



Playback device

From the drop-down list, select the playback device connected to the control station.

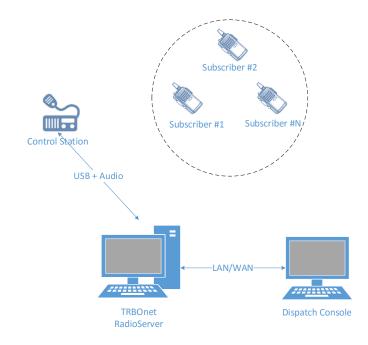
Recorder device

From the drop-down list, select the recording device connected to control station.

5.7.3.1 Control Station Connection Modes

Single Control Station

The Single Station mode is the simplest connection mode for receiving and transmitting voice and data through a conventional channel using one control station at this particular frequency.



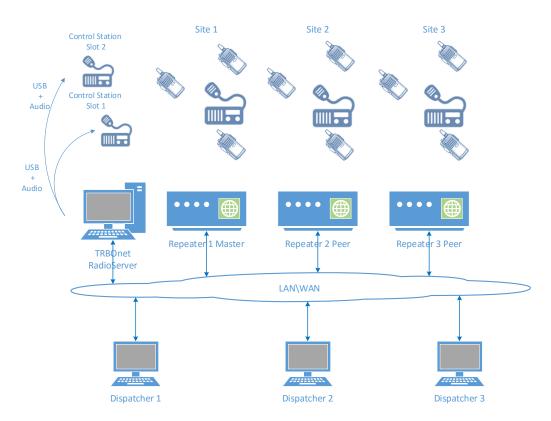
IP Site Connect

The IPSC is a digital conventional two way MOTOTRBO system that allows you to extend the area of your communications by providing 2 wide area channels. It is possible to connect up to 15 repeaters in one system using IP connection.

The Server Connection Modes are as follows:

- 1. TRBOnet Server is connected to a repeater with two time slots in the "IP Site Connect" mode. The Server can transmit and receive over IP.
- 2. TRBOnet Server has no IP connection to a repeater. To transmit and receive, two control stations are required, that is one control station per time slot.





Common Channel

The Common Channel is a mode where it is possible to use multiple simplex base stations operating at the same frequency with overlapping communication zones.

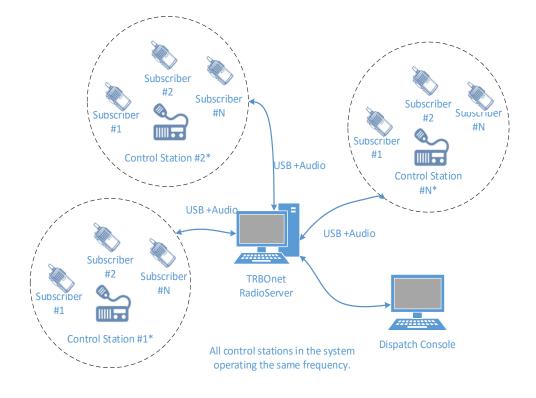
This mode allows the customer to provide radio coverage of large areas when there is only one frequency and additional frequencies are unavailable. While in this mode, the coverage area is being extended only for the dispatcher, and specifically when operating at one and the same frequency. When a radio unit initiates a call, the signal that can potentially be received by several base stations will be filtered on the server side so that repeated audio playback and recording be prohibited.

The signal filtering is preformed based on the "first packet", that is only the signal coming first to the server is played back and recorded, while the remaining signals are discarded.

When a dispatcher initiates a call to a specific base station, the signals received by the neighboring base stations will be discarded to prevent dispatchers from listening to their own call at the time of transmission. The dispatcher is not recommended to use a simultaneous call to all base stations to avoid interference in the subscribers' area.

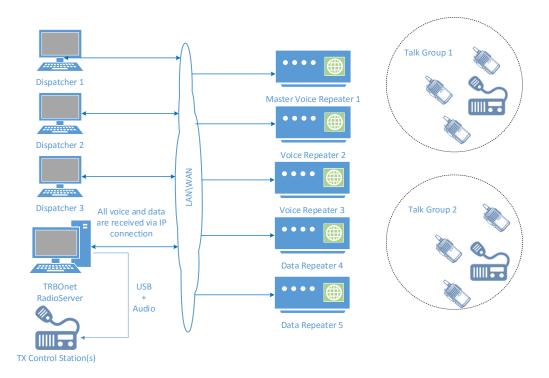
The best way to use this mode is as follows: each base station is configured with its own color code, and radio units are equipped with option boards having a Georoaming feature, and each geographic area is assigned its own radio channel with the corresponding color code.





Capacity Plus TRBOnet

Capacity Plus TRBOnet is a limited option. All voice and data are received via IP. At least one control station is required for outgoing voice and data session at a time. Private calls and SIP calls require dedicated control stations.

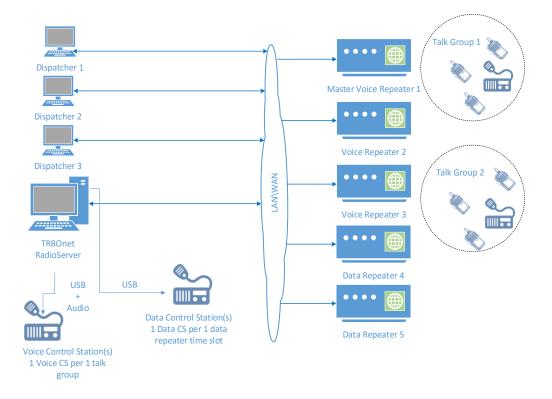




Capacity Plus MOTOTRBO

Capacity Plus MOTOTRBO is a digital trunked two-way MOTOTRBO system that allows you to accommodate high volume communication. It is designed to organize stable connection in a few groups within one building or a set of buildings. This system type allows you to increase the number of channels for voice and data transmission between the subscribers and control centers. The subscribers are always automatically forwarded to a free channel. The main objective of Capacity Plus MOTOTRBO is to support more simultaneous voice and data transmissions within one capacious system.

In the Capacity Plus MOTOTRBO mode you can configure voice and data control stations to transmit and receive data over the air as it is displayed in System Planner. Keep in mind that two data control stations are required per each data repeater – one per time slot. TRBOnet Dispatch Software provides you an option to utilize an IP connection to receive voice and data.



5.7.3.2 Advanced Settings

• In the **Configuration** pane, under the corresponding **Control Station**, select **Advanced Settings**.



Configuration		Advanced settings			
💣 Service	^				
🕤 Network		🗹 Automatically reset ala	irm mode		
🕏 Redundancy		🗹 Automatically handle c	all alert		
Database		Emergency Call/Alarm	indication		
😪 Reports		Use front microphone			
Service Management		Always transmit when	the PTT is pre	essed ("Impolit	te" channel access)
X Advanced settings		Use serial port for PTT			
Geocoding Servers		Serial port:		Ψ.	
Radio Networks		Scharports			
		TX Timeout:	60	\$	seconds
Services		Cinentine Custom	None	•	Configure
Control Station #1		Signaling System:	NOTE	•	Configure
Advanced settings		Allow CSBK Data			
🛄 Analog Control Stations					
📷 Remote Agents					
🔂 Friendly Servers					
🔞 Telephony					
🖞 Data Sources					
🍀 Modbus TCP					
🔀 Email	۷				
Set Defaults			A	pply	OK Cancel

- In the **Advanced Settings** pane, specify the following control station-related advanced settings:
 - Automatically reset alarm mode

Select this option to reset alarm mode on the control station radio automatically. It is recommended to enable this option.

Automatically handle call alert

Select this option to automatically redirect call alerts from the control station radio to the Dispatch Console.

Emergency Call/Alarm indication
 Select this option so that audio and visual indication is given by the control station radio when an emergency Call/Emergency Alarm is received.

Use front microphone

Select this option to use a remote speaker microphone on the radio.

Always transmit when the PTT is pressed ("Impolite" channel access)
 Select this option so that the radio will always transmit when the PTT button is pressed (not available in Capacity Plus and Linked Capacity Plus systems).

Use serial port for PTT key up

Select this option to use a remote control of the PTT button via the radio's serial port.

TX Timeout

Enter the time, in seconds, to be used as a voice session limit. When a dispatcher starts any voice session in the Dispatch Console, transmission will be interrupted after this TX Timeout expires.

Signaling system

From the drop-down list, select the signaling system.

• **MDC 1200** signaling is a Motorola data system using audio frequency shift keying (ASFK) using a 1,200 baud data rate. A general option is to enable or disable an acknowledgement (ACK) data packet.



• **SELECT 5** (5 Tone Signaling System). In the 5 Tone Signaling Systems, each radio has a unique numeric identity (e.g. 12345). To signal the number 12345, a sequence of 5 tones is sent. Sequences of audible tones of a very short duration are sent between radios. Most 5 tone sequences take less than half a second to send. Available for Voice Calls, Check Radio, Call Alert, and Enable/Disable Radio.

Click the **Configure** link and specify desired SELECT 5 settings.

oice Calls			
Call Type	Telegram ID	Source ID	Target ID
Private Call:	1 🗘 Encoder:		A1 A2 A3 A4
	Decoder:	A1 A2 A3 A4	
Group Call:	1 🗘 Encoder:		A1 A2 A3 A4
	Decoder:	A1 A2 A3 A4	
All Call:	1 🗘 Encoder:		A1 A2 A3 A4
	Decoder:	A1 A2 A3 A4	
heck Radio			8
all Alert			3
nable Radio			8
isable Radio			8

5.7.4 Adding a MOTORBO Repeater

- In the Digital Systems pane, click Add.
 Or, in the Configuration pane, right-click Digital Systems.
- In the drop-down menu, click Add MOTOTRBO System.

Configuration		Repeater #1					
💣 Service	^						
S Network		System Name:	Repea	iter #1			
🛱 Redundancy		TRBOnet Peer ID:	100		\$		
Database		TRBOnet Radio ID:	64250		*		
😪 Reports			04200		-		
Service Management		TRBOnet Local Port:	50000		÷		
X Advanced settings		Master Repeater Con	nection	Info:			
Geocoding Servers		Master IP Address:	10.10	102.131	-		
Radio Networks		Master UDP Port:	50011			Test	
					•	L	·
Services		Authentication Key:	99999				
Repeater #1		System Type:	IP Site	Connect			•
Advanced settings		System Identifier:	Depar	tment1			
Privacy		-,	o cpu	unence			
		Use NAI Voice					
Slot #2		🗌 Use NAI Data (MNIS a	nd DDMS	5)			
		Use RCM for control ra	idio activ	ity			
Control Station #1							
Analog Control Stations							
Remote Agents							
Friendly Servers	¥						
Set Defaults				Apply		OK	Cancel

- In the **Repeater** pane, specify the following repeater-related parameters:
 - System Name

Enter a name for the repeater. This name will be displayed in the Dispatch Console.

TRBOnet Peer ID

Enter a Peer ID for TRBOnet Server. The Peer ID must be unique among the repeaters in the radio system.



TRBOnet Radio ID

Enter the Radio ID, which is a gateway for voice and data. The Radio ID must be unique in the radio system (for Capacity Plus and Linked Capacity Plus systems, the maximum value is 65535).

TRBOnet Local Port

Enter the local port number that will be used by TRBOnet Server to establish connections for the repeater. Use unique port numbers for each repeater connection if there are several repeaters connected.

Master IP Address

Enter the Ethernet IP address of the repeater.

Note: This value is programmed for a repeater via MOTOTRBO CPS, in *Link Establishment*>*Master IP*.

Master UDP Port

Enter the UDP port number of the master repeater.

Note: This value is programmed for a repeater via MOTOTRBO CPS, in *Link Establishment*>*Master UDP Port*.

Authentication Key

Enter the repeater's authentication key (if any).

Note: This value is programmed for a repeater via MOTOTRBO CPS, in *Link Establishment*>*Authentication Key*.

System Type

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

Test

Click this button to check the connection to your master repeater. If the test succeeds, you'll see information on the repeater you are connected to, such as the serial number, firmware version, etc.

System Identifier

Enter the system identifier if a Capacity Plus or Linked Capacity Plus system is used with one or more control stations. Use the same system identifier as you have specified for the corresponding control stations.

Use NAI Voice

Select this option to connect to the repeater via NAI (Network Application Interface) for Voice transfer.

Use NAI Data (MNIS and DDMS)

Select this option to connect to the repeater via NAI (Network Application Interface) for Data transfer.

• MNIS

MOTOTRBO Network Interface Service is a Windows application which acts as a data gateway between the data applications and the radio system. Data messages are routed through the MNIS.



DDMS

Device Discovery and Mobility Service is a service to receive data to a repeater.

5.7.4.1 Advanced Settings

• In the **Configuration** pane, under the corresponding **Repeater**, select **Advanced settings**.

Configuration		Advanced settings					
💣 Service	^	Voice Call Hang Time (
S Network		voice call nalig fille (ins <i>j</i> :				
🛱 Redundancy		Group Call:	3000	\$			
Database		Private Call:	4000				
😪 Reports		Private Call:	4000	•			
Service Management		Emergency Call:	4000	÷			
🔀 Advanced settings							
Geocoding Servers		TX Preamble:	120	÷			
Radio Networks		TX Timeout:	60	\$	seconds		
Digital Systems							
Services		Phone System:	Motorola Phone Syster	m		•	
Repeater #1		Allow CSBK Data					
Advanced settings		Allow CSDK Data					
Privacy							
III Slot #2							
Local Slots							
Control Station #1							
Analog Control Stations							
Remote Agents							
Friendly Servers	~						
Set Defaults			Apply		OK	Cancel	

• In the **Advanced Settings** pane, specify the following repeater-related advanced settings:

Voice Call Hang Time (ms):

Group Call

This value sets the duration the repeater reserves the channel after the end of a group call transmission. During this time, only members of the group that the channel is reserved for can transmit.

Private Call

This value sets the duration a radio keeps the private call setup after a user releases the PTT button. This is to avoid setting up the call again each time a user presses the PTT button to transmit. During this time, other radios can still transmit since the channel is essentially idle. After the hang timer expires, the radio transmits using the *TX Contact Name* parameter specified for this channel in MOTOTRBO CPS.

Emergency Call

This value sets the duration the repeater reserves the channel after the end of an emergency call transmission. During this time, only members of the Group that the channel is reserved for can transmit.

Note: The values of the above three parameters must be taken from the corresponding parameter values programmed for the repeater via MOTOTRBO CPS in *General Settings*.



TX Preamble

Enter the value of the TX Preamble. The TX Preamble is a string of bits added in front of a data or control message (Text Messaging, Location Messaging, Registration, Radio Check, Private Call, etc.) before transmission. The acceptable range is 0 - 8640 ms. The recommended value is 120 ms.

TX Timeout

Enter the time, in seconds, to be used as a voice session limit. When the dispatcher starts any voice session in the Dispatch Console, transmission will be interrupted after this TX Timeout expires.

Phone system

From the drop-down list, select the system for phone calls:

Motorola Phone System

This system uses a special call type with the parameters specified for a radio unit in MOTOTRBO CPS. The Motorola Phone System is recommended for IP Site Connect mode to minimize Radio response time. For more details on programming Motorola Radios, see <u>Appendix B: SIP Setup for Motorola Phone System</u>.

• TRBOnet Phone System (TX Interrupt)

This is a phone call system based on the private call type using TX Interrupt feature. This phone system is available for radio systems with control stations.

Allow CSBK Data

Select this option so that the GPS and ARS data are compressed into a single CSBK data.

Note: This feature is available only when the <u>MNIS data service</u> is enabled for the repeater.

5.7.4.2 Privacy

• In the **Configuration** pane, under the corresponding **Repeater**, select **Privacy**.

Configuration		Privacy			
🗬 Service	^				
S Network		Privacy Type:	Enhanced	-	
🛱 Redundancy		Basic Privacy Key ID:	1	<u>_</u>	
Database		Enhanced Alexalders		· ·	
😪 Reports		Enhanced Algorithm:	ARC4 (40 bit)	•	
Service Management		Enhanced Privacy Keys:			
🔀 Advanced settings		ID Name		Value	
Geocoding Servers		1 🗘			
Radio Networks					
Services					
Repeater #1					
X Advanced settings					
🔒 Privacy					
III Slot #1					
Slot #2					
Local Slots					
Control Station #1					
Analog Control Stations					
Remote Agents		Add Remo	20		
Friendly Servers	~	Add Remo	ve		
Set Defaults			Apply		Cancel



• In the **Privacy** pane, specify the following privacy-related settings:

Privacy Type

From the drop-down list, select one of the privacy types: None, Basic, or Enhanced.

Basic Privacy Key ID

Enter the Privacy Key ID available for the **Basic** privacy type.

Enhanced Algorithm

From the drop-down list, select one of the enhanced algorithms if you are going to use additional encryption.

Note: For more details on ARC4, see <u>https://en.wikipedia.org/wiki/RC4</u>

Enhanced Privacy Keys

Here you add enhanced privacy keys for the selected enhanced algorithm.

• Click **Add** and specify the required ID, name, and value for the privacy key being added.

5.7.4.3 DDMS Service

The DDMS, or Device Discovery and Mobility Service is a service to receive data to a repeater.

• In the **Configuration** pane, under the corresponding **Repeater**, select **DDMS service**.

Configuration	DDMS service	
Service Network Redundancy Database	Use DDMS service	
Reports	Service IP Address: 127.0.0.1 Test	
Service Management	Service port: 3000	
Advanced settings	Authentication Port: 5055 🗘	?
Digital Systems	Redundant services:	
💭 Services	Service IP Address Service port Local port	
Repeater #1 X Advanced settings Privacy DDMS service MIXIS data service Slot #1 Control Station #1 Main analog Control Station #1	1	
Set Defaults	Apply OK	Cancel

- In the **DDMS service** pane, specify the following DDMS service-related settings:
 - Use DDMS service

Select this option to enable the DDMS service for the repeater.

Local Port

Enter the number of the local port to be used on a PC with TRBOnet Dispatch Software for DDMS service.



Service IP Address

Enter the IP Address of the PC with the DDMS service installed and running.

Service port

Enter the service port number.

Note: This value is programmed for a DDMS service via MOTOTRBO DDMS Administrative Client, in Interfaces>Watcher Settings>PortWatcher.

Authentication Port

Enter the authentication server port number.

Note: This value is programmed for a DDMS service via MOTOTRBO DDMS Administrative Client, in Interfaces>Authentication Server Settings> AuthenticationServerPort.

Radio ID list

Enter the list of radios to be monitored.

Redundant services

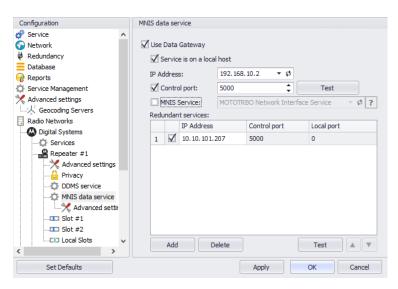
Here you see the list of redundant DDMS services for failover purposes.

- Click **Add** and specify the required parameters for the DDMS service being added.
- Click **Test** to test if the selected DDMS service is available.
- Use the Up () and Down () buttons to move a selected DDMS service up and down in the priority list of DDMS services.

5.7.4.4 MNIS Data Service

The MNIS, or Motorola Network Interface, is a service that captures data from DDMS service and transfers the data to a radio server.

• In the **Configuration** pane, under the corresponding **Repeater**, select **MNIS data service**.





- In the MNIS data service pane, specify the following MNIS data servicerelated settings:
 - Use Data Gateway
 - Select this option to enable the MNIS data service for the repeater.
 - Service is on a local host
 Select this option if MNIS data service will be used on the local PC;
 - IP Address

Enter the IP Address used by the MNIS to communicate with the PC.

Note: This value is programmed for a MNIS data service via MOTOTRBO MNIS Configuration Utility, and can be retrieved from *General>Tunnel Network>Tunnel IP Address*.

Control port

Enter the number for the MNIS control port.

Note: This value is programmed for a MNIS data service via MOTOTRBO MNIS Configuration Utility, in Advanced>Network>MNIS Control Interface TCP Port.

MNIS Service

Select this option, and from the drop-down list select the available MNIS service.

Redundant services

Here you see the list of redundant MNIS data services for failover purposes.

- Click **Add** and specify the required parameters for the MNIS data service being added.
- Click **Test** to test if the selected MNIS data service is available.
- Use the Up (
) and Down (
) buttons to move a selected MNIS data service up and down in the priority list of MNIS data services.

Advanced Settings

• In the Configuration pane, under MNIS data service, select Advanced settings.



Configuration		Advanced settings
💣 Service	^	
S Network		Register network routes
🛱 Redundancy		Register port forwarding rules on gateway
Database		
😪 Reports		Send data to group over control port
Service Management		Radio Range: 1 2 - 16777215
💥 Advanced settings		
Geocoding Servers		
Radio Networks		
Services		
Privacy		
DDMS service	- 1	
MNIS data service		
Advanced settings		
III Slot #1		
Slot #2		
Local Slots		
	¥	
Set Defaults		Apply OK Cancel

- In the **Advanced settings** pane, specify the following advanced MNIS settings:
 - Register network routes
 Select this option to register network routes.
 - Send data to group over control port
 Select this option so that data will be sent via the specified control port.
 - Radio Range
 Specify the range of radios to be monitored by the MNIS service.

5.7.4.5 Slots

- Note: The slots are available only when **IP Site Connect** is selected in the **Repeater** pane.
- In the **Configuration** pane, under the corresponding **Repeater**, select **Slot #1** or **Slot #2**.

Configuration	Slot #1
Service Redundancy Latabase Reports Service Management Advanced settings Digital Systems Digital Systems Services Repeater #1 Advanced setti Privacy Services Repeater #1 Colors Slot #2	✓ Slot #1 Name: IPSC1 Messaging Delay: Normal Use the slot for RX Data only (GPS Revert or Data Revert) Use Privacy Use Privacy Privacy Key: Privacy Key: ✓ Allow TX Interrupt ✓ Allow TX interrupt ✓ Private Call Confirmed Private Call Confirmed ✓ Emergency Alarm Ack ✓ Emergency Call/Alarm Indication
Set Defaults	Apply OK Cancel

• In the **Slot #1** (or **Slot #2**) pane, specify the following slot-related parameters:



Name

Enter a name for the slot. This name will be displayed in the Dispatch Console.

Messaging Delay

From the drop-down list, select the inter-repeater messaging delay based on the IP network configuration.

Normal

The inter-repeater messaging delay is 60 ms.

• High

The inter-repeater messaging delay is 90 ms.

Use the slot for RX data only (GPS Revert or Data Revert)

Select this option to configure the slot so that it will only receive data, thus having no any transmission capability.

Use Privacy

Select this option to use Privacy for the slot.

Note: This option is available only if the **Basic** or **Enhanced** Privacy Type have been selected in Repeater's <u>Privacy</u> settings.

Privacy Key

From the drop-down list, select the privacy key.

Note: This option is available only if the **Enhanced** Privacy Type has been selected in Repeater's <u>Privacy</u> settings).

Allow TX interrupt

Select this option to allow the slot to be interrupted during voice transmissions by radios that are Transmit Interrupt capable.

Note: This feature is available only when the **Use NAI Voice** option is cleared in the **Repeater** pane.

Always transmit when the PTT is pressed ("Impolite" channel access)
 Select this option so that the radio will always transmit when the PTT button is pressed (not available in Capacity Plus and Linked Capacity Plus systems).

Data Call confirmed

Select this option to enable individual packets in data calls (ARS, GPS, and Text Message) on the current slot to be confirmed.

Note: This feature is available only when the **Use NAI Voice** option is cleared in the **Repeater** pane.

Private Call Confirmed

Select this option to set Private calls on the current slot as confirmed. By default, Private calls are unconfirmed.



Emergency Alarm Ack

Select this option so that the slot is allowed to acknowledge an emergency alarm.

Emergency Call/Alarm Indication

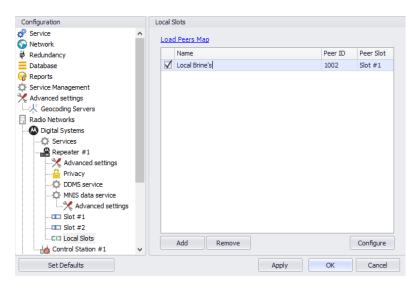
Select this option so that audio and visual indication is given by the slot when an emergency call/emergency alarm is received.

5.7.4.6 Local Slots

Note: Local slots are available only when **IP Site Connect** is selected, and the **Use NAI Voice** option is selected in the **Repeater** pane.

While on a local slot, voice or data are not transmitted between sites in IPSC systems. Due to MOTOTRBO limitations TRBOnet Server can only receive information from local slots, but cannot transmit by IP connection to such slots.

• In the **Configuration** pane, under the corresponding **Repeater**, select **Local Slots**.



- In the Local Slots pane, specify the following Local Slot-related settings:
 - To add a Local Slot to the system, click Add.
 - Select the option in the first column to enable the selected local slot.
 - Enter a Name for the local slot. This name will be displayed in the Dispatch Console.
 - Enter the **Peer ID** of the repeater.
 - From the drop-down list, select the Peer Slot.
 - To configure the selected local slot, click Configure:



X Configuration			×
Name:	Local Brine's		
Messaging Delay:	Normal	•	
Use the slot for RX	Data only(GPS Rev	vert or Data Rever	t)
Use Privacy			
Privacy Key:		Ψ.	
Allow TX interrupt			
Always transmit wh	en the PTT is press	sed ("Impolite" char	nnel access)
Data Call Confirmed	l -		
Private Call Confirm	ed		
Emergency Alarm A	ck		
Emergency Call/Ala	rm Indication		
		OK	Cancel

 Specify the desired local slot settings similar to those for a common repeater <u>slot</u>.

5.7.4.7 Audio Paths

Note: Audio paths are available only when **Capacity Plus** or **Linked Capacity Plus** are selected, and the **Use NAI Voice** option is selected in the **Repeater** pane.

The Audio Paths are talk paths of the system to make and receive Voice Calls; in general, they are talk groups. TRBOnet Server requires that all audio paths of a Connect Plus system be registered in its configuration. If an audio path is not registered, the TRBOnet operator will not be able to receive and transmit to the corresponding talk group.

• In the **Configuration** pane, under the corresponding **Repeater**, select **Audio Paths**.

Configuration		Audio Paths		
Database	^	Load Groups Map		
😪 Reports				
Service Management		Call Type	Group ID	Site ID
🔀 Advanced settings		Group Call	10	Wide
Geocoding Servers		Group Call	20	Wide
Radio Networks		V Private Call	•	
		All Call		
Services				
Repeater #1				
Advanced settings				
Privacy				
DDMS service				
MNIS data service				
Advanced settings				
Audio Paths				
Control Station #1				
Analog Control Stations				
Remote Agents				
Friendly Servers				
Telephony Telephony		Add Delete		Confirme
↓ Data Sources	~	Add Delete		Configure
Set Defaults			Apply	OK Cancel

- In the **Audio Paths** pane, specify the following Audio Path-related settings:
 - To add an audio path to the system, click **Add**.
 - Make sure the check box in the first column is selected to make and receive voice calls from the selected subscriber.



- From the drop-down list, select the **Call Type** for the audio path. The available call types are All Call, Group Call, and Private Call.
- Enter the **Group ID**, which is an ID of the talk group the dispatcher can make calls to. The Group ID is not applicable for Private Calls and All Calls.
- Enter the Site ID of the site the audio path will belong to in a Linked Capacity Plus system. Or, leave zero value in this column. In this case, the Site ID will be displayed as Wide, meaning that the audio path will belong to all sites in the system.
- To configure the selected audio path, click **Configure**.
- Specify the desired audio path settings similar to those for a common repeater <u>slot</u>.

5.7.5 Adding a TRBOnet Swift Agent

The TRBOnet Swift Agent functions as a gateway to receive and transmit voice and data.

- In the **Digital Systems** pane, click **Add**. Or, in the **Configuration** pane, right-click **Digital Systems**.
- In the drop-down menu, click Add TRBOnet Swift Agent.

Configuration		TRBOnet Swift Agent#1				
💣 Service	^					
S Network		Name:	TRBOnet Swift Ager	nt#1		
🖗 Redundancy		Radio ID:	64250	*		
Database				-		
😪 Reports		IP Address:	10.10.110.191	•		
Service Management		Port:	8002	÷	Test	
🔀 Advanced settings			Circle Control Chatte			
↓ Geocoding Servers		Mode:	Single Control Statio	m		•
Radio Networks		System Identifier:	Department2			
		Use the radio for RX D	ata only (CPS Devert	or Dat	a Devert)	
Services				or Dut	unevery	
		VoIP port:	4000	÷		
		Audio Format:	PCM 8 kHz 16 bit			•
TRBOnet Swift Agent#1						
🗰 🖗 Redundancy						
Analog Control Stations						
Remote Agents						
Friendly Servers						
7 Telephony						
Data Sources	¥					
Set Defaults			Apply		ОК	Cancel

- In the **TRBOnet Swift Agent** pane, specify the following Swift Agent-related parameters:
 - Name

Enter a name for the Swift Agent. This name will be displayed in the Dispatch Console.

Radio ID

This is the Radio ID of the Swift Agent.

(for Capacity Plus and Linked Capacity Plus systems, the maximum value is 65535).



Note: This box is populated automatically once you have successfully tested the Swift Agent by clicking the **Test** button.

IP Address

Enter the IP Address of the Swift Agent network interface;

Port

Enter the port number of the Swift Agent for incoming connections (8002, by default).

Test

Click this button to check the connection to the Swift Agent. If the test succeeds, you'll see information on the Swift Agent you are connected to, such as Serial number, Firmware version, etc.

Mode

From the drop-down list, select the connection mode for the Swift Agent being configured. For more details, see section 5.7.2.1, Control Station Connection Modes.

System Identifier

Enter the system identifier if the control station is used with a Capacity Plus or Linked Capacity Plus system. Note that the system identifier should be the same for all control stations used in the radio system.

Use the radio for RX data only (GPS Revert or Data Revert)

Select this option to configure the radio channel so that it will only receive data, thus having no any transmission capability.

VoIP port

Enter the port number for audio communication (4000, by default).

Audio Format

From the drop-down list, select the format to transmit audio data.

5.7.5.1 Advanced Settings

• In the **Configuration** pane, under the corresponding **TRBOnet Swift Agent**, select **Advanced Settings**.



Configuration	A	dvanced settings			
🗬 Service	^				
S Network		🗹 Automatically reset ala	rm mode		
🛱 Redundancy		🗹 Emergency Call/Alarm I	Indication		
Database		Always transmit when	the PTT is pressed ("Im	polit	e" channel access)
😪 Reports		TX Timeout:	60	^	seconds
Service Management				-	
💥 Advanced settings		PTT Mode:	KeyUp / DeKey	•	
Geocoding Servers		Signaling System:	None	•	Configure
Radio Networks					
Digital Systems					
💭 Services					
TRBOnet Swift Agent#1					
X Advanced settings					
🐺 🛱 Redundancy					
Analog Control Stations					
Remote Agents					
Friendly Servers					
Telephony Telephony					
 ↓ Data Sources 	¥				
Set Defaults			Apply		OK Cancel

- In the **Advanced Settings** pane, specify the following Swift Agent-related advanced settings:
 - Automatically reset alarm mode

Select this option to reset alarm mode on the control station radio automatically. It is recommended to enable this option.

Emergency Call/Alarm indication

Select this option so that audio and visual indication is given by the Control Station radio when an Emergency Call/Emergency Alarm is received.

Always transmit when the PTT is pressed ("Impolite" channel access)
 Select this option so that the radio will always transmit when the PTT button is pressed (not available in Capacity Plus and Linked Capacity Plus systems).

TX Timeout

Enter the time, in seconds, to be used as a voice session limit. When a dispatcher starts any voice session in the Dispatch Console, transmission will be interrupted after this TX Timeout expires.

PTT Mode

From the drop-down list, select the mode of pressing the PTT on the radio.

Signaling system

From the drop-down list, select the signaling system.

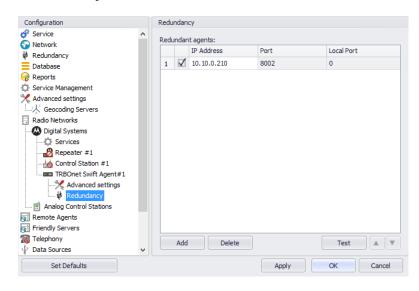
- **MDC 1200** signaling is a Motorola data system using audio frequency shift keying (ASFK) using a 1,200 baud data rate. A general option is to enable or disable an acknowledgement (ACK) data packet.
- **SELECT 5** (5 Tone Signaling System). In the 5 Tone Signaling Systems, each radio has a unique numeric identity (e.g. 12345). To signal the number 12345, a sequence of 5 tones is sent. Sequences of audible tones of a very short duration are sent between radios. Most 5 tone sequences take less than half a second to send. Available for Voice Calls, Check Radio, Call Alert, and Enable/Disable Radio.



5.7.5.2 Redundancy

A Redundant TRBOnet Swift Agent will be used when a connection to the Main TRBOnet Swift Agent is lost.

• In the **Configuration** pane, under the corresponding **TRBOnet Swift Agent**, select **Redundancy**.



- In the **Redundancy** pane, specify the following Redundant Agent-related settings:
 - Click Add and specify the desired parameters for the Redundant Agent being added.
 - IP Address

Enter the IP Address of the Swift Agent that will be used as a Redundant Swift Agent.

• Port

Enter the port number of the Redundant Swift Agent for incoming connections (8002, by default).

- Click **Test** to check the connection to the Redundant Swift Agent. If the test succeeds, you'll see information on the Swift Agent you are connected to, such as Serial number, Firmware version, etc.
- Local Port

Enter the port number that will be used for incoming connections from the Redundant Swift Agent. The value 0 (default) means that a random port will be used.

5.7.6 Adding an XRC Controller

The XRC Controller is a site controller that provides a channel for transferring data between sites and managing data flow.

In the Digital Systems pane, click Add.
 Or, in the Configuration pane, right-click Digital Systems.



• In the drop-down menu, click Add XRC Controller.

Configuration		Controller #1				
→↓ Geocoding Servers	^					
Radio Networks		Name:	Controller #1			
Digital Systems		IP Address:	192.168.0.250	•	Test	
Services		System Identifier:	Connect Plus 1			
Repeater #1		bystem ruentmer.	Connect Plus 1			
		Radio ID list:	105,111			?
TRBOnet Swift Agent#1						
🗰 🛱 Redundancy						
Analog Control Stations						
Remote Agents						
Friendly Servers						
👸 Telephony						
🤌 Data Sources						
🗱 Modbus TCP						
🔀 Email						
SMS						
⋥ License						
	4					

- In the **Controller** pane, specify the following XRC controller-related parameters:
 - Name

Enter a name for the XRC controller. This name will be displayed in the Dispatch Console.

IP Address

Enter the IP Address of the XRC controller network interface.

- Click **Test** to check the connection to the controller.
- System Identifier

Enter the system identifier. Note that the system identifier should be the same through all the controllers in a Connect Plus system.

Radio ID list

Enter a list of the radios to receive data from according to the following rules:

- To receive data from all radios in the system, leave this box blank.
- To receive data from certain radios, separate each Radio ID by a comma, e.g. 105,106,111, etc.
- To receive data from a range of radios, enter the range using the following example: 105-111.

Note: In the Radio ID list, enter Radio IDs only, without mentioning Radio Names and/or the word "Radio".

5.7.6.1 Advanced Settings

• In the **Configuration** pane, under the corresponding **XRC Controller**, select **Advanced Settings**.

Configuration	Advanced settings	
Geocoding Servers	A	^
Radio Networks	Automatic Registration service (ARS)	
	Controller port: 4005	
Services		
	Local port: 0	
	Location service (GPS / Indoor)	
	Controller port: 4001	
Controller #1		
🔀 Advanced settings	Local port: 4001	
🗰 🛱 Redundancy	Use adaptive GPS trigger	
Analog Control Stations		
Remote Agents	Text Messaging service (TMS)	
Friendly Servers	Controller port: 4007	
🔞 Telephony	local port: 4007	
↓ Data Sources		
🍀 Modbus TCP	Dispatcher ID: 64250	
🔀 Email		
SMS	Multi Gate Connection	
📮 License	Subscribe ID: 1	
	×	~
Set Defaults	Apply OK Cancel	

- In the **Advanced Settings** pane, specify the following XRC controller-related advanced settings:
 - Automatic Registration service (ARS) provides an automated data application registration for the radio. When the radio powers up, it automatically registers with the server. This feature is used with data applications, i.e. any data traffic on this channel that is associated with an application server, such as MOTOTRBO Text Messaging or MOTOTRBO Location Service. This option is selected by default and cannot be cleared.
 - Controller port

Enter the controller's port number for ARS service (4005, by default).

• Local port

Enter the local port of the PC with TRBOnet Dispatch Software. The value 0 (default) means that a random port will be used.

Location service (GPS)

Select this option to enable Location service on the controller. The radio can send its coordinates when it is in Global Positioning coverage area. GPS settings can be configured in the **Service Management** pane (see section 5.5.2, Location Service).

• Controller port

Enter the controller's port number for Location service (4001, by default).

• Local port

Enter the local port of the PC with TRBOnet Dispatch Software (4001, by default).

• Use adaptive GPS trigger

Select this option to use the adaptive GPS polling interval.

Text Messaging service (TMS)

Select this option to enable text message transmission on the controller.

• Port

Enter the controller's port number for Text Messaging service (4007, by default).



• Local port

Enter the local port of the PC with TRBOnet Dispatch Software (4007, by default).

• Dispatcher ID

Enter the Dispatcher ID. The Dispatcher ID should belong to TRBOnet Server account in a Connect Plus system.

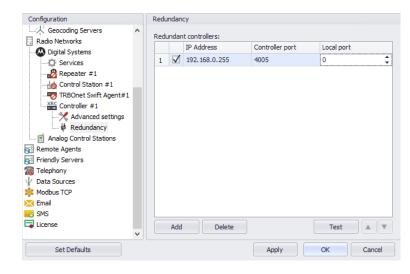
Multi Gate Connection

Select this option to use a multi-gate connection and enter the corresponding **Subscribe ID**.

5.7.6.2 Redundancy

A redundant XRC controller will be used when a connection to the main XRC controller is lost.

• In the **Configuration** pane, under the corresponding **XRC Controller**, select **Redundancy**.



- In the **Redundancy** pane, specify the following redundant XRC controllerrelated settings:
 - Click Add and specify the desired parameters for the redundant XRC controller being added.
 - IP Address

Enter the IP Address of the XRC controller that will be used as a redundant XRC controller.

Controller Port

Enter the port number of the redundant XRC controller for incoming connections (4005, by default).

• Click **Test** to check the connection to the redundant XRC Controller. If the test succeeds, you'll see information on the XRC controller you are connected to, such as serial number, firmware version, etc.



Local Port

Enter the port number that will be used for incoming connections from the redundant XRC controller. The value 0 (default) means that a random port will be used.

5.7.7 Adding an XRT Controller

The XRT controller functions as a voice gateway connected to each XRC controller in a Connect Plus system.

- In the **Digital Systems** pane, click **Add**. Or, in the **Configuration** pane, right-click **Digital Systems**.
- In the drop-down menu, click **Add XRT Controller**.

Configuration		Controller #1		
↓ Geocoding Servers	^			
Radio Networks		System Name:	Controller #1	
		Radio ID:	64250	‡
Services		Start Local Port:	0	A
Repeater #1			-	Ŧ
		XRT-9000 Controller I	nfo:	
		Controller IP Address:	192.168.0.225	-
XRC Controller #1		Controller TCP Port:	10001	Test
X Advanced settings		User Name:	Admin	
🗰 韓 Redundancy		User Marrie,	Aumin	
Controller #1		Password:	•••••	
Privacy		System Identifier:	Connect Plus 1	
🏠 Data Path				
Audio Paths		Monitor Voice sessions	s (without audio)	
🔤 🛱 Redundancy				
Analog Control Stations				
Remote Agents				
Friendly Servers				
7 Telephony				
🜵 Data Sources	۷			
Set Defaults			Apply	OK Cancel

- In the **Controller** pane, specify the following XRT Controller-related parameters:
 - System Name

Enter a name for the XRT Controller. This name will be displayed in the Dispatch Console.

Radio ID

Enter the individual virtual radio ID (for Capacity Plus systems, the maximum value is 65535). The virtual Radio ID is required to do the following:

- Make all types of voice calls from XRT Controller to radios, dispatchers and groups.
- Send commands (e.g. Remote Monitor).

Start Local Port

Enter the local port of the PC with TRBOnet Dispatch Software. The value 0 (default) means that a random port will be used.

XRT Controller Info:

Controller IP Address

Enter the IP Address of the XRT controller network interface.



Controller TCP Port

Enter the port number of the XRT controller to be used for connections via TCP (10001, by default).

- Click **Test** to check the connection to the XRT controller.
- User Name

Enter the user name. For the user name, refer to the XRT controller configuration.

Password

Enter the password for the user. For the password, refer to the XRT controller configuration.

Note: The user name and password should belong to the same TRBOnet Connect Plus account and be appropriately configured.

System Identifier

Enter the system identifier. Note that the system identifier should be the same through all the controllers in a Connect Plus system.

Monitor Voice sessions (without audio)

Select this option to monitor only PTT press events.

5.7.7.1 Privacy

• In the **Configuration** pane, under the corresponding **XRT Controller**, select **Privacy**.

Configuration		Privacy					
Geocoding Servers	^						
Radio Networks		Privacy T	ype:	Enhanced	-		
		Basic Priv	acy Key ID:	1			
Services		E-h	d Algorithm:				
			-	ARC4 (40 bit)	•		
			Privacy Keys:				
		ID	Name		Value		
XRC Controller #1		1	A		*****	****	
🗰 🛱 Redundancy							
Controller #1							
🔒 Privacy							
💭 Data Path							
Audio Paths							
🗰 🛱 Redundancy							
Analog Control Stations							
🔂 Remote Agents							
Friendly Servers							
🔞 Telephony		Add	Rem	ove			
🖞 Data Sources	¥						
Set Defaults				Apply		ОК	Cancel

• In the **Privacy** pane, specify the following Privacy-related settings:

Privacy Type

From the drop-down list, select one of the privacy types: None, Basic, or Enhanced.

Basic Privacy Key ID

Enter the Privacy Key ID available for the **Basic** Privacy Type.



Enhanced Algorithm

From the drop-down list, select one of the enhanced algorithms if you are going to use additional encryption.

Note: For more details on ARC4, see https://en.wikipedia.org/wiki/RC4

Enhanced Privacy Keys

Here you add enhanced privacy keys for the selected enhanced algorithm.

• Click **Add** and specify the required ID, Name, and Value for the privacy key being added.

5.7.7.2 Data Path

The Data Paths are used to transmit data in a Connect Plus system.

• In the **Configuration** pane, under the corresponding **XRT Controller**, select **Data Path**.

Configuration		Data Path			
Geocoding Servers	^				
Radio Networks		Data Service:	Autodetect		•
		Radio ID:	64251	*	
💭 Services			01201	*	
XRC Controller #1					
🔤 🤯 Redundancy					
XRT Controller #1					
Data Path					
🔤 🛱 Redundancy					
Analog Control Stations					
🔂 Remote Agents					
Friendly Servers					
🔞 Telephony					
🖞 Data Sources	Y				
Set Defaults			Apply	ОК	Cancel

• In the **Data Path** pane, specify the following data path-related settings:

Data Service

From the drop-down list, select the data service to be used to transfer data.

Radio ID

Enter the Radio ID of the data service.

5.7.7.3 Audio Paths

The Audio Paths are talk paths of the system to make and receive voice calls; in general, they are talk groups. TRBOnet Server requires that all audio paths of a Connect Plus system be registered in its configuration. If an audio path is not registered, the TRBOnet operator will not be able to receive and transmit to the corresponding talk group.

• In the **Configuration** pane, under the corresponding **XRT Controller**, select **Audio Paths**.



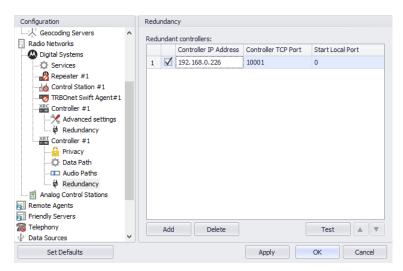
Configuration		Audio Paths	
Radio Networks	^	Call Type Source ID Target ID	-
Digital Systems		Group Call 10	
Services		Group Call 20	
Repeater #1		Private Call 64250	
Control Station #1		All Call	
XRC Controller #1			
Advanced settings			
Redundancy			
Controller #1			
Privacy			
Data Path			
Audio Paths			
Redundancy			
Analog Control Stations			
📷 Remote Agents			
Friendly Servers			
778 Telephony		Add Delete Configure	
Data Sources Data Sources	۷		
Set Defaults		Apply OK Cancel	

- In the Audio Paths pane, specify the following Audio Path-related settings:
 - To add an Audio Path to the system, click **Add**.
 - Make sure the check box in the first column is selected to make and receive Voice Calls from the selected subscriber.
 - From the drop-down list, select the **Call Type** for the audio path. The available call types are All Call, Group Call, and Private Call.
 - Enter the Source ID, which indicates the Radio ID of the call initiator. In general, this is TRBOnet's Radio ID. If more than one Radio ID is specified in a Connect Plus system (for example, for different dispatchers), the corresponding talk paths should be added for all of them.
 - Enter the **Target ID**, which is the Radio ID of the talk group to make a call to. The Target ID is not applicable for Private Calls and All Calls.

5.7.7.4 Redundancy

A Redundant XRT Controller will be used when a connection to the Main XRT Controller is lost.

• In the **Configuration** pane, under the corresponding **XRT Controller**, select **Redundancy**.





- In the **Redundancy** pane, specify the following Redundant XRT Controllerrelated settings:
 - Click Add and specify the desired parameters for the Redundant XRT Controller being added.
 - Controller IP Address

Enter the IP Address of the XRT Controller that will be used as a Redundant XRT Controller.

Controller TCP Port

Enter the port number of the Redundant XRT Controller to be used for connections via TCP (10001, by default).

Start Local Port

Enter the local port of the PC with TRBOnet Dispatch Software. The value 0 (default) means that a random port will be used.

Click **Test** to check the connection to the Redundant XRT Controller.
 If the test succeeds, you'll see information on the XRT Controller you are connected to, such as Serial number, Firmware version, etc.

5.7.8 Adding a Selex Repeater

The Selex repeater is configured as a stand-alone repeater which supports connections to MOTOTRBO[™] radios to transmit voice and data in digital, analog, and mixed modes.

- In the **Digital Systems** pane, click **Add**. Or, in the **Configuration** pane, right-click **MOTOTRBO**.
- In the drop-down menu, click Add SELEX Repeater.

Configuration		Selex #1	
Geocoding Servers	^		
Radio Networks		Name:	Selex #1
Digital Systems		Radio ID:	64250
Services			
		Repeater Mode:	Digital
Selex #1			
Slot #1			
Slot #2			
Analog Control Stations			
🔁 Remote Agents			
Friendly Servers			
778 Telephony			
↓ Data Sources			
🍀 Modbus TCP			
🔀 Email	Y		
Set Defaults			Apply OK Cancel

• In the **Selex** pane, specify the following Selex Repeater-related parameters:

Name

Enter a name for the Selex Repeater. This name will be displayed in the Dispatch Console.



Radio ID

Enter the Radio ID for the Selex Repeater (for Capacity Plus systems, the maximum value is 65535).

The Radio ID is an individual ID that uniquely identifies the radio. This ID is used by other calling radios when addressing the radio, for instance, when making a private call or sending a text message.

Repeater Mode

From the drop-down list, select the mode. The available modes are Digital, Analog, Mixed, and <u>Tier III</u>.

5.7.8.1 Advanced Settings

• In the **Configuration** pane, under the corresponding **Selex**, select **Advanced Settings**.

Configuration		Advanced settings				
Geocoding Servers	^					
Radio Networks		Keep Alive Interval:	10	÷	seconds	
🐼 Digital Systems		TX Timeout:	60		seconds	
Services				•		
🌃 Controller #1						
Selex #1						
X Advanced settings						
III Slot #1						
Slot #2						
Analog Control Stations						
🔂 Remote Agents						
Friendly Servers						
7 Telephony						
Ψ Data Sources						
CP Modbus TCP						
🔀 Email	×					
Set Defaults				Apply	ОК	Cancel

 In the Advanced Settings pane, specify the following Selex Repeater-related advanced settings:

Keep Alive Interval

Enter the time interval, in seconds, for TRBOnet Server to check the connection to the Selex repeater (10, be default).

TX Timeout

Enter the time, in seconds, to be used as a voice session limit. When a Dispatcher starts any Voice Session in the Dispatch Console, transmission will be interrupted after this TX Timeout expires (60, be default).

5.7.8.2 Slots

The Selex repeater has two available slots (in **Digital** or **Mixed** mode) to transmit voice and data.

 In the Configuration pane, under the corresponding Selex, select Slot #1 or Slot #2.



Configuration	Slo	t #1				
Configuration Geocoding Servers Cadio Networks Oigital Systems Control Station #1 Control Station #1 Control Swift Agent#1 Controller #1 Selex #1 Controller #1 Solet #1 Advanced settings Solt #1 Control Stations Remote Agents	^	t #1 Slot #1 Name: TRBOnet IP Address: SELEX IP Address: Use the gateway for Ri Use Encryption Always transmit when 1 Data Call Confirmed Private Call Confirmed		vert or		\$
Friendly Servers Telephony						
↓ Data Sources	_					
🍁 Modbus TCP						
🔀 Email	¥					
Set Defaults			Apply		ОК	Cancel

- In the **Slot #1** (or **Slot #2**) pane, specify the following slot-related parameters:
 - Name

Enter a name for the slot. This name will be displayed in the Dispatch Console.

TRBOnet IP Address

Enter the IP Address of the PC with TRBOnet Dispatch Software. Enter the **Port** number (6080, by default).

SELEX IP Address

Enter the IP Address of the Selex Repeater (refer to the repeater configuration). Enter the **Port** number (6080, by default).

- Click **Test** to check the connection to the repeater.
- Use the gateway for RX data only (GPS Revert or Data Revert) Select this option to configure the channel so that it will only receive data, thus having no any transmission capability.
- Use Encryption

Select this option to encrypt voice and data traffic over IP.

- Always transmit when the PTT is pressed ("Impolite" channel access)
 Select this option so that the radio will always transmit when the PTT button is pressed (not available in Capacity Plus and Linked Capacity Plus systems).
- Data Call Confirmed

Select this option to enable individual packets in data calls (ARS, GPS, and Text Message) on the current slot to be confirmed.

Private Call Confirmed

Select this option to set Private calls on the current slot as confirmed.

5.7.8.3 Tier III and Audio Paths

The Selex repeater can be used in a **Tier III** mode. To configure this mode, do the following:

• While in the **Selex** pane, select **Tier III** from the **Repeater Mode** drop-down list.



- Configuration Tier III 🗹 Tier III Radio Networks 🙆 Digital Systems Name: Tier III Services TRBOnet IP Address: 10, 10, 100, 99 → ¢ Port: 6080 单 SELEX IP Address: 10, 10, 9, 30 ▼ Port: 6080 ≜ TRBOnet Swift Agent#1 Test Controller #1 Use the gateway for RX Data only (GPS Revert or Data Revert) Controller #1 Use Encryption 📸 Selex #1 X Advanced settings Always transmit when the PTT is pressed ("Impolite" channel access) Tier III ✓ Data Call Confirmed Audio Paths V Private Call Confirmed Analog Control Stations Remote Agents Friendly Servers Telephony Data Sources K Modbus TCP Email Set Defaults Apply OK Cancel
- In the Configuration pane, under the corresponding Selex, select Tier III.

- In the **Tier III** pane, specify the following Tier III-related parameters:
 - Use Encryption

Select this option to encrypt voice and data traffic over IP.

Always transmit when the PTT is pressed ("Impolite" channel access)
 Select this option so that the radio will always transmit when the PTT button is pressed (not available in Capacity Plus and Linked Capacity Plus systems).

To configure Audio Paths:

• In the **Configuration** pane, under the corresponding **Selex**, select **Audio Paths**.

Note: Make sure the **Tier III** mode has been selected as a Repeater Mode for the Selex repeater.

Configuration		Audio	o Paths					
Geocoding Servers	^		0-1 T				C	
Radio Networks			Call Type				Group ID	
		\checkmark	Group Call				10	
Services		\checkmark	Group Call				20	
		\checkmark	Private Call					
		\checkmark	All Call					
🌃 Controller #1								
Selex #1								
🔀 Advanced settings								
III Tier III								
Audio Paths								
Analog Control Stations								
Remote Agents								
Friendly Servers								
📷 Telephony								
Data Sources Data Sources								
🍀 Modbus TCP			Add	Delete				
🔀 Email	Y							
Set Defaults					Apply	0	<)	Cancel

- In the Audio Paths pane, specify the following Audio Path-related settings:
 - To add an Audio Path to the system, click Add.



- Make sure the check box in the first column is selected to make and receive Voice Calls from the selected subscriber.
- From the drop-down list, select the **Call Type** for the audio path. The available call types are All Call, Group Call, and Private Call.
- Enter the Group ID, which is a radio ID of the talk group to make a call to. The Group ID is not applicable for Private Calls and All Calls.

5.7.8.4 Analog channel

The Selex repeater can also use the Analog channel.

• In the **Configuration** pane, under the corresponding **Selex**, select **Analog**.

Note:	Make sure the Analog or Mixed mode have been selected
	as a Repeater Mode for the Selex repeater.

Configuration	Analog								
Geocoding Servers									
Radio Networks	Analog								
	Name: Analog	Analog							
🗘 Services	TRBOnet IP Address: 10.10.100.99 ▼ ♥ Port: 6080 ♣	1							
	SELEX IP Address: 10, 10, 9, 30 Port: 6080	1							
	SELEX IP Address: 10.10.9.30 • Port: 6080 •								
	Test								
찬 Controller #1									
Controller #1	Use the gateway for RX Data only (GPS Revert or Data Revert)								
Selex #1	Use Encryption								
Advanced settings	Always transmit when the PTT is pressed ("Impolite" channel access)								
Analog	Data Call Confirmed								
Analog Control Stations	Private Call Confirmed								
Remote Agents									
Friendly Servers									
Telephony									
↓ Data Sources									
🍀 Modbus TCP									
🔀 Email									
SMS Y									
Set Defaults	Apply OK Car	ncel							

• In the **Analog** pane, specify the following Analog channel-related settings:

Name

Enter a name for the Selex repeater in the analog mode. This name will be displayed in the Dispatch Console.

TRBOnet IP Address

Enter the IP Address of the PC with TRBOnet Dispatch Software. Enter the **Port** number (6080, by default).

SELEX IP Address

Enter the IP Address of the Selex Repeater (refer to the repeater configuration). Enter the **Port** number (6080, by default).

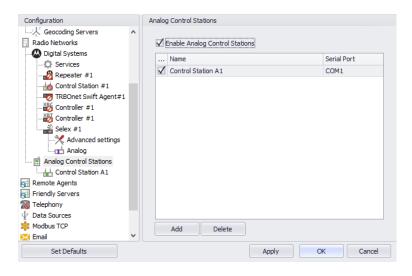
- Click **Test** to check the connection to the repeater.
- Always transmit when the PTT is pressed ("Impolite" channel access)
 Select this option so that the radio will always transmit when the PTT button is pressed (not available in Capacity Plus and Linked Capacity Plus systems).



5.8 Analog Control Stations

TRBOnet Dispatch Software allows using analog radios as control stations.

- In the Configuration pane, select Analog Control Stations
- In the Analog Control Stations pane, select Enable Analog Control Stations.



5.8.1 Adding an Analog Control Station

• In the Analog Control Stations pane, click Add.

Configuration	Control Station A1					
Geocoding Servers	^					
Radio Networks		Name:	Control Stati	on A1		
Digital Systems						
Services		Playback device:	Primary Sound Driver			- ¢
		Recorder device:	Primary Sour	Primary Sound Capture Driver		
		Serial port:	COM1	•		
👬 Controller #1				1.00		
🚻 Controller #1		Always transmit whe	n the PTT is pre	ssed ("Impolit	te" channel acces	ss)
Selex #1		TX Timeout:	60	¢	seconds	
🔀 Advanced settings		Mic delay time:	0	÷	milliseconds	
Analog		Hie delay une.	U	•	miniseconda	
Analog Control Stations						
Control Station A1						
Remote Agents		Extended protocol:	None			-
Friendly Servers						
👸 Telephony						
🖗 Data Sources						
🍀 Modbus TCP						
🔀 Email	¥					
Set Defaults			A	vlad	ок	Cancel

- In the **Control Station** pane, specify the following Analog Control Station-related settings:
 - Name

Enter a name for the analog control station. This name will be displayed in the Dispatch Console.

Playback device

From the drop-down list, select the playback device connected to control Station.



Recorder device

From the drop-down list, select the recording device connected to control station.

Serial port

From the drop-down list, select the serial port the control station is connected to on the PC.

 Always transmit when the PTT is pressed ("Impolite" channel access) -Select this option so that the radio will always transmit when the PTT button is pressed (not available in Capacity Plus and Linked Capacity Plus systems).

TX Timeout

Enter the time, in seconds, to be used as a voice session limit. When a Dispatcher starts any voice session in the Dispatch Console, transmission will be interrupted after this TX Timeout expires.

Mic delay time

Enter the time, in milliseconds, to be used as a delay time interval between pushing the PTT and starting voice communication.

Extended protocol

From the drop-down-list, select either **None**, if your radio does not support the extended protocol, or **IC-F1721D v1.01** if the radio supports the extended protocol.

5.8.1.1 Serial Port

Note: The serial port settings are available only when the extended protocol **IC-F1721D v1.01** is selected for the analog control station.

• In the **Configuration** pane, under the corresponding **Control Station**, select **Serial Port**.

Configuration		Serial Port				
Geocoding Servers	^					
Radio Networks		Baud Rate:	19200	÷		
Digital Systems		Data Bits:	8	*		
Services			-	•		
		Parity:	None	•		
		Stop Bits:	1	•		
		Handshake:	None	•		
Selex #1						
Advanced settings						
Analog						
Analog Control Stations						
Control Station A1						
Serial Port						
🔂 Remote Agents						
Friendly Servers						
🔞 Telephony						
🖞 Data Sources						
🌟 Modbus TCP	4					
Set Defaults			Ap	ply	ОК	Cancel

• In the **Serial Port** pane, specify the same serial port settings as those on the radio device connected to the serial port.



5.9 Remote Agents

The Remote Agent is TRBOnet Agent installed on a remote PC.

• In the Configuration pane, select Remote Agents.

Configuration		Remote Agents
Radio Networks	^	
		Registered remote Agents:
Services		Agent Name IP Address Port Redundancy
		Agent: 1 10.10.110.190 4020 No
TRBOnet Swift Agent#1		
Controller #1		
Selex #1		
Analog		
Analog Control Stations		
Control Station A1		
🔤 🖶 Serial Port		
Remote Agents		
Agent: 1		
🐺 🛱 Redundancy		
🔂 Friendly Servers		
Telephony		Add Delete Test
↓ Data Sources	Y	
Set Defaults		Apply OK Cancel

• In the **Remote Agents** pane, click **Add**.

Configuration		Agent: 1
Radio Networks Digital Systems Services Repeater #1 Control Station #1 TRBOnet Swift Agent#1 Selex #1 Advanced settings Analog Control Station A1 Control Sta	~	Agent Name: Agent: 1 IP Address: 10.10.110.190 Port: 4020 Test Use all services Use only specified services Service Name Load services from agent
Set Defaults		Apply OK Cancel

- In the **Agent** pane, specify the following parameters:
 - Agent Name

Enter a name for the remote agent. This name will be displayed in the Dispatch Console.

• IP Address

Enter the IP address of the remote agent (each remote agent has its own IP Address).

• Port

Enter the local port number that will be used by TRBOnet Server to accept connections from the remote agent.

• Click **Test** to check the connection to the remote agent.



• Use all services

Choose this option so that all available services will be used on the remote agent.

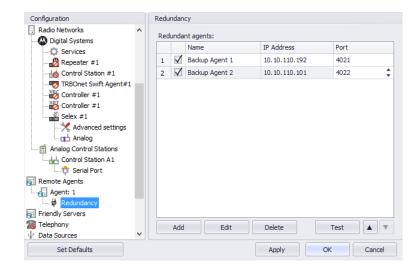
• Use only specified services

Choose this option and click the **Load services from agent** link to load services available on the remote agent.

5.9.1 Redundancy

A Redundant remote agent will be used when a connection to the Main remote agent fails.

• In the **Configuration** pane, under the corresponding **Agent**, select **Redundancy**.



• In the Redundancy pane, click Add.

Agent Name:	Backup Agent 2	
IP Address:	10.10.110.101	
Port:	4022 🗘	Test
Ouse all service		
O Use only spec	ified services	
Service	Name	

- In the **Remote Agent** dialog, specify the following parameters:
- Agent Name

Enter a name of the redundant remote agent.



• IP Address

Enter the IP address of the redundant remote agent.

• Port

Enter the local port number that will be used by TRBOnet Server to accept connections from the redundant remote agent.

- Click **Test** to check the connection to the redundant remote agent.
- Use all services

Choose this option so that all available services will be used on the redundant remote agent.

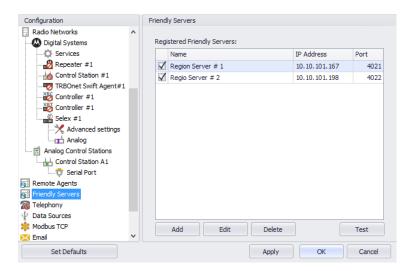
• Use only specified services

Choose this option and click the **Load services from agent** link to load services available on redundant the remote agent.

• Click **OK** to add a redundant remote agent to the system.

5.10 Friendly Servers

The Friendly Servers are used to transmit voice over IP between dispatchers from different servers.



• In the Configuration pane, select Friendly Servers.

• In the Friendly Servers pane, click Add.

Server	×
Name:	Region Server # 1
IP Address:	10.10.101.167
Port:	4021 🗘 Test
	OK Cancel

- In the Server dialog box, specify the following parameters:
 - Name

Enter a name for the friendly server. This name will be displayed in the Dispatch Console.



• IP Address

Enter the IP Address of the server.

• Port

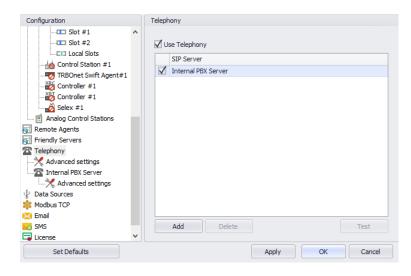
Enter the local port number on the PC to connect to the friendly server.

- Click **Test** button to check the connection to the friendly server.
- Click **OK** to add the friendly server to the system.

5.11 Telephony

TRBOnet Server has its own built-in SIP server to support VoIP communications between the radios as well as other SIP-compliant clients. In addition, you can add an external PBX server to the TRBOnet Server configuration.

- In the **Configuration** pane, select **Telephony**
- In the **Telephony** pane, select **Use Telephony**.



5.11.1 Internal PBX Server

- Make sure the Internal PBX Server option is selected in the Telephony pane.
- In the **Configuration** pane, select **Internal PBX Server**.

Configuration	Int	ernal PBX Server				
Slot #1 Slot #2 Control Station #1 Control Station #1 Controller #1 Controller #1 Analog Control Stations Remote Agents		Ive Internal PBX Server Use Internal PBX Local IP: Dispatch Cent SIP ID: SIP User:	10.10.100.9	9 ▼ భ Por	t: 5060 ‡	
 Friendly Servers Telephony Advanced settings Internal PBX Server Advanced settings Data Sources Modbus TCP Email SMS 						
Carl License	*					
Set Defaults				Apply	OK	Cancel



- In the Internal PBX Server pane, specify the following parameters:
 - Local IP

Enter the IP address of the PC with TRBOnet Server.

Port

Enter the local UDP port number for the SIP service (5060, by default).

Dispatch Center

SIP ID

Enter the SIP ID that will be used by the Dispatch Center.

SIP user

Enter the SIP user name that will be used by the Dispatch Center.

5.11.1.1 Advanced Settings

• In the **Configuration** pane, under **Internal PBX Server**, select **Advanced Settings**.

- In the **Advanced Settings** pane, specify the following Internal PBX Serverrelated advanced settings:
 - Packet time

Enter the packet length, in milliseconds.

Codecs

In the drop-down list, select/deselect the codecs to be used.

• Registration Interval (sec)

Enter the time interval, in seconds, to check the radio status (online/offline etc.).

DTMF Send Mode

Enter mode for sending DTMF tones. The available modes are RFC 2833, SIP INFO (dtmf relay), and SIP INFO (dtmf).

First VolP port

Enter the number of the first VoIP port for audio communications



Use VoIP ports

From the drop-down list, select which VoIP ports will be used (all, even, or odd).

5.11.2 External PBX Server

You can enable an external PBX server to use the SIP Interconnect feature. This feature enables calls from the radio to the phone and vice versa. The dispatcher can make a call from the Dispatch Console to a phone as well as redirect a phone call to a subscriber radio.

• In the **Telephony** pane, click **Add**. Or, in the **Configuration** pane, right-click **Telephony** and choose **Add PBX Server**.

Configuration	External PBX Server
Advanced settings Privacy Slot #1 Slot #2 Control Station #1 Control Station #1 Control File Controller #1 Selex #1 Analog Control Stations Remote Agents Friendly Servers Telephony	✓ Use External PEX Server Provider options Address: yourprovider.com Port: 5060 ↓ Test Local IP: 10.10.100.99 • ¢ Port: 5061 • Dispatch Center SIP ID: 57068 SIP User: User 123 Password:
Model and the settings Marcel Advanced Settings	Test Call
External PBX Server	
Set Defaults	Apply OK Cance

• In the **External PBX Server** pane, specify the following parameters:

Use External PBX Server

Select this option to enable the SIP Interconnect feature.

Provider options

Address

Enter your SIP provider address, and select the protocol from the dropdown list to the right of the address (for more details, contact your SIP provider).

Port

Enter the port number of the SIP provider (5060, by default).

- Click **Test** to check the connection to the provider.
- Local IP

Enter the IP address of the PC with TRBOnet Server.

Port

Enter the local port number to make connections from.

Dispatcher Center



Note: This information is provided by the SIP provider.

SIP ID

Enter the SIP ID that will be associated with TRBOnet Server to make and receive calls.

SIP user

Enter the SIP user name for the login.

Password

Enter the password for the login.

Test Call

Click this button to make a test call.

Note: To make a test call, make sure that the TRBOnet Server service is not running.

5.11.2.1 Advanced Settings

• In the **Configuration** pane, under **External PBX Server**, select **Advanced Settings**.

🔆 TRBOnet.Enterprise 5.1 / Serve	r Cor	nfigurator		-	-		×
Configuration		Advanced settings					
Services	^						
		Packet time (ms):	60	÷			
		Used codecs:	PCMU,PCMA,G729,	SPEEX,SP	EEX-WE	,AMR,	-
TRBOnet.Swift Agent #1		Registration Interval (sec):	3600				
Controller #1				•			
Controller #1		DTMF Send Mode:	RFC 2833	•			
Analog Control Stations		Do not register users on a P	BX server (SIP trunk))			
Remote Agents		Do not register internal u	sers on a DRV server	-			
Friendly Servers							
Telephony Telephony		Configure user's authorizat	<u>100</u>				
X Advanced settings		First VoIP port:	Default	÷			
Internal PBX Server		Use VoIP ports:	All	-			
Advanced settings			-	·			
External PBX Server		Available SIP numbers:	1				-
Advanced settings							
Ψ Data Sources							
🍀 Modbus TCP							
🔀 Email							
SMS	~						
Set Defaults			Apply	OK		Cance	

- In the **Advanced Settings** pane, specify the following External PBX Serverrelated advanced settings:
 - Packet time

Enter the same value as specified in the phone system;

Codecs

In the drop-down list, select/deselect the codecs specified in the phone system.

Note: For more details on Phone System configuration, see <u>Appendix B: SIP Setup for Motorola Phone System</u> section.

Registration Interval (sec)

Enter the time interval, in seconds, to check the radio status (online/offline etc.).



Do not register users on a PBX server (SIP trunk)

Select this option so that radios will use the SIP trunk system to get extensions. See the following <u>example</u> of the SIP trunk configuration of Asterisk/FreePBX.

Configure user's authorization

Click this link to set up user authorization for the systems with enhanced authorization parameters. It is recommended to use when Radio ID is equal to SIP ID. In case when Voice is transmitted via Radio Channel, Radio ID is used. When voice is transmitted via GSM channel, SIP ID is used.

S	P Authorization us	ers X
	SIP ID	User Name
I	010101	User # 1
	Add XDelete	

- Click **Add** to add a new user authorization.
- SIP ID

Enter the SIP ID for the new user.

• User Name

Enter the User Name for the new user;

• Click **OK** to save the new user authorization.

5.12 Data Sources

The Data Sources feature allows receiving data from third-party applications and devices.

TRBOnet Dispatch Software can work with the following two data source types:

- 1. Physical or virtual devices connected via a COM port
- 2. PCs running third-party applications connected via TCP/IP

To allow TRBOnet Dispatch Software to receive data from a third-party application or device:

• In the **Configuration** pane, select **Data Sources**.



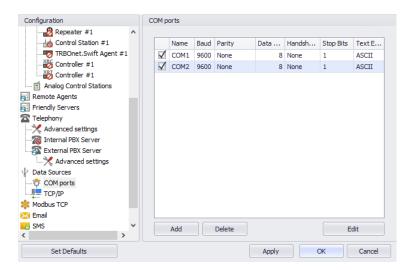
Configuration	Data Sources
Repeater #1 Control Station #1 TRBOnet.Swift Agent #1 Controller #1 Controller #1 Controller #1 Analog Control Stations Remote Agents Friendly Servers Telephony Advanced settings Internal PBX Server Advanced settings Lotanal PBX Server COM ports TCP/IP Modbus TCP Email SMS S	Enable Data Sources
Set Defaults	Apply OK Cancel

• In the Data Sources pane, select the Enable Data Sources option.

5.12.1 COM Ports

To manage physical or virtual devices connected to the TRBOnet Server PC via COM port:

• In the Configuration pane, under Data Sources, select COM ports.



• In the **COM ports** pane, click **Add** to add a new device.

COM Port	×
Serial port name:	COM1 T
Baud rate:	9600 🔻
Parity-checking protocol:	None 🔻
Stop bits per byte:	1 •
Data bits per byte:	8 🔻
Handshaking protocol :	None
Protocol:	Text 🔻
Text Encoding:	ASCII 👻
Message delimiter:	LINE FEED 0x0A(\n)
	OK Cancel



• In the **COM Port** dialog box, specify the following parameters:

Serial port name

From the drop-down list, select the COM port on the PC with TRBOnet Server to which the device is connected to.

Baud rate

From the drop-down list, select the baud rate at which the data is transmitted.

Parity-checking protocol

From the drop-down list, select one of the values that represent the paritychecking protocol.

Stop bits per byte

From the drop-down list, select the standard number of stop bits per byte.

Data bits per byte

From the drop-down list, select the standard length of data bits per byte.

Handshaking protocol

From the drop-down list, select the handshaking protocol for serial port transmission of data.

Text Encoding

From the drop-down list, select the Text Encoding type.

Note: The Text Encoding types selected in the TRBOnet Server and in the connected application must be the same to avoid incorrect text display and incorrect data parsing.

Message delimiter

From the drop-down list, select the type of delimiters in the data.

- Note: The Message delimiter types selected in the TRBOnet Server and in the connected application must be the same to avoid incorrect text display and incorrect data parsing.
- Click **OK** to save settings and close the dialog.

5.12.2 TCP/IP

Note: When TCP/IP connection is used, all data will be transferred via UDP protocol only.

To manage PCs running third-party applications:

• In the Configuration pane, under Data Sources, select TCP/IP.



Configuration		TCP/IF					
TRBOnet.Swift Agent TRBOnet.Swift Agent Controller #1 Analog Control Stations Remote Agents Friendly Servers Telephony Advanced settings	#1 ^	TCP/IF	Name Terminal 1 Terminal 2	Remote IP 10.10.102.216	Port 11002 11002	Mode Client Server	Encoding UTF8 UTF8
Thernal PBX Server External PBX Server Advanced settings Data Sources COM ports TCP/IP Modbus TCP							
K Email SMS License	>		Add	Delete		[Edit
Set Defaults					Apply	ОК	Cancel

• In the **TCP/IP** pane, click **Add** to add a TCP/IP connection.

Name:	Terminal 2	
	2	
Mode:	Server (TRBOnet connects	to App)
Remote IP:	10.10.102.216	
Port:		11002 🗘
Text Encoding:	UTF8	•
Ignore Simila	ar Messages	
During	30 🌲 min	
Do not to consid	ler the following substring (regex):
	\d{2}:\d{2}:\d{2}	

• In the External Connection dialog box, specify the following parameters:

Name

Enter a name for the TCP/IP connection.

Mode

From the drop-down list, select the connection mode. The connection mode depends on the type of the application installed on the connected PC:

• Client

In this case, the application connects to TRBOnet Server which sends the data to the application.

• Server

In this case, TRBOnet Server accepts connections from the application and receives the data.

Remote IP

Enter the IP address of the application server.

Note: Available only when the **Server** connection mode is selected.



Port

In case of the **Client** connection mode, select the local port of the PC with TRBOnet Server PC.

In case of the **Server** connection mode, select the port of the PC where the third-party application is installed.

Text Encoding

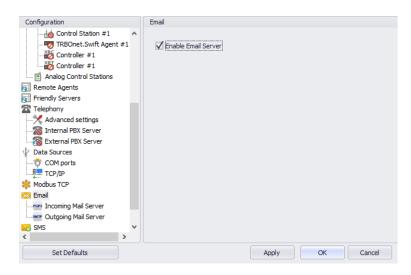
From the drop-down list, select the Text Encoding type.

Note: The Text Encoding types selected in the TRBOnet Server and in the connected application must be the same to avoid incorrect text display and incorrect data parsing.

5.13 Email Settings

TRBOnet Dispatch Console allows processing emails as follows:

- 1. Receive emails from email servers and forward them to a particular radio or talk group (via a POP3 or IMAP server);
- 2. Send emails from radios to a particular email address (SMTP Server).
- Note: Microsoft Exchange Server can be used as SMTP and POP3/IMAP servers.
 - In the Configuration pane, select Email.
 - In the Email pane, select Enable Email Server.



5.13.1 Incoming Mail Server

The Incoming Mail Server is used to synchronize the Incoming Emails folder located on a mail server with your local PC. If you are using a POP3 server, all incoming emails can be downloaded from the mail server to the local PC to be then forwarded as text messages to radios or talk groups.

• In the Configuration pane, under Email, select Incoming Mail Server.



Configuration	Incoming Mail Server	
Control Station #1	▲ Enable Server:	77.232.61.123
Analog Control Stations	Port:	This server requires a secure connection (SSL)
Friendly Servers Telephony	Protocol:	POP3 •
X Advanced settings X Internal PBX Server 	Check for new messa every: Connect using	60 🔄 seconds
Data Sources COM ports TCP/IP	Anonymous a Windows aut	
Modbus TCP Email Incoming Mail Server	O Use login and Login:	password
Outgoing Mail Server	Password:	Check New Emails Now
Set Defaults		Apply OK Cancel

- In the **Incoming Mail Server** pane, specify the following incoming mail-related parameters:
 - Enable

Select this option to enable Incoming Mail Server.

Server

Enter the server hostname or IP address.

This server requires a secure connection (SSL)

Select this option to enable a secure connection. Note that a dedicated port will be used to connect to the mail server via SSL.

- Note: The port number will automatically change as you select this option. For example, from 110 to 995 for POP3, and from 143 to 993 for IMAP.
- Port

Enter the port number to be used for the connection.

Note: This box is populated automatically depending on the selected protocol and whether a secure connection is required.

Protocol

From the drop-down list, select the protocol for the incoming mail server.

Note: The port number will automatically change as you change the protocol.

Check for new messages every X seconds

Enter the time interval to check for new email messages (60, by default).

Connect using

Choose one of the following options:

• Anonymous access

Choose this option to use an anonymous access to the incoming mail server.



• Windows authentication

Choose this option to connect via TRBOnet Service Windows Account, if it is running under a specific account;

• Use login and password

Choose this option and specify the credentials for the mailbox:

✓ Login

Enter the incoming mail server login.

✓ Password

Enter the incoming mail server password.

Check New Emails Now

Click this button to synchronize the Incoming Emails folder and check for new emails.

5.13.2 Outgoing Mail Server

The SMTP Server is used to send emails from users to mail servers as well as between mail servers to deliver emails to the final destination.

For example, the Administrator can enable email notifications from TRBOnet Dispatch Console to particular email users when alarms occur on selected radios. In this case, the radio sends an alarm to TRBOnet Server which in turn converts this alarm to text and then forwards it as an email message to particular email addresses (for example, to <u>admin@yourcompany.com</u>).

• In the Configuration pane, under Email, select Outgoing Mail Server.

Configuration		Outgoing Mail Server	
Controller #1 Controller #1 Analog Control Stations Remote Agents Friendly Servers Callebony Advanced settings External PBX Server External PBX Server Comports Comports TCP/IP		Enable Sender Email: username.you SMTP Server: 77.232.61.12	r requires a secure connection (SSL)
Modbus TCP Modbu	>	User name: Password: Type: Auto	Send Test Message
Set Defaults		A	Apply OK Cancel

- In the Outgoing Mail Server pane, specify the following outgoing mailrelated parameters:
 - Enable

Select this option to enable Outgoing Mail Server.

- Sender Email Enter the email address to send emails to.
- SMTP server

Enter the server hostname or IP address of the SMTP server.



This server requires a secure connection (SSL)

Select this option to enable a secure connection. Note that a dedicated port will be used to connect to the mail server via SSL.

Note: The port number will automatically change as you select this option. For example, from 25 to 465.

SMTP server port

Enter the port number to be used for the connection.

Note: This box is populated automatically depending on whether a secure connection is required.

Connect using

Choose one of the following options:

• Anonymous access Choose this option to use an anonymous access to the SMTP server.

• Windows authentication

Choose this option to connect via TRBOnet Service Windows Account, if it is running under a specific account;

• Use SMTP user name and password

Choose this option and specify the credentials for the mailbox:

- ✓ User name Enter the SMTP server user name.
- ✓ Password

Enter the SMTP server password.

🗸 Туре

From the drop-down list, select the SMPT login type.

Send Test Message

Click this button to send a test message from the Sender Email address.

5.14 SMS Settings

TRBOnet Dispatch Console allows sending SMS notifications to a cell phone when alarms and other events occur on selected radios (e.g. DTMF commands from radios, Telemetry, Radio State, etc.).

- In the **Configuration** pane, select **SMS**.
- In the SMS pane, select Enable SMS Server.
- In the Configuration pane, under SMS, select SMS.



Configuration		SMS			
Analog Controller #1	^	Sender: Connection to GSM	via	Viene 44 ann de former et	
Friendly Servers		Connection to GSM	Vid:	Vianett service (www.vi	anett.com) V
Telephony		Login:		login@yourcompany.com	n
		Password:		******	
External PBX Server			S	end Test MMS	Send Test SMS
↓ Data Sources					
COM ports					
TCP/IP					
🍀 Modbus TCP					
🔀 Email					
Incoming Mail Server					
Outgoing Mail Server					
SMS					
SMS					
📮 License					
	¥				
<	>				
Set Defaults				Apply	OK Cancel

- In the **SMS** pane, specify the following SMS-related parameters:
 - Sender

Leave this box blank.

Connection to GSM via

From the drop-down list, select the type of connection.

- <u>Nokia mobile phone connected to TRBOnet Server PC</u>
 Select this item to send SMS notifications via a Nokia cell phone connected to the TRBOnet Server PC.
- <u>Vianett service</u>

Select this item to use an account on Vianett service. For more details on Vianett service, see <u>www.vianett.com</u>

<u>SMS Broadcast</u>

Select this item to use an account on SMS Broadcast service. For more details on SMS Broadcast service, see <u>www.smsbroadcast.com.au</u>

- <u>Clickatell</u> Select this item to use an account on Clickatell service.
 For more details on Clickatell service, see www.clickatell.com
- Login

Enter the login for the selected service account.

Password

Enter the password for the selected service account.

Send Test MMS

Click this button to send a test MMS from the selected service account to a recipient's phone number.

Note: This button is available when connected via Vianett service only.

Send Test SMS

click to send a test SMS from Vianett account to recipient phone number.



Note: This button is available when connected via Vianett, SMS Broadcast, or Clickatell services.



6 TRBOnet Dispatch Console

The key features of TRBOnet can be configured by the Administrator in TRBOnet Dispatch Console after initial installation and configuration. The default Administrator credentials are **admin** for the login and **admin** for the password.

6.1 Main Menu

The TRBOnet Dispatch Console main menu allows the user to manage the main Dispatch Console options. The main menu is located in the upper left corner of the main window.

File View Map Tools Help		
Voice Dispatch	Radio Interface	
🖪 🗄 L 👶 🗶 7 🗇 🔿 🐼	Radio Interface Recent Calls/Events	
	Active Calls	🗙 Quick Commands 🗙 📤
😑 🧟 Online Dispatc		Test
345 🗐 🔔		We are on fire
Administrat		Carfanas
B & Group1		
X North Group	Telephony 📧 🕢 🔽 Intercom 💷 📧 🖉	Queued Messages X
	All Call	🥥 Record 🔻 🔛 File 🔻
	PTT	To: Selected Channels
🗉 📑 Firemen 📮	Menu 🖚	Start Voice Message
Voice Dispatch	Line 1 Line 2 Line 3 Session:	Voice Message
	Line 4 Line 5 Line 6 Free channel	Voice Message
Location Tracking		Tote Pressage
	1 2 3 Sender:	Cross Patch 🗙
🚟 Job Ticketing	4 5 6	Drag and Drop PTT Box here to
~	7 8 9	create new group
🥂 Route Management	* 0 # RX / TX	
RFID Tracker		V Firemen - Police
RFID Tracker	Recent Calls/Events	
Text Messages	🚳 Playback 🚽 Save 🛛 🕘 Print 💷 Pause 🛷 Clear 🛛 🧐 Reload 🦷 Filter By Radio 🗮 Grouping	🍸 Auto Filter 🗇 Default Settings 🛛
	Date Radio System Sender Recipient Message De	taís Note
🚭 Voice Recording	18-Nov-2016 13:01:17 CapacityPLUS Administrator All All Call from dispatcher 'Ad Me	
-	2 18-Nov-2016 13:01:11 CapacityPLUS Administrator All All Call from dispatcher 'Ad Me	
Event Viewer	18-Nov-2016 12: 13:39 CapacityPLUS 345 125 Private Call: Dispatcher '34 Me 18-Nov-2016 12: 13:34 CapacityPLUS 345 235 Private Call: Dispatcher '34 Me	
(T)	18-Nov-2016 12:12:49 CapadityPLUS Server 125 Call Queued	mbers, 545, 255
Radio Allocation	18-Nov-2016 12:12:43 CapacityPLUS 125 All Subscriber '125' has sent R	-
Administration	144 44 4 Record 1 of 629 + 1+ 1+ 4	Þ
	Recent Calls/Events Recent Calls Request to Talk Radio State Active Tasks Active Routes User Activi	ty Map
🐻 127.0.0.1 🖓 🥵 💆 Administrator 📑	censed to: demo Demo License	🕑 Active -

6.1.1 File

ile	
	Connect to TRBOnet Server
	Exit

The File menu contains the following items:

• File > Connect to TRBOnet Server

Choose this menu item to connect to a different TRBOnet Server, or to use different credentials for the current connection.

Connect to TRBOnet Serv	/er X
Connect to:	
Address:	127.0.0.1 ~
Port:	4021 Configure
Authentication:	
Method:	TRBOnet Authentication $~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~$
User Name:	admin
Password:	*******
Connect on startup	
	OK Cancel

In the dialog that opens, specify the following connection parameters:



Connect to:

Address

Enter the IP address of the TRBOnet Server to connect to.

Port

Enter the local port of the TRBOnet Server PC to accept connections from Dispatch Console. Use unique ports for each Dispatch Console connection if there are several Dispatch Consoles connected.

Authentication:

Method

From the drop-down list, select the Authentication method:

• 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 password is not required when the Windows Authentication method is used.

User Name

Enter the User Name registered in the TRBOnet Dispatch Console Users list.

Password

Enter the individual password.

Connect on startup

Select this option to launch Dispatch Console without typing User Name and Password.

• File > Exit

Choose this menu item to exit TRBOnet Dispatch Console.



6.1.2 View

Show Navigation	
Show Modules	•
Configure PTT Boxes	
Configure Active Calls	Panel
Customize Hot Keys	
Add Radio Interface Page	ge
Delete Radio Interface P	age
Show Channel Selector	Box
Show Call Type Buttons	5
Show Keypad Panel	
Audio Message Library.	
Extended PTT Boxes	
Large PTT Boxes	
Medium PTT Boxes	
Small PTT Boxes	
Custom PTT Boxes	
Show Active Calls Pane	I.
Show Quick Command	s Panel
Show Queued Message	s Panel
Show Cross Patch Pane	ł
Show Telephony Tab	
Show Extended Messag	es Tab
Show Radios Tab	

The **View** menu contains the following items:

• View > Show Navigation

Choose this menu item to toggle the Navigation Tree display.

• View > Show Modules >

Choose this menu item and in the pull-down menu select/deselect the modules to display.

• View > Configure PTT Boxes

Choose this menu item to configure the view of PTT boxes.

Name:	Radio Interface			
			1	
Туре	Name	View Mode	Available Calls	
Channel	Intercom	Normal		
Channel	Control Station #1	Normal	All	
Group	Group 1	Normal	Firemen	
Group	Group 2	Normal	Police	-

In the **Configure Voice Boxes** dialog, specify the following PTT box parameters:

Type

In this column, the box type (e.g. Channel or Group) is displayed.

Name

Ether a name for the selected box. This name will be displayed in the title of the PTT box.



View Mode

From the drop-down list, select the view mode:

• Invisible

Select this mode so that the PTT box will not be displayed.

• Normal

Select this mode so that the PTT box will be displayed in Normal view mode:



• Minimized

Select this mode so that the PTT box will be displayed in Minimized view mode:

Control Station #1 🕘 📢 🥥

Note: Hover your mouse pointer over the Minimized PTT box and see the PTT box popped up in Normal view mode.

Available Calls

From the drop-down list, select available Call Types for the PTT box:

Create virtual channel boxes

 To create a virtual PTT box, click the Create link in the upper-left corner of the Configure Voice Boxes the dialog.



Virtual Channel	×
virtual channel	^
✓ Name: Gr	oup Call
Call Type:	Call Target:
All Call	Select by Dispatcher
Group Call	 Selected from list
O Private Call	_
Execute call on ch	annels:
Execute call on all	available channels
Execute call only of the second se	n selected channels
Control Static	n #1
Intercom	
✓ Local Brine's	
Repeater #1	Slot #1
C Repeater #1	Slot #2
1	
	OK Cancel

In the **Virtual Channel** dialog, specify the following virtual channel parameters:

Name

Select this option and enter a name for the virtual channel.

- Choose the **Call Type** for the channel.
- Call Target

(available only when Group Call or Private Call is selected as the Call Type) Choose **Select by Dispatcher** to allow the dispatcher to select a Call Target. Or, choose **Selected from list** and from the list below select the desired group (if the Group Call type is chosen) or individual radio (if the Private Call type is chosen).

Execute call on channels

(available only when All Call or Group Call is selected as the Call Type) Choose **Execute call on all available channels**, or **Execute call only on selected channels** and in the in the list below select the available channels.

• View > Configure Active Calls panel

Choose this menu item to configure call types and advanced settings for the Active Calls panel:



Call Types Advanced Show All Call Show Group Calls Show Emergency Calls Show Private Calls Show Remote Monitor Show Intercom All Calls Show Intercom Private Calls Show Intercom Private Calls	>
Show Group Calls ✓ Show Emergency Calls ✓ Show Private Calls ✓ Show Remote Monitor ✓ Show Intercom All Calls	
 ✓ Show Emergency Calls ✓ Show Private Calls ✓ Show Remote Monitor ✓ Show Intercom All Calls 	
 ✓ Show Private Calls ✓ Show Remote Monitor ✓ Show Intercom All Calls 	
Show Remote Monitor	
Show Intercom All Calls	
☐ Show Intercom Private Calls	
OK Can	

• Call Types

While on this tab, you can select which call types to display in the Active Calls panel:

A 15 - C II	
Active Calls	×
Call Types Advanced	1
 ✓ Show Visible Channels ✓ Show Hidden Channels ✓ Show Missed Calls 	
Display Time: 600 🔹 seconds	
OK Cancel	

• Advanced

While on this tab, you can specify whether to display Visible/Hidden Channels and Missed Calls, as well as their display time.

The **Active Calls** panel is displayed in the upper part of the Dispatch Console:



File View Map Tools Help		
Voice Dispatch	Radio Interface	
💼 🗄 👶 🛠 🍸 😒	Radio Interface Recent Cals/Events Active Calls	Quick Commands
Administrator	Control Station #1 (1) Police PTT Police Administrator	Configure Queued Messages
Firemen Police		Cross Patch
Voice Dispatch	All Call Channel 4 PDTT PDTC Channel 4 PDTC PDTC	Cross Patch X Drag and Drop PTT Box here to create new group
GPS Positioning	Session: Free channel Group Call	
🔡 Job Ticketing	Police Police Sender:	1
Route Management	Administrator	
RFID Tracker	RX/TX	
M Text Messages	Recent Calls/Events	1. 5h @ D & how 2
🔮 Voice Recording	Playback Save - Print II Pause Clear - Reload Ti Filter By Radio Filter By Radi Filter Filter By Radio Filter By Radi Filter	Auto Filter 🗇 Default Settings 彈
Reports	2 29-Sep-2016 17:03:17 Control Station Administrator Police Dispatcher 'Administrator' Members 2 29-Sep-2016 17:02:37 Control Station Administrator Police Dispatcher 'Administrator' Members 2 29-Sep-2016 17:02:37 Control Station Administrator Police Dispatcher 'Administrator' Members	
Event Viewer	29-Sep-2016 17:02:23 Control Station Administrator Polce Dispatcher 'Administrator' Members 29-Sep-2016 17:02:00 Control Station Administrator Firemen Dispatcher 'Administrator' Members	s: Administrator
িষ্ঠ Radio Allocation	29-Sep-2016 17:01:147 Control Station Administrator Poice Dispatcher 'Administrator' Members 29-Sep-2016 17:01:125 Intercom Administrator All Intercom Call: Dispatcher' Members 41 41 4 Record 1 of 312 Intercom Administrator All Intercom Call: Dispatcher' Members	
Administration	Image: A construction of	•
🚺 127.0.0.1 🐞 🚯 🔂 💁 Administr	ator 📑 Licensed to: demo Demo License	Active

• View > Customize Hot Keys

Choose this menu item to configure hot keys for the actions on the selected channels.

HotKey	Action	Caption
Shift	Terminate All Transmitions	Terminate all
Enter	Default PTT channels	Transmit
[L]	PTT	Intercom
[Shift]+[H]	PTT	Repeater #1: Slot #1
[Shift]+[O]	PTT	Repeater #1: Slot #2
	PTT	Local Brine's
	PTT	Control Station #1
	PTT	Group 2
144 44 4 Record 5 of	f10 🕨 🕪 🚧 🖪	•

- If you are going to configure PTT actions for PTT boxes, click the Show all PTT boxes link and assign a hotkey or a combination of hotkeys. Double-click the desired PTT box and select the hotkey(s) for the action.
- If you are going to set some specific actions for PTT boxes (e.g., mute channels or set default PTT channels), click the **Create** link:



ction			
HotKey:	Ctrl		Configure
Caption:	Mute Mode		
Action:	Mute channels	•	
Channels:			
C Repeater			
Control Si Group 2 Group 1 All Call	tation #1		
		OK	Cancel

In the Action dialog box that opens, specify the following parameters:

• Hotkey

Click the **Configure** button and on the keyboard, press the key or key combination you want to assign as a hot key for the selected action.

• Caption

Enter a caption that will be displayed in the Dispatch Console.

• Action

From the drop-down list, select the desired action:

✓ Default PTT channel

Selected PTT box functions as a default PTT channel.

✓ Mute channels

This action mutes selected PTT boxes.

✓ Unmute channels

This action unmutes selected PTT boxes.

✓ Voice from channels

This action mutes voice from all PTT boxes except for selected one(s).

✓ Terminate All Transmissions

This action terminates all transmissions for selected PTT boxes.

- **Channels** In the list below, select PTT boxes to assign the actions specified above.
- To enable displaying the configured hotkeys in the Dispatch Console, select the **Show actions panel** option.

All the hotkeys you have configured are displayed in the upper part of the Dispatch Console:



File View Map Tools Help									
Voice Dispatch	Radio Interface								
💼 🗄 🗄 👶 🛠 🍸 😒	Radio Interface Recent	t Calls/Events	Radios						
	Terminate all Transmit							k Command	s 🗙
Online Dispatchers (1)			Active Ca	lls			K Configu	re.	
Administrator							Quer	ed Messag	es 🗙
🛛 📑 Firemen 📮			<u> </u>					ord 🔻 🕼	
Police 📮								ted Channels	File 🔻
-				_				cted channels	
	Intercom	•))	∎Ø) (Ŀ	Control Stati	ion #1		0	ross Patch	×
Voice Dispatch	All Ca			DTT.	Channel 4			nd Drop PTT Box	
	PTT			PTT	All Call	•		reate new grou	P
GPS Positioning									
0-0	Session			_	Session:				
🚰 Job Ticketing	Free chi	annel			Free channel				
Route Management	Sender:				Sender:				
Koute Hanagement									
RFID Tracker									
	RX / TX		_	RX / TX					
Text Messages			_) (~		
0	Recent Calls/Events								
👻 Voice Recording	🗐 Playback 🚽 Save • 🗐	Print II Pau	se 🦪 Clear 🗸	🗐 Reload 🍸	🖞 Filter By Radio	Groupin	g 🍸 Auto Filter	💮 Default Se	ettings
Reports	Date	Radio System	Sender	Recipient	Message	D	etaís	Note	
() Actors		Intercom	Administrator	All			embers: Administra	tor	•
Event Viewer	🔆 29-Sep-2016 17:53:22		RadioServer	All	Connection to 'Con				
		Intercom Control Station	Administrator Administrator	All Police			embers: Administra embers: Administra		
Radio Allocation	· ·	Intercom	Administrator	All			embers: Administra embers: Administra		-
-		F H H 4							Þ
Administration	Recent Cals/Events Recent	t Calls Radio St	ate Active Ta	sks Active Rout	tes User Activity	Мар			
🔂 127.0.0.1 🔥 🎲 😘 🕵 🙎 Administr	ator 📑 Licensed to: demo D	emo License							🕑 Active -

• View > Add Radio Interface Page

Choose this menu item to add a new Radio Interface page.

Name:	Radio Interface #1			
Туре	Name	View Mode	Available Calls	
Channel	Intercom	Normal		
Channel	Control Station #1	Normal	All	
Group	Group 1	Normal	Firemen	
Group	Group 2	Normal	Police	
Channel	Repeater #1: Slot #1	Normal	All	
Channel	Repeater #1: Slot #2	Normal	All	
Channel	Local Brine's	Normal	All	
All Call	All Call	Normal		

- In the **Configure Voice Boxes** dialog, specify the following PTT box parameters for the new radio interface:
 - Name

Enter a name for the radio interface.

Other parameters can be configured in the same way as when <u>Configuring</u> <u>PTT Boxes</u>.

Radio Interfaces can be switched between by clicking on the tab bar in the upper part of the **Calls** pane.



File View Map Tools Help									
Voice Dispatch	Radio Interface								
📴 🗄 🗄 🔏 🛠 🏹 🚳	Radio Interface Radio I Terminate all Transmit	Interface #1	Recent Calls/Ev	ents Radios]		Quick O	ommands	X
Contine Dispatchers (1) Administrator Firemen			Active C	alls		×		e Messag (▼ t⊇ Fie	
Police 📮				.		~		ted Channels	
Voice Dispatch	PTT All Ca			Control Sta	tion #1 🔊 📧 Channel 4 All Call		Cross Drag and D	s Patch Drop PTT Box he ate new group	ere
GPS Positioning	Session Free d				Session: Free channel				
🚼 Job Ticketing	Sender	:			Sender:				
💓 Route Management									
RFID Tracker	RX/TX			RX / TX -					
V Text Messages	Recent Calls/Events								
Voice Recording	🗐 Playback 🛃 Save • 🔙	Print II Pau	use 🦪 Clear	• 🏐 Reload	🌇 Filter By Radio 🛛 🚟 G	rouping 🍸	Auto Filter		» •
-	Date	Radio System	Sender	Recipient	Message	Details		Note	
Reports	29-Sep-2016 10:48:54	Intercom Intercom	Administrator Administrator	Al	Intercom Call: Dispatche Intercom Call: Dispatche				-
Event Viewer	29-Sep-2016 17:53:22 29-Sep-2016 17:27:01	Intercom	RadioServer Administrator	Al Al	Connection to 'Control S Intercom Call: Dispatche				
8 Radio Allocation	29-Sep-2016 17:27:00 29-Sep-2016 17:26:48	Control Statio Intercom	Administrator Administrator	Police	Dispatcher 'Administrato Intercom Call: Dispatche				-
	HI 44 4 Record 1 of 303	▶ ₩ ₩ 4							•
Administration	Recent Calls/Events Recen	1¢	tate Active T	asks Active Ro	utes User Activity Map				
🚯 127.0.0.1 🕵 🙎 Administrator 📑 Lice	ensed to: demo Demo License							🕑 Ac	ctive -

• View > Delete Radio Interface Page

Choose this menu item to delete the currently selected Radio Interface page.

Note: The default Radio Interface pages can't be deleted.

• View > Audio Message Library

Choose this menu item to add configured Voice Messages to the Queued Messages panel. To configure Voice Message settings, see <u>Tasks</u>, <u>Voice</u> <u>Message</u>.

Filena	me	Description	Severity	Hot Key	Visibility
Alarm	Tone		Alarm		Hidden
Bobb	.mp3		Information		Button
Daisy	mp3		Information		Link

- In the **Saved Audio Files** dialog box, specify the following parameters:
 - Filename

The name of the message displayed in the Queued Messages panel.

• Description

Enter a description for the Voice Message.



• Severity

From the drop-down list, select the severity level (Information, Alarm, or Warning).

• Hot Key

Click the **Hot Key** button and press the key or key combination you want to assign as a hot key for the selected Voice Message box.

• Visibility

From the drop-down list, select how to display the selected Voice Message box:

✓ Hidden

Hide the Voice Message box.

✓ Button

Display the Voice Message as a button (1).

✓ Link

Display the Voice Message as a link (2).

Radio Interface	9						
Radio Interface	Recent Calls/Even	ts Radios					
Terminate all Trar	nsmit						Quick Commands
		Active	Calls			×	Configure
					1 2		Queued Messages
							🔘 Record 💌 😰 File 💌
						^	To: Selected Channels
Intercom		. 💿 🖬 💿	Control St	ation #1	0 • 0	N	Daisy.mp3
	All Call			Chan	nel 4		Bobby.mp3
PTT			PTT	All Call	•		To: All Channels
	Session:			Session:			Cross Patch
	Free channel			Free channel			Drag and Drop PTT Box here to
							create new group
	Sender:			Sender:			
RX/TX -			RX /TX				
]		
						~	

• View > Extended PTT boxes

Select this command to display PTT boxes as shown:

\checkmark		Cont	trol Statio	n #1	
		Control Sta	tion #1		
PTT		Channel 1	\bigcirc \bigcirc		
			Free channel		Terminate
Tone	& PTT	RX/TX			
	Call:	All Call		•	Check
÷	(1	2	3	Call Alert
		4	5	6	Monitor
		7	8	9	
Spk) Mic	C	0	<	123

• View > Large PTT boxes

Select this command to display PTT boxes as shown:





• View > Medium PTT boxes

Select this command to display PTT boxes as shown:



View > Small PTT boxes

Select this command to display PTT boxes as shown:



• View > Custom PTT boxes

Select this command to display PTT boxes as shown:



• View > Show Active Calls Panel

Select this command to display the Active Calls panel in the Dispatch Console. See also <u>Configuring Active Calls panel</u>.

• View > Show Quick Commands Panel

Select this command to display the Quick Commands panel in the Dispatch Console.

- View > Show Queued Messages Panel Select this command to display the Queued Messages panel in the Dispatch Console.
- View > Show Cross Patch Panel Select this command to display the Cross Patch panel in the Dispatch Console.
- View > Telephony Tab Select this command to display the Telephony tab in the Radio Interface pane.
- View > Show Extended Messages Tab Select this command to display the Extended Messages tab in the Radio Interface pane.



• View > Show Radios Tab

Select this command to display the Radios tab in the Radio Interface pane. The **Extended Messages** and **Radios** tabs appear on the top of the **Calls** pane:

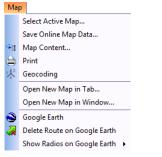


6.1.3 Map

- Select Location Tracking (1) in the Navigation pane to enable Map Options:
- Click the **Map** menu (2).



The **Map** menu contains the following items:



• Map > Select Active Map

Click this menu item to select the map to display in the Dispatch Console.



vailable Maps	Path	State
APNIK	1001	OK
CYCLE		OK
TRANSPORT		OK
ANDSCAPE		OK
SING_ROAD		OK
SING_AREA		OK
SING_HYBRID		OK

- Enter the **Caption** of the map that will be displayed in the Dispatch Console.
- In the list of **Available Maps**, choose the map to be displayed.
- You can also add a custom map using the URL. Click the **Add** button.

Add Map		×
Name:	region	
Map Type:	Custom Map	-
URL :	https://www.openstreetmap.org/#map=11/59.9497/30.0517	
	Example : http://tile.openstreetmap.org/{z}/{x}/{y}.png	
	ОК	Cancel

- Enter the **Name** for the new map.
- Enter the **URL**, as shown in the example.
 - ✓ Z

Enter the zoom value for the map.

✓ X

Enter the coordinate in X-direction.

✓ Y

Enter the coordinate in Y-direction.

• Map > Save Online Map Data

Click this menu item to save your current map region.

Tiles bulk downloader	-		×
Region from: N59°57'07.92" E030°14'33.51" to N59	°56'48.68" E	030°19'02	2.27"
Expire tiles days: 30			
Redownload all tiles			
Zoom level: 14 Tiles to download:	40		
Sature Finished Landrig poon level: 14 Loaded from the web: 0 Ubdated from the web: 39 Loaded from the web: 39 Faeled: 0			
Show tiles preview 🖌 Show tiles progress			
Loaded: 40 of 40 (100 %)			
	Start	Clos	e



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.

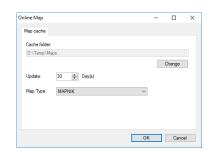
Redownload all tiles

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.

• Map > Map Content

Click this menu item to specify the folder and settings to store the map data.



In the Online Map dialog box, specify the following settings:

Cache folder

Click **Change** and locate the folder on the PC where you wish to store the map data.

Update

Enter the update interval for the map data stored in the specified Cache folder.

Note: The value 0 means that the map data won't be updated.

Map Type

From the drop-down list, select the map type. For more details on the maps used in TBOnet Dispatch Console, see <u>Map Types</u>.

6.1.3.1 Map Types

Online maps:

 OpenStreetMap – free online maps. Includes MAPNIK, CYCLE, TRANSPORT, LANDSCAPE, and MAPQUEST subtypes. For more details on



OpenStreetMaps, visit the official the website: <u>http://www.openstreetmap.org</u>

 Microsoft BING – commercial maps from Microsoft. Includes BING_ROAD, BING_AREA, and BING_HYBRID subtypes. A user may use BING maps for 90 days and then they must get a Basic Key. Visit <u>http://msdn.microsoft.com/en-us/library/ff428642.aspx</u> to get a Basic Key.

Offline Maps:

- TRBOmap internal map-making resource. A user can customize a part of online maps according to requirements. For more details on map calibration, visit TRBOnet Knowledge Base and read the following article: <u>http://kb.trbonet.com/public.pl?Action=PublicFAOZoom;ItemID=27</u>.
- TMap internal map-making resource. A user can create an offline copy of online maps for selected regions according to requirements. A user can create a map from any picture via the TRBOnet Map Edit application.

Click **Start > All Programs > Neocom Software > TRBOnet Map Edit** For more details on map calibration, visit TRBOnet Knowledge Base and read the following article:

http://kb.trbonet.com/public.pl?Action=PublicFAQZoom;ItemID=28.

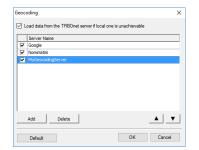
- GIS Panorama offline Russian map. For more details, visit the official website: <u>http://www.gisinfo.ru/</u>
- Beacon 2D two-dimension offline map for Indoor positioning. A user can create maps using the Beacon2DMapGenerator tool. To get Beacon2DMapGenerator, contact your local TRBOnet dealer.
- Beacon 3D tree-dimension map for Indoor positioning. A user can use any dicectX(.x) file as a map.
- MapLib map format free offline map. Requires a lot of internal memory. Requires Franson GpsTools. For more details on Franson GpsTools, visit the official website: <u>http://fransongpstools.software.informer.com/2.3/</u>
- TatukGIS commercial offline map. For more details on TatukGIS, visit the official website: <u>http://www.tatukgis.com/</u>

• Map > Print

Click this menu item to print the map region currently displayed in the Map pane.

• Map > Geocoding

Click this menu item to configure geocoding servers in the Dispatch Console.





- Load data from the TRBOnet server if local one is unachievable Select this option to allow the Dispatch Console to resolve GPS data from the TRBOnet Server PC.
- For other settings, see 5.6.1.1 Configuring Geocoding Servers.

• Map > Open New Map in Tab

Click this menu item to add a new map tab to the Map pane.

lap Type:	Online maps		
Caption:	Му Мар		
vailable Maps			
Name	Path		State
MAPNIK			OK
CYCLE			OK
TRANSPORT			OK
LANDSCAPE			OK
BING_ROAD			OK
BING_AREA			OK
BING_HYBRID			OK

Map Type

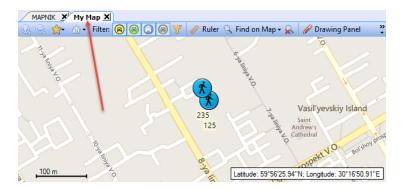
From the drop-down list, select the map type.

Caption

Enter a caption for the new map tab.

For other required settings, see <u>Selecting Active Map</u>.

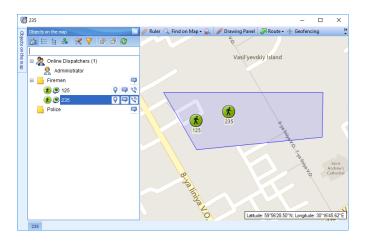
Once you have clicked **OK**, the new tab will appear in the Map pane:



- Map > Open New Map in Window
 - Click this menu item to create a new map window with the specified map.
 - For the required settings, see <u>Selecting Active Map</u>

Once you have clicked **OK**, the new Map window will appear:





• Map > Google Earth

Click this menu item to open the Google Earth application.

Note: Google Earth must be previously installed on the PC. For more details on Google Earth, visit Google's official website: http://www.google.co.uk/earth

• Map > Delete Routes on Google Earth

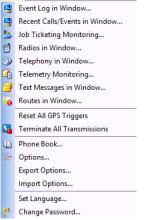
Click this menu item delete all routes from Google Earth.

• Map > Show Radios on Google Earth

Click this menu item and in the drop-down menu select which radios to display on Google Earth.

6.1.4 **Tools**

Tools



The **Tools** menu contains the following items:

• Tools > Event Log in Window

Click this menu item to open the Event Log in a new window.



	Radio System Control Station #1	Reload High Grouping Sender Dispatcher	Y Auto Filter Recipient	
(i) 05-Oct-2016 15:38:45	Control Station #1			
		Dispatcher	41	
(i) 05-Oct-2016 15:38:43			A1	
	Control Station #1	Dispatcher	Al	
(i) 05-Oct-2016 15:38:41	Control Station #1	Dispatcher	Al	
04-Oct-2016 17:38:38	Repeater #1: Slot #1	125	Al	
(i) 04-Oct-2016 17:38:32	Repeater #1: Slot #1	235	All	
(i) 04-Oct-2016 17:32:42	Repeater #1: Slot #2	Administrator	Al	
(1) 04-Oct-2016 17:31:55	Repeater #1: Slot #2	Administrator	Al	
(i) 04-Oct-2016 17:30:50	Repeater #1: Slot #1	125	All	
(i) 04-Oct-2016 17:30:45	Repeater #1: Slot #1	235	All	
(i) 04-Oct-2016 17:30:40	Repeater #1: Slot #1	Administrator	Al	
(1) 04-Oct-2016 17:28:48	Repeater #1: Slot #1	125	Al	
(i) 04-Oct-2016 17:28:45	Repeater #1: Slot #1	235	All	
(i) 04-Oct-2016 17:18:05	Repeater #1: Slot #1	235	Al	
(i) 04-Oct-2016 17:16:01	Repeater #1: Slot #1	Administrator	All	
(1) 04-Oct-2016 17:15:58	Repeater #1: Slot #2	Administrator	Al	
(1) 04-Oct-2016 16:56:17	Repeater #1: Slot #2	Administrator	Al	
(i) 03-Oct-2016 10:51:39	Control Station #1	235	Al	
Hi H 4 Record 12 of 290	b bb bb d			
	0 04-Oct-2016 17:38:32 0 04-Oct-2016 17:38:32 0 04-Oct-2016 17:38:52 0 04-Oct-2016 17:38:55 0 04-Oct-2016 17:38:55 0 04-Oct-2016 17:38:55 0 04-Oct-2016 17:38:55 0 04-Oct-2016 17:38:65 0 04-Oct-2016 17:38:45 0 04-Oct-2016 17:38:45 0 04-Oct-2016 17:38:45 0 04-Oct-2016 17:18:05 0 04-Oct-2016 17:18:55 0 04-Oct-2016 16:15:55:17	● 04-02-2016 17.38:32 Repeater #1: Solt #1 ● 04-02-2016 17.32:42 Repeater #1: Solt #2 ● 04-02-2016 17.32:42 Repeater #1: Solt #2 ● 04-02-2016 17.30:50 Repeater #1: Solt #1 ● 04-02-2016 17.30:50 Repeater #1: Solt #1 ● 04-02-2016 17.30:40 Repeater #1: Solt #1 ● 04-02-2016 17.50:40 Repeater #1: Solt #1 ● 04-02-2016 17.55:40 Repeater #1: Solt #1 ● 04-02-2016 15.51:7 Repeater #1: Solt #1 ● 04-02-2016 15.51:7 Repeater #1: Solt #1 ● 04-02-2016 17.55:80 Repeater #1: Solt #1 ● 04-02-2016 15.51:7 Repeater #1: Solt #1	0 04-0ct-3016 17-38:32 Repeater #1: Slot #1 235 0 04-0ct-3016 17-32:42 Repeater #1: Slot #2 Administrator 0 04-0ct-3016 17-30:55 Repeater #1: Slot #1 Administrator 0 04-0ct-3016 17-30:56 Repeater #1: Slot #1 255 0 04-0ct-3016 17-30:57 Repeater #1: Slot #1 235 0 04-0ct-3016 17:15:06 Repeater #1: Slot #1 235 0 04-0ct-3016 17:15:07 Repeater #1: Slot #2 Administrator 0 04-0ct-3016 17:15:08 Repeater #1: Slot #2 Administrator 0 04-0ct-3016 17:15:08 Repeater #1: Slot #2 Administrator 0 04-0ct-3016 15:01:17 Repeater #1: S	0 04-Oct-3016 17:38:32 Repeater #1: Slot #1 235 Al 0 0-40-0.3016 17:38:32 Repeater #1: Slot #2 Administrator Al 0 0-40-0.3016 17:38:42 Repeater #1: Slot #2 Administrator Al 0 0-40-0.3016 17:38:58 Repeater #1: Slot #1 25 Al 0 0-40-0.3016 17:39:49 Repeater #1: Slot #1 25 Al 0 0-40-0.3016 17:28:48 Repeater #1: Slot #1 225 Al 0 0-40-0.3016 17:28:48 Repeater #1: Slot #1 225 Al 0 0-40-0.3016 17:28:48 Repeater #1: Slot #1 225 Al 0 0-40-0.3016 17:28:49 Repeater #1: Slot #1 225 Al 0 0-40-0.3016 17:84:68 Repeater #1: Slot #1 225 Al 0 0-40-0.3016 17:84:68 Repeater #1: Slot #1 235 Al 0 0-40-0.3016 17:84:68 Repeater #1: Slot #2 Administrator Al 0 0-40-0.3016 17:84:68 Repeater #1: Slot #2 Administrator Al

• Tools > Recent Calls/Events in Window

Click this menu item to open Recent Calls/Events in a new window.

Q 5-Oct.2016 15:96:32 Raddever AI Connector to Control St Q 5-Oct.2016 15:38:45 Control Stat Depatcher AI AI Call from dispatcher Dm. Q 5-Oct.2016 15:38:45 Control Stat Depatcher AI AI Call from dispatcher Dm. Q 5-Oct.2016 15:38:41 Control Stat Depatcher AI AI Call from dispatcher Dm. Q 5-Oct.2016 15:38:41 Control Stat Depatcher AI AI Call from dispatcher Dm. Q 5-Oct.2016 16:78:41 Control Stat Depatcher AI AI Call from dispatcher Dm. Q 6-Oct.2016 17:78:156 Administrator 125 Depatcher 'Administrator M Members: 125 Q 6-Oct.2016 17:73:157 Repeater #1	Date	Radio System	Sender	Recipient	Message	Details	Note	
0 5-Oct-2016 15:38:43 Control Stati Dispatcher Al Al Call from depatcher Du 0 5-Oct-2016 15:38:43 Control Stati Dispatcher Al Al Call from depatcher Du 0 5-Oct-2016 15:38:44 Control Stati Dispatcher Al Cancenton to Repeater J 0 5-Oct-2016 07:08:16 Administrator 125 Dispatcher Administrator J 0 4-Oct-2016 17:38:38 Repeater #1 25 Dispatcher Administrator J 0 4-Oct-2016 17:38:38 Repeater #1 25 Dispatcher Administrator J 0 4-Oct-2016 17:38:38 Repeater #1 25 Al Al Call from 125 (00:01) Members: 125 0 4-Oct-2016 17:38:38 Repeater #1 Alministrator Al Al Call from 125 (00:02) Members: 235 0 4-Oct-2016 17:38:39 Repeater #1 Alministrator Al Al Call from 125 (00:02) Members: Administrator 0 4-Oct-2016 17:38:59 Repeater #1 All Al Call from 125 (00:01) Members: 235 0 4-Oct-2016 17:38:49 Repeater #1	05-Oct-2016 15:42:32		RadioServer	All	Connection to 'Control St			
05-Oct-3016 15:38:41 Control Stati Depatcher Al Al Call from depatcher Du 05-Oct-3016 00:40:04 Radderver Al Connection to Repeater J Science J Sciene J	05-Oct-2016 15:38:45	Control Stati	Dispatcher	All	All Call from dispatcher 'Di			
Option Register All Connection to Register 0 +00-c3:03 to 90+40+4 Administrator 125 Dipatcher 'Administrator Image: Connection to Register Image: Connection to	05-Oct-2016 15:38:43	Control Stati	Dispatcher	All	All Call from dispatcher 'Di			
4 0-0-2.03 bi 17-83:56 Administrator 125 Dispatcher /Administrator Members: 125 0 4-0-0:05 17:83:68 Repeater #1 125 Dispatcher /Administrator Members: 125 0 4-00:05 17:83:78 Repeater #1 125 Al Al Call from 125 (00:01) Members: 125 0 4-00:05 17:83:87 Repeater #1 125 Al Al Call from 125 (00:01) Members: 235 0 4-00:05 17:83:57 Repeater #1 Al Al Call from 125 (00:00) Members: 245 0 4-00:05 17:83:57 Repeater #1 Al Call from 125 (00:01) Members: Administrator 0 4-00:05 17:83:57 Repeater #1 Al Call from 125 (00:01) Members: Administrator 0 4-00:05 17:83:57 Repeater #1 Al Call from 125 (00:01) Members: 245 0 4-00:05 17:83:57 Repeater #1 Al Call from 125 (00:01) Members: 245 0 4-00:05 17:83:58 Repeater #1 Al Call from 125 (00:01) Members: 245 0 4-00:05 15:73:547 Repeater #1 Al Call from 125 (00:01) Members: 255 0 4-00:05 15:73:547 Repeater #1 Al Call from 125 (00:01) Members: 255	05-Oct-2016 15:38:41	Control Stati	Dispatcher	All	All Call from dispatcher 'Di			
Other Other Digrater Administrator Image: Construction of the second of the sec	05-Oct-2016 09:49:04		RadioServer	All	Connection to Repeater			
04-Oct-2016 17:38:38 Repeater #1 125 AI AI Call from '125' (00:00) Members: 125 04-Oct-2016 17:38:32 Repeater #1	04-Oct-2016 17:45:36		Administrator	125	Dispatcher 'Administrator'			
0+Oct-3015 17:30:32 Repeater #125 Al Al Cal from 1235 (00:00) Members: 235 0+Oct-3015 17:30:32 Repeater #1Administrator Al Al Cal from digatcher / AMembers: Administrator 0+Oct-3015 17:30:32 Repeater #1Administrator Al Al Cal from digatcher / AMembers: Administrator 0+Oct-3015 17:30:50 Repeater #1Administrator Al Al Cal from 1235 (00:00) Members: 125 0+Oct-3015 17:30:50 Repeater #125 Al Al Cal from 1235 (00:00) Members: 125 0+Oct-3015 17:30:50 Repeater #125 Al Al Cal from 1235 (00:00) Members: 125 0+Oct-3015 17:30:40 Repeater #1255 Al Al Cal from 1235 (00:00) Members: 235 0+Oct-3015 17:30:40 Repeater #1125 Al Al Cal from 1235 (00:00) Members: 235 0+Oct-3015 17:21:40 Repeater #1125 Al Al Cal from 1235 (00:00) Members: 235 0+Oct-3015 17:21:40 Administrator Al Al Cal from 1235 (00:00) Members: 235 0+Oct-3015 17:10:405 Repeater #1125 Al Al Cal from 1235 (00:00) Members: 235	04-Oct-2016 17:43:26		Administrator	125	Dispatcher 'Administrator'			
04-Oct-2016 17:32:42 Repeater #1 Administrator AI AI Cal from dispatcher A Members: Administrator 04-Oct-2016 17:33:45 Repeater #1 Administrator AI AI Cal from dispatcher A Members: Administrator 04-Oct-2016 17:33:45 Repeater #1 125 AI AI Cal from 125 (000) Members: 255 04-Oct-2016 17:33:45 Repeater #1 125 AI AI Cal from 125 (000.01) Members: 255 04-Oct-2016 17:33:46 Repeater #1 125 AI AI Cal from 125 (000.01) Members: 255 04-Oct-2016 17:33:46 Repeater #1 125 AI AI Cal from 125 (000.01) Members: 235 04-Oct-2016 17:33:46 Repeater #1 125 AI AI Cal from 125 (000.01) Members: 235 04-Oct-2016 17:34:47 Repeater #1 125 AI AI Cal from 125 (000.01) Members: 235 04-Oct-2016 17:34:48 Repeater #1 125 AI AI Cal from 125 (000.01) Members: 235 04-Oct-2016 17:34:49 Repeater #1 125 AI AI Cal from 125 (000.02) Members: 235 04-Oct-2016 17:34:40 Repeater #1 125 AI AI Cal from 125 (000.02) Members: 235	04-Oct-2016 17:38:38	Repeater #1	125	All	All Call from '125' (00:01)	Members: 125		
0 4-Oct-2016 17:3155 Repeater #1 Administrator Al Al Call from dispatcher A Members: Administrator 0 4-Oct-2016 17:30:50 Repeater #1 125 Al Al Call from 125 (00:00) Members: 125 0 4-Oct-2016 17:30:50 Repeater #1 235 Al Al Call from 125 (00:00) Members: 125 0 4-Oct-2015 17:30:40 Repeater #1 235 Al Al Call from 125 (00:00) Members: Administrator 0 4-Oct-2015 17:30:40 Repeater #1 125 Al Al Call from 125 (00:00) Members: 35 0 4-Oct-2015 17:30:40 Repeater #1 125 Al Al Call from 125 (00:00) Members: 235 0 4-Oct-2015 17:30:40 Repeater #1 125 Al Al Call from 125 (00:00) Members: 235 0 4-Oct-2015 17:30:40 Repeater #1 125 Al Al Call from 125 (00:00) Members: 235 0 4-Oct-2015 17:30:40 Repeater #1 125 Al Al Call from 125 (00:00) Members: 235 0 4-Oct-2015 17:30:50 Repeater #1 235 Al Al Call from 125 (00:00) Members: 235 0 4-Oct-2015 17:30:50 Repeater #1 235 Al Al Call from 125 (00:00)	04-Oct-2016 17:38:32	Repeater #1	235	All	All Call from '235' (00:00)	Members: 235		
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04-Oct-2016 17:28:45 Repeater #1 25 Al Al Call from ?235 (00:01) Members: 235 04-Oct-2016 17:28:40 Administrator 125 Dispatcher 'Administrator' Members: 235 04-Oct-2016 17:28:40 Repeater #1 255 Al Al Call from ?235 (00:02) Members: 235	04-Oct-2016 17:30:40	Repeater #1	Administrator	All	All Call from dispatcher 'A	Members: Administrator		
0+Oct-2016 17:28:40 Administrator 125 Dispatcher 'Administrator' 0+Oct-2016 17:28:45 Repeater #1 235 Al Al Cal from '235' (00:02) Members: 235	04-Oct-2016 17:28:48	Repeater #1	125	All	All Call from '125' (00:01)	Members: 125		
04-Oct-2016 17:18:05 Repeater #1 235 All All Call from '235' (00:02) Members: 235	04-Oct-2016 17:28:45	Repeater #1	235	All	All Call from '235' (00:01)	Members: 235		
	04-Oct-2016 17:28:40		Administrator	125	Dispatcher 'Administrator'			
	04-Oct-2016 17:18:05	Repeater #1	235	All	All Call from '235' (00:02)	Members: 235		
	44 4 Record 8 of 321	> > > >						Þ

- Click **Playback** to play back the selected call.
- Click Save to save the selected call as an audio file.

In the 'Save As' dialog box, locate the folder where you want to save the audio file, specify the file name, and from the drop-down 'Save as type' list, select the format (*.wav or *.tna) for the audio file.

Click Add Note to add a note to the selected call.

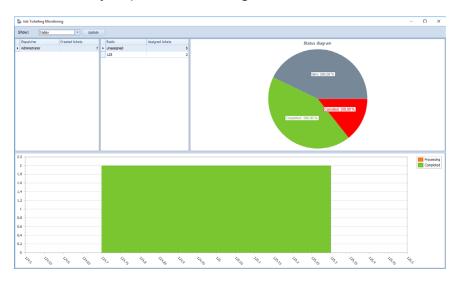
Note		×
Well done		A
		Ŧ
Add Extension	ОК	Cancel

- Enter the text of the note in the text box.
- You can extend the form of a note by clicking the **Add Extension** link and adding new fields and their possible values to the form.



• Tools > Job Ticketing Monitoring

Click this menu item to open the window that visually represents the job tickets created by dispatchers and assigned to radios.



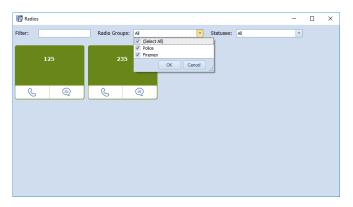
In this window, you can perform the following actions:

- Select a time period for which to display Job Ticketing data.
- Monitor tickets created by dispatchers.
- Monitor tickets assigned to radios.

All data are shown in the form of status diagrams.

• Tools > Radios in Window

Click this menu item to open a new window that displays the radios present in the system.



In this window, you can make radio calls, send text messages. In addition, you can select to display radios by groups and statuses.

• Tools > Telephony in Window

Click this menu item to open a new window that displays the Telephony system present in the system.

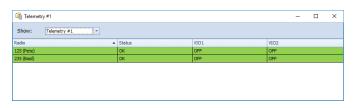


Telephony				-	
1 Finish	Walt	Î	•	*	o 🔹
Hold Forward	00:15	- 11	1	2	3
2			4	5	6
	Line free		7	8	9
Call		- 11	С	0	<
3			<u> </u>	Call	
Call	Line free			Walt	
				235	
4	Line free			125	
📞 Call					

In this window, you can make and receive telephone calls.

• Tools > Telemetry Monitoring

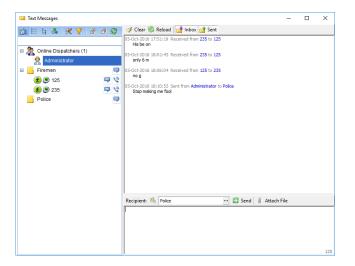
Click this menu item to open the window that displays configured telemetry profiles for the radios.



• From the **Show** drop-down list, select the Telemetry profile to display.

• Tools > Text Messages in Window

Click this menu item to open a new window to manage text messages.



In this window, you can perform the following tasks:

- View sent messages in the in the upper-right pane.
- Select online dispatchers and radio groups in the left pane, or by clicking the ... button in the lower-right pane.
- Type messages in the text box in the lower-right pane.



• Send messages by clicking the **Send** button in the lower-right pane.

• Tools > Routes in Window

Click this menu item to open a new window to manage routes.

For more details on Route Management configuration, see section 6.2, Route Management.

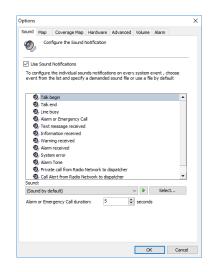
• Tools > Terminate All Transmissions

Click this menu item to terminate all voice sessions.

This action is a "hard" inquiry to stop all transmissions in TRBOnet software and is intended to stop any "hung" transmission in TRBOnet. If a radio communication session does not allow to be interrupted on a repeater or base station, it will be interrupted for TRBOner software only.

6.1.4.1 Options

• On the Tools menu click Options



Sound

- In the **Options** dialog box, click the **Sound** tab.
 - Use Sound Notifications

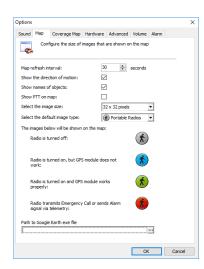
Select this option to enable sound notifications in the Dispatch Console.

- Select the event in the list and specify the sound.
- From the Sound drop-down list, select ether 'Sound by default' to play default sound, or 'Disabled' to disable sound notification for the event.
- Click 🕨 to listen to the sound notification for the selected event.
- Click **Select** and browse for the sound file on your PC.
- Alarm of Emergency Call duration
 Enter the time value, in seconds, for the duration of the alarm tone when an emergency call is received.

Мар

• In the **Options** dialog box, click the **Map** tab.





• Map refresh interval

Enter the time period, in seconds, to update map data.

- Show the directions of motion Select this option to display a direction of motion for map objects.
- Show names of objects Select this option to display object names on the map.
- Show PTT on map

Select this option to allow the dispatcher to make private calls by clicking a corresponding radio icon on the map.

- Select the image size From the drop-down list, select the size of a radio icon.
- Select the default image type From the drop-down list, select the default image type of a radio icon.
- Path to Google Earth exe file Click ... and specify the location of the Google Earth exe file on your PC.

Coverage Map

TRBOnet Dispatch Console allows displaying RSSI levels on a map. The RSSI is a received signal strength indicator. It measures a radio signal loss from the radio. The RSSI maps can be used by radio system engineers to plan a further extension of their radio networks.

In the Options dialog box, click the Coverage Map tab.

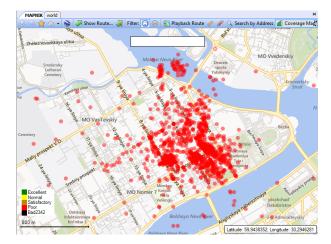


					Luce Lee 1	
ound	Map Cov	erage map	Hardware	Advanced	Volume Alarm	
-	Draw in Dots Draw Coverag		e, m			
	Value (dB)	T De	cription		Color	_
	Volue (ub)	-65 God			YellowGree	20
Þ		-80 Ave			Orange	.
Ė		-co Bad			255, 0, 0	
	Add	Delete			Default	
	Add	Delete	1		Default	

Draw in Dots

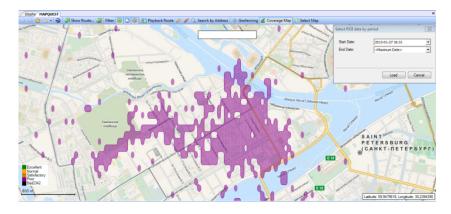
Choose this option to display RSSI levels on the map as dots that represent coordinate points for more a detailed data view.

The RSSI map will be displayed as follows:



Draw Coverage Zone

Choose this option to configure RSSI zone in meters and display on map average data of RSSI level GPS coordinates for more common data view:



RSSI Zone Size

Enter the size, in meters, of an RSSI zone.



- Click Add to add a new RSSI level.
 - Value

Enter the minimum level for the signal range (e.g., -65 means -65 and higher).

• Description

Enter a name of the RSSI level to display in the system.

• Color

Pick the color for RSSI indicator on the map.

To view RSSI levels on the map, click the **Location Tracking** tab and on the Map pane's toolbar, click **Coverage Map**. Then set the Start Date and End Date to display RSSI data.

Hardware

In the **Options** dialog box, click the **Hardware** tab.

iound	Мар	Coverage Map	Hardware	Advanced	Volume	Alarm	
3		rnal hardware op pment to control F					
🗹 Us	e extern	al hardware					
Se	rial port:		COM1			~	
			TRI	BOnet foots	witch		
🛛 Us	e signalir	ng device					
Se	rial port:		COM1			~	
			Confid	ture			
PTT U	SB Devic	e:	Direct	X Device		~	
D	evice Na	me:				~	
PT	T Buttor	n:				~	
Pr	essing ir	dicator:					
First \	oIP port	:	4022		•		
	e proxy : nfigure	server					
Config	gure aud	io devices:					
Pla	yback d	evice (Speaker):	Realte	k Digital Out	put (Real	tek Hij 🗸	
Re	corder d	levice (Mic):	Microp	hone (Logite ture	ch USB H	eadse \vee	
					OK		Can

Use external hardware

Select this option to use external hardware devices, e.g. mic connectors.

• Serial port

From the drop-down list, select the COM port the device is connected to.

• TRBOnet footswitch

Select this option if you are going to use TRBOnet footswitch as a PTT button.

Use signaling device

Select this option to use an external signaling device.

- Serial port From the drop-down list, select the COM port the signaling device is connected to.
- Click **Configure** and specify the duration of a signal and which call types to include in signaling.



Signaling COM port	×
Duration Private Call	10 📩 seconds
Call Alert	
Alam	
	OK Cancel

PTT USB device

From the drop-down menu, select the type of the USB device with a PTT button connected to the PC (DirectX or HID).

Device Name

From the drop-down menu, select the USB device name.

• PTT button

From the drop-down menu, select the available PTT button. Press the PTT button on the USB device. If the device's PTT and the PTT in the Dispatch Console are set up correctly, the **Pressing indicator** will become green.

First VoIP port

Enter the number of the first VoIP port for audio communications (4022, by default). Each additional Dispatch Console will create a connection on the next port number.

Use proxy server

Select this option to enable Proxy Server service in TRBOnet Dispatch Console to access the Internet.

A proxy server can be used when a user's computer cannot be connected directly to the Internet, but there is another computer with Internet access in the network.

• Click the **Configure** link to specify the alternative server settings.

Configure th	e proxy server	Х				
☑ Use an a Settings	alternative server					
Address:	177.71.134.70					
Port:	80					
Authentication						
Login:	User					
Password:						
	OK Cancel					

Configure audio devices

Playback device (Speaker)

From the drop-down list, select the audio device to play incoming voice messages and playback voice recordings in the Dispatch Console;



Recorder device (Mic)

From the drop-down list, select the recording device where the microphone is connected.

- Note: If TRBOnet Dispatch Console 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 Dispatch Console and TRBOnet Server.
- Click the **Configure** link to configure the Recorder device:

Configure Recorder	×
I∕ Use frequency filter]	D
	4000
Min: 0 🔶 Max: 4000 🔶	
ОК	Cancel

✓ Use frequency filter

Select this option to configure the microphone to use the frequency filter to reduce external noise level.

✓ Specify the Min. and Max. values for the frequency filter.

Advanced

• In the **Options** dialog box, click the **Advanced** tab.

Options	×						
Sound Map Coverage Map Hardware Advanced Volume Alarm							
Advanced application options							
Configuration Scope	^						
O Per machine: all dispatchers share the same workspace							
Per user: a separate workspace for each Windows user account							
PTT Options							
Tone and PTT when using external PTT device							
Use Record Mode with external PTT device							
Suggest Queued Message when channel is busy or subscriber radio is offline	- II.						
Enable Short Press PTT (press and release instead of press and hold)							
Use 'Space' button to PTT Configure							
Voice Options							
Mute other dispatchers							
Mute radio-to-radio private calls							
Mute all receive sources during voice input							
Automatically set channel to Solo when transmitting audio							
Automatically unmute channel when transmitting audio							
View Options Customize the automatic subscriber name pattern Configure							
Show extended notes							
Show confirmation dialogs							
Use popup windows to display incoming Text Messages							
Use popup windows to display incoming Text Messages							
Close button minimizes application							
Minimize button minimizes to Voice Bar							
Primitize button minimizes to voice Bar	v						
ОК С	ancel						

Configuration Scope

Per machine

Choose this option to store settings in a common place for all dispatchers of the Dispatch Console.

Per user

Choose this option to store settings for each dispatcher separately if they are using different Windows user accounts.



PTT Options

Tone and PTT when using external PTT device

Select this option to enable Alert Tone for all subscribers on a channel when the dispatcher presses the PTT button on an PTT external device.

- Use Record Mode with external PTT Select this option to record all voice transmissions from external PTT devices (Palm mics, Footswitches, etc.).
- Suggest Queued Message when channel is busy or subscriber radio is offline

Select this option to record a TX Queued Voice Message when a radio channel is busy or subscriber is offline (see TX Passive configuration page);

Enable Short Press PTT

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

Use 'Space' key to press PTT

Select this option to use a hot key for the PTT. Click the **Configure** link and on the keyboard, press the key you want to assign as a hot key for the PTT button.

Voice Options

Mute other dispatchers Select this option to mute all other dispatchers voice transmissions.

- Mute radio-to-radio private calls
 Select this option to mute all private calls on the channel.
- Mute all receive sources during voice input Select to mute all Voice Notifications when Dispatcher transmits or records audio.
- Automatically set channel to Solo when transmitting audio
 Select this option to mute other channels when transmitting audio.
- Automatically unmute channel when transmitting audio
 Select this option to automatically unmute a channel when transmitting through this channel.

View Options

Customize the automatic subscriber name pattern
 Select this option and click the Configure link to set a custom alias for a radio in the list of subscribers.



splay Formats		
Radio display name:		
%NAME%		•
Example: My Radio		
Allocated radio display	name:	
%NAME% (%OWNER	%)	
Example: My Radio (Joł	hn Smith)	
Allocated radio display (the owner has more t		
%NAME% (%OWNER	%)	•
Example: My Radio (Joł	hn Smith)	
	-	
Defaults	OK	Cancel

• Radio display name

Click ... and in the Format dialog box pick the fields to display for a radio.

ermat		×
		_
%NAME% (%CHANNEL%)		
Example: My Radio (Master Station / Channel)		
Add Field:		
Radio Callsign		
Radio Owner name		
Radio ID		
Active Channel		
Plate Number		
<u>Make</u>		
Phone Number		
Email		
	OK Cano	cel

• Allocated radio display name

Click ... and in the Format dialog box pick the fields to display for an allocated (taken) radio.

Allocated radio display name

(the owner has more than one radio)

Click ... and in the Format dialog box pick the fields to display for an allocated (taken) radio in case when a user has more than one radio.

• Click **Defaults** to set default settings for radio display.

Show extended notes

Select this option to enable Extended Notes in the Dispatch Console.

The Extended Notes feature is intended to add predefined Extended Notes templates, the same as for Extended Messages, for the selected calls and events.

E.g., a Taxi Dispatcher needs to check clients' calls response period for the company internal monitoring of the employees. They can add a predefined template and check the time period. All Extended Notes are displayed in the Extended Notes column:



Di	ate ▽	Radio System	Sender	Recipient	Message	Ext. Note	Note
2 7/	7/2014 3:49:56 AM		Radio 11	All	Geofencing Alarm [Dat		
決 7/	7/2014 3:49:56 AM		Radio 11	All	Radio left allowed region		1
1/	7/2014 3:47:52 AM	Repeater #1 Slot 1	Radio 105	Dispatcher	Administrator Accept		1
2 7/	7/2014 3:41:24 AM	Repeater #1 Slot 1	RadioServer	Radio 105	Telemetry status cann		
1/	7/2014 3:40:16 AM		Administrator	All	test		
7/	7/2014 3:39:08 AM	Repeater #1 Slot 1	Radio 105	Unknown group: 1010	Radio 'Radio 105' calls	View	
決 7/	7/2014 3:32:55 AM		Administrator	Radio 105	Dispatcher 'Administra		
決 7/	7/2014 3:18:43 AM		105	All	On Duty		> 2
2 7/	7/2014 12:56:40 AM	Intercom	Dispatcher 1	All	Intercom Call: Dispatc		2
2 7/	4/2014 4:01:35 AM	Intercom	Dispatcher 1	All	Intercom Call: Dispatc		
	4 Record 54 of 83	Tabayanaya	A distance of the	A.0	tata and the second		

Click the **Extended Notes** button (1) to fill the template;

Click the View button (2) to see the Extended Note.

Show confirmation dialogs

Select this option to enable confirmation dialogs for dispatcher actions (e.g. when sending a configured Voice Message from the Dispatch Console).

Use popup windows to display incoming Text Messages

Select this option so that incoming Text Messages will pop up over the application window.

File View Map Tools Help		
Voice Dispatch	Radio Interface	
🚮 🗄 h 👶 🛠 🍸 🖉 🖉 🛇	Radio Interface Recent Cals/Events	
	Active Calls	X Quick Commands X
🛛 🔂 Cleaners 🗖		
		P Test
B 📑 Firemen 📮	Message 1 of 1 X	We are on fire
🗶 🧭 111 🛛 📮 😒 💻		A Configure
💰 🖲 125 (Pete) 🛛 📮 😒		Queued Messages
🚯 🖓 222 🔲 😅 💌	1 lext message	
Voice Dispatch	Message: 18-Nov-2016 13:53	To: Selected Changels
Voice Dispatch	olay	Start Voice Message
Location Tracking		Start voice Message
		Voice Message
200 Ticketing	nnel	Voice Message
The second		
Route Management	Do not show this message next time Show on map	Cross Patch 🔀
	Request Location	Drag and Drop PTT Box here to
RFID Tracker	Corev Next>>> Core	create new group Y
	Recent Calls/Events	<u> </u>
Text Messages	🕮 Playback 📓 Save - 🎃 Print 🛛 🛚 Pause 🕩 Clear - 🥘 Reload 🏻 🌇 Filter By Radio 🗮 Groupi	ing 🍸 Auto Filter 🍥 Default Settings
	Date Radio System Sender Recipient Message D	Details Note
🔓 Voice Recording	2 18-Nov-2016 13:53:53 CapacityPLUS 125 All okay	
*	al 18-Nov-2016 13:51:19 CapacityPLUS Server 125 Call Queued	
Event Viewer	2 18-Nov-2016 13:49:08 CapacityPLUS 125 All Subscriber '125' has sent	
	18-Nov-2016 13:47:10 CapacityPLUS 125 All ok	
(1) Radio Allocation	18-Nov-2016 13:45:35 CapacityPLUS 125 All LG 39 18-Nov-2016 13:39:37 235 All Reset Geofencing Alarm	
-	14 44 4 Record 1 of 655 F H HK 4	
Administration	Recent Calls/Events Recent Calls Request to Talk Radio State Active Tasks Active Routes User A	ctivity Map
🔂 127.0.0.1 🍓 🍓 🙎 Administrator 📑 Li	ensed to: demo Demo License	📑 1 🔮 Active -

Use popup windows to display incoming Request to Talk
 Select this option so that incoming Request to Talk messages will pop up over the application window.

Request to Tal	k		
2	125 The Request to T You must accept of		eived.
	Accept	Reject	Queue

Close button minimizes application

Select this option so that clicking the Close button will minimize the Dispatch Console rather than close it.

Minimize button minimizes to Voice Bar

Select this option so that once you click the Minimize button you will see only the Voice Bar displayed.



Max items in "Recent calls/Events"

Enter the maximum number of items to display in the **Recent calls/Events** pane.

- Measurement system
 From the drop-down list, select either the Metric or the US unit system.
- Coordinate system

From the drop-down list, select the coordinate system to be used.

• On Map

Select this option to display coordinates on the map.

Volume

In the **Options** dialog box, click the **Volume** tab.

Sound	Мар	Coverage	Мар	Hardware	Advanced	Volume	Alarm	
Se	lected c	hannel:	_			De	faults	
F	layer:		Def	ault			-	
S	ipeaker:		Left	and Right			-	
N	olume:		Ξ		-0		\oplus	
Un	selecte	d channel				De	faults	
F	layer:		Def	ault			-	
s	ipeaker:		Left	and Right			-	
×	olume:		Θ		-0		\oplus	
Int	ercom:					De	faults	
F	layer:		Def	ault			-	
s	peaker:		Left	and Right			-	
	olume:		Θ		-0-		\oplus	
SI	• Interc	onnect:				De	faults	
F	layer:		Def	ault			-	
s	peaker:		Left	and Right			-	
	olume:		Θ		-0-		+	
Sy	stem so	unds:			Ť	De	faults	
F	layer:		Def	ault			-	
s	peaker:		Left	and Right			-	
	olume:		Θ		-0-		+	
Au	dio play	er:			~	De	faults	
	laver:		Def	ault			-	

- Customize Selected channel speakers and volume parameters.
- Customize Unselected channel speakers and volume parameters. This option is intended for radio channels which are not selected in Dispatch Console.
- Customize Intercom speakers and volume parameters. This option is intended for Intercom Voice session between the dispatchers.
- Customize System sounds speakers and volume parameters.
 For the list of system sounds, see section <u>Sound</u>.
- Customize SIP Interconnect speakers and volume parameters. This option is intended for SIP calls.

Alarm

• In the **Options** dialog box, click the **Alarm** tab.



Radio in alarm mode in new window

Select this option to display a radio in alarm mode on the selected map in a new window.

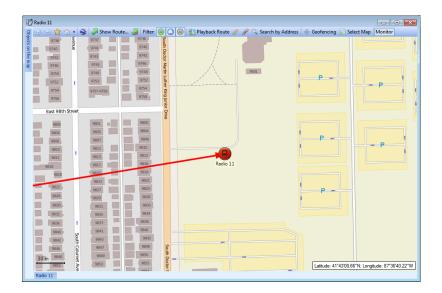
• Map

This field displays the map name. Click the **Select map** link and specify the map on which to display a radio in alarm mode.

Always show radio in alarm mode on map

Select this option so that radios in alarm mode will always be displayed on the map.

Note: When this option is selected, you cannot disable the display of radios in alarm mode.



6.1.4.2 Exporting/Importing Options

A dispatcher can export custom Dispatch Console settings (Volume level, UI view, hotkeys configuration, etc.) as a .config file and save it to the local PC or to a selected external device.

• Click **Tools > Export Options** and save the file to the specified location.



If you want to apply settings from a different TRBOnet Dispatch Console:

Click **Tools** > **Import Settings** and browse for the .config file with the desired settings.

6.1.4.3 Setting Language

• On the **Tools** menu, click **Set Language**

Select Langua	ge	×
Language:	English	
	OK Cancel	

• From the drop-down list, select the desired language and click **OK**.

The changes will apply after you restart the Dispatch Console.

6.1.4.4 Changing Password

• On the Tools menu, click Change Password

Change Password	×
Change Pass	sword
Old password:	••••
New password:	•••••
Repeat password:	•••••
	OK Cancel

- In the **Old password** box, enter your current password.
- In the **New password** box, enter the new password.
- In the **Repeat password** box, enter the new password again.
- Click OK.

6.1.5 Help

• Help > Send Feedback

Click this menu item to send your feedback to Neocom Software, either through E-mail, or online via the site.

• Help > Save System Logs

Click this menu item to save the logs as a .zip file. This .zip file can then be sent to Neocom support.

• Help > About

Click this menu item to see the About dialog displaying information about TRBOnet PLUS (applied license, version, build date, etc.).

6.2 Route Management

The Route Management feature allows the user to create routes and assign them to selected radio subscribers or dispatchers.



File View Map Tools Help	
Route Management	Route Management
📴 🗄 😫 🗶 🍸 🖉 a 💡	✓ Intercom
€ ⊗ Radio 204 ➡ ♥ ▲ □	
🚯 🕑 111 📮 🔍 🗐	Name Route
€ 222 ₽ ♥ € 235 (Basil) ₽ ♥	Route 1 9:00 9:30 10:00 10:40 Test route Point 1 Point 2 Coffee Fire dep
Radio 200 Radio 200 Radio 201 Radio 201	2
Voice Dispatch	-
Location Tracking	
🔡 Job Ticketing	1
😥 Route Management	H (4 Record 1 of 1) () () () () () () () () ()
RFID Tracker	🕨 Start 11 Pause 📕 Stop 📑 Edit 🚳 Export 🗸 🗮 Grouping 🍸 Auto Filter 🗇 Default Settings
Text Messages	Name Route Route1 00:02 9:00 9:30 10:00 10:40 125 Pete)
Dice Recording	18-Nov-2016 14:03 Point 2 Coffee Fine dep
Event Viewer	
Radio Allocation	₩ 4 4 Record 1 of 1 > >> >> +> +> +> ++ + + + + + + + + +
🚺 127.0.0.1 🛞 🥵 🤦 345 📑 Licensed t	to: demo Demo License 📑 3 🥑 Active 🗸

• Click the Route Management tab (1).

6.2.1 Creating a Route

• Click the **Create** button (2) to create a new route.

ute		
Name:	Route 1	
Description:	Test route	
Rule:	All checkpoints, strict order, strict schedule	
	,	
	oute Points Checkpoint Statuses Notifications Tags	
Start Route		
Manually by dis		
Automatically b	y receiving Text Message from a radio	
Message:	12	
	y receiving Telemetry Command from a radio	
10.	1 Command: Any event	
	y receiving DTMF command from a radio	
Command:	123 #123#	
	y receiving Status from a radio	
Didicity:	0	
Wait for confi	irmation from a radio	
Pause Route		
Resume Route		:
Finish Route		3
Manually by display the second sec		
Automatically b	y receiving Text Message from a radio	
Message:		
	y receiving Telemetry Command from a radio	
410.	1 Command: Any event	
	y receiving DTMF command from a radio	
Command:		
	y receiving Status from a radio	
Status:	0	
Automatically at	fter all points have been attended	
Limit route p	rocessing time	
	0 h 0 m	
Max. Time:		
Max. Time:		

• Name

Specify a name for the route to display in the route list.

• Description

Add a description for the route.

• Rule

Select the type of the rule from the drop-down-list:

• All checkpoints, strict order, strict schedule

Checkpoints are to be attended in the specified order, each within a specified time range.



All checkpoints, strict order, loose schedule

Checkpoints are to be attended in the specified order. The time for attending each checkpoint is not limited.

- All checkpoints, loose order, loose schedule
 Checkpoints can be attended in any order, each at any time.
- Click the Start/Stop Rules tab.

Start Route

Specify the rules to start the route.

Manually by dispatcher

This option is enabled by default and cannot be edited. This option enables the dispatcher to start the route by clicking the **Start** button in the **Route Management** tab or in the **Active Routes** pane.

Automatically by receiving Text Message from a radio

The route starts when the radio sends a specified text message to TRBOnet Server. If you select this option, specify a brief text message in the **Message** box.

Automatically by receiving Telemetry Command from a radio

The route starts when the user presses a preconfigured button on the radio and TRBOnet Server receives a telemetry command from the user's radio. If you select this option, specify the **VIO** contact, and from the **Command** drop-down list, select the signal level at which the user's radio should send the telemetry command.

Automatically by receiving DTMF command from a radio The route starts when the user sends a specified DTMF command to TRBOnet Server, for instance, #11#. If you select this option, specify the DTMF combination without the # characters in the Command box.

Automatically by receiving Status from a radio

The route starts when the user sends the specified Status to TRBOnet Server, for instance, 1. If you select this option, specify the **Status**.

Wait for confirmation from a radio

Select this option to delay the start of a route until a confirmation from the radio is received. In this case, the route is assigned to the radio or user and paused. The route can then be resumed.

Pause Route

Specify the rules to pause the route.

Resume Route

Specify the rules to resume the route.

Finish Route

Specify the rules to finish or stop the route.

Automatically when all points have been attended

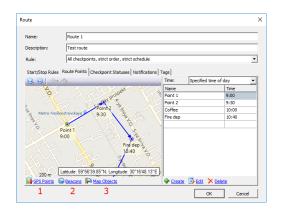
Select this option so that the route is finished automatically when all checkpoints have been attended.



Limit route processing time

Select this option, and specify the maximum allowed time in the **Max. Time** box. If the time is exceeded, the route will stop automatically. All unattended checkpoints automatically change their statuses from 'Waiting' to 'Not Attended'.

• In the **Route** dialog box, click the **Route Points** tab.



• Click the **GPS Points** link (1) to add points to the selected map:

Select Map				×
Map Type:	Online maps			~
Caption:	Му Мар			
Available Maps				
Name	Path			State
MAPNIK				ОК
CYCLE				OK
TRANSPORT				OK
LANDSCAPE				OK
BING_ROAD				OK
BING_AREA				ОК
BING_HYBRID				OK
Add	Edit	Remove	ОК	Cancel

- Select the map. For more details on map types, see <u>Map Types</u> section.
- Click the **Create** link or double-click a selected point on the map to create a new route point:

Point properties	×
Name:	Bank
Location:	Latitude: 59°56'35.20"N; Longitude: 30°16'4 💌
Radius:	10 meters
□ Intermediate	way point (not served)
Time:	15:00
Time delta:	5 minutes
	OK Cancel

Name

Specify a name for new point to display on the map.

Location

This box displays the current GPS coordinates of new point.



Radius

Specify the radius within which to consider the point as attended.

- Intermediate way point (not served)
 - Select this option to exclude the point from being used as a checkpoint.
- Time

Specify the time the point is to be attended at.

Time delta

Specify the time accuracy to attend the point.

- Click **OK** to add the new point.
- Click the **Beacons** link (2) to add a beacon as a checkpoint.

Note: To enable the **Indoor** feature, make sure your license includes **Indoor Positioning** (see <u>License information</u> page) and **Indoor Service** is selected in the list of available services (see <u>Services</u>).

ute					
Name:	Route 1				
Description:	Test route				
Rule:	All checkpo	nts, strict order, strict sch	edule		
Start/Stop Rules	Route Points	Checkpoint Statuses Not	ifications Tags		
🖗 Beer			Time:	Specified time of	day
Coffee			Name		Time
🥪 Tea			Point 1		9:00
			Point 2		9:30
			Coffee		10:00
			Fire dep		10:40
			Tea		10:50
GPS Points (🗟 Beacons 🖡	A Map Objects	P Create	: 📑 Edit 🗡 Dek	ate
				ОК	Cancel

• Click the **Create** link and then click a beacon in the list.

Point properties	×
Name:	Coffee
Beacon:	Coffee 💌
Radius:	meters
Intermediat	e way point (not served)
Time:	10:00
Time delta:	5 minutes
	OK Cancel

• Click the **Map Objects** link to add a map object as a checkpoint.



Name:	Route 1						-
vame:	Route 1						
Description:	Test route						
Rule:	All checkpoin	its, strict order, strict sc	hedule				•
Start/Stop Rules	Route Points	Checkpoint Statuses No	tifications Tag	s			
Abiding place			T	me:	Specified time o	f day	•
🖸 Fire dep			N	ame		Time	_
Hospital No2			P	Point 1		9:00	
Police department	ent No 1			Point 2		9:30	
			G	offee		10:00	
			Fi	re dep		10:40	
	> 0-	Map Objects			🛃 Edit 🗙 De		

• Click the **Create** link and then click an object in the list.

int properties		
Name:	Fire dep	
Map Object:	🛐 Fire dep	•
Radius:	10 🔹 meters	
Intermediat	way point (not served)	
Time:	10:40	
Time delta:	5 🛨 minutes	
	ок	Cancel

• In the **Route** dialog box, click the **Checkpoint Statuses** tab.

loute	
Name:	Route 1
Description:	Test route
Rule:	All checkpoints, strict order, strict schedule
Start/Stop Rules	Route Points Checkpoint Statuses Notifications Tags
Set state	is to Attended:
_	
	dio enters the point area
	Ition when radio is in the point area
Aut	comatically by receiving Text Message from a radio
	ssage: Yep, I'm here
Aut	comatically by receiving Telemetry Command from a radio
VIC	
_	comatically by receiving DTMF command from a radio
	nmand:
Aut	comatically by receiving Status from a radio
Sta	tus: 0 🜲
Statuses	that can be set by dispatcher: Waiting, Attended, U 💌
🗹 Set state	is to Alarm:
Aut	tomatically by receiving Text Message from a radio
Me	isage:
Aut	tomatically by receiving Telemetry Command from a radio
VIC	1 🗘 Command: Any event 💌
🗹 Aut	tomatically by receiving DTMF command from a radio
Cor	nmand: 5 #5#
Aut	tomatically by receiving Emergency from a radio
Em	g. Type: Emergency Alarm
Aut	comatically by receiving Status from a radio
Sta	tus: 0 💠
	OK Cancel

• Set status to Attended

Select this option so that TRBOnet Server will change the checkpoint status to 'Attended' based on the information from the radio.

When the radio enters the point area

Choose this option so that the radio detects the closest beacon and sends location data to TRBOnet Server. The respective checkpoint changes its status to 'Attended ' automatically.



By condition when the radio is in the point area

If this option is chosen, the radio sends a preconfigured command to TRBOnet Server. The last detected checkpoint changes its status to 'Attended ' by this command. Configure the preferred command(s):

- Automatically by receiving Text Message from a radio Select this option so that the checkpoint is considered to be attended after the dispatcher receives a text message with the specified text from a radio. If you select this option, specify a brief text message in the Message box.
- Automatically by receiving Telemetry Command from a radio Select this option so that the checkpoint is considered to be attended after the dispatcher receives a specified telemetry command from a radio. If you select this option, specify the VIO contact, and from the Command drop-down list, select the signal level at which the user's radio should send the telemetry command.
- Automatically by receiving DTMF command from a radio Select this option so that the checkpoint is considered to be attended after the dispatcher receives a specified DTMF command from a radio, for instance, #11#. If you select this option, specify the DTMF combination without the # characters in the **Command** box.

• Statuses that can be set by dispatcher

Select this option to allow the Dispatch Control operator to manually change the status of checkpoints in the **Active Routes** panel.

In the drop-down list, select the checkpoint statuses to be available for the operator: Waiting, Attended, Unattended, and Alarm.

• Set status to Alarm

Select this option to allow the radio to set an alarm on the attended checkpoint. Configure the command(s) that can set the checkpoint status to 'Alarm'.

Automatically by receiving Text Message from a radio Select this option to set the point to alarm mode after the dispatcher receives a text message with the specified text from a radio. If you select this option, specify a brief text message in the Message box.

Automatically by receiving Telemetry Command from a radio Select this option to set the point to alarm mode after the dispatcher receives a specified telemetry command from a radio. If you select this option, specify the VIO contact, and from the Command drop-down list, select the signal level at which the user's radio should send the telemetry command.

• Automatically by receiving DTMF command from a radio

Select this option to set the point to alarm mode after the dispatcher receives a specified DTMF command from a radio. If you select this option, specify the DTMF combination without the # characters in the **Command** box.



Automatically by receiving Emergency from a radio

Select this option to set the point to alarm mode after the dispatcher receives an Emergency from a radio.

• Emg. Type

Select the Emergency type from the drop-down list.

• In the **Route** dialog box, click the **Notifications** tab to manage notifications to a radio.

Name: Route 1 Description: Test troute Rule: All checkpoints, strict order, strict schedule Start/Stop Rules] Route Points [Checkpoint Statuses] Tops] Vacance works of the seage on route assign to rado Test Message: Version and works on route assign to rado Test Message: Version and works Start (RouteName); (RouteName); Version and works Start (RouteName); Version and the seage on route assign to rado Test Message: Version and the state on route assign to rado Test Message: Version a Test Message on route statet Test Message: Test Message: The (RouteName) is resumed Version a Test Message on route resume Test Message: Test Message: The (RouteName) is finahed Version a Test Message on route resume Service (PointName) is finahed Version a Test Message: The (RouteName) is finahed Version a Test Message: The (RouteName) is finahed Version a Test Message: The (PointName) is served. Version a Test Message: The (PointName) is served. Version a Test Message off point is not attendedd Test Mes	ute		
Rule: All checkpoints, struct order, struct schedule Start/Stop Rules: Route Points Start/Stop Rules: Route Points Start/Stop Rules: Route Points Of an entity Point/Rancy, Point/Rancy, PlextPoint/Rancy, PlextPoint/Rancy Image: Assign (RouteRhame), PlextPoint/Rancy, PlextPoint/Rancy Image: Assign (RouteRhame), PlextPoint/Rancy Image: Start (RouteRhame) Image: Thet (RouteRhame) is supervised Image: Thet (RouteRhame) is finished Image: Thet (RouteRhame) is Supervised Image: Serve (PointBhame) is Supervised Image: Thet (PointBhame) is Supervised Image: Thet (PointBhame) is Supervised. Image: Thet (PointBhame) is supervised. Image: Thet (PointBhame) is supervised. Image: Thet (PointBhame)	Name:	Route 1	
Seriel Starkes Route Parks (Deedpoint Statuses Notifications) Tage [You can use vanishes in fact message:	Description:	Test route	
Pour care use vanables in fact message: (Revelational), (PointTime), (PointShink), (PointShink), (PointShink), Send a Text Message on route assign for cado If Send a Text Message on route assign (RouteName), Send a Text Message on route assign (RouteName), Send a Text Message on route assigned Text Message: Start (RouteName) Send a Text Message on route assigned Text Message: The (RouteName) is supended Send a Text Message on route reame Text Message: The (RouteName) is supended Send a Text Message on route reame Text Message: The (RouteName) is resumed Send a Text Message on route reame Text Message: The (RouteName) is resumed Send a Text Message on route reame Text Message: The (RouteName) is finished Send a Text Message when approaching attendance the The Message: The (RouteName) is finished Send a Text Message when approaching attendance the The Message: Senve (PointName) at (PointTime) Send a Text Message the point as takended Text Message: The (PointName) is served Send a Text Message: The (PointName) is served Served a Text Message: The (PointName) is not served For the last point is not attended Text Message: The (PointName) is not served Served Send a Text Message if point is not attended Text Message: The (PointName) is not served Served	Rule:	All checkpoints, strict order, strict schedule	
(Routekame), Pointme), PlantBame), PlantBame), PlantBame) ✓ Send a Text Message on route start Text Message: Sam (Routekame) ✓ Send a Text Message on route start Text Message: Sam (Routekame) ✓ Send a Text Message on route start Text Message: Sam (Routekame) ✓ Send a Text Message on route start Text Message: Time (Routekame) is supended Text Message: Time (Routekame) is resumed ✓ Send a Text Message on route resume Text Message: Text Message: Time (Routekame) is resumed ✓ Send a Text Message on route fish Text Message: Text Message: Time (Routekame) is fishahed ✓ Send a Text Message on route fish Text Message: Text Message: Serve (PointBame) is fishahed ✓ Send a Text Message after point is aborded Text Message: ✓ Send a Text Message: Serve (PointBame) is served. ✓ Send a Text Message: Time (PointBame) is served. ✓ Send a Text Message: Time (PointBame) is served. ✓ Send a Text Message: Time (PointBame) is served. ✓ Send a Text Message: Time (PointBame) is served. ✓ Send a Text Message (fippint is	Start/Stop Rules Ro	ute Points Checkpoint Statuses Notifications Tags	
Text Message: Assign (Routerlame) Image: Start (Routerlame) Start (Routerlame) Image: Start Routerlame) Start (Routerlame) Image: Start Routerlame) Start (Routerlame) Image: Start Routerlame) Image: Start Routerlame) Image: Start Routerlame Image: Start Routerlame Image: Start Routerlame Image: Start Routerlame Image: The Quantitiane) is served. Next is (NextPointName) at (NextPointTime) Image: The Quantitiane) is served. Image: The Quantitiane) is served. Image: The Quantitiane) is served. Image: The Quantitiane) is not served. Image: The Quantitiane) is not served. Image: The Routerlame			
✓ Send a Text Message on route start Text Message: Start (BouteName) is superided ✓ Send a Text Message on route superid Text Message: The (RouteName) is superided ✓ Send a Text Message on route resume Text Message: The (RouteName) is resumed ✓ Send a Text Message on route resume Text Message: The (RouteName) is resumed ✓ Send a Text Message on route finish Text Message: The (RouteName) is finished ✓ Send a Text Message when apcroaching attendance the The before attendance: Sorie (RouteName) is finished ✓ Send a Text Message is point is not attended Text Message: Text Message: The (PointName) is served. Next is (NextPointName) at (NextPointTime) For the last point: The (PointName) is not served. ✓ Send a Text Message: The (PointName) is not served. ✓ Send a Text Message: The (PointName) is not served. ✓ Send a Text Message if point is not attended Text Message: Text Message: The (PointName) is not served.	🔽 Send a Text Me	ssage on route assign to radio	
Text Message: Start (lioutaliame) If end a Text Message on route supperd Text Message: The (SouteName) is superneded If end a Text Message on route resume Text Message: The (SouteName) is resumed If end a Text Message on route finish Text Message: The (SouteName) is finaled If end a Text Message on route finish Text Message: The (SouteName) is finaled If end a Text Message when approaching attendance the The dest Message: Serve (FoinName) at (PointTime) If end Text Message: Serve (FoinName) at served. If end Text Message: The (PointName) is not served. If end Text Message: The (PointName) is not served. If end Text Message: The (PointName) is not served.	Text Message	Assign {RouteName}	
✓ Send a Text Message on route suspend Text Message: The (RouteName) is suspended ✓ Send a Text Message on route resume Text Message: The (RouteName) is resumed ✓ Send a Text Message on route resume ✓ Send a Text Message on route resume ✓ Send a Text Message when approaching attendance time The (RouteName) is finished ✓ Send a Text Message when approaching attendance time The Before attendance: ✓ Send a Text Message after point attended Text Message: The (PointName) is served. Next is (NextPointName) at (NextPointTime) ✓ Send a Text Message: The (PointName) is served. ✓ Send a Text Message: The (PointName) is served. ✓ Send a Text Message: The (PointName) is not served. ✓ Send a Text Message: ✓ Send a Text Message if point is not attended Text Message: ✓ Send a Text Message if point is not attended ✓ Send a Text Message if point is not attended ✓ Send a Text Message if point is not attended ✓ Send a Text Message if point is not attended	🔽 Send a Text M	ssage on route start	
Text Message: The (RouteName) is supended Image: Text Message: The (RouteName) is resumed Image: Text Message: The (RouteName) is resumed Image: Text Message: The (RouteName) is finished Image: Text Message: The (RouteName) is finished Image: Text Message: The (RouteName) is finished Image: Text Message: Serve (PointName) is finished Image: Text Message: Serve (PointName) is finished Image: Text Message: The (PointName) is Served. Next is (NextPointName) at (NextPointName) at (NextPointName) is served. Image: The (PointName) is not served. Image: Text Message: The (PointName) is not served. Image: Text Message: The (PointName) is not served. Image: Text Message: Text Message: The (PointName) is not served. Image: Text Message: The PointName Text Message: The PointName Text Message: The PointName Text Message: Text Messa	Text Message	Start (RouteName)	
IF Send a Text Message on route resume Text Message: The (Southame) is resumed IF Send a Text Message on route finish Text Message: The (Southame) is finished IF Send a Text Message when approaching attendance time Time Heating at the sender of the sender o	🔽 Send a Text Me	ssage on route suspend	
Text Message: The (RouteName) is resumed Image: The (RouteName) is finished Text Message on route finish The (RouteName) is finished Image: The (RouteName) is finished Image: The RouteName) is finished Image: Servic Quantitation time Time before attendance: Servic Quantitation (Quantitation) at Quantitation (Quantitation) Image: Servic Quantitation) at Quantitation (Quantitation) Image: The Quantitation) is served. Image: The Quantitation) is not served.	Text Message	The {RouteName} is suspended	
Send a Text Message on route finish Text Message: The (RouteName) is finished Send a Text Message information approaching attendance time The before attendance: Send a Text Message information approaching attended Text Message: The (PointName) is served. Next is (NextPointName) at (NextPointTime) For the last point: The (PointName) is served Send a Text Message if point is not attended Text Message: The (PointName) is not served Send a Text Message if point is not attended Text Message: The (PointName) is not served Send a Text Message if point is not attended Text Message: The (PointName) is not served Send a Text Message if point is not attended	Send a Text M	ssage on route resume	
Text Message: The (RouteName) is finished Image: Send a Text Message when approaching attendance time Time before attendance: Image: Sender S	Text Message	The {RouteName} is resumed	
Text Message: The (RouteName) is finished ✓ Send a Text Message when approaching attendance time Time before attendance: Serve (PointBame) at (PointTime) Text Message: Serve (PointBame) as served. Next is (NextPointHame) at (NextPointTime) ✓ Send a Text Message: The (PointBame) is served. ✓ Send a Text Message: The (PointBame) is served. ✓ Send a Text Message: The (PointBame) is served. ✓ Send a Text Message: The (PointBame) is not served. ✓ Send a Text Message: The (PointBame) is not served. ✓ Send a Text Message: The (PointBame) is not served.	Sand a Tayt M	erana on route finish	
✓ Send a Text Message when approaching attendance time Time before attendance: Image: Service (PointName) at (PointTime) ✓ Send a Text Message: Text Message: Text Message: The (PointName) is served. Next is (NextPointName) at (NextPointTime) ✓ Send a Text Message if point is not attended Text Message: The (PointName) is served. ✓ Send a Text Message if point is not attended Text Message: The (PointName) is served. ✓ Send a Text Message if point is not attended Text Message if point is not attended Text Message if point is not attended		-	
Time before attendince: 5 1 minutes Text Message: Serve (PointName) at (PointTime) ✓ Send a Text Message after point is attended Text Message: The (PointName) is served. Next is (NextPointName) at (NextPointTime) For the last point: The (PointName) is served. ✓ Send a Text Message if point is not attended Text Message: The (PointName) is not served. ✓ Send a Text Message if point is in alternided Text Message: The (PointName) is not served.			
Text Message: Serve (PointHame) at (PointTime) Serve a Text Message after point is attended The (PointHame) is served. Next is (NextPointHame) at (NextPointTime) For the last point: The (PointHame) is served Send a Text Message: The (PointHame) is served Send a Text Message: The (PointHame) is served Send a Text Message: The (PointHame) is not served Send a Text Message: The (PointHame) is not served Send a Text Message: The (PointHame) is not served			
Text Message: The (PointHame) is served. Next is (NextPointHame) at (NextPointTime) For the last point: The (PointHame) is served Send a Text Message if point is not attended Text Message: Text Message if point is not attended Send a Text Message if point is not attended Send a Text Message if point is in alarm mode Send a Text Message if point is in alarm mode	Text Message	Serve {PointName} at {PointTime}	
For the last point: The (PointNiame) is served Image: Send a Text Message if point is not attended The (PointNiame) is not served Text Message: The (PointNiame) is not served Image: Send a Text Message if point is in alarm mode The (PointNiame) is not served	Send a Text Me	ssage after point is attended	
Send a Text Message if point is not attended Text Message: The (PointName) is not served Send a Text Message if point is in alarm mode	Text Message	The {PointName} is served. Next is {NextPointName} at {NextPointTim	ie}
Text Message: The (PointName) is not served ✓ Send a Text Message if point is in alerm mode	For the last po	nt: The {PointName} is served	
₩ Send a Text Message if point is in alarm mode	🔽 Send a Text M	ssage if point is not attended	
	Text Message	The {PointName} is not served	
Text Message: Alarm on (PointViame)	🔽 Send a Text M	ssage if point is in alarm mode	
	Text Message	Alarm on {PointName}	

- Note: To enable an option, select the checkbox. The Text Message boxes already include text. If necessary, replace the text with your own text, using variables as placeholders that will be substituted with actual data.
- Send a Text Message on route assign
 Select this option to inform a radio holder that the route is assigned to.
- Send a Text Message on route start
 Select this option to inform a radio holder that the route started.
- Send a Text Message on route suspend Select this option to inform a radio holder that the route is suspended.
- Send a Text Message on route resume Select this option to inform a radio holder that the route is resumed.
- Send a Text Message on route finish Select this option to inform a radio holder that the route is finished.
- Send a Text Message when approaching attendance time Select this option to inform a radio holder that the next checkpoint is expected in the time interval specified in the Time before attendance box. This message is only available for routes with the specified attendance time.



- Send a Text Message after point is attended Select this option to confirm attending a checkpoint.
- Send a Text Message if point is not attended
 Select this option to notify a radio holder if the point was not attended.
- Send a Text Message if point is in alarm mode
 Select this option to notify radio holder if the point is in alarm mode.
- Click **OK** to save settings.

The new route is added to the route list (1):

6.2.2 Starting a Route

File View Map Tools Help		
Route Management	Route Management	5
die 1: 8 % 7 0 0 -	V Intercom	
🚯 🕑 Radio 204 📮 😒 🏠	✔ Group 10 ■ ● ● Ø ✔ Group 20 ● ● ● Ø Ø ● ● ■ Private Cal ■ ● ● ●	0
🕏 🕑 111 🛛 📮 😒	🕨 🕨 Start 📑 Create 📑 Edit 📑 Copy 🌒 Export 🗸 📴 Delete 🛛 🗮 Grouping 🍸 Auto Filter 🗇 Default	Settings
💰 🕒 125 (Pete) 🛛 📮 📎 🗮		
🗶 🧭 222 📃 🔍	Route 1 9:00 9:30 10:00 10:40	
😥 🧶 235 (Basil) 🛛 📮 🔌	Point 1 Point 2 Coffee Fire dep	
🖈 🎯 Radio 200 🛛 📮 🔌		
A Padia 201	2	
Voice Dispatch		
Location Tracking	1	
Job Ticketing		
Route Management	Mill Image: Active Routes	Þ
RFID Tracker	Konve Koures Start II Pause Stop Stort Koures Koures Grouping Y Auto Filter Default Settings	
	Name Route	
Text Messages	▶ Route 1 00:47 9:00 9:30 10:00 10:40 125 (Pete)	
🔮 Voice Recording	125 (Pete) 2007 2016 14:03 Point 1 Point 2 Coffee Pire dep	
Event Viewer		
[행] Radio Allocation	H4 44 4 Record 1 of 1 > >> >> >> +> +> +> ++ 4	Þ
🔂 127.0.0.1 🛞 🕵 💆 345 📑 Licensed	tio: demo Demo License 🛃 3 🥑	Active -

• Click the **Start** button (2) to start the route:

Start Route			×
Name:	Route 1		
Start Date:	14-Oct-2016 10:58		•
Route:	Route 1		•
		Create Route	Modify
Radio:	🚯 125 (Pete) 125		•
Radio Owner:			•
Dispatcher:	All		-
		ОК	Cancel

Name

Enter a name for the route to be started. Tis name will be displayed in the **Active Routes** pane.

Start Date

Select a date to start the route on.



Route

From the drop-down list, select the route to start. Click the **Create Route** button to create a new route based on the selected route. Click the **Modify** button to modify selected route parameters.

Radio

From the drop-down list, select the radio to assign the route to.

Radio Owner

From the drop-down list, the select the <u>User</u> to assign the route to.

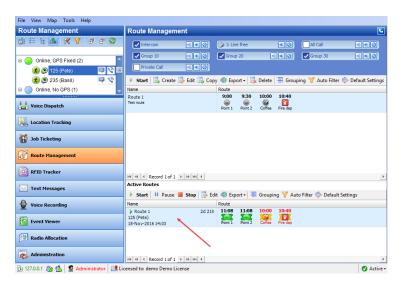
Dispatcher

From the drop-down list, the select the dispatcher to monitor the route.

Note: Do not select both **Radio** and **Radio Owner** to prevent incorrect route running.

Click **OK** to start the route.

The active route appears in the Active Routes panel.



If the route point is not attended, it becomes red.

• Click the **Stop** button to replace an active route in the list of created routes.

The administrator can generate reports on the finished routes.

 Click the Reports (1) tab, and in the Reports pane select Common reports > List Finished Routes (2):



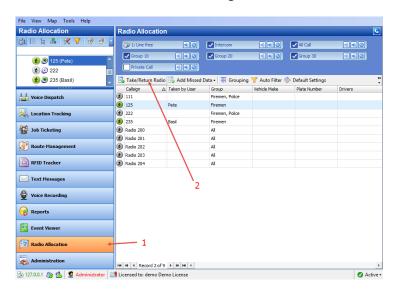
File View Map Tools Help						
Reports	Common repo	rts				<u></u>
Common reports	Sroup 10	 	Intercom) • Ø	All Call) « Ø
User Messages and Notes Radio Allocation Radio Disabling Telemetry	Private Call Query paramete List Finished 6					
Radio Users by Channel State of Radios Summary Lone Worker Activity CAN graphics	Query Params:	Not defined	×			
CAN messages Job Ticketing Change Job Status Job Ticket Assignments 2	Start Date: End Date: Filter:	10-Oct-2016 0:00	•			
Ful Movement Details	Radio: Logical Group: Radio ID (e.g. 22,3	Not defined Not defined 13,40-55,88):	•			
Location Tracking	User:	Not defined	<u>•</u>			
Sob Ticketing	Dispatcher: Route Name:	Not defined	•			
RFID Tracker	Show routes wit					
Voice Recording	Generate R	eport	Save Query Params	Delete	Query Params	
Reports	1					
Event Viewer						
	censed to: demo Demo	License				1 🖸 Active

6.3 Radio Allocation

The radio can be assigned to a selected employee registered in the system.

All available radios are disabled and an employee will need to type in username and password to take and enable selected radio. When an employee returns allocated radio it gets disabled again.

• Click the Radio Allocation tab (1) to assign radios to users:



• Select the radio in the list and click the **Take/Return Radio** button (2):

Take Radio			×
Radio:	125		
User:	Pete		-
Password:	*****		
		Take Radio	Cancel



Radio

This box displays the selected radio.

User

Form drop-down list, select the user to allocate the radio to.

Password

Enter the password for the selected user.

- Note: For more details on user access to Allocation Console, see <u>Users</u> section.
- Click the **Take Radio** button to assign the radio to the selected user.

The administrator can generate reports on the allocated radios.

 Click the Reports (1) tab, and in the Reports pane select Common reports > Radio Allocation (2):

File View Map Tools Help		
Reports	Common reports	
Common reports	(a) 1: Une free (b) (c) (c)	•) =: 0 •) =: 0
Radio Disabling 2	Query parameters Radio Allocation Radio Allocation	
Location Tracking	Select data by period: Start Date: 114/00-2016 0:00 v	
Sob Ticketing	Start Date: 11-Nov-2016 0:00 ••• End Dote: ••• Filter: ••• ••• •••	
RFID Tracker	Radio:Not defined	
Text Messages	Rado ID (e.g. 22,33,40-55,88) : User:Not defined	
Reports	Grouping: Group by: By radios	
Event Viewer Badio Allocation	Generate Report Save Query Params Delete Query Params	
Administration		
🔂 127.0.0.1 🚷 🕵 💆 Administrator 🗉	👤 Licensed to: demo Demo License	Active •

6.4 Beacons

TRBOnet Dispatch Console provides the **Indoor Positioning** feature to monitor radio location inside a building where no GPS signal is available. The feature requires additional hardware (beacons spread around the building and option boards in radios). A radio unit will be displayed on indoor floor plan on exact beacon when the radio enters the beacon's coverage area. A beacon icon on the map notifies on the amount of radios that are currently in this beacon's coverage area (e.g. Room 1(3) - there are 3 radios in Room 1).

- Note: To enable the **Indoor** feature, make sure your license includes **Indoor Positioning** (see <u>License information</u> page) and **Indoor Service** is selected in the list of available services (see <u>Services</u>).
- Click the Location Tracking tab (1), then click Map (2) and choose Open New Map in Tab:



File View Map Tools Help		
Location Fracking	Мар	Objects
di: 🖉 👶 🛠 🍸 🗇 🗗 🖸	3: Line free € Ø Intercom ● € Ø	Al Cal 🛛 🔍 🕊 📴 🗄
2 (£ (2) 125 (Pete) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	✓ Group 10 0	Group 30 € € Ø - Ø @ Bear - Ø @ Coffee
🚷 🕲 235 (Basil) 🛛 🔍 📮 义 🖕	BING_ROAD	
Voice Dispatch	O. O. C. Karler, All Select Map	▼ Pluer Find on Map - → Pluer → Plu
Location Tracking	Map Type: Beacon2D	Hospital No2
🚰 Job Ticketing	Capton:Available Maps	·····································
💓 Route Management	Name Path scheme D:\scheme.bmap	State
RFID Tracker	scheme U: poheme.omap	3
Text Messages	Recent Calls/Events	1
🔮 Voice Recording	🕮 Playback 📓 Save - 🕒 🛛 🗛	5 Iter 🗇 Default Settings 💙
Reports	Date 18-Nov-2016 14:05:10 18-Nov-2016 14:05:09	Note
Event Viewer	18-Nov-2016 14:04:59 18-Nov-2016 14:04:59 Add Edit Remove	OK Cancel
Radio Allocation	18-Nov-2016 14:03:57	he Coffee is not carved
Administration	Recent Calls /Events Recent Calls Request to Talk Radio State Active Task	
🔂 127.0.0.1 🛞 🥵 💆 Administrator 🗉	Licensed to: demo Demo License	🖉 Active -

Map Type

From the drop-down list, select 'Beacon 2D' to enable 2D floor plan, or 'Beacon 3D' to enable 3D floor plan (3).

- Click **Add** (4), and browse required map on your PC.
- Click **OK** to add the map.

Add a beacon to the selected floor plan

- Click the **Set Location** button (1) and then click on the map to point the location of a physical beacon on the floor.
- In the dialog box that opens (2), specify the beacon properties.

File View Map Tools Help		
Location Tracking	Мар	Objects
gi 🗄 h 🚵 🛠 🏹 🗗 🖉 🛇	🖌 Intercom 🛛 📢 🥥 🛞 1: Line free 🛛 🗮	a) 🔚 🗄
Conline, GPS Fixed (2) Conline, GPS Fixed (2) Conline, GPS (1) Conline, INO GPS (1)	Al Cal Plant of the second properties Plant of the second properties Plant of the second properties Plant of the second plant	2 x 2 thrent No 1
Voice Recording	Recent Calls/Events	22
Event Viewer	Date 21-Nov-2016 11:13:21	2E
[행] Radio Allocation	2 21-Nov-2016 11:13:12 2 21-Nov-2016 11:13:09 W 44 A Record 10f61	OK Cancel
Administration	Recent C Recent Request Radio St Active T Active R	
🔂 127.0.0.1 🛞 🥵 💆 Administrator 📑 L	icensed to: demo Demo License	Active -

Type

Select the beacon type from the drop-down list.

Name

Specify a name for the beacon.



• Major ID and Minor ID

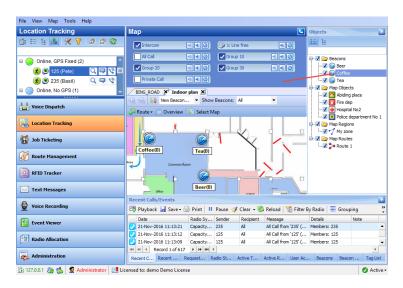
Enter the beacon's major and minor ID exactly as specified on the iBeacon device.

Description

Add a description for the beacon.

Edit parameters of a beacon

Select a beacon in the **Objects** panel and double-click to edit its parameters.



Note: For more details on beacon parameters, see the following <u>article</u>.

6.5 Administration

Click the **Administration** tab to set system elements and options.

6.5.1 Server

Click the **Administration** tab (1), and see the **Server (2)** pane with the full system information:



File View Map Tools Help		
Administration	Server	
Server Ucense U	I Line free Image: Comparison of the company of the	S € Ø Ø Al Cal 0 € Ø S € Ø Ø Group 30 0 € Ø
Telephony	Administration	
Voice Dispatch	Select an item in left menu to administer.	
Location Tracking	Licensed to: demo Demo License	
😵 Job Ticketing	Server is available CapacityPLUS	
😥 Route Management	Capacity Plus (Department1) Data (Data) Serial number: 484TMG4110	
RFID Tracker	Version: 2.6.0.7 CapacityPLUS: Private Call Serial number: 4847MG4110	
C Text Messages	Version: 2.6.0.7 CapacityPLUS: All Call Serial number: 494TMG4110 Version: 2.6.0.7	
Voice Recording	CapacityPLDsCr Serial number: 484TMG4110 Version: 2.60.7	
Reports	CapacityPLUS: Group #20 Serial number: 4917MG4110 Version 2.6.0.7	
Event Viewer	CapacityPLUS: Group #30 Serial number: 404TMG4110 Version: 2.6.0.7	
[행] Radio Allocation	Telephony Service is available	
Administration	- 1	
🔂 127.0.0.1 🛞 🕵 💆 Administrator 🗉	Licensed to: demo Demo License	🕑 Active -

6.5.1.1 Database

Go to Administration (1), Database (2) to see the full overview of the database:

File View Map Tools Help							
Administration		Database					G
Barver Database Radio Systems 2	^	 I: Line free Group 10 Private Call 	•:0 •:0 •:0	Group 20) #0	All Call	•
Telephony	~	🍕 Backup 🛛 🤇	💱 Schedule				
Voice Dispatch		📔 Dat	abase Information	ı –			
Location Tracking			er name:	(local) \SQLEXPRESS			
Location Tracking			base name:	TRBOnet			
30b Ticketing			up date:	25-Oct-2016 16:28:26			
Route Management		Data	base version:	Microsoft SQL Server 201 Jun 17 2016 19:14:09 Copyright (c) Microsoft C Express Edition (64-bit) o	orporation		
RFID Tracker			a size: o size:	17.23 MB 22.77 MB			
Mark Messages							
👲 Voice Recording							
Reports							
Event Viewer							
Radio Allocation		1					
Administration	~						
🚯 127.0.0.1 🛞 🕵 💆 Administra	tor 📔	🖁 Licensed to: dem	no Demo License				🕑 Active -

In the **Database** pane, the administrator can restore and back up the database and audio recordings.

For more details on backups, see Appendix A: Database and Audio Recordings Backup and Restore.

6.5.1.2 Radio Systems

All radio systems registered in the Server are represented on the Radio Systems pane.

Go to Administration (1), Radio Systems (2) to see system elements' parameters:



File View Map Tools Help						
Administration		Radio Systems				S
Server	^		Group 20	040	All Call	*) •: 0 •) •: 0
Telephony Z	~	Properties				
	_	System type	System ID	Capti	on	
Voice Dispatch		🗸 Intercom		Inter	com	
		V Phone		Telep	hony	
Location Tracking		Capacity Plus	Department1	Capa	cityPLUS	
30b Ticketing Image: The second sec						
🔮 Voice Recording						
Reports						
📔 Event Viewer						
Radio Allocation		1				
Administration	~	H4 44 4 Record 1 of 3 + ++ ++ 4				•
访 127.0.0.1 🛞 🥵 🙎 Administrate	or 🖻	Licensed to: demo Demo License				🕑 Active -

The administrator can see the following radio system parameters in the table:

- **System Type** the type of the system.
- **System ID** a unique System Identifier configured in TRBOnet Server configuration for repeater or controller stations in the system.
- **Caption** channel type to transmit voice and data.

Radio System Properties

To see the radio system properties, do the following:

• Select a radio system in the list and click the **Properties** button (1); or,

double-click the radio system in the list;

or,

click the corresponding element at the bottom of the Dispatch Console window, and choose **Properties** (2).

File View Map Tools Help				
Administration	Radio Systems			S
Server	Contraction of the second seco	 	•) 4(Ø Z Al Cal	•) •() •) •()
- Age System Bridging - Marke Taeke	Private Cal Properties System type	System ID	Caption	
Uoice Dispatch	Intercom Phone Capacity Plus	Department1	Intercom Telephony CapacityPLUS	_
Job Ticketing		Department1	CapacityPLUS	
RFID Tracker		1		
Voice Recording				
Event Viewer	2			
Administration	H4 44 4 Record 1 of 3 >			
127.0.0.1 🛞 🔂 🙎 Admini Reset Properties	strator	license		🕑 Active •



The administrator can see Active and Inactive registered systems. In case you have more than 10 registered systems, systems are grouped and can be seen in the drop-down list.

Common information for all system elements is listed below:

Description tab

On the **Description** tab, you can see the general info:

Repeater #1: Slot #	1	×
Description Cha	nnels Transmits	
System Type:	IP Site Connect	
System ID:	Department1	
Caption:	Repeater #1: Slot #1	
	OK Cancel	

• System Type

The system type for a repeater/Digital or Analogue mode for a control station. For the repeater, see <u>MOTOTRBO Radio Systems</u> page.

• System ID

A unique System Identifier configured in TRBOnet Server for repeater or controller stations in the system;

• **Caption** Enter the channel name.

Channels tab

On the **Channels** tab, you can see channel properties:

lepeater #1: Slot #1		>
Description Channels Transmits		
😭 Properties 👘 Control 🚔 Re	set	
Name	Voice	Data
Repeater #1: Slot #1	RX, TX	RX, TX
Channel for private and phone calls:		
Channel for private and phone calls:		_



• Click the **Properties** button to see the repeater additional data:

Repeater #1: S	Slot #1	Х
Description	Talk groups Volume	
ID:	8ccc8f18-a3e6-4b4f-b8e7-581e19debceb	
Name:	Repeater #1: Slot #1	
Type:	MOTOTRBO Repeater	
Mode:	IP Site Connect	
Connect	ted	
Serial 1	Number: 484TMG4110	
Firmwa	are version: 2.6.0.7	
	OK Cancel	

ID

Default registration number (manufacturer's number);

Name

System element's name in the system;

Type

System type for repeater/Digital or Analogue mode for control station. For the repeater, see <u>MOTOTRBO Radio Systems</u> page.

Mode

System type for a repeater/connection mode for a control station.

For the control station, see Control Station Connection Modes.

- Connected
 - Serial number

Default system element's serial number (manufacturer's number).

• Firmware Version

Current system element's firmware version.

- Click the **Reset** button to test the connection to the system element.
 - Note: For a repeater, clicking the **Reset** button reconnects the repeater. For a control station, clicking the **Reset** button reloads the radio.

Talk groups tab (for repeaters only)

• On the **Talk groups** tab, you can see selected Talk group info:



nepear	er #1: 5						>
Desc	ription	Talk gro	oups	Volume			
Sp	ecify av	vailable ta	alk gro	ups			
5	All Ca	ill.					1
	Firem	en			 		
	Police						
							1
					OK	Cancel	

• Specify available Talk groups for the system element in the list of created Talk groups.

Selected Talk groups are available on the **Radio** tab in the system element box in the drop-down list:



Note: Close TRBOnet Server before applying the system element settings.

Volume tab (for repeaters only)

• On the **Volume** tab, you can see Volume settings for the repeater:



epeater #1: S	lot #1			×
Description	Talk groups	Volume		
	۲		۲	
	Θ		\ominus	
	RX		TX	
	Reset		Reset	
Confi	gure system v	volume		
			ОК	Cancel

- Specify the **RX** and **TX** volume levels for the Repeater using a volume control slider.
- Click the **Reset** link to set default volume level for RX or TX.
- Configure system volume

Select this option to save default volume settings for Voice transmissions from the selected Repeater.

Transmits tab

• On the **Transmits** tab, you can see information about audio and data transmissions:

epeater #1: Slot #1		×
Description Channels	Transmits	
Record Audio		
Manage Audio by	DTMF	
Mute channel:		
Unmute channel:		1
	1	
	ОК	Cancel

Record audio

Select this option to enable audio recordings for the selected repeater.

Manage Audio by DTMF

Select this option to manage audio in the selected channel by specified DTMF tones.

Mute channel

Enter a DTMF sequence to be used to mute the selected channel.



• Unmute channel

Enter a DTMF sequence to be used to unmute the selected channel.

6.5.1.3 System Bridging

TRBOnet Dispatch Console provides the **System Bridging** function. System Bridging allows configuring the network to redirect calls.

Administrator can create two types of System Bridging:

- System Bridging for Master stations allows connecting all types of Radios (analogue and digital radios, supports IP Site Connect, Capacity Plus, Linked Capacity Plus and Connect Plus modes).
- 2. **System Bridging for repeaters** allows connecting only the repeaters in the IP Site Connect mode.

Go to **Administration** (1), **System Bridging** (2) to add System Bridging to the system:

File View Map Tools Help						
Administration	System Bridging					S
Server	Group 10 Private Call Add Edit		✓ Intercom ✓ Group 20	0 #0	All Call	0 4 0 0 4 0
Voice Dispatch	Type ✓ System Bridge ✓ System Blidge	△ Name Firemen - Po System Bridg				Δ
Location Tracking		System Bridg	je			
📅 Job Ticketing	3					
💓 Route Management						
RFID Tracker						
C Text Messages						
🔮 Voice Recording						
Reports						
Event Viewer						
Radio Allocation						
Administration	144 44 4 Record 1 of 2					Þ
🔂 127.0.0.1 🚷 🕵 🧕 Administrator	📑 Licensed to: demo Demo	o License				🕑 Active -

• Click the **Add** button (3) to add a Cross Patch.

From the drop-down menu, select the System Bridging type.

Radio System Bridging

ame:	System Bridge					
lork Mode:	Channels rea	Channels redirect the calls to each other				
FT Button:	Always Enab	Always Enabled				
Channels P	arameters					
Channels to re	direct calls					
Radio System		Group	Mode			
Control Station	#1	Any Groups	Always			
Repeater #1: 5		 Any Groups 	Always			
		2	3 4			
	/ 1					



Name

Specify a name for System Bridging to display in Radio Interface.

Work mode

Select the work mode from the drop-down list. For more details on System Bridging types, see <u>System Bridging Types</u>.

PTT Button

set PTT on the System Bridging interface to be able to transmit voice or do not set only to hear the voice from other channels. There are 3 options available:

- Enable when a Bridge enabled
- Always Enabled
- Invisible
- On the **Channels** tab, click the **Add** button (1) to add a channel to the list.
- In the Radio System column, select a radio channel from the drop-down list (2).
- In the **Group** column, select available group for the radio channel (3).
- In the **Mode** column, select a mode for the radio channel (4).
 - Always

Enables System Bridging always, regardless of the radio status (online/offline).

• ByRadio

Enables System Bridging on a selected channel when there are online radios capable to receive voice calls from the selected group.

• On the **Parameters** tab, specify call types for System Bridging:

lame: S	ystem Bridge		
Nork Mode:	hannels redirect the o	alls to each other	
TT Button:	lways Enabled		
Channels Parame	ters		
Specify call type	s for System Bridg	2	
Voice Call		Text Message	
Check Radio		Telemetry	
Enable/Disable R	adio	Location (GPS)	
Call Alert		User Data	
Emergency Alert			

- Select call types to use in System Bridging mode.
- Click **OK** to add System Bridging for the radio channels.

The System Bridges are displayed on the Cross Patch panel of the Radio Interface pane:



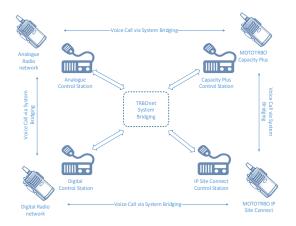
	idio Interface Radio Interface Recen	t Calls/Events							×
Voice Dispatch ☐ := : : : : : : : : : : : : : : : : : :		t Calls/Events							
	Radio Interface Recen	t Calls/Events							
 (₹) ② 222 (₹) ③ 235 (Basil) 	Free cha		tive Calls			×	Start Voice Messa Voice Message		^ ر ا
Voice Dispatch	All Call	-	•0				Cross Pat	Box here to	•
Job Ticketing	PTT Police Administra Police						System Bri CapacityP All Call CapacityP	PTT	
Route Management	Group 20		•				Cleaners Firemen - F	olice	
Voice Recording	Group 30 cent Calls/Events	(*))				v	Police CapacityP Firemen		IJ,
S Reports	Playback 📓 Save 🛛 🚽			-		-			» •
Event Viewer	18-Nov-2016 17:18:52	Radio System CapacityPLUS CapacityPLUS	Administrator			ministra N	Details Aembers: Administrator Aembers: Administrator	Note	•
3 Radio Allocation	18-Nov-2016 17:18:49 18-Nov-2016 17:16:31	CapacityPLUS	Administrator			spatche N	fembers: Administrator		•
	cent Calls/Events Recent		st to Talk R	adio State A	ctive Tasks	Active Routes	s User Activity Ma	p	

System Bridging Types

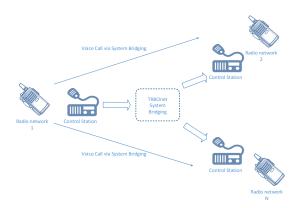
1. Channels redirect the calls to each other

This is the most common type of System Bridging when data exchanges between the channels set in the System Bridging settings. Thus, there is a common channel for all the subscribers of the specified control stations:

To create this mode of System Bridging, add a System Bridging and set the Work Mode as **Channels redirect the calls to each other**.



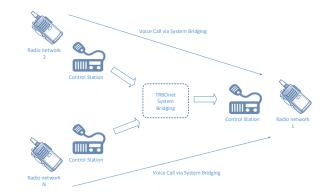
2. One channel station redirects calls to many channels





To create this type of System Bridging, add a System Bridging and set the Work Mode as **One channel redirects the calls to many channels**.

3. Many channels redirect calls to one channel



To create this type of System Bridging, add a System Bridging and set the Work Mode as **Control stations redirect the calls to one control station**.

Binary Patch (for IP Site Connect only)

ame:	Binary Pate	h			
Rules					
Rule 1 of 2					1
Slot: Slot 1			Voice	🗸 Data	
All Calls		Private Calls	Group Calls		
Groups: (All Gr	oups)				
Repeaters: (Al	Repeaters)				
Rule 2 of 2					,
Slot: Slot 2			Voice	🗌 Data	
All Calls		Private Calls	Group Calls		
Groups: (All Gr	oups)				
Repeaters: (Al	Repeaters)				

• Name

Specify a name for the Binary Patch to display in Radio Interface.

• Rules

Specify the rules for System Bridging to redirect calls.

- Check **Voice/Data** to transmit on the selected slot.
- Select available **Call types**.
- Select available **Groups** for System Bridging from the drop-down list.
- Select available **Repeaters** to redirect calls in System Bridging from the drop-down list.

The Binary Patches are displayed on the Cross Patch panel of the Radio Interface pane:

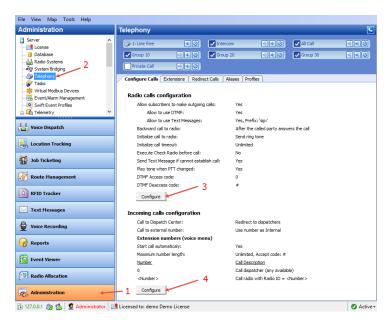


File View Map Tools Help								
Voice Dispatch	Radio Interface							
💼 🗄 😹 🛠 🍸 🖉 🎽	Radio Interface Telephe Terminate all Transmit	ony Recent Calls/Ev					Queued Mess	ages 🗙
Administrator Online, Indoor (0) Online, GPS Fixe			Active Ca	alls		⊠	Record T.	7 File 🔻
Online, SGS Fite Online, No GPS (0)	Control Station #3		Gro	Free ch	n) 📢 Ø		To: Selected Cha	nnels
GPS Positioning	Group 2 PTT Free cha Poice	o) 🛋 🥝	Rep PT	eater #1: Slo Free ch			Patch on Repea	group
Route Management	Repeater #1: Slot						System Brid Repeater	lge PTT
RFID Tracker Text Messages	Free cha Al Cal	innel	РТ	All Call	nannel	v	Firemen Control St Any Groups	
🔮 Voice Recording	🛱 Playback 🖬 Save - 🤤	Print II Pause <	🌶 Clear 👻 🏐	Reload 1 1 Recipient	Filter By Radio 🐺 Grou Message	ping 🍸 Auto Filter	Default Setting Note	s Petails 🙄
Reports	17-Oct-2016 14:21:07	Repeater #1: Slot #1 Control Station #1		All	All Call from '125' (00:01) All Call from dispatcher '	Members: 125	Note	Ext. Note
Event Viewer	7-Oct-2016 14:21:02 17-Oct-2016 14:20:57	Control Station #1 Control Station #1	Dispatcher Dispatcher	All	All Call from dispatcher ' All Call from dispatcher '			
[변) Radio Allocation	7-Oct-2016 14:20:51	Repeater #1: Slot #1	125 Disnatcher	All All	All Call from '125' (00:01) All Call from dispatcher '	Members: 125		•
Administration	Recent Calls/Events Recen	t Calls Radio State	Active Tasks	Active Routes	User Activity Map			Active -

Note: System Bridging can also be created by drag and drop of the PTT boxes in Radio Interface. It is a temporary System Bridging; it will be deleted after reconnecting to TRBOnet Server or exiting TRBOnet Dispatch Console.

6.5.1.4 Telephony

Click **Administration** (1), and then **Telephony** (2) to configure incoming and outgoing SIP calls:



Radio Calls Configuration

Click the **Configure** button (3) to set radio call configuration parameters:



Radio calls configuration	×
Allow subscribers to make outgoing calls	5
Allow to use DTMF	
Allow to use Text Messages	
Prefix:	sip:
Play the incoming call tone on the radio:	After the called party answ 💌
Initialize call to radio:	Start transmission 💌
Initialize call timeout:	Unlimited 🔶 seconds
Execute Check Radio before call	
🔽 Send Text Message if cannot establish	call
✓ Play tone when PTT changed	\ominus $ \oplus$
DTMF Access code:	0
DTMF Deaccess code:	#
	OK Cancel

• Allow subscribers to make outgoing calls

Select this option to enable outgoing phone calls for the radio subscribers.

• Allow to use DTMF

Select this option to allow radio subscribers to dial the phone number as a sequence of DTMF tones.

• Allow to use Text Messages

Select this option to allow radio subscribers to initialize phone calls via sending TMS messages with a specified prefix to the dispatcher.

Prefix

Enter the standard prefix for a text message.

• Play the incoming call tone on the radio

Select the mode for playing the incoming call tone on the radio that initiates a call.

After the called party answers the call

When a radio initiates a phone call to a subscriber via DTMF tones or a TMS message, the incoming call tone will be played on the radio after the called party answers the call.

Immediately

When a radio initiates a phone call to a subscriber via DTMF tones or a TMS message, the incoming call tone will be played on the radio immediately that is without waiting for the called party to answer the call.

• Initialize call to radio

Select the option how to start a call on a radio.

Start transmission

Select to start a call to a radio automatically.

Send ring tone

Select to play a ring tone until the radio user presses the PTT.

• Initialize call timeout

Specify a timeout that defines how long to make an attempt to connect to the called party.



- **Execute Check Radio before call** Select this option to execute a Check Radio command before placing a call.
- Send text message if cannot establish call Select this option to send a text message when the channel is busy and a phone call cannot be established.
- Play tone when PTT changed Select this option so that a phone will play sound tones when the PTT is pressed/released on the remote radio.
- DTMF Access Code Specify a DTMF Access Code as **0**.
- DTMF Deaccess Code Specify a DTMF Deaccess Code as #.

Incoming Calls Configuration

Click the **Configure** button (4) to set incoming call configuration parameters:

Call to external num	ber:	Use number	as Inte	ernal	
Extention numbe	rs (vo	ice menu)			
Start call automa	ticaly				
Max. number length	:	Unlimited	*	Accept code:	#
Number	Call [Description			
0	Call o	dispatcher (a	ny avai	lable)	
<number></number>	Call r	adio with Ra	dio ID =	= <number></number>	

• Call to Dispatch Center

Select the mode for handling incoming calls made to the dispatcher.

Decline calls

All incoming phone calls will be declined.

Open voice menu

When an incoming call arrives, the subscriber will hear Voice menu commands.

Redirect to dispatchers

All incoming voice calls will be redirected to all dispatchers of the Dispatch center and any free dispatcher will answer the phone call.

• Call to external number

Select the mode for handling incoming calls made from unregistered subscribers.

Decline Calls

Select this option to decline all calls from unregistered subscribers.



Use number as Radio ID

Select this option to allow the system to read unregistered numbers as a Radio ID and start a Private Call.

Use number as Internal

Select this option to allow the system to read unregistered numbers according to Voice Menu rules.

Extension numbers (Voice menu)

• Start call automatically

Select this option to search for the number in the table automatically. When this option is disabled, the subscriber must dial the number according to the following example: **0(phone number)#**. The character **#** is used to search for the phone number in the table.

• Max. number length

Specify the maximum number of characters allowed in a phone number.

• Accept Code

Specify the character that will be used to finish dialing the number.

All available numbers are listed in the table below.

• Click the **Add** link to add a number to the table.

To add a static number

• Choose Static number.

Extension numbe	er		×
Static numb Opnamic numb	-		
Number:	123456		
Call Type:	Call Group		•
Channel:	Control Station #1		
Group:	All Call		•
		ОК	Cancel

Number

Enter a phone number to add to the table (contact list).

Call Type

Select the call type from the drop-down list.

• Call Dispatcher

Select this type to make a phone call to the dispatcher.

• Call Radio

Select this type to make a phone call to the selected radio.

Call Group

Select this type to make a phone call to the selected group.



Channel

Select the channel to make a group phone call through (available for Group Calls only).

Dispatcher/Radio/Group

Select the dispatcher, radio, or group depending on what you have selected in the **Call Type** box.

To add a dynamic number

Choose Dynamic number.

Extension numb	er X
C Static numb	-
Prefix:	123
Call Type:	Call Radio
Channel:	Auto Detect 💌
Radio:	Detected by Radio ID
	OK Cancel

Prefix

Specify a prefix to type in on the keyboard.

Call Type

Select the call type from the drop-down list.

• Call Radio

Select this type to make a phone call to a radio.

Call Group

Select this type to make a phone call to a group.

Call Phone

Select this type to make a phone call to a telephone.

Channel

Select the channel to make a group phone call through (available for Group Calls only).

6.5.1.5 Tasks

Go to Administration (1), Tasks (2) to see the list of the tasks created in the system:



Server Uterscen System Finding Database Coup 10 Coup 20 Coup 20 Task System Finding Task System Finding Coup 20 Coup 20 Coup 20 Task Tester Coup 10 Coup 20 Coup 20 Coup 20 Coup 20 Task Tester Coup 20 Coup 20 Coup 20 Coup 20 Coup 20 Coup 20 Task Tester Coup 20 Coup 20 Coup 20 Coup 20 Coup 20 Coup 20 Task Tester Coup 20 Coup 20 Coup 20 Coup 20 Coup 20 Coup 20 Statt Event Notifies Coup 20 Coup 20 Coup 20 Coup 20 Coup 20 Coup 20 Statt Event Notifies Coup 20 Statt Event Notifies Coup 20 Coup 20 </th <th>Administration</th> <th>Tasks</th> <th><u></u></th>	Administration	Tasks	<u></u>
	Ucense Ucense Uotabase Uotabas	Croup 10 () (€) (€) (€) (€) (€) (€) (€) (€) (€) (€) (€) (€) (
Yoice Dispatch ✓ Sederaring ↓ Location Tracking ✓ Sederaring ✓ Job Ticketing ✓ Mesages 1_Mesages for Period ✓ Note Hanagement ✓ Mesages 1_Mesages for Period ✓ Text Hessages ✓ Sederaring ✓ Text Hessages ✓ Sederaring ✓ Voice Recording ✓ Sederaring ✓ Voice Recording ✓ ✓ Radio Allocation (Control Fermin) ✓ ✓ Text Hessages ✓ Voice Message ✓ Voice Recording ✓ ✓ Radio Allocation 1	Virtual Modbus Devices 2	Task Name	Δ
Voice Recording Voice Recording Voice Recording Voice Recording Radio Allocation 1			
Route Hanagement SMS and Enal notifications REID Tracker Image: SMS and Enal notifications Text Hessages Image: SMS and Enal notifications Voice Recording Image: SMS and Enal notifications Image: SMS and Enal notifications Image: SMS and Enal notifications Image: SMS and Enal notifications Image: SMS and Enal notifications Image: National Notification Image: SMS and Enal notifications Image: National Notification Image: SMS and Enal notifications Image: National Notification Image: SMS and Enal notifications		 ☑ Mesages 1_Messages for Period ☑ ⁶¹⁰/₀ Missed GPS data loading 	
	😥 Route Management	SMS and Email notifications	
Voice Recording Image: Strength Viewer		🗵 🎦 User Activity	
Image: Contraction 1		Vice Message	
Administration	Event Viewer	3	
Administration #1 41 4 Record 12 of 14 + # #1 4	<i>v</i>	1	
	Administration 4	144 44 4 Record 12 of 14 + 39 39 4	Þ

Note: After you have created a task you need to enable it. Just select the checkbox (3) beside the task you want to enable.

Agenda

The Agenda is used to automatically send predefined messages to the radios. It may be used when you have any software receiving any messages but it is not able to send them to the subscribers. In this case, TRBOnet Dispatch Console acts as an intermediary for receiving the messages from the folder and sending them to radios.

• To add an agenda, select Tasks (1), and click Add > Agenda (2).

Administration	Tasks					S
Server Server Dotabase Radio Systems Server 1	Intercom Group 10	0 # 0 0 # 0	3: Line free Group 20	4) 4) () 1) 4) ()	All Call	
Telephony Toss Toss Toss Toss Toss Toss Toss Tos						Δ
Voice Dispatch	Voice Message Agenda M Import Routes Scheduled Report	do				
Location Tracking	HotSOS	d				
🕖 Route Management	Sign-in notificati		2			
RFID Tracker	Image: Constraint of the second se					
C Text Messages	Voice Message					
🔮 Voice Recording						
Event Viewer						
Radio Allocation						
administration	H4 44 4 Record 1 of	14 1 10 10 10				Þ

• In the Agenda dialog box, specify the following parameters.



Task name: Agenda			
Settings			
Outgoing folder (on server):			
C:\Outgoing			
Incoming folder (on server):			
C:\Incoming			
Wait for response(sec):	120	* *	
Text to confirm:	OK		

Task name

Specify a name for the task.

Outgoing folder (on server)

Specify the outgoing folder for the text messages to be displayed in the Dispatch Console (e.g. **C:\Outgoing**).

- Incoming folder (on server)
 Specify the incoming folder for the reports (e.g. C:\Incoming files);
- Wait for response
 Specify the time interval for the response.
- Text to confirm Specify the text to be sent by the subscribers after they receive the message.

Recorder

The Recorder feature allows connecting to an audio recorder via IP.

• To enable the task, select **Tasks**, and click **Add** (1) > **Recorder** (2):

<u>Eile ⊻iew Map Iools H</u> elp		
Administer	Tasks	6
Telemetry #2	Service inactive 📧 Control Station #1 🚽 🕫 🖉 Remote Control Stat 🗐 🖷 Ø	
E-X Tools	Cal #1 •) •€ Ø Cal #2 •) •€ Ø R1 •) •€ Ø	
Swift Configuration Tool	Control Station #1 00 46 0 Intercom 46 0 VPSC #1 Slot 1 00 46 0	
Template Maker	▼ IPSC #1 Slot 2 • 1) • € 0 ▼ Repeater #1 Slot 1 • 1) • € 0 ▼ Repeater #1 Slot 2 • 1) • € 0	
- 💕 Tasks	🗛 Add - 🕞 Edit 📑 Delete	
- 👼 Dispatchers 🛛 🦼 🎽	Cone Worker	
- 🔂 Users	S Export Data	
Logical groups	Scheduled Task	
Radio Groups	Voice Message	
Radios +	Recorder O	
	Agenda	
Radio	2 Import beacon data from DB "Firebird"	
GPS Positioning	Scheduled Task	
GPS Positioning	SMS and Email notifications	
Job Ticketing	🗵 🎅 User Activity	
300 Herecully	🐼 🍕 Voice Message	
Route Management	Voice Message	_
C Text Messages		
Reports and Statistics		
Event Log		
Telemetry		
Radio Allocation		
Administer	144 44 Record 5 of 11 + 1+ 1+ 14	•
	😘 🏠 🅵 🕵 📩 Warning! You are logged as Administrator 🛛 📑 Licensed to: Neocom Software Ltd	
10 12/ WAL 🖓 😳 🚱 🚱 🚱 🚱	🔝 🔝 🔝 🐨 🗠 wanning: rou are logged as Administrator 🔤 Licensed to: Neocom Software Ltd	

The feature allows replicating audio recordings to the recorder:



udio Recorder		
Task name:	Audio Recorder	
Settings		
IP:		7
Port: 90	94	
Test of Ch	annels	
	OK Cancel	
	Caliba	

• Task name

Specify a name for the task.

• IP

Enter the recorder's IP address.

Port

Specify the recorder's port number.

- Click **Test of channels** to view all available channels on the recorder.
- Click **OK** to add the task.

Import Beacon Data from Firebird DB

The **Import beacon data from Firebird DB** option allows import beacon data from Firebird database to TRBOnet Dispatch Software database.

To enable the task, select **Tasks**, and click **Add** (1) > **Import beacon data from DB Firebird** (2):

<u>File View Map Tools Help</u>	
Administer	Tasks
Telemetry #2	▲ Service inactive ★ Ø Control Station #1 0 € Ø Remote Control Stat 0 € Ø
→ Telemetry #3	
	✓ Control Station #1 •0) •€: ○ Intercom •€: ○ ✓ IPSC #1 Slot 1 •0) •€: ○
	V IPSC #1 Slot 2 • •) • • • • • • • • • • • • • • • •
Disabled Radios	🕞 Add - 🕞 Edit 📑 Delete
	Lone Worker
	🖏 Export Data
Radio Groups	Scheduled Task
Radios	S Voice Message
	T Recorder
Hadio	Agenda
	Scheduled Task
GPS Positioning	Subcoded rask
9 1	V A State Charles And
😵 Job Ticketing	Voice Message
Route Management	S Voice Message
👷 Route Management	
Text Messages	
Reports and Statistics	
(E)	
Event Log	
8 Telemetry	
Radio Allocation	
🚓 Administer	HH 44 4 Record 6 of 11 + + + HH 4
127.0.0.1 🙈 🕵 🕵 🕵 🕏	🎍 🔂 📸 📸 🕵 🔔 Warning! You are logged as Administrator 📑 Licensed to: Neocom Software Ltd



mport beacon data from DB "Firebi	ird"
Name: Import beacon da	ta from DB "Firebird"
Settings Import	
Server:	User:
localhost	SYSDBA
Database path:	Password:
	•••••
Port:	Update (sec):
3050 🚔	10
Test	
	OK Cancel
	OK Cancel

• Name

Specify a name for the task;

• Server

Specify a remote server or a server on the local PC.

• User

Type in a name of the Firebird DB user.

Database path
 Gravity the Final DB a

Specify the Firebird DB path.

• Password

Specify a password to connect to Firebird DB (provided at logon).

• Port

Specify the port number to connect to Firebird DB.

• Update (sec.)

Specify the update period for Firebird DB.

- Click **Test** to test the connection to Firebird DB.
- Click the **Import** tab to specify Import settings:

Import beacon data from DB "Firebird"
Name: Import beacon data from DB "Firebird" Settings Import
Settings Import Import data from: (The Oldest Date Possible > Import Ø Delete old data
Report:
OK Cancel



Import data from

Specify the Firebird DB name.

- Click **Import** to import data.
- **Delete old data** Select this option to delete all previously imported data from Firebird DB.
- Report

In this box, an import report will be displayed.

• Click **OK** to add the task.

Export Data

TRBOnet Dispatch Console provides the Export Data function, which allows exporting data to an external database table.

• To add an Export Data task, select **Tasks** (1), and click **Add > Export Data** (2):

File View Map Tools Help		
Administration	Tasks	
Server Database Database Redio Systems Redio System Bridging) .) . ()
Telephony Tase Virtual Modbus Devices Event/Alarm Management Swift Event Profiles	Add B Edit R Colete Conservation Conserva	Δ
Voice Dispatch	Voice Message do Agenda Monot Routes	
Location Tracking	Scheduled Report 2	
Sob Ticketing	C Timer	
🕂 Route Management	Sign-in notification	
RFID Tracker	Buser Activity Solice Message	
C Text Messages	🐼 🧐 Voice Message	
Voice Recording		
Event Viewer		
Radio Allocation		
Administration	144 44 4 Record 1 of 14 b b b 4	Þ
🔀 127.0.0.1 🍇 🕵 🙎 Administrator 📑 Li	icensed to: demo Demo License	Active •

• In the **Export Data** dialog box, specify the following parameters:

Export Data		>	<
Task name:		Export to database table - Location of radio	7
Type:		Export to database table	·
Data:		Location of radio	·
Connection	Data	a Scheduler Advanced	
C Defau Specif		nnection	
Server na	ame	(local)\SQLEXPRESS	
Database	name	e TRBOnet 💌	
Vindo	ws au	uthentication	
User nam	e		
User pass	sword		
		OK Cancel	



Connection tab

• Task name

Specify a name for the task.

• Type

Select the type of data export from the drop-down list. TRBOnet Dispatch Console allows exporting data for third-party systems using data export tasks.

Export to database table

Allows exporting data to MS SQL Server tables. Specify MS SQL Server connection parameters, database, base and table to export data.

Export to VersaTrans

Allows exporting data to the VersaTrans data collection system via IP. For more details, visit the <u>official website</u> of VersaTrans.

Export to Google

Allows exporting data to file (file format is KML). For more details, visit the following <u>website</u>.

Export to NMEA

Allows exporting data to a file (text file format, export format is NMEA 0183). For more details, visit the following <u>website</u>.

Export to file

Allows exporting data to a text file.

• Data

Select which data to export from the drop-down list.

• Default connection

Choose this option for default connection to SQL Server.

• Specified connection

Choose this option and specify the SQL Server and database name.

• Server name

Specify the SQL server name.

• Database name

Select the database from the drop-down list.

• Windows authentication

Select this option to use **Windows authentication**, or deselect it to use **SQL Server authentication** (SQL Server user name and password will be required).

Data tab



	Export to da	atabase table - Location of radio				
Type:		latabase table	-			
Data:						
	Locadon on	1000				
Connection [ata Schedule	er Advanced				
	-		-			
Table:	[Export_Lo					
Column ma	pping:	Create table Load columns lis	t			
Table colu	mn	Data				
Date		Location date	•			
		Latitude				
Latitude		Longitude				
Latitude Longitude			_			
		Speed				
Longitude		-				
Longitude Speed		Speed				
Longitude Speed Direction		Speed Direction	r			

• Table

the name of the table to be exported into external database (by default, the name of the table is created after you have specified it in **Create table** dialog box).

- Click the **Load columns list** link to update the columns list in case you have made any changes to the table.
- Click the **Create table** link to add a new table for data export:

	table to export data
- Active date	base connection
Table name:	Export_Locations
Column list:	
Table column	Data
✓ Date	Location date
✓ Latitude	Latitude
✓ Longitude	Longitude
Speed	Speed
✓ Direction	Direction
Precision	Accuracy
RadioID	Radio ID
☑ ID	Unique radio ID
✓ Name	Radio name
ExportDate	Export date
the store is	ales 1

• Select the data fields to add to the table.

Scheduler tab



Task name:	Export	to database tab	ole - Locatio	on of radio		
Type:	Export	to database tal	ble			
Data:	Locatio	n of radio				ĺ
Connection Dat	a Sch	eduler Advan	ced			
Days of week:	[(All days)			-]
• Execute recu	rrently wi	th interval				
Start time:		13:00				
Stop time:		15:00	-			
Repeat eve	ry:	01:00:00	-			
C Execute at pa	articular t	ime				
						1

• Days of week

In the drop-down list, select the days of the week on which to export the data.

• Execute recurrently with interval

Choose this option to perform data export on a periodic basis.

Start time

Specify the time at which to start data export.

Stop time

Specify the time at which to stop data export.

Repeat every

Specify a time period for periodic data exports.

• Execute at particular time

Choose this option and specify the times in the columns of the table below.

Advanced tab

Export Data	×
Task name:	Export to database table - Location of radio
Type:	Export to database table
Data:	Location of radio 💌
Export Export mod Alwa Upda	Data Scheduler Advanced only changed data e ys add new records te existing and add new records te existing records
	OK Cancel



• Export only changed data

Select this option to export only changed location of the radio data.

• Export mode

Choose the mode for exporting data.

Geofencing

The Geofencing feature allows controlling the location and speed of radios relative to manually defined regions on the map.

The Geofencing monitoring consists of the manually defined regions and the tasks. The regions specify where to apply the rules, while the tasks specify how to apply the rules for the regions and radios.

• Click Tasks (1), and double-click Geofencing (2) in the Tasks pane.

Administration		Tasks					
Server License Database Radio Systems System Bridging	^	Group 10	*) *; 0 *) *; 0 *) *; 0	3: Line free Group 20	ۯ •) €Ø	Al Call	*) #: Ø
Tasks Tasks Vitual Modbus Devices Vitual Modbus Devices Event/Alarm Management Swift Event Profiles	*	Add Edit Task Name Image: State St	ence Control				
Voice Dispatch		Geofencing Geofencin	- Location of radio				
Location Tracking		Lone Worker 1 Mesages 1 Mes	reason for Davied	2			
🚰 Job Ticketing		Missed GPS dat	a loading	-			
Route Management		🖌 🥰 SMS and Email i					
RFID Tracker		Given Timer Given Activity					
C Text Messages		 ✓ Øy Voice Message ✓ Øy Voice Message 					
🔓 Voice Recording							
Event Viewer							
Radio Allocation							
Administration		144 44 4 Record 4 of					

The administrator can **add/disable/delete** the rules for Geofencing as well as edit the currently selected rules:

Geofencing and Speed Control		×
Rules	General Location Speed Regions Radios Lone Worker	
 Monitor Area 1 		
Monitor Area 3	Specify the general parameters of the rule and the time window when it is active	
$\backslash_{_{4}}$	Name: Monitor Area 3 Description: Watch out for the workers	-
	Activate the rule on a schedule	
	Days of week: Monday, Tuesday, Wednesday, Thursday, 🔻	
	Start time: 9:00 🚖	
	Stop time: 18:00	
	After the rule is triggered:	-
_ ¹	2^{2} 3^{3}	
Rerun the rules after each rule edit,	rever respect and at the start of each scheduled time window (not recommended) $({f i})$	
Add Rule Disable	Rule Delete Rule OK Cancel	



- Click the **Add Rule** button (1) and select the appropriate rule from the dropdown list (Map Region, Beacons, Radios, Lone Worker) to add a rule to the current Geofencing configuration. A new rule will be displayed in the list of rules (4).
- Click the **Disable rule** button (2) to disable the selected rule.
- Click the **Delete rule** button (3) to delete the selected rule.

General tab

- Name Specify the rule name.
- **Description** Add a description of the rule.
- Run the rule on a schedule

Select this option and in the boxes below specify the schedule for the rule to run.

Days of week

In the drop-down list, select the days of the week on which to run the Geofencing rule.

Start time

Specify the start time to run the rule.

Stop time

Set the time to stop running the rule.

• **Reset Alarm mode when the rule conditions are no longer met** Select this option to reset Alarm mode after the rule is triggered.

Location tab

Rules	General Location Speed Regions Radios Lone Worker
I Montor Area 1	Define the subscriber's relative positioning conditions which will trigger the rule and choose specific actions to perform when the rule is executed Image: The solution of
Rerun the rules after ead	n rule edit, server restart and at the start of each scheduled time window (not recommended) (i)

Trigger this rule when a subscriber:

• Enters the selected regions

Select this option so that the rule will be triggered as soon as a subscriber enters the selected region.



• Leaves the selected regions

Select this option so that the rule will be triggered as soon as a subscriber leaves the selected region.

For multiple nested/overlapping regions

Choose one of the options specifying for multiple regions whether to consider only outer border of the group of regions, or any border of a region within the group.

Perform the following actions:

Here you specify which actions to execute when the rule is triggered.

• Activate Alarm mode

Select this option to activate an Alarm mode in the Dispatch Console.

• Activate Lone Worker mode

Select this option to automatically activate a Lone Worker mode for the radio in case of entering or leaving the selected region.

• Send Text Message to the source radio

Select this option to automatically send a text message to the radio when it enters or leaves the selected region.

• Send notification

Select this option to send a notification when the radio enters or leaves the selected region. Click the **Recipients** link and specify the recipients to send the notification to.

• Send Call Alert to the source radio

Select this option to automatically send a call alert to the radio when it enters or leaves the selected region.

Speed tab

Rules	General Location Speed Regions Rad	lios Lone Work	er	
Monitor Area 1 Monitor Area 3	Define the subscriber's motion attribu to perform when the rule is executed	tes which will tri	gger the rule and choose s	pecific actions
	Trigger this rule when a subscriber:			
	Moves faster than:	60	🗧 km/h	
	Moves slower than:	10	🕽 km/h	
	Stands still for longer than:	90	\$ seconds	
	Track speed in relation to regions:	Everywhere	•	
	Perform the following actions: Active Aammode Send Text Message to the source Send Call Alert to the source rac			
Rerun the rules after each rule ed	t, server restart and at the start of each sch	eduled time win	dow (not recommended) 🤇	D

Trigger the rule when a subscriber:

• Moves faster than

Select this option and specify the maximum allowed speed for the vehicles. The rule will be triggered when the vehicle with the radio exceeds this speed limit.



• Moves slower than

Select this option and specify the minimum allowed speed for the vehicles. The rule will be triggered when the vehicle with the radio drops below the specified speed.

• Stands still for longer than

Select this option and specify the time period, in seconds, during which the vehicle is allowed to stand still. The rule will be triggered when the vehicle with the radio stands still for longer than this specified time period.

• Track speed in relation to regions

From the drop-down list, select where to track the speed of the vehicles: inside or outside the selected regions, or independently of the region.

Regions tab

Geofencing and Speed Control	×
Rules	General Location Speed Regions Radios Lone Worker
IZ Monitor Area 1 ✓ Monitor Area 3	Select the regions where this rule can be triggered All regions Only selected regions Regions / Mry zone Route 1
	Select All Deselect All
Rerun the rules after each rule ed	t, server restart and at the start of each scheduled time window (not recommended) (1)
Add Rule 🔻 Disat	le Rule Delete Rule OK Cancel

• All regions

Choose this option to apply this rule for all regions.

• Only selected regions

Choose this option to apply the rule for one or several regions.

- Select all Click this button to select all regions in the list.
- Deselect all

Click this button to deselect all regions in the list.

Radios tab



Geofencing and Speed Con	rol	×
Rules	General Location Speed Regions Radios Lone Worker	
 Monitor Area 1 		
 Monitor Area 3 	Select radios the rule is applied for:	
	O All radios	
	Only selected radios	
		0
	Firemen	
	25 (Pete) 125	
	235 (Basil) 235	
	Police	
	1234 5	
	a a a a	1: -
Rerun the rules after each	rule edit, server restart and at the start of each scheduled time window (not recommended) $(ar{1})$	
Add Rule 🔻	Disable Rule OK Can	cel

• All radios

Choose this option to apply this rule for all radios.

• Only selected radios

Choose this option to apply the rule for one or several radios.

• Select all (1)

Click this button to select all radios in the list.

• Deselect all (2)

Click this button to deselect all radios in the list.

• Collapse all (3)

Click this button to collapse the view of radios in the list.

• Expand all (4)

Click this button to expand the view of radios in the list.

• (5)

Click this button, and from the drop-down menu, select which list to display: Radio List, Radio Groups, or Logical Groups.

Lone Worker tab

Geo	fencing and Speed Control	×	
Ru	les	General Location Speed Regions Radios Lone Worker	
2	Monitor Area 1		1
	Monitor Area 3	Select the tasks to be executed when the rule is triggered	
		○ All tasks	
		Only selected tasks	
		- <u> </u>	
		Lone Workers /	
		Lone Worker	
		Select All Deselect All	
٦P	Rerun the rules after each rule edit	server restart and at the start of each scheduled time window (not recommended) $({f i})$	
	Add Rule 🔻 Disabl	Rule Delete Rule OK Cancel	



• All Tasks

Choose this option to execute all Lone Worker tasks configured by the administrator when the rule has been triggered.

• Only selected tasks

Choose this option, and in the list below, select the Lone Worker tasks to be executed when the rule has been triggered.

Variable settings for Geofencing rules of event types (Map Region, Beacons, Radios and Lone Worker) are represented in the table below:

Event type	Tab Name	Parameters Description
Common Settings	General	Name – specify the rule name;
		Description – add the rule description;
	Scheduler	Run the rule on a schedule - select to start a scheduler for Geofencing rules;
		Days of week - select the days of the week on which to activate the Geofencing rule;
		Start time - set the time at which to start the rule;
		Stop time - set the time at which to stop the rule.
	Radios	All radios – choose to apply this rule for all radios;
		Only selected radios – choose to apply the rule for one or several radios;
		Select all – click to select all radios in the list;
		Deselect all – click to deselect all radios in the list.
		Regions Control – select to enable regions control;
		Control mode – select the control mode for regions in the dropdown list;
		Activate Alarm mode if the rule has been triggered – select to activate Alarm mode in the Dispatch Console if Regions Control rule has been triggered;
		Send Text Message to a radio if the rule has been triggered – select to inform radio subscriber if Regions Control rule has been triggered;
		Activate Lone Worker if the rule has been triggered – allows automatically activating a Lone Worker policy for a radio in case of entering or leaving exact region on map. Select to enable this option.
		Speed and Idle Control – select to enable speed and idle control;
		Control mode – select the control mode for speed and idle control in the dropdown list;
		Maximum Speed – set the maximum speed for radio;
		Maximum Idle Time – set the maximum idle time for radio;
Map Region.	General	Activate Alarm mode if the rule has been triggered – select to activate Alarm mode in the Dispatch Console if Speed and Idle Control rule has been triggered



Allows configuring rules when a radio(s) enters or leaves the defined map region(s).		Send Text Message to a radio if the rule has been triggered – select to inform radio subscriber if Speed and Idle Control rule has been triggered; Send Call Alert to a radio if the rule has been triggered – select to inform radio subscriber if the rule
		has been triggered; Reset Alarm mode if the rule is not triggered - select to inform radio subscriber if the rule has not been triggered.
	Scheduler	See above
		All regions – choose to apply this rule for all regions;
	Regions. Select regions to apply	Only selected regions – choose to apply the rule for one or several regions;
	the rule	Select all – click to select all regions in the list;
		Deselect all – click to deselect all regions in the list.
	Radios	See above
	Lone Worker.	All Tasks – choose to apply all tasks configured by the
	Enables Lone Worker when the rule has been triggered	administrator when the rule has been triggered; Only selected tasks – choose this option, and in the list below, select the Lone Worker tasks to be executed when the rule has been triggered.
Beacons.	General	Control mode:
Allows configuring rules when a radio (s) enters or leaves		Control entering beacon coverage zone – select to enable the rule when a radio enters beacon coverage zone;
the beacon coverage zone		Control leaving beacon coverage zone - select to enable the rule when a radio leaves beacon coverage zone;
		Activate Alarm mode if the rule has been triggered - select to activate Alarm mode in the Dispatch Console if Beacons rule has been triggered;
		Reset Alarm mode if the rule is not triggered – select to reset Alarm mode in the Dispatch Console automatically if the rule condition was not triggered (e.g., when Control entering beacon coverage zone is selected and the radio enters the monitored coverage zone and then instantly leaves the zone, the alarm mode in the Dispatch Console will be reset automatically)
		Send Call Alert to a radio if the rule has been triggered – select to inform radio subscriber if the rule has been triggered;
		Send Text Message to a radio if the rule has been triggered – select to inform radio subscriber if Beacons rule has been triggered;
		Activate Lone Worker if the rule has been triggered – allows automatically activating a Lone Worker policy for a



		radio in case of entering or leaving beacon coverage
		zone. Select to enable this option.
	Scheduler	See above
	Radios	See above
	Beacons.	All Beacons – choose to apply this rule for all beacons;
	Enables rule for selected beacons	Only selected beacons – choose to apply the rule for one or several beacons.
	Lone Worker	See above.
		Control mode:
		Control Entering Region – select to enable the rule when a radio enters the coverage zone associated with another radio;
		Control Leaving Region - select to enable the rule when a radio leaves the coverage zone associated with another radio;
Radios. Allows using radio(s)1 as a map		Activate Alarm mode if the rule has been triggered - select to activate Alarm mode in the Dispatch Console if Radios rule has been triggered;
region and monitor when another radio(s) enters or leaves radio's coverage zone	General	Reset Alarm mode if the rule is not triggered – select to reset Alarm mode in the Dispatch Console automatically if the rule condition was not triggered (e.g., when Control Entering Region is selected and radio enters to the monitored coverage zone and then instantly leaves the zone, alarm mode in the Dispatch Console will be reset automatically)
		Send Text Message to a radio if the rule has been triggered – select to inform radio subscriber if Radios rule has been triggered;
		Send Call Alert to a radio if the rule has been triggered – select to inform radio subscriber if the rule has been triggered;
		Minimum distance between radios – specify the distance, in meters. When a distance is less than the selected value, the rule will be triggered according to the settings above.
		Color of region – select the radio coverage zone color.
	Scheduler	See above
	Regions	Select radio coverage zones the rule is applied for.
	Radios	See above
Lone Worker.		Days of week - select the days to activate the Lone Worker rule;



Allows configuring scheduled Lone Worker tasks	General	Start time - set the time to start the rule; Stop time - set the time to stop the rule.
	Radios	See above
		Select all configured by Administrator Lone Worker tasks or several configured tasks.
	Lone Worker	When a Lone Worker task is mentioned as Disabled, the administrator should enable the task.

Idle Time

The Idle Time feature allows monitoring vehicles idle time assigning Telemetry Commands on selected VIOs.

• Click Tasks (1), and double-click Idle Time (2) in the Tasks pane.

Administration	Tasks					2
Server	Group 10	0 40 0 40	3: Line free Group 20	• •	Al Call	0 4 0 0 4 0
→ Žel System Bridging → ③ Telephony → Tasks ← 1 ↓ Virtual Modbus Devices	Add - Edit					
Event/Alarm Management	Agenda	ce Control				
Voice Dispatch	Export to SWD - L	ocation of radio				
Location Tracking	Ide Time Ide Time Ide Time Ide Time Ide Time					
3ob Ticketing	Mesages 1_Messa Missed GPS data k Gradio Allocation (S	pading	2			
😿 Route Management	SMS and Email not					
RFID Tracker	User Activity					
Caracterization Text Messages	Voice Message					
Voice Recording						
Event Viewer						
Radio Allocation						
Administration	H4 44 4 Record 5 of 14	L 10 100 100 d				

Specify the telemetry to set the Idle Time:

Idle Time				×
Start	VIO:	1+	Command: High	•
Stop	VIO:	1 -	Command: High	▼
			ОК	Cancel

Start

• Specify the telemetry VIO and Command to start the Idle Time.

Stop

• Specify the telemetry **VIO** and **Command** to stop the Idle Time.

The administrator can see Idle Time reports and statistics.

Click **Reports** (1), and under **GPS reports**, click **Idle Time Summary** or **Idle Time detailed** (2) to see a common Idle Time report:



File View Map Tools Help		
Reports	GPS reports	S
GPS reports GPS reports GPS taying in a Region / Proximity Drive Activity Summary Speed for period Ide Time Summary	Intercom 6 (2)<	9) #:0) 1)
Idle Time Detailed 2 V	Idle Time Summary	
Voice Dispatch	Query Params:Not defined	
Location Tracking	Select data by period: Start Date: 11+Nov-2016 0:00 • ···	
😵 Job Ticketing	End Date:	
😥 Route Management	Filter: Radio:Not defined	
RFID Tracker	Logical Group:Not defined	
C Text Messages	Radio ID (e.g. 22,33,40-55,88):	
🔮 Voice Recording	Speed: 1 🚉 km/h	
Reports	Generate Report Save Query Params Delete Query Params	
Event Viewer		
Radio Allocation	1	
Administration		
🔂 127.0.0.1 🚷 🕵 🙎 Administrator 📑 Li	censed to: demo Demo License	🕑 Active -

Note: Specify the speed accuracy value in the **Speed** box (3).

Lone Worker

The Lone Worker policy lets the dispatcher set a time interval the communication with a subscriber is expected. For example, if a lone worker has not called the dispatcher for 15 minutes, the radio receives a message and the Dispatcher receives an alarm signal.

• To add a Lone Worker task, select **Tasks** (1), and click **Add > Lone Worker** (2).

File View Map Tools Help		
Administration	Tasks	S
Database Ado Systems System Bridging Taulos Taulos Taulos Taulos Taulos Taulos Taulos Taulos	Intercom 0 0 0 0 1 1 Cal If intercom 0	0) 4 :0
Virtual Modbus Devices	Add De Lette	۵
Voice Dispatch	Scheduled Task	
Location Tracking	Agenda	
📅 Job Ticketing	Scheduled Report HotSOS d 2	
Route Management	D Timer Z Missed GPS data loading	
RFID Tracker	Sign-in notification	
Text Messages		
Voice Recording	Voice Message	
Reports		
Event Viewer		
(1) Radio Allocation		
Administration	144 44 4 Record 5 of 14 🕨 34 4	Þ
🔂 127.0.0.1 🍇 🕵 🧟 Administrator 📑 Li	icensed to: demo Demo License	Active

• In the **Lone Worker** dialog box that opens, specify the following parameters:



ask name:	Lone Worker 1
ask Start Con	ditions Task Stop
_	y dispatcher
	lly by receiving Text Message from a radio
Message:	Start
	ally by receiving Telemetry Command from a radio
VIO:	1 🗘 Command: Any event
Automatica	Ily by receiving DTMF command from a radio
Command:	
Automatica	, illy by receiving Status from a radio
Status:	0
Send the fo	ollowing text message to the radio
Message:	

Task Start tab

- **Manually by dispatcher** Select this option to start the Lone Worker task manually by the dispatcher.
- Automatically by receiving Text Message from a radio Select this option so that the Lone Worker task will start after receiving a message from a radio. If you select this option, specify a text message in the Message box.
- Automatically by receiving Telemetry Command from a radio Select this option so that the Lone Worker task will start after receiving a telemetry command from a radio. If you select this option, specify the VIO contact, and from the **Command** drop-down list, select the signal level at which the user's radio should send the telemetry command.
- Automatically by receiving DTMF command from a radio Select this option so that the Lone Worker task will start after receiving a predefined DTMF command, for instance, #11#. If you select this option, specify the DTMF combination without the # characters in the **Command** box.
- Automatically by receiving Status from a radio Select this option so that the Lone Worker task will start after receiving a specified status from a radio. If you select this option, specify **Status**.
- Send the following text message to the radio Select this option and in the **Message** box enter the text message that will be sent to the radio when a Lone Worker task is started for that radio.

Conditions tab



Lone Worker	×
Task name:	Lone Worker 1
Task Start Cond	ditions Task Stop
Radio has not b	been transmitting during 30 👘 minutes
Send a notification	fication to a radio to start transmitting
Send notifica	ation before 60 🛓 seconds
Send Cal	Il Alert to a radio
O Send Tex	xt Message to a radio
Message	21
Reset Lone	Worker after the Text Message received
Message	
Reset Lone	Worker after the Telemetry received
VIO:	1 🜩 Command: Any event
Reset Lone	Worker after the distance has been passed
Distance:	: 5 🗼 km
Do not trigge	er alarm if radio is in offline state less then:
Interval:	60 🔹 seconds
	OK Cancel

• Radio has not been transmitting during

Specify the time period, in minutes, during which the radio has not been transmitting, to enable the Lone Worker policy.

• Send a notification to a radio to start transmitting

Select this option to send a notification to a radio before triggering the Lone Worker policy if the radio has not transmitted during the specified time period.

Send notification before

Specify the time period before the time comes to trigger the Lone Worker policy, to send a notification asking the radio to respond.

Send Call Alert to a radio

Choose this option to send a call alert to the radio in case the policy has been triggered;

Send Text Message to a radio

Choose this option to send a text message to the radio in case the policy has been triggered. Specify the message text in the **Message** box.

Reset Lone Worker after receiving Text Message

Select this option to reset the Lone Worker task after receiving the message specified in the **Message** box.

• Reset Lone Worker after receiving Telemetry command

Select this option to reset the Lone Worker task after receiving the telemetry command. If you select this option, specify the **VIO** contact, and from the **Command** drop-down list, select the signal level at which the user's radio should send the telemetry command.

• Reset Lone Worker after the distance has been traveled Select this option to reset the Lone Worker task after the distance specified in the **Distance** box has been traveled.



• Do not trigger alarm if radio is offline for less than

Select this option so that the alarm is not triggered if the radio is offline for the time less the time specified in the **Interval** box.

Task Stop tab

Lone Worker	\times
Task name: Lone Worker 1	
Task Start Conditions Task Stop	
Manually (on demand of dispatcher)	
 Automatically by receiving Text Message from a radio 	
Message:	
 Automatically by receiving Telemetry Command from a radio 	
VIO: 1 Command: Any event	
Automatically by receiving DTMF command from subscriber	
Command: 123 #123#	
Automatically by receive Status from subscriber	
Status: 0	
Send Text Message to a radio	
Message:	
OK Cano	el

While on **Task Stop** tab, you can specify how to stop the Lone Worker task. The available options are similar to those you specified on the **Task Start** tab.

Enabling Lone Worker

• To enable the Lone Worker task for a selected radio, go to **Voice Dispatch** (1), right-click the selected radio (2), and choose **Start Lone Worker** (3):

oice Dispatch		Radio Inte	rface							
li 🗄 🗄 💑 🕺 '	7	🗊 🗸 🛛 Radio Inte	rface Telep	ohony Recent Calls/E	ivents					
		Terminate all	Transmit						uick Comma	ands X
Online, GPS		<u> </u>		A	Active Call	5		× 🖸	onfigure	
Ҟ 🜔 125 (P 🕇		Presence in Network						Q	ueued Mess	ages 🛛 🗙
Ҟ 🔊 235 (B		Private Call							Record 🔻 👔	7 File 🔻
		Send Call	_						Selected Chan	
Voice Dispatch		Request Location		a		Intercom			isy.mp3	
							ree channel			
GPS Positioning		Send Message		•••	" P	ТТ	ree channer		 Bobby. 	mp3
		Advanced	•	Menu		A	I Cal	То	: Selected Cha	nnels
Job Ticketing 1	禍	Find on Google Earth			$\leq -$					
1	2	Show Route on Google Ea	rth	•0) 🗮 🧔	2) 🗋 🗆	Group 2	•0)		Cross Pate	h 🗙
🖞 Route Management		Monitoring) ee d	hannel		F	ree channel	Dra	g and Drop PTT	Box here to
.		Specify Custom Icons		23	P	T			create new	group
RFID Tracker		Set Radio Channel	+ emer				olice			\equiv
Text Messages		Set On Duty		ot#1 🔟 🛋 🕼		Repeater #	1: Slot #2 🔊 🕻		atch on Repea	iters
Text Plessages		Start Lone Worker 1 📈	1:50			kebeater #	1: SIOT #2		•	
Voice Recording		Start Timer	e - (Print I Pause	🦪 Clear 🗸	🚳 Reload	🍸 Filter By Radio 📑	Grouping 🍸 Auto	o Filter 🍥 De	fault Settings
-	· · · ·	Date		Radio System	Sender	Recipient	Message	Details	Note	Ext. Note
Reports		21-Oct-20	6 17:56:27	Repeater #1: Slo	Administra	Police	Dispatcher 'Administr	Members: Administr		
		21-Oct-20		Repeater #1: Slo			Dispatcher 'Administr			
Event Viewer			6 17:56:23	Repeater #1: Slo			All Call from dispatch			
-		21-Oct-20		Repeater #1: Slo		Al	All Call from '125' (00			
Radio Allocation		21-Oct-20	6 17:56:14	Repeater #1: Slo Repeater #1: Slo	235	Al Al	All Call from '235' (00 All Call from '235' (00			
7	_	141 44 4 Re			~~~		art armm 205 00	members: 76		Þ
Administration		Recent Calls/E	Date:	and Calle Dealer Chains	Ashing Test	a Anti-	Routes User Activity	Man		

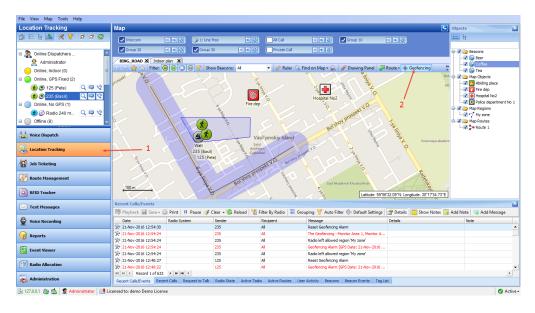
• To monitor the Lone Worker task, click the **Active Tasks** tab:



File View Map Tools Help				
Voice Dispatch	Radio Interface			
d: 🗄 h 🚵 🛠 🍸 🖉 🍟	Radio Interface Telephony	Recent Calls/Events		Quick Commands
🗉 🦲 Online, GPS	reminate all Transmit	Active Calls	×	
😚 🕑 125 (P 📮 🕅 🚍				Queued Messages X
💰 🖲 235 (B 📮 义				Record V La File V
	(^	To: Selected Channels
Voice Dispatch	Telephony 1 2 3			Daisy.mp3
GPS Positioning	4 5 6 M e			Bobby.mp3 To: Selected Channels
Job Ticketing				
	Intercom			Cross Patch X
🥂 Route Management	PTT	'		Drag and Drop PTT Box here to create new group
RFID Tracker	All Call			Patch on Repeaters
Text Messages	Group 1	•) •: 0	~	Binary Patch
_	Active Tasks			
👻 Voice Recording	📕 Stop 📑 Grouping 🍸 Aut			
Reports	Task Lone Worker 1	Radio 125 (Pete) 125	State 16:5	5
· ·		100 (000) 100	2010	
Event Viewer				
Radio Allocation				
	H4 44 4 Record 1 of 1 + H+ HH		-	Þ
Administration	Recent Calls/Events Recent Calls	1	Active Routes User Activity	1ap
🖒 127.0.0.1 🔊 🔂 🔂 🖉 Administra	tor Licensed to: demo Demo	License		🖸 Active -

Enabling Lone Worker from Geofencing

• Click **Location Tracking** (1), and click the **Geofencing** button (2) in the **Map** pane:



In the Geofencing and Speed Control dialog box, click
 Add Rule > Lone Worker (1):



TRBOnet.Enterprise 5.1 / Dispatch C	onsole				_	□ ×
File View Map Tools Help						
GPS Positioning	Geofencing and Speed Control			×	< 🔄 Objects	
di 🗄 🗄 💑 🛠 🍸 🖻	Rules	General Radios Lone	Worker		😑 🗄	
	Monitor Area 1					
😑 🦲 Online, GPS	Monitor Area 3	Name:	Lone Worker 2			Beacons
😥 💌 125 (P 🛛 🖓 🐺 🕅	✓ Lone Worker 2	Description:	Department 1			Beer
🐔 🕑 235 (B 💡 📮 🔇						Coffee
X @ 235 (B Y - X						Map Objects
Voice Dispatch						Abiding place
		Days of week:	Monday, Wednesday			Fire dep
GPS Positioning		Start time:		_		Hospital No2
		Stop time:	0:00			Map Regions
😸 Job Ticketing		Stop one.	0:00			7 My zone
M						Map Routes
🥂 Route Management					Wortsov	Route 1
RFID Tracker					Palace	
Contemporary Text Messages						
-					Kuur	
🕎 Voice Recording					9	
0	1				niralteyskiy	
Reports	1 [†]				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Event Viewer						
	Rerun the rules after each rule edit,	, server restart and at the	start of each scheduled time window (no	t recommended) (1)		
Radio Allocation	Add Rule 🔽 Disable	e Rule Delete	Rule	OK Cancel		
	1 Map Region				18'40.14"E	
Administration	Beacons Recent Cals	s Radio State Active 7	Tasks Active Routes User Activity	Beacons Beacon Events Tag Lis	at at a second s	
🐻 127.0.0.1 🛞 🕵 🕵 🗴 Adminis	🛛 🛞 Radios 🛛		Carle Course Course	acatal acatal favorita i fugua		🕑 Active -
	tre 🐕 Lone Worker 🕈 emo Demo					- Active -

• Specify a **Name** for the Lone Worker rule and add a **Description**.

Days of week

In the drop-down list, select the days of the week on which to activate the Lone Worker rule.

Start time

Specify the time at which to start the rule.

Stop time

Specify the time at which to stop the rule.

• Click the **Radios** tab and add radios to which to apply the Lone Worker rule:

Geofencing and Speed Control		×
Rules	General Radios Lone Worker	
Monitor Area 1		
Monitor Area 3	Select radios the rule is applied for:	
<pre><rule name=""></rule></pre>	O All radios	
	 Only selected radios 	
		9
	25 (Pete) 125	
	35 (Basil) 235	
	Ø 0	i= -
Rerun the rules after each rule	IL edit, server restart and at the start of each scheduled time window (not recommended) (1)	
Add Rule 🔻 Di	able Rule Delete Rule OK	Cancel
Add Rule V	able Rule OK	Cancel

All radios

Choose to apply this rule to all radios.

Only selected radios

Choose to apply the rule to one or several radios.

Select all

Click to select all radios in the list.



Deselect all

Click to deselect all radios in the list.

• Click the Lone Worker tab and select the configured Lone Worker tasks:

Geofencing and Speed Control		×
Rules	General Location Speed Regions Radios Lone Worker	
V Monitor Area 1	Select the tasks to be executed when the rule is triggered	/) Deselect Al
Rerun the rules after each rule edit, s	erver restart and at the start of each scheduled time window (not recommended) $($	i)
Add Rule 🔻 Disable I	Rule Delete Rule OK	Cancel

• Choose either all configured Lone Worker tasks or several configured tasks.

Note: When a Lone Worker task is mentioned as **Disabled**, enable it on the **Tasks** pane.

Radio Allocation (Sprite Forms)

This function is used for direct communication between the dispatcher and the subscriber via special **Tallysman Option board** installed into the radio. The dispatcher and subscriber have special form templates. The dispatcher receives Duty ID of the subscriber with his template output form whereas the subscriber sends it using his template input form. The radio name changes to its Duty ID.

- Note: Any activity may be decoded with its Duty ID so this is a way to communicate for the dispatcher and subscribers only.
- Click Tasks (1), and double-click Radio Allocation (Sprite Forms) (2) in the Tasks pane.



File View Map Tools Help		
Administration	Tasks	S
G Server → Batabase → Radio Systems → System Bridging → Telephony	Intercom 1 400 1 110e free 400 Al Cal If Group 10 1 400 If Group 20 6 400 If Group 30 If Private Cal 1 400 If Group 20 6 400 If Group 30	0.40
Tasks	Add	۵
Voice Dispatch	Dispatcher Presence Control O Export to SWD - Location of radio	
Location Tracking	Geofending Goldenting	
號 Job Ticketing		
💓 Route Management	😨 📴 Missed GPS data loading	
RFID Tracker	Gradio Allocation (Sprite Forms) Scheduled Report 12 Assages for Period	
C Text Messages	Image: SMS and Email notifications Image: Optimized Control	
🔮 Voice Recording	☑ <a>2 ☑ <a>100 ☑ <a>100 ☑ <a>100	
Event Viewer	Voice Message	
8 Radio Allocation		
Administration	HI 4 4 Record 9 of 15 > >> >> H 4	Þ
🔂 127.0.0.1 🖓 🔥 💆 Administrator 📗	Licensed to: demo Demo License	🕑 Active -

• Load the **Sprite Form** (output template) and select the **Field Name**:

Radio Allocation (Spri	te Forms)	Х
Form Description:		
FORMÄTTED= 0203000F598C0AF3 0F800F5025368692 AS_ARRAY=bx02, (0x4E, 0x5A, 0x20, 0 0x05, 0x00, 0x02, 0 0x68, 0x69, 0x66, 0 0x78, 0x1E METADATA=00080 FORM_TITLE=NZ E FORM_D=2 FORM_REVISION= [Field Data #0]	12/12/2012 8:21:05 a m. 502EB004E5A20427573018000000106180500028768CE0F1 674206E756D62657235AD781E x03, 0x00, 0x0F, 0xB9, 0x8C, 0x0A, 0xF5, 0x02, 0xFB, 0x00, x42, 0x75, 0x73, 0x01, 0x80, 0x00, 0x00, 0x01, 0x06, 0x18, x87, 0x68, 0xCE, 0x01, 0x80, 0x00, 0x00, 0xF5, 0x02, 0x53, r74, 0x20, 0x6E, 0x75, 0x6D, 0x62, 0x65, 0x72, 0x35, 0xAD, 00000000000 Bus	
Prompt="Shift numb	-	*
	Loa	d
Field Name:	Shift number	-
	OK Cano	el

• Click **OK** to add a Sprite Form.

Scheduled Task

This function allows sending scheduled messages to radios.

• To add a scheduled task, click Add (1) > Scheduled task (2):



File View Map Tools Help		
Administration	Tasks	
Server Conse Cons		
Virtual Modbus Devices	Lone Worker Cone Vorker Cone Vorker	۵
Voice Dispatch	Scheduled Task	
Location Tracking	Voice Message do Agenda Monot Routes	
🔡 Job Ticketing	Scheduled Report	
😥 Route Management	HotSOS d Timer "% Missed GPS data loading	
RFID Tracker	3 Sign-in notification	
C Text Messages	Timer Source Activity	
🔮 Voice Recording	Voice Message	
Event Viewer		
Radio Allocation		
administration	H4 44 4 Record 1 of 14 ▶ ₩ ₩ 4	Þ
🔂 127.0.0.1 🚷 🕵 🙎 Administrator 📑 L	icensed to: demo Demo License	Active •

Scheduled Task		×
Task name:	Scheduled Task	
Command Sche	duler	
Command:	Send Text Message	1
Message:	Alarm	1
Send to rad		
C Send to sub	scribed radio	
Recipient		.
Firemen		
	OK Cancel	

Task name

Specify a name for the task.

Command

From the drop-down list, select what to send to selected radios.

Send Text Message

Message

Enter the message text in this box.

Send Telemetry

Select this command to send scheduled telemetry commands to selected radios/groups, or request telemetry states from selected radios/groups.

VIO

Specify the VIO contact.

Command

From the drop-down list, select the signal level at which to send the telemetry command to selected radios/groups, or select 'Request state' to receive telemetry states from selected radios/groups.



Request Location

Select this command to receive location data from selected radios/groups.

Send to radio group

Choose this option to send the specified command to selected radio groups.

Send to subscribed radio

Choose this option to send the specified command to selected radios.

Recipient

In this list, select radio groups/radios to send the specified command to, or receive telemetry/location data from.

Send Voice Message

Select this command to send a voice message to selected radios/groups:

Sch	neduled Task			×				
Ta	ask name: Scheduled	Task 1						
C	Command Scheduler							
	Command: Send Vo	pice Message		•				
	Load from file							
	Record message							
	Playback message							
	Call Type	Channel	Call Target					
	Private Call	Auto Detect	125					
	Group Call	HRepeater #1: Slot	Firemen					
	Intercom call	Intercom	All	•				
	Impolite channel access							
	Inpolite charmer access	•						
			OK	Cancel				

Load from file

Click this link to load an existing file from your PC.

Record Message

Click this link to record a new voice message.

Play back message

Click this link to play back the voice message.

Specify Call type, Channel, and Call Target for a voice message.

Note: To send a Voice Message to a subscriber from the phone book, click ... in the Call Target column and select a contact from the phone book.

Impolite channel access

Select this option so that the voice message will be sent regardless of whether the channel is busy or not.

Scheduler tab



Scheduled Task	Х
Task name: Scher	duled Task 1
Command Scheduler	
Start date:	01 October 2016
Stop date:	13 October 2016
Days of week:	Monday, Tuesday, Wednesday, Thursday, Friday 💌
Execute recurrently	with interval
Start time:	15:00
Stop time:	18:00
Repeat every:	01:00:00
C Execute at particula	ar time
	OK Cancel

• Start date

Select a date to start the task.

• Stop date

Select a date to stop the task.

• Days of week

In the drop-down list, select the days of the week on which to perform the task.

• Execute recurrently with interval

Choose this option to perform the task on a periodic basis.

• Start time

Specify the time at which to start the task.

• Stop time

Specify the time at which to stop the task.

- **Repeat every** Specify a time period for periodic task executions.
- **Execute at particular time** Choose this option and specify the times in the columns of the table below.

SMS and Email Notifications

TRBOnet Dispatch Console allows managing text messages:

- Send Text Messages from LAN to a particular radio or talk group (POP3 Server);
- 2. Forward all Text Messages from radios to base radio to particular email address (SMTP Server).
 - Note: Microsoft Exchange Server can be used as SMTP and POP3 servers. For more details on SMTP or POP3 servers, ask your System Administrator.

To enable the task, click **Tasks** (1), and double-click **SMS and Email notifications** (2) in the **Tasks** pane.



File View Map Tools Help						
Administration	Tasks 🔍					
Server Server Server Server Radio Systems System Bridging System Bridging System Bridging Server Server Server Server Server	Intercom Image: Comp 10 Image: Comp 20 Image: Comp 30 Image: Comp 3					
Tasks I Virtual Modbus Devices	Add • Edit Collect Task Name Z Delete Z					
Voice Dispatch	Paperton					
Location Tracking	Ceofending					
📅 Job Ticketing	Lone Worker 1					
📝 Route Management	O Messages 1_Messages for Period Missed GPS data loading department of the second of th					
RFID Tracker	✓ [®]					
C Text Messages	♀ ۞ Timer ▼ ቇ User Activity					
🔮 Voice Recording	✓ ♥ Voice Message ✓ ♥ ♥ Voice Message					
Event Viewer	2					
😰 Radio Allocation						
Administration	H H K Record 10 of 14 ▶ N N K C					

SMS settings tab

15 and Ema	Inotifications	
SMS settings	Outgoing Email settings (SMTP) Incoming Email settings	
Send S	MS to recipients if ALARM has been activated	
Send 1	IMS to recipients if ALARM has been activated	
Forward T	ext Messages to cell phone recipients	
🗹 Input	nessages (from radionetwork to dispatchers)	
🗹 Outpu	messages (from dispatchers to radionetwork)	
SMS Group	s	
L		
		OK Car

- Send SMS to recipients if ALARM has been activated
 Select this option to send an SMS in case of an alarm on the radio.
- Send MMS to recipients if ALARM has been activated Select this option to send an MMS in case of an alarm on the radio.

Forward Text Messages to cell phone recipients

- Input messages (from radio network to dispatchers)
 Select this option to forward incoming text messages to cell phones.
- Output messages (from dispatchers to radio network)
 Select this option to forward outgoing text messages to cell phones.

For more details on SMS settings, see Outgoing Mail Server (SMTP).

A radio sends text messages to the base station. TRBOnet Server forwards all text messages to a particular email address (e.g. <u>admin@yourcompany.com</u>). The administrator receives text messages from radios as regular emails.

Outgoing Email settings (SMPT) tab



	Inotifications)
SMS settings	Outgoing Email settings (SMTP)	Incoming Email settings	
Send E	mail to recipients if ALARM has bee	en activated	
	ext Messages to email recipients		
🗹 Input m	nessages (from radionetwork to dis	apatchers)	
Cutput	messages (from dispatchers to ra	dionetwork)	
Email Group	25		

• Send Email to recipients if ALARM has been activated Select this option to send an Email in case of an alarm.

Forward Text Messages to email recipients

- Input messages (from radio network to dispatchers)
 Select this option to forward incoming text messages to Email address(es).
- Output messages (from dispatchers to radio network)
 Select this option to forward outgoing text messages to Email address(es).

Incoming Email settings tab

TRBOnet Server connects to POP3 server, reads emails and sends text messages to radios or talk groups.

- 1. Create an email account on your email server.
- Send an email to <u>radioserver@yourcompany.com</u>. In the **Subject** field, enter Radio ID: XXX to send an email to a selected radio, or **Group ID**: XXX to send an email to a selected radio group.
 - Note: If you don't properly specify the email **Subject**, or specified a non-existing **Radio ID**, a corresponding notification will appear in the Event Log of the Dispatch Console.
- Forward incoming emails to radio network (from email box to radios) Select this option to forward incoming emails to radio network.

User Activity

The **User Activity** function allows the dispatcher to create lists of radios, to which radios can be assigned due to their activity.

For example, if a subscriber sends an **On duty** message or presses an exact preset telemetry button, this subscriber gets assigned to the **On duty** list in the Dispatch Console. The dispatcher can also manually assign subscribers to lists.

• To enable the User Activity task, click **Tasks** (1), and double-click **User Activity** (2) in the **Tasks** pane:



File View Map Tools Help		
Administration	Tasks	S
Server Server	[Intercom •	0 E 0
Virtual Modbus Devices	Task Name	Δ
Voice Dispatch	■ ■ Agenda ■ ■ Dispatcher Presence Control ● ● Dispat to SWD - Location of radio	
Location Tracking		
🚰 Job Ticketing	Sea Lone Worker 1	
📝 Route Management	Mesages 1_Messages for Period Mesages 4_Messages for Period Mesage 4_Messages 6_Messages 6_Message	
RFID Tracker	Image: Weight and Allocation (Sprite Forms) Image: Weight and Email notifications	
Text Messages	 ☑ ⊕ Timer ☑ № User Activity 	
🔮 Voice Recording	Voice Message	
Event Viewer	2	
8 Radio Allocation	_	
Administration	H4 4 4 Record 12 of 14 + H H 4	•
🔂 127.0.0.1 🔊 🛋 🦉 Administrator 📑 Li	censed to: demo Demo License	🕜 Active -

Lists of radios tab

ser A	ctivity						×
Lists	ofradios 🛛	dvanced					
	Name			Descript	ion		
۲	Off Duty						
۲	On Duty						
۲	User Activit	y # 1					
			Add		Edit		Delete
						OK	Cancel

• Click **Add** to add a list of radio activities:

User Acti	vity List Set	tings			×
General	Logical Gro	ups			
Name:		User Activit	ty # 1		
Descrip	otion:				
Backgr	ound:	🛞 Violet			▼ + -
Move a	a radio to thi	s list if:			
🗹 Ma	nually (on d	emand of dis	patcher)		
🗌 Au	tomatically b	y receiving	Text Message	from a radio	
Me	ssage:				
🗹 Au	tomatically b	y receiving	Telemetry Con	nmand from a rad	lio
VIC	D:	1 ≑	Command:	High level	•
🗌 Au	tomatically b	y receiving l	DTMF comman	d from subscribe	r
Co	mmand:				
🗌 Au	tomatically b	y receive St	atus from sub	scriber	
Sta	atus:	0			
				OK	Cancel



• Name

Specify a name for the user activity list.

- **Description** Add a description for the user activity list.
- **Background** Select the background color to display the radios assigned to the list.

Move a radio to this list if:

- Manually by dispatcher Select this option to assign radios to the list manually.
- Automatically by receiving Text Message from a radio Select this option to assign a radio to the list after receiving a text message from the radio. If you select this option, specify a brief text message in the Message box.
- Automatically by receiving Telemetry Command from a radio Select this option to assign a radio to the list after receiving a telemetry command. If you select this option, specify the VIO contact, and from the Command drop-down list, select the signal level at which the user's radio should send the telemetry command.
- Automatically by receiving DTMF command from a radio Select this option to assign a radio to the list after receiving a predefined DTMF command, for instance, #11#. If you select this option, specify the DTMF combination without the # characters in the **Command** box.

To assign offline radios to the default User Activity list, click the **Advanced** tab:

User Activity					×
Lists of radios Ac	dvanced				
Automatical	ly set the def	ault status fo	r offline radio	s	
Set the def	ault status	10 🜲	minutes		
			_		
				OK	Cancel

- Automatically set the default status for offline radios
 Select this antion to allow assigning the default status for offline
 - Select this option to allow assigning the default status for offline radios.
- Timeout

Specify the time period, in minutes, after which the default status is set to a radio.



Voice Message

The Voice Message allows automatically broadcasting a predefined Voice Message after receiving a telemetry command, a text message or a DTMF command.

To add a Voice Message task, select Tasks (1), and click Add > Voice Message (2).

Administration	Tasks	<u></u>
Server Conse C	▲ ✓ Intercom ■ ■ ■ Al Cal ✓ ✓ Group 10 ■ ■ ✓ ✓ □ ■ ✓ ✓ □ ■ ✓ □ □ ■ □ ✓ □ <th></th>	
Telephony 1	Add - B Edit B, Delete Setup to the setup to th	Δ
Voice Dispatch	O Scheduled Task Voice Message Agenda	
😵 Job Ticketing	Import Routes Scheduled Report HotSOS d	
RFID Tracker	™ Missed GPS data loading Image: Sign-in notification Image: Sign-in notification	
🔀 Text Messages	Subser Activity	
🔮 Voice Recording	✓ Ø. Voice Message ✓ Ø. Voice Message	
Event Viewer		
Badio Allocation		
Administration	H4 44 4 Record 12 of 14 + IN H9 4	

The user can have several Voice Message policies for different purposes. Specify a name of the policy in the **Task name** box and set the policy's parameters.

Task Start tab

Voice Messa	ige				×
Task name:	Voice M	lessage			
Task Start	Task Process	Task Stop	Message	Telemetry	
Manua	ally by dispatch	er			
Autom	natically by rece	eiving Text M	lessage fror	m a radio	
Messa	ige:				
Autom	natically by rec	eiving Teleme	etry Comma	nd from a radio	
VIO:	1	Comr	mand: H	ligh level	•
Autom	natically by rece	eiving DTMF	command fr	om a radio	
Comm	and:				
Autom	, natically by rece	eiving Emerg	ency from a	radio	
Emg. 1	Type: All		-		•
O Activa	ated by any rac	lio			
Activa	ated by specific	radios only			
Radio	: 125	Pete), Walt			•
🗹 Send t	the following te	xt message	to the radio	1	
Messa	ige:				
	-				
				OK	Cancel

• Manually by dispatcher

Select this option to allow the dispatcher to manually start the Voice Message task.



- Automatically by receiving Text Message from a radio Select this option to start the Voice Message task after receiving a specified text message from a radio. If you select this option, specify a brief text message in the **Message** box.
- Automatically by receiving Telemetry Command from a radio Select this option to start the Voice Message task after receiving a telemetry command. If you select this option, specify the VIO contact, and from the Command drop-down list, select the signal level at which the user's radio should send the telemetry command.
- Automatically by receiving DTMF command from a radio Select this option to start the Voice Message task after receiving a DTMF command from a radio, for instance, #11#. If you select this option, specify the DTMF combination without the # characters in the **Command** box.
- Automatically by receiving Emergency from a radio Select this option to start the Voice Message task after receiving an emergency command from a radio.
 - Emg. Type

From the drop-down list, select the type of emergency to be sent from a radio.

• Activated by any radio

Choose this option to expect receiving data from any radio in the system.

• Activate by specific radios only

Choose this option to expect receiving data from selected radios.

Radio

In the drop-down list, select the radio(s).

• Send Text Message to a radio

Select this option so that a text message will be sent to the radio that activated the Voice Message task. If you select this option, specify a brief text message in the **Message** box.

Task Process tab



Voice Message		×
Task name: Voice M	essage 1	
Task Start Task Process	Task Stop Message Telemetry	
C Send voice message o	nce	
Send voice message response of the send voice me	epeatable	
Repeat Interval:	60 second(s)	
Repeat Count:	10	
Impolite channel acces	35	
Delay on start:	1 second(s)	
	ОК	Cancel

• Send Voice Message once

Choose this option to send the voice message to a selected radio (s) only once.

• Send Voice Message repeatedly

Choose this option to send the voice message repeatedly.

Repeat Interval

Specify the repeat interval, in seconds.

Repeat Count

Select this checkbox and specify the number of times to repeat the voice message.

• Impolite channel access

Select this option so that the voice message will be sent regardless of whether the channel is busy or not.

• Start delay

Select this checkbox and specify the delay time, in seconds, for the Voice Message task.

Task Stop tab

Note: These options are available only if you have selected the **Send Voice Message repeatedly** option in the **Task Process** tab.



Voice Message	×
Task name: Voice Message	
Task Start Task Process Task Stop Message Telemetry	
Manually by dispatcher	
Automatically by receiving Text Message from a radio	
Message:	
Automatically by receiving Telemetry Command from a radio	
VIO: 1 Command: High level	•
Automatically by receiving DTMF command from a radio	
Command:	
Send the following text message to the radio	
Message:	
ОК	Cancel

• Manually by dispatcher

Select this option to allow the dispatcher to manually stop the Voice Message task.

• Automatically by receiving Text Message from a radio

Select this option to stop the Voice Message task after receiving a message from a radio. If you select this option, specify a text message in the **Message** box.

• Automatically by receiving Telemetry Command from a radio

Select this option to stop the Voice Message task after receiving a telemetry command from a radio: If you select this option, specify the **VIO** contact, and from the **Command** drop-down list, select the signal level at which the user's radio should send the telemetry command.

• Automatically by receiving DTMF command from a radio Select this option to stop the Voice Message task after receiving a DTMF

command from a radio, for instance, #11#. If you select this option, specify the DTMF combination without the # characters in the **Command** box.

• Send Text Message to a radio

Select this option so that a text message will be sent to the radio that stopped the Voice Message task. If you select this option, specify a brief text message in the **Message** box.

Message tab



Voice Message		×
Task name: Voice M	essage 1	
Task Start Task Process	Task Stop Message Tel	emetry
Load from file Record message Playback message		
Call Type	Channel	Call Target
	 Auto Detect 	235
Group Call	HRepeater #1: Slot	Firemen
Add X Remove		
		OK Cancel

• Load from file

Click this link to load an existing file from your PC.

• Record Message

Click this link to record a new voice message.

• Play back message

Click this link to play back the voice message.

• Specify Call type, Channel, and Call Target for a voice message.

Note: To send a Voice Message to a subscriber from the phone book click ... in the Call Target column and select a contact from the phone book.

Telemetry tab

Voice Message		\times
Task name:	Voice Message 1	
Task Start Task	Process Task Stop Message Telemetry	
Send Teleme	etry before starting task	
VIO:	1 Command: High level	
Delay after	send: 0 😂 second(s)	
Send Teleme	etry after stopping task	
VIO:	1 Command: Togqle level	
Delay before	e send: 0 🖨 second(s)	
Recipient:	Selected Radios: 1; Selected Radio Groups: 2	
Send Teleme	etry on every Voice Message	
	OK Can	cel



• Send telemetry before starting task

Select this option to send a telemetry command before the voice message is transmitted.

- Specify the **VIO** contact number.
- Select the signal level from the **Command** list.
- Delay after sending

Specify the time period, in seconds, that will be used as a delay timeout for the voice message after the telemetry command is sent.

• Send telemetry after stopping task

Select this option to send a telemetry command after the Voice Message task is stopped.

- Specify the **VIO** contact number.
- Select the signal level from the Command list.
- Delay before sending

Specify the time period, in seconds, that will be used as a delay timeout before sending the telemetry command after the Voice Message task is stopped.

• Recipient

In the drop-down list, select the radios/groups to send the telemetry command to.

• Send Telemetry on every Voice Message

Select this option to send the telemetry command to the selected radios/groups every time the voice message is sent, provided the voice message is repeatedly sent.

Scheduled Report

The Scheduled Report task allows reporting on selected parameters and sending these reports to selected Email subscribers groups. The user can have several Scheduled Report policies for different purposes.

- Note: Before configuring the task, you need to create a number of the Email groups to send reports to. For more details on Email groups, see <u>Email Groups</u> section.
- To add a Scheduled Report task, select Tasks (1), and click Add > Scheduled Report (2):



File View Map Tools Help		
Administration	Tasks	•
Server	✓ Intercom If @ ② 1: Line free ■ ② Al Cal If @ ② ✓ Intercom If @ ③ Ø Group 20 If @ ③ If @ ④ If	
Virtual Modbus Devices	Lone Worker Detee Detee	Δ
Voice Dispatch	Scheduled Task Voice Message do	
Location Tracking	Agenda Ø import Routes	
Job Ticketing	Scheduled Report HotSOS d	
Route Management	D Timer Missed GPS data loading	
RFID Tracker	2 Contraction 2	
Text Messages	User Activity	
Voice Recording	Voice Message	_
Event Viewer	-	
Radio Allocation		
Administration	HI 41 4 Record 12 of 14 + H H 4	Þ
🔂 127.0.0.1 🛞 🥵 🧕 Administrator 📑 Li	icensed to: demo Demo License 🥑 Act	ive -

• Specify a name of the policy in the **Task name** box and set the policy parameters.

Task name: Mesages 1				
Report Scheduler				
System reports	^			
🗊 Registered Radios		Select data by p	period:	
🕞 Unregistered Radios		Start Date:	19-Oct-2016 0:00	
🕞 GPS Status		End Date:	<maximum date=""></maximum>	
User Connection History		End Bater	a lavanan aares	
		Filter:		
Channel Change		Message Type:	All Messages	
Common reports		De die Gustern		
Messages for Period		Radio System:	Not defined	
🗊 State of Radios		Private From:	Not defined	
		Radio Group:	, Not defined	
Radio Allocation		Radio Group.		
		Logical Group:	Not defined	
Radio Users by Channel		Radio ID (e.g. 22,	33,40-55,88):	
Lone Worker Activity		Find Text:		
CAN graphics				
CAN messages		Print notes		
		Print coordinate		
		Show street na	-	
Job Ticket Assignments		Show street has	mes	
List Finished Routes		Internet access:	Server	
Eull Movement Details	•		J	

• On the **Report** tab, select the type of a report for the Scheduled Report task. The report details and filter might be different.

For more details on reporting, see **User Guide**, section **Reports and Statistics**.

• Click the **Schedule** tab to configure a schedule for the report.



Scheduled Rep	ant -	×
Scheduled Kep		^
Task name:	Mesages 1	
Report Sche	duler	
Start date:	26 October 2016	•
Stop date:	27 October 2016	•
Days of week	Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday	•
Start time:	8:00	
Statistic perio	d: 1 🛓 Hours 💌	
Email groups:	Police dep	
Check	ОК	Cancel

• Start date and Stop date

Select the time period over which to generate reports and send them to email group.

Note: The start date may be any date you choose to start the task on. The stop date must be later or the same as the current date.

• Days of week

In the drop-down list, select the days of the week you want to generate reports on.

• Start time

Specify the time to start generating the report at.

• Statistic period

Select the time interval (in minutes, hours, days, weeks, or months) to collect the data.

• Email groups

In the list, select Email groups to send the report to.

The created scheduled report will be displayed in the **Tasks** pane:



File View Map Tools Help		
Administration	Tasks	<u></u>
Server	Comp 10 C C C C C C C C C C C C C C C C C C	
	🔜 Add 🗸 🥪 Edit 📑 Delete	
Virtual Modbus Devices	Task Name Agenda	Δ
Voice Dispatch	Dispatcher Presence Control Dispatcher Presence Control Dispatcher Presence Control Dispatcher Presence Control	
Location Tracking		
🐮 Job Ticketing	Cone Worker 1	
😿 Route Management	♥ ♥ Messages for Period ♥ ™ № New Ger State loading ♥ ® Radio Allocation (Sortie Forms)	
RFID Tracker	Scheduled Report 1_Messages for Period_26-Nov-2016 00:00:00	
C Text Messages	C Timer	
Voice Recording	☑ Àg User Activity ☑ ⑤ Voice Message	
Event Viewer	Voice Message	
8 Radio Allocation		
Administration	H4 44 4 Record 10 of 15 ▶ H> H9 4	Þ
访 127.0.0.1 🛞 🐟 💆 Administra	rator 📃 Licensed to: demo Demo License	🕜 Active -

To enable the task, just select the checkbox in front of the Scheduled Report task you have already created.

There are three types of the Scheduled Report status icons:

- Green indicates an active task, meaning the task is enabled (checked).
- Grey indicates an inactive task, meaning the task is disabled (unchecked).
- Red indicates a disabled task, meaning the task period is up in the past.

6.5.1.6 Event/Alarm Management

The Event/Alarm Management feature allows creating action rules for Alarms, Emails, Notifications, Text Messages to radios etc. When a configured rule is executed, a configured action will start.

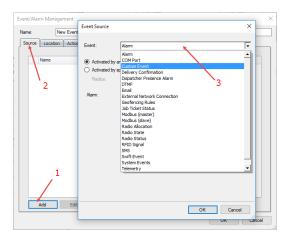
For example, an external application sends text data which contains the text "alarm" to TRBOnet software. The text "Alarm" is configured as the rule to start sending a predefined voice message to selected radios (e.g. the group "firemen") with (e.g. "Alarm in Sector N"). As a result, the group "firemen" is notified about emergency condition.

• Go to **Administration** (1), **Event/Alarm Management** (2) to set Event/Alarm Management:



File View Map Tools Help		
Administration	Event/Alarm Management	S
Server License Database Kadio Systems System Bridging 2	Comp 10 Comp 10) # () -) # ()
Virtual Modbus Devices Virtual Modbus Devices Event/Alarm Management	Add Edit Create a Copy Content Copy Content Copy Content Copy Content Content Send DTM	Δ
Voice Dispatch	3	
📸 Job Ticketing		
Route Management	_	
RFID Tracker Text Messages	_	
Voice Recording		
Event Viewer		
[b] Radio Allocation Rest Administration	1	
· ·	HH HH H Record 2 of 2 > >> >+ ++ H 4	Þ
🔂 127.0.0.1 🛞 🕵 🕱 Administrator 📃	Licensed to: demo Demo License	🕜 Active 🕶

- Click **Add** (3) to add a new Event/Alarm Management configuration.
- The administrator can create a copy of the existing Event/Alarm Management configuration. Select a configuration in the list and click the **Create a Copy** button. The system will create a copy with the same configuration parameters.
- On the **Source** tab (1), click **Add** (2) to add a new data source for the action.



Event

From the drop-down list (3), select the event type to set as a rule for the action.

For the settings for various event types, see the table below:

Event Type	Parameters Description
	Activated by any radio – choose to receive text messages with predefined text from any radio in the system to enable the action;
Text Message	Activate by specific radios only - choose to receive text messages with predefined text from selected radios in the system to enable the action;
	Text Contains – specify the text or characters that the text messages from radios must contain to start the action selected in the Action page.
Telemetry	Activated by any radio – choose to receive telemetry data from any radio in the system to enable the action;



	Activate by specific radios only - choose to receive telemetry data from
	selected radios in the system to enable the action;
	VIO – specify VIO to send telemetry;Command – specify a command for selected VIO.
	Activated by any radio – choose to receive DTMF command from any radio
	in the system to enable the action;
DTMF	Activate by specific radios only - choose to receive DTMF command from selected radios in the system to enable the action;
	Command – specify DTMF command to start the action.
	COM Port – select the COM Port connection configured in Server;
COM Port	Regular Expression – specify the text or characters that the external application data must contain to start the action selected in the Action page. For more details on regular expressions, see the <u>Wiki</u> article.
External	Connection – select the connection configured in Server in the <u>TCP/IP</u> page;
External Network Connection	Regular Expression – specify the text or characters the external application data must contain to start the action selected in the Action page. For more details on regular expressions, see the <u>Wiki</u> article.
	Activated by any radio – choose to receive an alarm from any radio in the system to enable the action;
	Activate by specific radios only - choose to receive an alarm from selected radios in the system to enable the action;
	Alarm – select alarm type in the dropdown list.
Alarm	Emergency Alarm – alarm configured in radio Code Plug;
	Man Down – radio's Man-Down monitoring;
	No Movement – radio's No-Movement monitoring;
	Crash Detect – radio's speed and sudden stop monitoring;
	Geofencing - control the location and speed of radios relative to manually defined map regions.
	Activated by any radio – choose to receive radio state data from any radio in the system to enable the action;
	Activate by specific radios only - choose to receive radio state data from selected radios in the system to enable the action;
Radio State	Radio is detected as online – select to start the action when a radio is online;
	Radio is detected as offline - select to start the action when a radio is offline;
	Radio fixed GPS - select to start the action when a radio has fixed GPS signals;
	Radio lost GPS - select to start the action when a radio has lost GPS signals.

Note: Select the checkbox beside the event you want to enable. In case no event is selected, all configured events are disabled by default:



Name:	New Et	vent	
	7		
Source	Location A	ction	
_			
_	Name	Description	
\checkmark	Text Message	Active Radios: All; Text: ;	
	COM Port	Port: COM1; Text: alarm;	_
	•		
	•		
	•		
		54 D.14	
	Add	Edit Delete	

• Click the **Location** tab (1) to set the regions for the action.

When the Location rule is enabled and a region is selected, the events specified in the **Source** tab must take place in the selected region to start the action.

Note: When **COM Port** and/or **External Network Connection** are selected as the event source, the **Location** rule should not be used.

Event/Alarm Management X
Name: New Event
Source Location Action
Enable
O All Regions
Selected Regions
Region /
V My zone Route 1
V Rode I
Select All Deselect All
OK Cancel

Enable

Select this option to apply the **Location** rule to the action.



All Regions

Choose this option to use Source Event rule in all map regions to start the action;

Selected Regions

Choose this option to use Source Event rule to start the action only in selected regions.

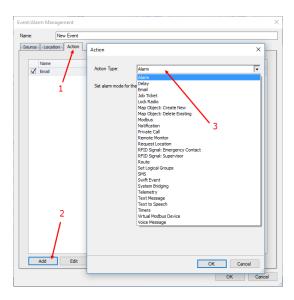
• Region

In the list, select the region(s).

• Click the **Action** tab (1) to set actions for the **Source Event** and **Location** rules.

In the Actions list, the administrator can add and configure the action types to be started when the rules configured in the Source and/or Location pages are executed.

• Click Add (2) to add an action:



Action Type

From the drop-down list (3), select the action type.

For the settings for various action types, see the table below:

Action Type	Parameters Description
Alarm	Not applicable.
	Recipients – select email recipients in the drop-down list;
	Subject – enter the subject of the email to send to recipients;
Email	Variables –add variables to include in the email subject:
	Text – enter the email text to send to recipients;
	Variables –add variables to include in the email text:
	Deadline – select the task end time;
Job Ticket	Recipients – select the radios or radio groups registered in the system;
JOD TICKEL	Description – add a description for the Job Ticket;
	Variables – add variables to include in Job Ticket description.



	Y
	Severity – select the severity level from the drop-down list.
	Information – low severity level;
Notification	Warning – middle severity level;
Notification	Alarm –high severity level.
	Text – add text to the notification to display in the Dispatch Console;
	Variables – add variables to include in the notification.
Request Location	Not applicable.
	Recipients – select SMS recipients from the drop-down list;
SMS	Text – enter the SMS text to send to recipients;
	Variables – add variables to include in the SMS text.
Custom	Profiles – select the System Bridging profile to activate/deactivate;
System Bridging	Activate/deactivate – choose the action type for the System Bridging profile.
	VIO - select the VIO to send telemetry commands to;
Telemetry	Command – select a signal level for the command for selected VIO;
	Recipients – select radios or radio groups to send telemetry commands to.
	Recipients – select text message recipients in the drop-down list;
Text Message	Text Message – enter the message text to send to recipients;
Wessuge	Variables –add variables to include in the message text.
	The Text to Speech feature allows converting text to speech:
	Action X
	Action Type: Text to Speech
	Call Type Cohannel Call Target Group Call Light Repeater #1: Slot #1 Fremen -
	Impolte Channel Access Text: 1:RADID_NAME:; Hgh[dangerlevel
	Variables: Radio ID: Radio Name: Radio State(on)(Pf) Dispatcher
	Beaconlame Adam Strettlame Motolin Redon Incomoralextlata sufficient Gavana 1 Sufficient Gavan 21 Tac ID: Tac Isane Supervisor Name
Text to	sadat user, General y sectorization sade Ema Boly, Jab Toks, Jab Tidet LD, Sab Tidet Comment Date: Time
Speech	
	OK Cancel
	1 – click the Add link to add a text to convert to speech;
	2 – configure Call Type , Channel and Call Target to send the text converted to speech.
	Text – enter the text to be converted to speech.
	Variables - add variables to include in the message to be converted to speech.
Voice Message	Voice Messages – select recorded voice messages. For more details on Voice Messages, see section <u>Voice Message</u> .



Note: After you configure the rule, enable it by selecting the checkbox beside it. In case when no rule is selected, the action will not be started.

Administration	E١	/ent/Alarm Ma	inagement				
Server		Intercom Group 10 Private Cal Add Edit	0) 45 0 0) 45 0 0) 45 0 Create a Conv	Sroup 20	4:0 •) 4:0	Al Cal) # () -) # ()
- 🔐 Tasks - 🎎 Virtual Modbus Devices		Name	cicate a copy e	× Delete			
Event/Alarm Management	~ -	New Event					
Voice Dispatch		Send DTMF					
Location Tracking		N					
Text Messages Voice Recording							
Event Viewer							
Radio Allocation							
administration		44 4 Record 2 of 2	5 15 15 15 A				

6.5.1.7 Telemetry

On the **Telemetry** page you can configure settings for Telemetry.

Radio Groups Telemetry

This is a default telemetry profile that is used to send telemetry commands to radio groups.

- Click Radio Groups Telemetry in the Administration pane.
- In the Telemetry configuration pane, click Edit.

File View Map Tools Help					
Administration	Telemetry	configuration			<u></u>
	Comp 10 Group 10 G	o eo	vel) vel)	🗌 Al Cal	
Badio Allocation Readio Allocation Readio Allocation					
🐻 127.0.0.1 🛞 🔂 🙎 Administrator 📗	Licensed to: demo	Demo License			Active



	metry	>
Felemetry Type:	MOTOTRBO	
Profile Name:	Radio Groups Telemetry	
Digital Outputs		
ID	Name	Command
VIO1	VIO1: High level	High level
VIO2	VIO2: High level	High level
VIO3	VIO3: High level	High level
VIO4	VIO4: High level	High level
VIO5	VIO5: High level	High level
Description ID: Name: Command:	VI01 💌 High level 💌	Apply

• Click Add and specify ID (VIO), Name, and Command (signal level).

Note: For **Radio Groups Telemetry** only the **Digital Outputs** tab is available.

Adding Telemetry Profile for Radios

• Go to Administration (1), Telemetry (2), and click Add (3):

File View Map Tools Help		
Administration	Telemetry configuration	G
Telephony Telephony Taids United Modus Devices United Modus Devices United Modus Devices United Modus Devices United Modus United Modu	Croup 10 0 € (0) Croup 20 0 € (0) Croup 30 Private Cal 0 € (0) Add Fatt Collete	0) 4: 0 0) 4: 0
Voice Dispatch	Telemetry Type: MOTOTRBO Auto refresh inputs: Disabled	
Location Tracking	Digital Inputs 3 • VIO.1: Telemetry VK1 (#igh level) • VIO.2: Telemetry VK2 (#igh level)	
😽 Job Ticketing	③ VIO3: Telemetry VK3 (High level)	
😿 Route Management	 ○ VIO+: Telemetry W4 (%gh level) ○ VIO:: Telemetry W5 (%gh level) Digital Outputs	
RFID Tracker	③ VIO5: VIO5: Low level (Low level)	
Text Messages		
Voice Recording		
Event Viewer		
Radio Allocation	1	
Administration		
🚯 127.0.0.1 🖓 🕵 🧕 Administrator 📑 Li	ensed to: demo Demo License	🕑 Active -

Telemetry Profile	×
Telemetry type: Profile name:	MOTOTRBO
Telemetry #2	
	OK Cancel

- Specify Telemetry Type for Radio groups:
 - MOTOTRBO telemetry from Motorola devices.
 - Novox telemetry from Novox devices connected to a radio via COM port.



- **Swift.Tracker** telemetry from Swift.Tracker sensors connected to a radio over-the-air.
- **Sprite** telemetry from Sprite devices.

Note: Sprite telemetry profile can be read but not written.

Profile name

Specify a name of the profile to display in the Dispatch Console.

Click OK.

elemetry #	1						×
Telemetry '	Type:	мототя	RBO				
Profile Nam	e:	Telemet	ry #1				
Common	Digital	Inputs Di	gital Outputs				
	uto requ equest ir	est input s nterval:	tates	÷ second	ł		
1 T	ace digi	tal inputs	,				
🗹 Tr	ace ana	log inputs					
R	eplace s	tate event	to VIO events				
R	FID						
					_		
						OK	Cancel

Common tab

Auto request input states

Select this option and in the **Request interval** box specify the time interval, in seconds, to request input data.

- **Trace digital inputs** Select this option to monitor digital input damages.
- **Trace analog inputs** Select this option to monitor analog input damages.
- Replace state event to VIO events
 Select this option to generate VIO ON/OFF event when the system compares between the last and the current states of the VIO.
 - Note: Most of the policies are set to replace events, so it is recommended to enable this option.

Digital Inputs



Felemetry Type:	MOT	OTRBO	
rofile Name:	Tele	metry #1	
Common Digita	al Inputs	Digital Outputs	
ID	Name		Event
VIO1	() V	101	High level
VIO2	() V	102	High level
Description ID: Name:	V	/102	
ID:		igh level 💌	
ID: Name: Reset Name:			
ID: Name: Reset Name: Event: Severity: 🗹 Display as	L L L L L L L L L L L L L L L L L L L	igh level ▼ N Warning ▼	
ID: Name: Reset Name: Event: Severity: Display as Auto reset	subscribe	igh level ▼ Marning ↓ r state	
ID: Name: Reset Name: Event: Severity: 🗹 Display as	subscribe	igh level ▼ Marning ↓ r state	Αρρίγ

- Click **Add** to add a VIO (Virtual Configured PIN) to the profile.
 - ID

Select the VIO to set the parameters for.

Name

Specify a name for the VIO to be displayed in the Dispatch Console.

Event

Select the signal level of VIO events from the drop-down list. When an event with the selected signal level occurs on the selected VIO, the telemetry will be activated. The signal level must be the same in the radio's Code Plug and in Telemetry configuration in TRBOnet. It is a programmable option that sets the pin's voltage level to **High** or **Low** in order to trigger a selected functionality.

Severity

Specify a severity level for the VIO event from the drop-down list.

Display as subscriber state

Select this option so that the radio will change its status after it sends the telemetry command.

Auto reset state

Select this option to automatically reset the telemetry VIO after the radio sends the telemetry command.

Request location of subscriber

Select this option to request a GPS position of the radio after it sends the telemetry command.

• Click **Apply** to apply settings to selected inputs.

Digital Outputs



actine of y	Type:	MOTOTRBO Telemetry #1							
ofile Nar	ne:								
ommon	Digital	Inputs	Digital Outputs						
ID		Name		Command					
VIO1		VIO1:	High level	High level					
VIO2		VIO2:	Low level	Low level					
VIO3		VIO3:	High level	High level					
VIO4		VIO4:	Toggle	Toggle level					
Descript ID: Name: Comma		Ĺ	to3 •						

- Click Add to add a VIO (Virtual Configured PIN) to the profile:
 - ID
 - Select the VIO in the dropdown list to set its parameters;
 - Name
 - Specify a name for the VIO to be displayed in the Dispatch Console.
 - Command Specify a signal level for the command to send to the selected VIO.
 - Click **Apply** to apply settings to selected outputs.

6.5.1.8 GPS Profile

The GPS Profile feature allows configuring different profiles of GPS update settings for built-in GPS receiver. GPS Profile overrides default GPS trigger configuration in Server settings. For example, fire emergency service has a number of departments in a city and needs to monitor current position of radio subscribers (firemen). The administrator can create a number of separate GPS profiles with different GPS tracking settings for each department.

Note: The GPS Profile feature is available for MOTOTRBO Generation II radios, firmware version 2.4 or later.

Go to **Administration** (1), **GPS Profile** (2). You can see the default GPS Profile settings (3) in the **GPS Profile** pane.



Water Notes Notice Profiles Weine Dispatch Water Dis	File View Map Tools Help	
Image: Specific Structure A Cal Image: Specific Structure Image: Specific Structure Image: Specific Structure No Image: Spec	Administration	GPS Profile
iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	Virtual Modbus Devices Event/Lalarm Management Oswirt Event Profiles Gord Telemetry Radio Statuses Corrected Corr	V Group 10 C.C.O. V Group 20 C.C.O.O. C.C.O.O. C.C.O.O. C.C.O.O. C.C.O.O.C.O.C
image: space of the space o	Voice Dispatch	
[®] Job Ticketing [®] Route Management [®] RFID Tracker [№] Period: Trager: Idential 30.0 sec [®] RFID Tracker [№] Period: Trager: No [®] Text Hessages [№] Text Hessages [®] Voice Recording [®] Voice Netwer	Location Tracking	GPS data: Latitude, Longitude, Direction, Speed, Precision
Image: Construction Notice Management Image: Construction No	30b Ticketing	
Image: State Notice Telemetry Tagar: Notice Image: Notice Recording Notice Recording Image: State Notice Notice	😥 Route Management	
✓ Text Hessages ✓ Vake Recording ✓ ✓ Vake Recording ✓ ✓ Vake Wever	RFID Tracker	Telemetry Trigger: No
Event Viewer 3	C Text Messages	1
3	🔮 Voice Recording	
(1) Badia Allocation	Event Viewer	3
	Radio Allocation	1
Administration		icensed to: demo Demo License

There is a default GPS Profile that the administrator can use and edit. The administrator can do the following:

- 1. Use default GPS profile.
- 2. Create a custom GPS profile: Add button.
- 3. Edit a profile: **Edit** button.

Note: In the default profile, the **Name** and **Description** cannot be changed.

Adding a GPS Profile

• In the **GPS Profile** pane, click the **Add** button.

GPS Profile		×
GPS type: Profile name:	MOTOTRBO	•
GPS Profile #1		
	OK Cano	el

GPS type

Select the GPS type.

• **Profile name** Enter a name of the profile.



Name:	GPS Profile #1
Description:	1
Save GPS data to	database
Manage trigger m	anually
GPS channel type:	Non-scheduled (Regular GPS over Voice or Data Revert Channel)
GPS data:	Latitude, Longitude, Precision, Direction, Speed
🗌 iBeacon data:	Major, Minor
iBeacon count:	1 *
Fast GPS on Conn	ect Plus systems
Periodic trigger	
Interval:	30.0 🔹 second
Distance trigger	
Distance:	1000 meters
Min. interval:	10 ÷ second
Telemetry trigger	
Emergency trigge	r
	cy mode for Radio when Emergency GPS message is received

• Name

Specify a name for the GPS profile.

• Description

Add a description for the GPS profile.

• Save GPS data to database

Select this option so that GPS data is saved in TRBnet database.

• Manage trigger manually

Select this option so that GPS triggering will be started manually by the dispatcher.

• GPS channel type

From the drop-down list, select a radio channel for sending location data to TRBOnet Server:

Non-scheduled

This is a channel with regular GPS (Enhanced GPS not supported).

Scheduled

This channel is available when the Enhanced GPS feature is configured in the radio system.

Non-scheduled with CSBK data

This channel allows using CSBK (Control Signaling Block) while decoding.

Scheduled with CSBK data

This is a channel with Enhanced GPS, which allows using CSBK (Control Signaling Block) while decoding.

• GPS data

Select this option to enable sending GPS data to TRBOnet Server. In the dropdown list, select which GPS data to include in a packet.

• iBeacon data

Select this option to enable sending iBeacon data to TRBOnet Server. In the drop-down list, select which iBeacon data to include in a packet:

- Major, Minor (included by default and cannot be disabled)
- UUID



TX Power, RSSI

• Periodic Trigger

Select this option to set a periodic GPS trigger on a radio. The trigger initiates the radio to send GPS and/or iBeacon data at the specified time interval.

Interval

Specify the update interval, in seconds.

• Distance trigger

Select this option to allow receiving GPS updates by a distance:

Distance

A radio will send GPS updates if it exceeds a specified distance from the last GPS point, in meters.

Min. interval

A radio will send GPS updates if it does not move within a specified period of time, in seconds.

• Telemetry trigger

Select this option so that a radio will send GPS and/or iBeacon data upon sending a Telemetry command.

• Emergency Trigger

Select this option so that a radio will send GPS and/or iBeacon data upon entering the emergency mode.

Show emergency mode for Radio when Emergency GPS message is received

Select this option if you want a Dispatch Console operator to see the emergency status of a radio that transmitted location data.

• Click **OK** to save the GPS profile settings.

To apply GPS Profile to a radio:

• Go to **Administration** (1), **Radios** (2), select the radio in the table, and click **Edit** (3):

File View Map Tools Help												
Administration	R	egistere	ed r	radio grou	ps and	rac	lios					
SMS Groups		🔊 1: Line	er #	1: Slot #1 🐠	• 0 • 0 • 0	-	Group 1 Repeater #1: Sk	•)) 4 E) 4 Ø
Voice Dispatch		Registere Add Gro		Unregistered	OTRBO Ra	dio	谒 Add WAVE	Radio 🔜 A	dd TRBOnet M	obile 📑	Edit	;
GPS Positioning	s.	Callsign 125 235		Type MOTOTRBO MOTOTRBO			MDC / Sel-5 0	SIP ID 2125 2235	Radio Groups Firemen	Logical (oups	Description
😸 Job Ticketing											3	
RFID Tracker											5	
C Text Messages												
Voice Recording												
Reports												
Event Viewer Radio Allocation												
Administration	144	- 1	ord	1of2 ⊨ ₩ ₩	H d							
🐻 127.0.0.1 🛞 🕵 🕵 🙎 Administrator 🛄 Li				mo License								Active



Seneral Logical Grou	ups Additional SIP Call	
- angles and		
Callsign:	125]
Radio ID:	125 MDC / Sel-5 (Hex): 0	
Radio Groups:	Firemen 🗸 🔸	1
Use icon:	🛞 Portable Radios 🗸 🗸	1
Extended Device:	None V Test	
Location Servic	e	
GPS Source:	Built-in GPS receiver	
GPS Profile:	(Default) V +	
	(Default) GPS Profile #1	
Telemetry Serv	ice	
TLM Source:	Built-in Telemetry 🗸	
TLM Profile:	Telemetry #1 V +	
Text Messages	Service	ł
TMS Source:	Built-in Text Messages	
Hide Advanced Se		

- Click the **General** tab, and from the **GPS Profile** list select the GPS profile.
- Select/clear the Location Enabled checkbox to enable/disable the location trigger.

Note: The GPS Profile is only applicable when the 'Built-in GPS receiver' is selected in the **GPS Source**.

6.5.1.9 Tools

On the **Tools** page, you can find some useful tools.

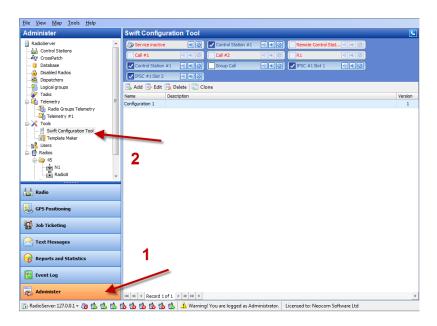
Swift.Tracker Configuration Tool

In general, a MOTOTRBO[™] portable radio comes with a standard option board factory-installed to the radio.

Generic Option Board replaces this standard option board, new radio like XPR 7550 come with Generic Option Board already installed. Generic Option Board can be flashed with custom firmware to provide additional functionality: ManDown, No Movement, Crash Detect, Lone Worker and event-driven GPS functionality. Event-driven GPS feature allows to collect GPS data more frequently, store and forward GPS data by event, also it allows to collect and store GPS data while radio is out of radio coverage to request GPS data when comes back to radio coverage.

Go to **Administration** (1), **Swift Configuration Tool** (2) to manage Swift.Tracker settings:





Click **Add** to add a configuration for Swift Tracker.

• Name

Specify a name for the configuration to apply to a radio or a group of radios.

• Description

Add a description for the configuration.

• Set Defaults

Click this button to enable default settings.

On the **General** tab, set general settings for Swift Tracker:

ft Configuration	on Tool		X
Name:	Configuration 1		
Description:			
General GP:	S Tracker Accelerometer Input Pins		
Module			٦
	s SPS Tracker		
	'No Movement" Alarm		
	'Man Down" Alarm		
Enable "	'Crash Detect"		
Genera	I Report		
Report P	Period (sec):	120	
Number	of Retries:	3	
Retry De	alay (sec):	15	
Radio	Settings		
Network	Radio ID (CAI ID):	13	
Target R	ladio ID:	64250	
Port:		4004	
Automati	ically Switch to Revert Channel:		
Set Defau	ilts	OK Cancel	

Modules

- **Enable GPS Tracker** when GPS enabled radio sends data to TRBOnet Server according individual GOB settings.
- Enable "No Movement" Alarm select to enable No Movement feature;
- Enable "Man Down" select to enable Man Down feature.



General report

- Report period (sec.) select time period for data transfer to the server;
- **Number of retries** specify the number of retries when data transfer is impossible. If the channel is busy data transfer to the server is priority and TX Interrupt feature will be enabled automatically;
- Retry delay select time period between data transfer retries.

Radio settings

- Network radio ID (CAI ID) select your Server PC network radio ID. ID=13 is a default value to route packet to Server PC, value 12 will send packets to a control station.
- **Target Radio ID** select target radio ID for data transfer. In case of direct connection to repeater select the TRBOnet server ID (TRBOnet peer ID).
- **Port** select port for data transfer.
- **Automatically Switch to Revert Channel** select to transfer data via revert channel in automatically mode.
 - Note: If the radio does not have a revert channel, this option must be disabled.

On the GPS Tracker tab, set GPS Tracker settings:

wift Configura	tion Tool		- O -X
une configura			
Name:	Configuration 1		
Description:			
Convert 10	PS Tracker Tasks Input Pins		
General	Tasks Input Pins		
GOB	Data Storage		
Save 0	GPS data on passing distance every (m)	50	* *
Addin	g Data to Report		
Speed	and Direction:		
Add Da	ata to Report every (m)	250	* *
Minima	I Direction Angle (°)	14	÷
Add Da	ata To Report every (sec):		
	rt Transmit Conditions		
	Period (sec):		
	d Distance is more than (m)		×
	Exceeds (km/h)		
Stop/k	dle Time is more than (sec)	300	*
Set Defa	aults Export Impor	•	OK Cancel
Set Dela	sura CADOL TUDOL		Cancel

GOB data Storage

• Save GPS data on passing distance every (m) - specify the distance. When the indicated distance is passed radio saves the data in Option Board memory but GPS data are not added in the report;

Adding data to report

• Speed and Direction - select to receive radio speed and direction data;



 Add data to report every (m) - specify the distance. When indicated distance is passed radio adds data to the report. At this case the data is saved in the report to send the report according to selected time period (see «Report Period » option).

Note: Number value Add data to report every (m) must exceed number value Save GPS data on passing distance every (m).

- **Minimal direction angle** select minimal direction angle to add data to the report automatically (if the radio reverses the direction the current data is added to the report automatically and next data recording is started).
- Add data to report every (sec.) specify time period for the report. When the indicated time period is passed radio adds the data to the report.

Report Transmit Conditions (custom report settings)

- Report period (sec.) set time period to send the report;
- **Passed distance is more than (m)** type in the distance. When the indicated distance is passed the Option Board sends the report.

- **Speed exceeds** select speed. When current speed is more than the indicated one, radio sends data to the TRBOnet Dispatch Software server;
- **Stop/Idle Time is more than (sec.)** select stop/idle time. When stop/idle time is more than the indicated one radio sends data to TRBOnet Server.

Go to Tasks page to set Man Down, No Movement, Lone Worker and Crash Detect settings:

Note: Number value Add data to report every (m) must exceed number value Save GPS data on passing distance every (m).



e:	Configuration 1		
ription:			
eral GPS	Tracker Tasks Input Pins		
General			-
	te accelerometer on the radio switching on		
	arm by button click		
"Mars Da	wn" Settings		
Activation	-	60	
	(1) Timeout (sec):	10	
Pre-Alarm		RingStyleTone1 -	
		rangetyle rene r	
	rement" Settings	15	
	Inreshold (%) Iam Timeout (sec):	15 ÷	
First Pre-A		RingStyleTone1	
		rangacyle rome r	
	forker" Settings	1800	
Timeout (s			
Pre-Alarm	lone:	RingStyleTone5 -	
Second	Pre-Alarm Notification		E
Timeout (s	ec)	5	
Pre-Alarm	Tone:	TakProhibit 🔻	
Volume Le	vel Increase (%):	50 🚖	
Pre-Alarm	Tone Duration (sec):	5	
"Crash D	Detect" Settings		
Crash Thre	eshold (g):	8	
Movement	t Stop Timeout (sec):	10 🚔	
No Moven	nent Timeout (sec):	15 🚔	
Emergen	cy Call		
TRBOnet	Emergency timeout (sec)	10 🚖	
MOTOTRI	BO Emergency timeout (sec)	10 🜩	
Sound n	otification after emergency call		
Timeout (s	ec):	0	
Tone:		RingStyleTone4 -	

- Activate the accelerometer on the radio switching on select to enable accelerometer;
- **Disable alarm by button click** select to allow radio subscriber disable alarm notification by pressing any button on the radio.

"Man Down" settings

- Activation angle select activation angle to enable Man Down feature;
- **Pre-Alarm (1) Timeout (sec.)** select time period preceding pre-alarm Tone 1;
- **Pre-Alarm tone (1)** select pre-alarm tone. All pre-alarm tones can be found in radio's code plug configuration.

"No Movement" Settings

- Vibration Threshold (%) select max. vibration threshold for No Movement feature;
- **Pre-Alarm Timeout (sec.)** select time period preceding pre-alarm Tone 1;
- **Pre-Alarm tone** select pre-alarm tone. All pre-alarm tones can be found in radio's code plug configuration.

"Lone Worker" Settings

- Timeout (sec.) select time period to enable Lone Worker alarm;
- **Pre-alarm tone** select pre-alarm tone. All pre-alarm tones can be found in radio's code plug configuration;



Second Pre-Alarm Notification

When pre-alarm tone (1) activates for **Man Down**, **No Movement** and **Lone Worker**, and there was no user's activity (the radio remains unchanged), the second pre-alarm tone activates:

- Timeout (sec.) select time period preceding pre-alarm Tone 2;
- **Pre-Alarm tone** select pre-alarm tone. All pre-alarm tones can be found in radio's code plug configuration;
- **Volume Level Increase (%)** select the percentage of the Volume Level Increase for pre-alarm Tone 2;
- Pre-Alarm Duration (sec.) select pre-alarm Tone 2 duration.

"Crash Detect" Settings

- **Crash Threshold (g)** select acceleration changing value to enable Crash Detect alarm notification;
- **Movement Stop Timeout** select the time period of movement stop to enable Crash Detect alarm notification;
- **No Movement Timeout** select the time period of the radio without any movement to enable Crash Detect alarm notification;

Emergency call

- TRBOnet Emergency Timeout (sec.) select time period preceding emergency tone to the Dispatch Console for Man Down, No Movement and Lone Worker options;
- **MOTOTRBO Emergency timeout (sec.)** select time period preceding emergency tone to the Dispatch Console.

Note: **MOTOTRBO Emergency Alarm** should be set in Radio's code plug.

Sound notification after emergency call

- **Timeout (sec.)** select time period to repeat the alarm notification. To stop the alarm notification Dispatcher should disable alarm notification;
- **Tone** select the notification tone. All tones can be found in radio's code plug configuration.

Click Set defaults to apply default values.

Click Import to import Swift .Tracker configuration from file.

Click **Export** to save Swift .Tracker configuration as a file to the PC.

Click the Input Pins tab to set the priority for Enabled/Disabled Pins:



: C	Configuration 1			
iption:				
eral GPS T	racker Tasks Input Pins			
Enabled		Disabled		
Pin 12V	Deferred -	Pin 12V	Deferred -	
Pin 1	Deferred -	Pin 1	Deferred -	
Pin 2	Deferred -	Pin 2	Deferred -	
Pin 3	Deferred -	Pin 3	Deferred •	
Pin 4	Deferred -	Pin 4	Deferred 💌	
Pin 5	Deferred -	Pin 5	Deferred -	
Pin 6	Deferred -	Pin 6	Deferred -	
Pin 7	Deferred -	Pin 7	Deferred -	
Pin 8	Deferred -	Pin 8	Deferred 💌	
Pin 9	Deferred -	Pin 9	Deferred -	
Pin 10	Deferred -	Pin 10	Deferred -	
Pin 11	Deferred -	Pin 11	Deferred •	
Pin 12	Deferred	Pin 12	Deferred •	
Pin Ign	Deferred -	• Pin Ign	Deferred -	

Select programmed Pin in Enabled/Disabled Pins table.

Select data transmission priority for Pin:

- Deferred to send the data into current packet;
- In Memory to save the data in the GOB memory;
- **Immediately** transmission interrupt oriented. Select **Immediately** to transmit the data via free channel with radio channel priority;
- Extremely transmission via radio channel and GSM channel simultaneously.

The PIN options are model dependent. All available PINs for the radio can be programmed in Radio's codeplug configuration (See **Accessories**, **GPIO Physical PINs**)

- Note: Additional PINs are available only when GSM Swift.Tracker is connected. For more details, contact our technical support.
- Click **OK** to save the settings.

Templates for Extended Messages

The Templates can be used for Extended Messages and Extended Notes.

The **Extended Messages** feature is a special function allowing users to send detailed preconfigured templates containing necessary information to each other with the help of the special TRBOnet Dispatch Console application.

This service has been created especially for clients who need to use more detailed and structured messages in their work. If the standard messages are not enough to contain all required information, you may use the Extended Messages service.

• Go to Administration (1), Templates (2) to create a new template:



File View Map Tools Help		
Administration	Templates	
Swift Event Profiles) = 0) = 0
Indoor 2D Map Converter	Add From File 🔜 Add i 🕞 Edit 👝 Save To File 🖳 Delete Preview Name	Δ
Voice Dispatch	New Form	
k Location Tracking	$\langle \rangle$	
📅 Job Ticketing		
Route Management		
RFID Tracker	5 '	
C Text Messages		
🔮 Voice Recording		
Event Viewer		
8 Radio Allocation	1	
Administration	H4 44 A Record 1 of 1 > >> >H 4	Þ
🔂 127.0.0.1 🛞 🥵 🙎 Administrator 📑 Lie	censed to: demo Demo License	🕑 Active -

- Click Add From File (3) to add a template from file.
 - Note: Before adding a template from file, save the created template to a custom directory.

Select the directory where you saved the template and click **OK** to add the file.

• Click Add (4) to create a new template:

Add/Edit Template			- 🗆 ×
Name: New Fo	om		
Elements: A Label M Textoo Checkbox S Combibox Dog selected element to the workspace Width: 400 © Height: 500 © Background:	New Forn Text Message Critical Group ✓	Template ID: 75/44/975-d Template ID: 75/44/97	True MiddeLeft False Unchecked (none) Default None True Standard Y
	<u> </u>		OK Cancel

• Name (1)

Specify a name for the template to display in the Dispatch Console (1).

• Elements (2)

Select elements to add to the template. Drag and drop the selected element to the desired place on the mail template box.

• Template size (3)

Specify the template dimensions and background color.

 Click an element on the template. On the right side of the Template dialog box, you can see the selected element properties.

Sending a template to a radio



File View Map Tools Help		
Tex Show Navigation	Text Messages	•
Show Modules >		
Show Voice Panel	Intercom 刘 🕷 🥥 1: Line free 🛋 🕢 🔲 Al Cal 🛛 🐠 🖷	
Large PTT Boxes	🖌 Group 10 🔹 🖉 🗸 Group 20 🔹 🖉 Group 30 🔹 👘	0
Small PTT Boxes	Private Cal 🛛 🕕 🕊 🥥	
G Show Extended Messages Tab	Simple Extended	
💰 🖉 Radio 240 m. 2 💷 😵 🗸	New Message	
Voice Dispatch	New Form	
Location Tracking	New Form	^
📅 Job Ticketing	5	
😿 Route Management	3	
RFID Tracker	<	> [×]
Text Messages	🖾 Playback 🚽 Save - 😓 Print 🔢 Pause 💞 Clear -	» •
	Date Mes Details N	
🔮 Voice Recording	4	-
	21400-2010 11:13:12 C 125 All All C Mem	- 11
Event Viewer	21-Nov-2016 11:08:19 C S 125 The	
Radio Allocation	Inbox (0) 21-Nov-2016 11:08:18 C S 125 The	
	Outbox (0)	
Administration		•
- ACA	New Message	۱.

- Click **Text Messages** (1)
- Click the View menu, and select Show Extended Messages Tab (2)
- In the Text Messages pane, click the Extended tab (3), and New message (4).

Simple Extended		
New Message New Form	Send to Rado	^
	< < ™ Playback ⊒ Save ⊕ Print 11 Pause ♂ Clear -	> *
	Date Me De Ext. Note	
	💋 01-Nov-2016 13:48:37 Dis Me	٠
	01-Nov-2016 13:48:37 Dis Me	
	01-Nov-2016 13:48:34 All All Me	
Inbox (0)	- 01-Nov-2016 13:48:27 All All Me	
INDOX (0)	 D1-Nov-2016 13:48:23 All All Me D1-Nov-2016 13:48:19 All All Me 	-
Outbox (0)	01-Nov-2016 13:48:19 All All Me 01-Nov-2016 13:48:16 All All Me	
New Message	HI 4I 4 Record 1 of 9 + + + H 4	•

- Select the template in the list (1).
- From the drop-down list (2), select a radio to which to send the template.
- Click **Send to Radio** (3) to send the template to a radio.

Indoor 2D Map Converter

TRBOnet Dispatch Console provides the Map Converter to use custom images as Indoor 2D Floor plans. The tool allows converting images to the BMAP format that is supported in Indoor Positioning.

• Click Administration (1), Tools > Indoor 2D Map Converter (2).



File View Map Tools Help		
Administration	Indoor 2D Map Converter	5
Radio Statuses GPS Profile Tools Tools Tools Tools Tonyates Toolares Toolares Toolares		
Disabled Radios Dispatcher Groups Dispatchers	Name: Florplan 1	
Voice Dispatch	Image: D:Ymage: RoomSketcher-2D -Floor-Plans.jpg Directory:	
😸 Job Ticketing	D: Umages (Brages	
Route Management	Start	
RFID Tracker Text Messages		
Voice Recording		
Event Viewer		
Administration	1	Active -

• Name

Specify a name for the new Indoor 2D Map.

• Image

Click ... and locate the image (PNG, JPG, TIFF, GIS) on your computer.

• Directory

Click ... and locate the folder where to save the converted Indoor 2D map on your computer.

• Click **Start** to convert the image.

To use the converted map

Click Location Tracking (1). On the Map menu, click Open New Map in Tab (2):





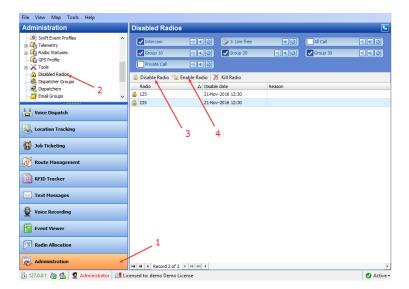
elect Map		
Map Type:	Beacon2D	
Caption:		
Vailable Maps		
Name	Path	State
Floorplan 1	D:\Images\Bmaps\Floorplan 1.bmap	OK

- From the Map Type list box, select 'Beacon 2D':
- Click Add to and browse for the map you have converted.
- Click **OK** to open the Indoor map in the Map pane.

6.5.1.10 Disabled Radios

TRBOnet Dispatch Console provides the **Stun Kill Passive** function that allows disabling a radio even if the radio is offline. The system will disable an offline radio as soon as it gets available.

- Note: The dispatcher can disable a radio when they have relevant Access Rights (for more details on adding and editing dispatchers, see <u>Dispatchers</u> section).
- Go to Administration (1), Disabled Radios (2) to disable selected radio:



• Click **Disable Radio** (3) and in the dialog box that opens:

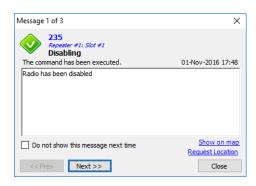


Radio:	🚯 235 (Basil) 235	•
Unlock:	No auto unlocking	•
Reason:		
Test		

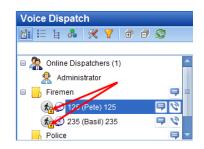
Radio

Select a radio from the drop-down list.

- Unlock
 - Select the time period after which to unlock the radio.
- Reason
 - Enter the reason for disabling the radio.
- Click **OK** to disable the radio.



The Radio is added to the Disabled Radios list and is marked as Disabled in the Voice Dispatch pane:



- Click Enable Radio (4) to enable selected radio.
- Select a radio from the drop-down list and specify the reason to enable.
- Click **OK** to enable the radio.

6.5.1.11 Dispatchers

The administrator can add, edit, and delete dispatchers in the system. Go to **Administration** (1), **Dispatchers** (2) to work with dispatchers:



File View Map Tools Help							
Administration	Registered D	ispatchers					S
Swift Event Profiles Control	Group 10) # 0 1) # 0 1) # 0	🔊 1: Line f		•0	Al Cal	1) C ()
Bisabled Radios Dispatcher Groups Dispatchers Dispatchers Dispatchers Company Dispatchers Company Com			SIP ID Dis 60200 Gro		Default Se .ogical Groups	-	
Voice Dispatch	N Dispatcher 1 Dis	56 456	Nor	rth Group rth Group			
Location Tracking							
😥 Route Management		3					
RFID Tracker							
Text Messages Voice Recording							
Event Viewer							
গ্রি Radio Allocation	1						
😞 Administration 🛛 🖌	H4 44 4 Record 2	of4 + ++ ++ 1					Þ
ö. 127.0.0.1 🙉 🛋 🗖 Administrature 🗔 📑 Lie	annual tax dama Dam	na Lisansa					🔿 Antiun -

• Click **Add** (3) to add a dispatcher.

Add/Edit	Dispatcher				×
Genera	Dispatcher Rights	Radio Systems	Radio Groups	Logical Groups	••
Authe	ntication:	TRBOnet Authen	tication		~
User 1	Name:	Dispatcher 1			
Passw	ord :	*****			
Repea	at password:	*****			
Displa	y Name:	Dispatcher 1			
Descri	iption:				
Dispa	tcher Groups:			-	+
Availa	ble Modules:	(All Modes)			•
🗌 In	visible to all other use	ers			
🗌 In	visible to all except t	ne assigned group	os		
	low multiple simultane	ous logons			
			OK	Can	cel

• On the **General** tab, specify general parameters for the new dispatcher.

Authentication

Select the Authentication method from the drop-down list.

Select **TRBOnet Authentication** to log on as a user registered in TRBOnet Dispatch Console users list.

Select **Windows Authentication** to log on using the PC name. The system automatically shows the PC name as User Name.

- Note: The password is not required when Windows Authentication is used.
- Note: For more details on user access to Allocation Console, see <u>Users</u> section.



User Name

Specify a user name for the dispatcher registered in TRBOnet Dispatch Software users list.

Password

Specify a password for the dispatcher.

• Display Name

Specify a name for the dispatcher to display in the Dispatch Console;

Description

Add a description for the dispatcher.

• Dispatcher Groups

In the drop-down list, select the group(s) of dispatchers to which to assign the dispatcher. Click + to add a group of dispatchers to the list.

• Available modes

In the drop-down list, select the modules that will be available for the dispatcher in the Dispatch Console.

• Invisible to all other users

Select this option to make the dispatcher invisible for other users.

• Invisible to all except the assigned groups

Select this option to make the dispatcher invisible for other users except for users belonging to the same group of dispatchers.

• Allow multiple simultaneous logons

Select this option to allow the dispatcher to use multiple instances of Dispatch Console simultaneously.

On the **Dispatcher Rights** tab, specify the available access rights for the dispatcher.

General	Dispatcher Rights	Radio Systems	Radio Groups	Logical Groups	4
ound of		readio o yotemo		cogical croaps	
	Dispatch Function				^
	e the Voice Dispatch	module			
\checkmark	Intercom calls				
\checkmark	Telephone calls via t	the SIP 2.0 phone	e interconnect		
🗹 Pla	y back the recorded	voice communica	tions		
Vie Vie	w all other voice call	s in addition to as	signed groups		
🗹 Ch	ange control station	channels			
🗸 Mu	te channels				
🗸 То	ne and PTT				
🗹 Sa	ve and export record	led voice commur	nications		
🗹 En	able/disable system t	oridge cross patcl	nes		
Applic	ation				
🗹 Cu	stomize user interfac	e			
Mo	dify subscriber statio	on properties			
Re	set connection to rad	dio network			
Cle	ar alarms				
	Override comment e	nforcement			
	erride comment enfo	rcement when re	iecting Call Aleri	ts	5

On the **Radio Systems** tab, specify the radio system(s) that will be available for the dispatcher.



Add/Edit [Dispatcher				×
General	Dispatcher Rights	Radio Systems	Radio Groups	Logical Groups	• •
	Radio Systems avai	able			
Or	nly selected Radio Sy	stems available			
	Radio System			TX	
	Control Station #	1			
L.	Repeater #1: Slo	t #1			
5	Repeater #1: Slo	t #2			
Ċ	ieck All Uncheck All				
			OK	Cance	I

• All Radio Systems are available

Choose this option to make all radio systems available for the dispatcher to transmit and receive Voice and Data.

• Only selected Radio Systems are available

Choose this option and specify which radio systems will be available to the dispatcher.

- Select the checkbox in the left column to add the corresponding radio system to the Radio Interface for the dispatcher.
- Select the checkbox the **TX** column to allow the dispatcher to make Voice calls using the corresponding radio system. When the checkbox is cleared in the TX column, the dispatcher cannot use the corresponding radio system to transmit voice and data.

On the Radio Groups tab, specify a group to assign the dispatcher to.

Add/Edit E	Dispatcher				×
General	Dispatcher Rights	Radio Systems	Radio Groups	Logical Groups	• •
	groups are available	2			
Or	ly selected groups a	are available			
ZZ	All Call Firemen				
	Police				
Ch	eck All Uncheck All				
			OK	Cano	tel



• All groups are available

Choose this option to make all groups in the system available for the dispatcher.

• Only selected groups are available

Choose this option and specify which radio groups will be available to the dispatcher.

• In the list, select the groups to make them available for the dispatcher.

On the **Dispatch Call** tab, specify Dispatch Call and SIP call settings for the dispatcher:

dd/Edit Dispatcher					>
Radio Groups Logi	cal Groups	Dispatch Call	Request to Talk	Reports	•
Radio ID:	60100		÷		
Phone Number:	123-4567	7			
Email:	billy@gma	ail.com			
Phone Call					
SIP ID:	60100				
SIP User:	60100				
Password:	•••••	••••			
SIP Profile:					\sim
			OK		ancel

• Radio ID

Specify the Radio ID of the dispatcher.

• Phone number

Specify the dispatcher's phone number (additional data).

• Email

Specify the dispatcher's Email (additional data).

Phone Call

SIP ID

Enter the SIP ID that will be used by the dispatcher.

• SIP Name

Enter the SIP user name that will be used by the dispatcher.

• Password

Enter the password for the dispatcher to be authenticated by the telephone system.

• SIP Profile

From the drop-down list, select the SIP profile to use.

On the **Request to Talk** tab, specify parameters that will be used by radios to request a call from the dispatcher:



Add/Edit Dispatcl	ner	×
Radio Groups	ogical Groups Dispatch Call Request to Talk	Reports · ·
Automatic Message: Automatic VIO: Automatic Command	ally by receiving Text Message from a radio 60100 ally by receiving Telemetry Command from a radio 1 Command: High level ally by receiving DTMF command from a radio	
Status:		
	ОК	Cancel

- Automatically by receiving Text Message from a radio Select this option to request a call from the dispatcher when a radio sends a predefined text message. If you select this option, specify a brief text message in the **Message** box.
- Automatically by receiving Telemetry Command from a radio Select this option to request a call from the dispatcher when a radio sends a predefined telemetry command. If you select this option, specify the VIO contact, and from the **Command** drop-down list, select the signal level at which the user's radio should send the telemetry command.
- Automatically by receiving DTMF command from a radio Select this option to request a call from the dispatcher when a radio sends the specified DTMF tones. If you select this option, specify the DTMF combination without the # characters in the **Command** box.
- Automatically by receiving Status from a radio Select this option to request a call from the dispatcher when a radio sends the specified Status to TRBOnet Server, for instance, 1. If you select this option, specify the **Status**.

On the **Reports** tab, specify the reports that will be available to the dispatcher.



Add/Edit Dispatcher	×
Radio Groups Logical Groups Dispatch Call Request to Talk Reports	4 🕨
 All reports are available 	
Only selected reports are available	_
🛃 Queries	^
Lost Devices	
5ystem reports	
🗊 Unregistered Radios	
User Connection History	
Channel Change	
Common reports	
Messages for Period	
I State of Radios	
User Messages and Notes	
Radio Allocation	
Radio Disabling	
🗍 🧊 Telemetry	¥
Check All Uncheck All	
ОК С	ancel
	unicer

• All reports are available

Choose this option so that all the reports will be available to the dispatcher.

• Only selected reports are available

Choose this option and in the list below select/deselect the reports to include/exclude.

6.5.1.12 Email Groups

Email Groups are used in Event/Alarm Management and Job Tickets configuration to send emails to dedicated recipient groups.

Go to **Administration** (1), **Email Groups** (2) to add/edit/delete email groups in the system:

File View Map Tools Help							
Administration		Email Groups					S
GPS Profile Disabled Radios	>	Group 10	*) *6 0 *) *6 0	3: Line free Group 20	ۯ 10 ۯ	Al Call	0) 4: 0
Dispatcher Groups Dispatchers SMS Groups	,	Group Name Police dep Termina 1	∠ Delete	ouping 🍸 Auto Filte	Email List qwerty@gmail.c	ngs om, asdf@gmail.com 1, 65@trbonet.com, 6	6@trbonet.com
Voice Dispatch		3	regelt & totin	F200 8	0.100 D0161100	,	
Dob Ticketing		5					
RFID Tracker							
Text Messages							
Event Viewer		1					
Administration		HI 41 4 Record 1 of					Active -

• Click **Add** (3) to create an email group.



Add/Edit Email G	roups X
Name:	Terminal 1
Description:	Region 1 Terminal 1
Email list:	64@trbonet.com 65@trbonet.com 66@trbonet.com
	Add Remove

Name

Specify a name for the email group.

Description

Add a description for the email group.

Email list

Click **Add** to add an email address to the Email list.

6.5.1.13 SMS Groups

SMS Groups are used in Event/Alarm Management configuration to send SMS to dedicated SMS recipient groups.

Go to **Administration** (1), **SMS Groups** (2) to add/edit/delete SMS groups in the system:

File View Map Tools Help						
Administration	Caller Groups					<u></u>
GPS Profile GPS Profile Cols Disabled Radios Disabled Radios Disabled States	Intercom Group 10 Private Cal	*) *(0 *) *(0	I: Line free ✓ Group 20	4:0 •) 4:0	Al Cal	9 4:0 9 4:0
Email Groups	📑 Add 📑 Edit 📑		uping 🍸 Auto Filter		ngs	
SMS Groups	Group Name	△ Description Regio 1 Departm	ient 2	Phone Numbers 79117894561, 7	9217894561	
Users 2	Department 3	Region 1 Depart		792112374567,		
Voice Dispatch	3					
📸 Job Ticketing						
😥 Route Management						
RFID Tracker						
Text Messages						
🔮 Voice Recording						
Event Viewer						
(1) Radio Allocation	1					
Administration	HI 41 4 Record 2 of 2	2 > >> >> +> +> +> +> 4				Þ
🔂 127.0.0.1 🛞 🥵 🙎 Administrator 📑	Licensed to: demo Demo I	License				🕑 Active -

• Click **Add** to create a new SMS group:



Add/Edit SMS Grou	ib2 ×
Name:	Department 3
Description:	Region 1 Department 3
Phone Numbers:	7 <u>92112374567</u> 79111234567
	Add Remove
	OK Cancel

Name

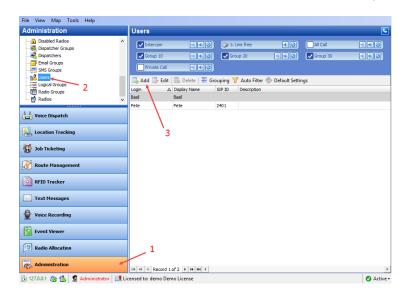
Specify a name for the SMS group.

- Description Add a description for the SMS group;
- Phone Numbers

Click **Add** to add a phone number to the SMS group.

6.5.1.14 Users

Go to Administration (1), Users (2) to add/edit/delete users in the system:



- Click **Add** (3) to add a new user to the system:
- On the **General** tab, set general parameters for the user:



d/Edit User		>
General Radios Adv	anced User Call Logical Groups	
Specify user i	nformation	
Login:	Basil	
Password :	*******	
Repeat password:	******	
Display Name:	Basil	
Max radios count:	1	
Description:		
	ОК	Cancel

Login

Specify the login to log on to the Dispatch Console.

Password

Type in the individual password.

Display Name

Specify a name for user to display in the Dispatch Console.

- Max radios count
 Select a number of radios that will be available for the user.
- Description

Add a description for the user.

• On the **Radios** tab, specify the radios available to the user.

Add/Edit U	lser				×		
General	Radios	Advanced	User Call	Logical Groups			
	Specify radios that the user can take						
	all radio: selected	-					
	Callsign			Group			
🖌 😵	111			Police, Firemen			
🖌 💽	125			Firemen			
	222			Police, Firemen			
🗆 🛞	235			Firemen			
144 44	Reco	rd 2 of 4 🕨	→ HH ₹		Þ		
				OK	Cancel		

Allow all radios

Choose this option to allow using all radios in the system.



Only selected radios

Choose this option and specify which radios will be available to the user.

• On the **Advanced** tab, specify settings related to taking/returning radios:

Add/Edit User		×				
General Radios Advanced	User Call Logical Gro	pups				
□ Lock radio on return						
Allow DTMF manageme	ent					
Take radio:	1234	#1234#				
Return radio:	5678	#5678#				
Allow Text Messages n	nanagement					
Take radio:	3214					
Return radio:	5678					
🗌 Allow Sign In / Sign Ou	t management					
Take radio:						
Send notification to ra	dio after the one was ta	ken/returned				
	_					
		OK Cancel				

Lock radio on return

Select this option so that a radio will be disabled after the users returns it.

Allow DTMF management

Select this option to allow taking/returning radios by sending the specified DTMF tones.

• Take radio

Specify DTMF tones to be sent by the user to take a radio.

Return radio

Specify DTMF tones to be sent by the user to return a radio.

Allow Text Messages management

Select this option to allow taking/returning radios by sending specified text messages.

• Take radio

Specify the text of the message to be sent by the user to take a radio.

Return radio

Specify the text of the message to be sent by the user to return a radio.

Allow Sign In / Sign Out management

Select this option to allow taking radios when the user signs in.

Take radio

Specify the text of the message to be sent by the user to take a radio.

- Send notification to radio after it is taken/returned
 Select this option so that a notification is sent to a radio every time the user takes/returns it.
- On the **User Call** tab, specify SIP Call settings for the user:



dd/Edit User		>
General Radios A	dvanced User Call Logical Groups	
Phone Number:	79211234567	
Email:	2401@gmail.com	
SIP Call		
SIP ID:	2401	
SIP Name:	2401	
Password:		
SIP Profile:		\sim
Block incomin	g calls	
Block outgoin	g calls	
	OK	Cancel

Phone number

Specify the user's phone number (additional data).

Email

Specify the user's Email (additional data).

SIP Call

SIP ID

Enter the SIP ID that will be used by the user.

SIP Name

Enter the SIP user name that will be used by the user.

Password

Enter the password for the user to be authenticated by the telephone system

SIP Profile

From the drop-down list, select the SIP profile to use.

Block incoming calls

Select this option to block all incoming SIP calls for the user.

Block outgoing calls

Select this option to block all outgoing SIP calls for the user.

6.5.1.15 Logical Groups

TRBOnet Dispatch Console allows adding custom logical groups in addition to radio groups. You can create groups and subgroups and then assign radios/users/dispatchers to these groups.

Go to Administration (1), Logical groups (2) to work with Logical Groups:



File View Map Tools Help						
Administration	Logical Groups					S
Disabled Radios Disabled Radios Dispatcher Groups Dispatchers Enal Groups Enal Groups SNS Groups SNS Groups SNS Groups	Group 10	0) 46 O	➢ 1: Line free ✓ Group 20	40 1) 40	Al Cal	9) #:0
Cogical Groups	Add - Edit Add as a Child Add as a Root	> Delete	4	Description	ent 1	
Voice Dispatch	Security			Groups for Security		
Sob Ticketing	Security 2	3				
Route Management						
Text Messages						
Voice Recording						
Fig Radio Allocation Radio Allocation Radio Allocation	1					
🔂 127.0.0.1 🙈 🕵 🕱 Administrator 📑	Licensed to: demo Demo Lie	cense				🕑 Active -

- Click **Add** (3) to add a logical group.
 - Select **Add as a Root** to add a logical group as a root folder.
 - Select **Add as a Child** to add a logical group as a child folder.

Group properties		×
Name:	Cleaning 1	1
Description:	Cleaning in Department 1	1
	OK Cancel	

- Specify a **Name** and **Description** for the logical group.
- Click **OK** to add the logical group.

To display logical groups, enable the Logical Group view:

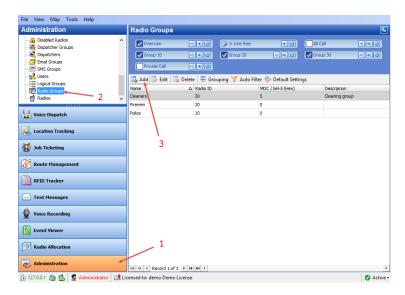


Voice Dispatch	
d: = = & % Y @ # &	
Cogical Groups	
Administrator	
😑 🌇 Cleaning	9
🗉 🏪 Cleaning 1	9
🐔 🕒 125 (Pete) 125	₽ 🔇
Cleaning 2	ę
E To Security	9
B 🔠 Security 1	
💰 🔊 235 (Basil) 235	99
Security 2	ę
Voice Dispatch	
GPS Positioning	
😸 Job Ticketing	
🕖 Route Management	
RFID Tracker	
C Text Messages	
Uvice Recording	
Reports	

All created logical groups are displayed in the list of radios.

6.5.1.16 Radio Groups

Go to **Administration** (1), **Radio Group** (2) to add/edit/delete Radio Groups in the system.



• Click **Add** (3) to add a radio group to the system:



Group Properties				 			×
							1
Name:	Cleaners						
Group ID:	30	-					
MDC / Sel-5:	5	-	(Hex)				
Description:	Cleaning group						1
Use custom (Call Tone						
Load from	<u>n file</u>						
Playback	message						
				ОК	C	Cancel	

Name

Specify a name for the radio group in the system.

Group ID

Specify the Radio ID for the radio group used to identify messages to/from the radio group.

MDC / Sel-5 (Hex)

Set an ID for MDC 1200 or SELECT 5 signaling systems. This ID is used to identify and communicate with a target radio or group of radios depending on the call type. For more details on MDC 1200, see http://en.wikipedia.org/wiki/MDC-1200.

Description

Add a description for the radio group.

Use custom Call Tone

Select this option and browse for the sound file (WAV, MP3) that will be used as a ringtone when receiving calls from the group.

6.5.1.17 Radios

The administrator can add/edit/delete radios in the system.

• Go to Administration (1), Radios (2).



File View Map Tools Help								
Administration	Registered r	adio grou	os and ra	dios				
Disabled Radios Signatcher Groups Dispatchers Dispatchers Signatchers Signatchers Sing Groups	Group 10	•)) •		1: Line free Group 20	• 0 • • 0			1) 4 0
Users Logical Groups - ୖୖୖୖୖୖୄଝ Radio Groups - P Radio Groups 2 ✓	Registered Add Group Callsign Δ Callsign Δ		Radio ID	MDC / Sel-5	SIP ID		Logical Groups	
Voice Dispatch	 125 222 235 	MOTOTRBO MOTOTRBO MOTOTRBO	125 282	0	2125	Firemen Firemen, Police Firemen	Cleaning 1	
Job Ticketing	Radio 200 Radio 201 Radio 201 Radio 202	MOTOTRBO MOTOTRBO MOTOTRBO	201	0 0 0 0		Al Al		
Route Management	 Radio 203 Radio 204 Radio 240 m 	MOTOTRBO MOTOTRBO MOTOTRBO	204	0		Al Al Police		
RFID Tracker Text Messages	Walt	TRBOnet Mo		0	3333	Police		
Voice Recording				3				
Event Viewer	_ 1							
Administration 4	HI II Record	1 of 11 → ₩	* *					Þ
🔂 127.0.0.1 🛞 🕵 💆 Administrator 📑 L	censed to: demo De	mo License						🕑 Active 🕶

• Click Add MOTOTRBO Radio to add a new radio.

On the **General** tab, specify general settings for the radio:

Voice Dispatch 125		X
		~
General Logical Grou	ps Additional SIP Call	-
Callsign:	125	٦ I
Calisign:		
Radio ID:	125 MDC / Sel-5 (Hex): 0	
Radio Groups:	Firemen V +	
Use icon:	🚯 Portable Radios 🗸 🗸	
Extended Device:	None V Test	· _
Location Service		
GPS Source:	Built-in GPS receiver 🗸	
GPS Profile:	(Default) V +	
	GPS Enabled	
Telemetry Servi	ce	
TLM Source:	Built-in Telemetry 🗸	
TLM Profile:	Telemetry #1 🗸 🔸	
Text Messages	Service	
TMS Source:	Built-in Text Messages	
Hide Advanced Set		ř
	OK Cancel	

• Callsign

Specify a callsign for the radio to display in the Dispatch Console.

• Radio ID

Specify a Radio ID for the radio. This ID is used by other calling radios when addressing the radio, for instance, when making a private call or sending a text message.

• MDC / Sel-5 (Hex)

Set an ID for MDC 1200 or SELECT 5 signaling systems. This ID is used to identify and communicate with a target radio or group of radios depending on the call type. For more details on MDC 1200, see http://en.wikipedia.org/wiki/MDC-1200.



• Radio Groups

In the drop-down list, select a radio group(s) to which to assign the radio.

• Use icon

From the drop-down list, select an icon for the radio.

• Extended Device

From the drop-down list, select the option board type the radio is equipped with.

Location Service

- GPS Source
 - Built-in GPS receiver

Select if the radio has its own built-in GPS receiver to send GPS data.

- Not equipped with GPS receiver Select if the radio cannot send GPS data.
- GPS Profile

From the drop-down list, select the default or preconfigured GPS Profile. For more details on GPS Profiles, see <u>GPS Profile</u>.

Location Enabled

Select/clear this checkbox to enable/disable the location trigger.

Telemetry Service

- TLM Source
 - Not equipped with Telemetry Select if the radio cannot send Telemetry data.
 - Built-in Telemetry

Select if the radio has its own built-in Telemetry.

Extended device

Select if the radio is equipped with an extended device.

• TLM Profile

From the drop-down list, select the default or preconfigured Telemetry Profile. For more details on Telemetry Profiles, see <u>Adding Telemetry Profile</u>.

Text Messages Service

- TMS Source
 - Not equipped with Display

Select if the radio is not equipped with a display.

Built-in Text Messages

Select if the radio supports Text Messaging service (equipped with Display).

DMR Compatible Text Messages

Select if the radio supports DMR Compatible text messages.

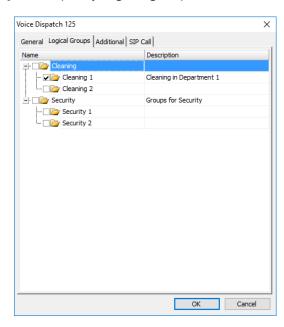
Radio Status Service



RS Profile

From the drop-down list, select the default or preconfigured Radio Status Profile.

On the Logical Groups tab, specify logical groups for the radio:



- Select a logical group in the list of available groups.
- For more information about logical groups, see <u>Logical Groups</u> section.

On the Additional tab, specify additional information about the radio subscriber:

Voice Dispatch 235		×
General Logical Gr	oups Additional SIP Call	
Load Image	Name: Radio 235 Description: Test radio	
Make:		
Plate Number:		
Phone Number:	+7 911 1234567	
Email:	tester@gmail.com	
Max speed:	0 🔶	
Route Color:	Powder 💌	
	OK Cancel	

• Name

Specify a name for the radio subscriber.

• Description

Add a description for the radio subscriber.



- Click the **Load Image** button and browse for the photo or image to assign to the radio subscriber.
- Make

Specify a make of the vehicle as additional information.

• Plate number

Specify a plate number of the vehicle as additional information.

• Phone number

Add a telephone number for the radio subscriber.

• Email

Add an email address for the radio subscriber.

• Max speed

Specify the maximum speed allowed for the vehicle, in kilometers per hour or in miles per hour, depending on the measurement system specified in TRBOnet server.

Route Color

Specify the color to display the route passed by the radio on the map.

On the **SIP Call** tab, specify SIP Call settings for the radio:

Voice Dispatch 125	5	×
General Logical G	roups Additional SIP Call	
SIP ID:	2125	
SIP Name:	2125	
Password:	•••••	
SIP Profile:	SIP 1	~
Block incom	ing calls	
Block outgo	ing calls	
		OK Cancel

• SIP ID

Enter the SIP ID that will be used by the radio.

• SIP Name

Enter the SIP user name that will be used by the radio.

• Password

Enter the password for the authentication.

• SIP Profile

From the drop-down list, select the SIP profile to use for the radio.



• Block incoming calls

Select this option to block all incoming SIP calls for the radio.

• Block outgoing calls

Select this option to block all outgoing SIP calls for the radio.

6.6 Configuring Job Ticketing

TRBOnet Dispatch Console provides the **Job Ticketing** feature – the integrated ticketing system that allows dispatchers to create, assign, and track job tickets through the radio network.

- Note: Before using the feature, make sure that your TRBOnet Dispatch Software license includes Job Ticketing.
- Click the **Job Ticketing** tab, and manage Job Tickets in the **Job Ticketing** pane.

File View Map Tools Help										
Job Ticketing	Job Ticketi	ng								5
d: = 1: 💩 🛠 🍸 🖉 🖉 🕲	Intercom		•0	🔊 1: Lin	_				•	
Conline Dispatchers (2) Administrator	Group 10		•0	Group	20	•)) •(0	oup 30	•)) 4]Ø)
Online, Indoor (0)	Job Ticketin		Custom Fi Assign (I		ouping	7 Auto Filter	🧼 Default S	iettings 🛛 🛃 Arc	hive (F8	B) **
Online, GPS Fixed (0)	Status 🔅 New	ID #A00007	Te 45		Perf	07-Nov-20		Ti Created By Administra	Ме	Com
★ ● 125 (Pete) ■ ● ★ ● 235 (Basil) ■ ●	New New	#A00011 #A00016		eck the pipe t back at		07-Nov-20 18-Nov-20	07-Nov-2016	18 Administra Administra		
Voice Dispatch										
🐨 Job Ticketing	HI HI I Record		HH 4							Þ
💓 Route Management	Status	ID		Start Tim	e	End Time		. Specified End Tir		
RFID Tracker	 → Assigned × Rejected 	#A00010 #A00014				07-Nov-20	16 16:36:33			
Text Messages										
Voice Recording										
(1) Radio Allocation										
administration	14 44 4 Record	i1of2 ⊧ ⊮	н							Þ
🔂 127.0.0.1 🛞 🕵 🙎 Administrator 📑 Lic	ensed to: demo D	emo License							0	Active -

6.6.1 Adding a Status for Job Ticketing

• Click the **Statuses** tab to see the statuses available for job tickets.



Image: Second	Intercom Coroup 10 Private Cal Job Ticketing, Sta Add Edit K Name New Canceled Assigned Accepted		I: Line free I: Group 20 elds Description	Al Cal	
Administrator Dispatcher 1 Online, Indoor (0) Online, RoS Fixed (0) Online, No GPS (3) Image: Street (1) Image: Street (1)	Dob Ticketing / Sta Job Ticketing / Sta Rame New Canceled Assigned Accepted	Uses Custom F	ields]	Status	
Administrator Dispatcher 1 Online, Indoor (0) Online, RoS Fixed (0) Online, No GPS (3) Image: Street (1) Image: Street (1)	Job Ticketing Sta Job Ticketing Sta Laboratory Sta Laboratory Sta Laboratory Sta Name New Canceled Assigned Accepted	tuses Custom Fi			
Dispatcher 1 Online, Indoor (0) Online, GPS Fixed (0) Online, No GPS (3) S 125 (Pete) S	Add Sedit Kara				
Online, Indoor (0) Online, GPS Fixed (0) Online, No GPS (3) (2) (Add Sedit Kara				
Online, GPS Fixed (0) Online, No GPS (3) (25 (Pete)	New Cancelled Assigned Accepted		Description		
Online, No GPS (3)	Cancelled Assigned Accepted			举 New	
🐔 🕭 125 (Pete) 📃 🔯	Assigned Accepted				
	Accepted			× Cancelled	
				 Assigned 	
				+ Accepted	
Yoice Dispatch	Rejected			Rejected In Progress	
	Progress Completed			 ✓ In Progress ✓ Completed 	
Location Tracking		\			
Route Management					
RFID Tracker					
Text Messages					
Voice Recording					
Event Viewer					
Radio Allocation					
Administration	H4 44 4 Record 1 of 7	b 100 101 1			ŀ

• Click the **Add** button to add a Job Ticket status.

Job Ticket Statu	s	×
Name:	Accepted	
Description:	Accept	
Status:	+ Accepted	•
	+ Accepted	
	✓ Completed	
	🕐 In Progress	
	- Rejected	

Name

Specify a Job Ticket status name to display in the system.

Description

Add a description for the job ticket status.

Status

From the drop-down list, select the Job Ticket status.

Note: Specify a Job Ticket status name according to the following compliance table, so that Job Tickets are identified by radio:

Name	Status
Accepted	Accepted
Rejected	Rejected
In Progress	In Progress
Completed	Completed

6.6.2 Adding a Job Ticket

• Click the **Job Ticketing** tab to see the created job tickets.



File View Map Tools Help								
Job Ticketing	Job Ticketin	ng						
gi 🗄 li 🤷 🛠 🏹 🗗 🗗 😋	Intercom	•) •€	2 🔊	1: Line free		Al Cal		
Online, GPS Fixed (2)	Group 10	•) 🕷 (Group 20	• • 0	Group 30	(
🐔 🕒 125 (Pete) 📮 🔏 🔤								
💰 🕒 235 (Basil) 📮 😒	Job Ticketing	-	om Fields				1 🖼 🗛 🖓	(FD) 22
Online, No GPS (1)	Status	Edit (F4) 🐒 Assi	gn (F5)		Specified End Time	7	reated By	
🐔 🛞 Radio 240 m 📮 🔌 🚽	A New	#A00007	456	Pe Cr 07			dministrator	Prio Co Medi
Voice Dispatch	🔅 New	#A00011	Check t.				dministrator	Medi
in the bipaten	🔅 New	#A00016	Get bac.	18		A	dministrator	Medi
Location Tracking		\backslash						
🙀 Job Ticketing								
🥳 Route Management		1 1 of 3 🕨 🍽 🕂]					Þ
RFID Tracker	Processing task							
I RID HACKET	Status Assigned			Start Time	End Time	9	pecified End 1	Time
Context Messages	× Rejected				07-Nov-201	5 16:36:33		
🚭 Voice Recording								
-								
Event Viewer								
😰 Radio Allocation								
administration	HI HI I Record	1of2 + ++ ++ 4						Þ
🖒 127.0.0.1 🔉 🖦 🗣 Administrator 📑 Li	icensed to: demo D	emo License						Active -

• Click the **Add** button to create a job ticket.

Ticket ID: #A00000 Templates: ✓ ✓ Enable Deadine End Time: Ø7-Nov-2016 18:28 +5min ±3min Priority: Medum Text: Oneck the pipe 1111 Variables: Priority: Medum Variables: Priority Data Time Notify of ticket is not accepted by 111 Comment: Integration Hide Advanced Options OK	Job Ticket	
Templates:		
Image: Constraint of the second se	Ticket ID:	#A00000
End Time: 07-Nov-2016 18:28 +5min +10min +10min +1hour Priority: Medium Text: Check the pipe 111 Variables: Priority Data Time Notify on status changes Notify ticket is not accepted by 07-Nov-2016 16:33 Notification List Comment:	Templates:	~
End Time: 07-Nov-2016 18:28 +5min +10min +10min +1hour Priority: Medium Text: Check the pipe 111 Variables: Priority Data Time Notify on status changes Notify ticket is not accepted by 07-Nov-2016 16:33 Notification List Comment:		~
Horits Horits Horits Priority: Medium Image: Status Text: Check the pipe 111 Vanables: Priority: Data Time 111 Notify on status changes Notify flicket is not accepted by 07-Nov-2016 16:33 Ordertain Image: Status Image: Status		Enable Deadline
Priority: Medium	End Time:	07-Nov-2016 18:28
Text:		+5min +10min +30min +1hour
Variables: Priority_Data_Time Notify on status changes Notify ticket is not accepted by IO7-Nov-2016 16:33 Variables:	Priority:	Medium \checkmark
Variables: Priority Data Time Notify on status changes Notify flicket is not accepted by 07-Nov-2016 16:33 Notification List Comment:	Text:	Check the pipe
Variables: Priority Data Time Notify on status changes Notify flicket is not accepted by 07-Nov-2016 16:33 Notification List Comment:		
Comment:		
Comment:	Variables:	Priority Data Time
Comment:		Notify on status changes
Comment:		Notify if ticket is not accepted by
Comment:		07-Nov-2016 16:33
		Notification List
	Comment:	
Hide Advanced Options OK Cancel	Comment.	
Hide Advanced Options OK Cancel		
Hide Advanced Options OK Cancel		
Hide Advanced Options OK Cancel		
	Hide Advanced O	ptions OK Cancel

• Ticket ID

This value will be set automatically once the ticket has been created.

• Templates

From the drop-down list, select a template for the Job Ticket.

Click the button to create a template.

Message Templates		×
of %PRIORITY% priority, to b	e done on %DATE%	6
Priority Date Time		
Filler Date fille		
	ОК	Cancel

• Enter the template text. You can also add:



✓ Priority

Click this link to add the task priority to the text.

✓ Date

Click this link to add the date to the text.

✓ Time

Click this link to add the time to the text.

• Enable Deadline

Select this option and in the **End Time** box, specify the date and time on which to finish the task.

• Priority

From the drop-down list, select the task priority.

• Text

Enter the text message in this box.

• Notify on status changes

Select this option to send notifications when Job Ticket status changes to dispatchers, Email and/or SMS groups.

• Notify if ticket is not accepted by

Select this option to send notifications to dispatchers, Email and/or SMS groups if a radio does not accept the Job Ticket at the time specified in the box below.

• Notification List

Click this link and choose the recipients of selected notifications.

Notification List	×
	\sim
Dispatchers Email SMS Radios	
Notify Dispatchers	
Administrator	
✓ Dispatcher 1 Dispatcher 2	
	_
OK Cancel	
	_

You can notify dispatchers with the help of notifications in the Dispatch Console (on the **Dispatchers** tab, check **Notify Dispatchers**, and select dispatchers), Email groups by sending Emails to dedicated Email groups (click the **Email** tab, check **Notify by Email**, and select Email groups) and phone users by sending SMS to dedicated SMS groups (clcik the **SMS** tab, check **Notify by SMS**, and select SMS groups).



• Comment

Add a comment for the task.

6.6.3 Assigning a Job Ticket

• Select the job ticket in the list, and click the **Assign** button. Or, right-click the job ticket and choose **Assign**.

Job Ticketing		J	ob Ticket	ing											5
g: 🗄 h 🛃 🛠 🏹 🔎	00		Intercom	•))	•0	8	🔉 1: Lin	e free			All Call		•) •: 0]	
- A outine Discutation (0)		ī (Group 10	•))	•0	ŀ	Group	20			Group 30		0) 🛋 🥝		
Administrator			Private Ca	al 🔊	•0										
Administrator Compatcher 1	₽▲		Job Ticketii												
Online, Indoor (0)		K.		9 Edit (F4) 🐒	Assian (51	= 6	ouning	V 41	to Filter 💩 (efault Setting	κ 🔂 Δ	rchive (F8) 🥝) Cancel	(F9) ³
<u> </u>		E.	Status	ID		ext				Specified End			ated By	Priority	Com
Online, GPS Fixed (0)		*	New	#A00007	4		_		07-N	opeoneo eno	inine.		inistrator	Medium	Comm
Online, No GPS (3)		*	New	#A00011	c	eck '	the		07-N	07-Nov-2016	18:28:00	Adm	inistrator	Medium	
💰 🔊 125 (Pete)	90	*	New	#A00016	¢	s)	Assign			1		Adm	inistrator	Medium	
💰 ڰ 235 (Basil)	9 🕫						Edit								
觰 🕑 Radio 240 mobile	98.					0	Cancel								
						×	Archiv	e							
Voice Dispatch								Based o	on						
							Resence			I					
Location Tracking		144	44 4 Recor	d 3 of 3 ▶ ₩ 1	₩ 4	_	Chang	e Status	•						Þ
Job Ticketing		Pn	ocessing tas	ks:		3	Add]					
🚰 Job Ticketing			Status	ID	Text			Start Tin	ne	End Tim	2	Spec	cified End Time	C	. Co
😿 Route Management		-	Assigned	#A00010	Sto		0							A	
Koute Hanagement		×	Rejected	#A00014	То		0			07-Nov-	2016 16:36:33			A	
RFID Tracker															
Context Messages															
Voice Recording															
Voice Recording															

In the dialog box that opens:

Assign Job	Ticket		×
Kan Assi	gn Job Ticket		
Radio:	€ 111 ♥ € 125 (Pete) 125 ● 225 (Basil) 235 ● Radio 200 ● Radio 201 ● Radio 202 ● Radio 202		•
		ОК	Cancel

- In the list, select a radio, radio or logical group to which to assign the job ticket.
- Click **OK** to assign the task to selected radio(s).

As a result, the selected radio will receive the job ticket.

6.6.4 Viewing Job Ticketing Statistics

• On the **Tools** menu, click **Job Ticketing Monitoring** to see the Job Ticketing statistic diagram:



v: Today	- Upd				
atcher	Created tickets	Radio	Assigned tickets	Status diagram	
ninistrator		7 • Unassigned 125		5	
		125		1	
				New: 300.00 %	
				Cancelled: 100.00 %	
				Completed: 300.00 %	
					_
					Pro Co
					00
		-			
× ++ ++ ++ ++ ++ ++ ++ ++ ++ ++ ++ ++ ++		a, a	, q, q, q		

For more details on the statistics, see Job Ticketing Monitoring.

6.6.5 Viewing Job Ticketing Reports

- To view a job ticketing report, go to **Reports** (1), and select **Common Reports** (2) **Job Ticketing** (3).
- On the **Common reports** pane, click the **Query parameters** tab, and specify the appropriate parameters and then click **Generate Report**.

Reports	(Comm	on reports									
	^	✓ Internet	rcom	0	1: Line free	a t 6	AL Cal			Group 10		
Common reports 2		_			· ·				•	a coop to		
Messages for Period	- 51	Gro	up 20		Group 30	•) 📧 🕻	Privati	e Call [
User Messages and Notes				Job Ticketing 🗴								
Radio Allocation	l	9' 🗛	y 🔍 100	% 👻 🔍 🖂		🖣 🕂 🖓 - 🖄 🛛	🗋 • 🖂 •					
		-										
- State of Radios Summary												
D CAN graphics			Joh J	icketing	1							
CAN messages 3				-2016 0:00 to 21								
Job Ticketing	~		nom 00-Ju	-2016 0:00 to 21	-1000-2016 0:00							
Voice Dispatch			Ticket ID	Text	Performer	Status	Creation Time	Start Time	End Time	Specified End Time	Created by	Priority
Location Tracking			#A00000	%PRIORITY%%	,	New	07-Nov-2016 14:04:31			07-Nov-2016 14:19:00	Administrator	Medium
				PRIORIT78			07-Nov-2016		07-Nov-2016			
🐕 Job Ticketing			#A00001	%PRIORITY%		Accepted	14:04:58		14:49:55		Administrator	Medium
				010.0000			07-Nov-2016		07-Nov-2016			
🕐 Route Management			#A00002	%DATE%		Assigned	14:25:12		14:50:09		Administrator	Nealum
			#A00003	%TIME%		Accepted	07-Nov-2016		07-Nov-2016		Administrator	Medium
RFID Tracker				101111270		Hosepted	14:25:25		15:00:35		- and a second	meanum
			#A00004	jkg		Assigned	07-Nov-2016		07-Nov-2016		Administrator	Medium
— Text Messages							15:01:59 07-Nov-2016		15:17:57 07-Nov-2016			
Voice Recording			#A00005	Abc		Assigned	15:18:13		15:21:07		Administrator	Medium
voice Recording					125 (Cleaning		07-Nov-2016		07-Nov-2016			
Reports	-	-1	#A00006	123	1)	Completed	15:29:19		15:35:02		Administrator	Medium
U III U III U			#A00007	AEC.		New	07-Nov-2016				Administrator	Madium
Event Viewer			##400007	430		New	15:38:32				Aummistrator	weulum
			#400008	Visit mortre		Completed		07-Nov-2016			Administrator	Medium
Radio Allocation						,	15:38:39	17:58:21	17:58:49			
			Duration					02:19:41				
Administration		,	Duration	2:					00:00:28			

• Click the **Job Ticketing** tab to see the generated report.



7 Installing Web-Console

The Web Console is a special interface to connect to TRBOnet Server and monitor subscriber radios using a regular Web browser on any device. For more details on Web Console interface, see **User Guide**, section **Web Console User Manual**.

7.1 Installing Web Console

- Click Start>Control Panel>Programs and Features.
- Click the Turn Windows features on or off link.

Control Panel Home	Uninstall or change a program							
View installed updates	To uninstall a program, select it from the list and then	click Uninstall, Change, or Repair.						
Turn Windows features on or								
off	Organize - Uninstall/Change		8==	- 🕐				
Install a program from the network	Name	Publisher	Installed On	Size				
	TRBOnet Enterprise 5.1	Neocom Software	21-Oct-2016	510				
\	💿 TRBOnet.Watch 2.3	Neocom Software	02-Sep-2016	111				
· · · · · · · · · · · · · · · · · · ·	G Unity Web Player	Unity Technologies ApS	25-Aug-20	12.0				
	4 Unlocker 1.9.2	Cedrick Collomb	09-Dec-2015					
	📧 Visual Studio 2010 Prerequisites - English	Microsoft Corporation	23-Nov-20	47.1				
	💐 Windows Driver Package - Google, Inc. (WinUSB) An	Google, Inc.	22-Dec-2015					
	🕿 Windows Driver Package - Motorola Solutions, Inc. (f	Motorola Solutions, Inc.	18-Nov-20					
	💐 Windows Driver Package - Motorola Solutions, Inc. N	Motorola Solutions, Inc.	18-Nov-20					
	💐 Windows Driver Package - Nokia pccsmcfd LegacyDr	Nokia	25-Aug-20					
	🛞 WinPcap 4.1.3	Riverbed Technology, Inc.	12-Sep-2016					
	Wireshark 2.2.0 (64-bit)	The Wireshark developer comm	15-Sep-2016	171				
	TrView 2.33	Gougelet Pierre-e	07-Sep-2015	16.3				
	🥥 Служба автоматического обновления программ	Mail.Ru	12-Sep-2016					
	💋 Центр управления мышью и клавиатурой (Micros	Корпорация Майкрософт (Міс…	25-Nov-20	37.3				
	🔀 Языковой пакет Microsoft Visual Studio 2010 Tools д	Microsoft Corporation	03-Nov-20	14.6				
	4			>				

 Go to Internet Information Services>World Wide Web Services>Application Development Features, and make sure all of them are selected:

Furn Win	dows features on or off			•
lo turn a fea	ture on, select its check box. To turn a	feature o	off, clear i	ts
heck box. A	filled box means that only part of the	feature i	s turned (on.
• 🗌 H	/per-V			1
🗹 In	ternet Explorer 11			
😑 🔳 📙 İn	ternet Information Services 🚤			
• 🗆	FTP Server	_		
· 🗆 🗖	Web Management Tools			
=	World Wide Web Services			
= E	Application Development Feature	es		
	.NET Extensibility 3.5	-	-	
	.NET Extensibility 4.6			
	Application Initialization			
	ASP ASP			
	ASP.NET 3.5			
	ASP.NET 4.6			
	CGI			
	CGI ISAPI Extensions			
	ISAPI Filters			
	Server-Side Includes			
	WebSocket Protocol			
H 🗐	Common HTTP Features			

• Also, make sure that **Common HTTP Features>Static Content** is selected.



📴 Windows Featu	res	-		×
Turn Windows	features on or off			•
To turn a feature or	n, select its check box. To	turn a feature i	off clear	its
	box means that only part			
M	WebSocket Protocol			/
	ommon HTTP Features			
	Default Document			
	Directory Browsing			
	HTTP Errors			
	HTTP Redirection			- 1
	Static Content			
	WebDAV Publishing			
	lealth and Diagnostics			
	erformance Features			
	ecurity			
	Information Services Host	able Web Core		
Isolated	User Mode			

- Restart your PC.
- Click Start>All Programs>Accessories>Command Prompt.

Command Prompt	-	×
icrosoft Windows [Version 10.0.10586] c) 2015 Microsoft Corporation. All rights reserved.		í
:\Users\v.kulinichev>		

Go to This PC>Local Disk (C:)> Windows > Microsoft.NET > Framework > v4.0.30319/aspnet_regils.

🖓 📙 🖬	Application Tools v4.0.3031	9			-	
Hile Home Share	: View Manage his PC > Local Disk (C:) > Windows > Mi				rch v4.0.30319	~
- → × ↑ <u> </u> → T	his PC > Local Disk (C) > Windows > Mi	crosoft.rvt1 > Pramework	> >++0.30319	v Ö Sei	rch v4.0.30319	, p
🔤 Desktop 🛛 🖈 ^	Name	Date modified	Туре	Size		
😫 Documents 🖈	adonetdiag.mof	30-Oct-2015 10:19	MOF File	8 K	3	
🕹 Downloads 🖈	adonetdiag.mof.uninstall	30-Oct-2015 10:19	UNINSTALL File	2 K	в	
Pictures #	🗟 alink.dll	30-Oct-2015 10:19	Application extens	116 K	3	
Images	AppLaunch	30-Oct-2015 10:19	Application	95 K	3	
pictures	i applaunch.exe	30-Oct-2015 10:21	XML Configuratio	1 K	В	
	Aspnet	13-Jan-2014 23:28	XML Configuratio	1 K	в	
TRBOnet_5.1	aspnet_compiler	30-Oct-2015 10:19	Application	55 K	3	
Ttt	aspnet_filter.dll	30-Oct-2015 10:19	Application extens	35 K	3	
OneDrive	aspnet_isapi.dll	30-Oct-2015 10:19	Application extens	25 K	8	
- onconic	Aspnet_perf.dll	24-Feb-2016 5:12	Application extens	41 K	3	
This PC	aspnet_perf.h	30-Oct-2015 10:19	H File	8 K	3	
Desktop	🥁 aspnet_perf	30-Oct-2015 10:19	Notepad++ Docu	975 K	8	
Documents	📈 aspnet_perf2	30-Oct-2015 10:19	Notepad++ Docu	973 K	3	
Downloads	🗟 aspnet_rc.dll	30-Oct-2015 10:19	Application extens	90 K	3	
h Music	aspnet_regbrowsers	30-Oct-2015 10:19	Application	44 K	3	
	📧 aspnet_regiis	30-Oct-2015 10:19	Application	40 K	8	
Pictures	aspnet_regsql	30-Oct-2015 10:19	Application	124 K	в	
Videos	aspnet_state	30-Oct-2015 10:19	Application	45 K	3	
Local Disk (C:)	aspnet_state_perf.h	30-Oct-2015 10:19	H File	1 K	3	
Local Disk (D:)	2 aspnet_state_perf	30-Oct-2015 10:19	Notepad++ Docu	42 K	В	
	aspnet_wp	24-Feb-2016 5:12	Application	43 K	8	
Network	CasPol	30-Oct-2015 10:19	Application	105 K	3	
*	📄 caspol.exe	30-Oct-2015 10:21	XML Configuratio	1 K	8	
61 items 1 item selecte	d 39.6 KB					Bee 6

• Drag the **aspnet_regils** file into the **Command Prompt** then press the space bar and add the **-i** key. Then press the **Enter** key:

Command Prompt	_		\times
icrosoft Windows [Version 10.0.10586] c) 2015 Microsoft Corporation. All rights reserved.			
:\Users\v.kulinichev>C:\Windows\Microsoft.NET\Framework\v4.0.30319\aspn	et_regii	s.exe	-i



- Go to Control Panel > Administrative Tools.
- Double-click the Internet Information Services (IIS) Manager shortcut and double-click ISAPI and CGI Restrictions.

File View Help		
Connections	S0142 Home	Actions Open Feature
 S0142 (NSV:kulinichev) D Application Pools Sites 	Net Image: Computer Section Se	Manage Server Retart Start Start View Application Pools View Application Pools View Stes Change ART Framework Version Get New Web Platform Components
	Image: Content Version Version Image: Content Version Version	Hitop

• In the **Restriction** column, set **Allowed** in all lines.

Tak War John Connections (S. 1996) (S. 1996) (S. 1996) (S. 1996) (S. 1996) (

- Copy the Web Site archive WebConsole to Computer > Local Disc (C:)
 >inetpub to create a folder for the Web Console.
- Go to **Application Pools** (1). Double-click **DefaultAppPool** (2) and check the **.Net CLR Version** (3):

← → ② + S0142 + App File View Help					
File View Help Connections Image: Connections	This page lets you view	r processes, contain one o	or more applications ow All Group by:	the server. Application pools are Edit Application Pool Name: DefaultAppPool	Actions Add Application Pool Set Application Pool ? Yool Tasks
1	Viene MIT v20 Carsic MIT v30 Carsic MIT v45 MIT v45 Classic MIT Ap. DefaultRappPool Fatures Vien Fatures Vien Carsic	Stanted v20 Stanted v40 Stanted v40 Stanted v40 Stanted v40 Stanted v40 Stanted v40	Mengord Pipel. Integrated Classic Classic Classic Classic Integrated	Att CGA verinin Att CGA Verinin 4.30019 Menagad jajohine mode lintrgated CGA verining and the second linear CGA verining att and the second linear	terred terred Cencel



• Click **Sites** (1), right-click **Default Web Site** (2) and choose **View Applications** (3):

← → 🗿 → S0142 → Site	•			
File Vice Help Connections 9 SU2105V-Judinicher) - 9 SU2105V-Judinich	Sites Fare: None Confinet who Site 2	Co Subaw All Group by No Grouping State Bridge State Bridge State State	Path	Aleres (a) Los de las multiple bindings. (b) Los de las multiple bindings. (c) Aleres de las multiple fieldings. (c) Aleres de las multiple fieldings. (c) Aleres de las multiple field remission. (c) Aleres d

• Click the Add Application link.

Salaria Internet Information Services (IIS) Manager				– 🗆 X
← → ⑤ + S0142 + Site	s 🕨 Default Web Site	•			📅 🗟 🔂 🕢
File View Help					
Connections Conne	-	Cations view and manage the list of applicati	ions. Applications contain co	intent and code.	Actions Add Application Set oplication Defaults
🗸 🐻 Sites	Filter	🔹 🐨 Go 🕞 🕁 Show All	Group by: No Grouping		😢 Help
Sport_daw Web Ster > → sport_dient	<	Physical Pern	5te	Application Pr	
Ready					4

• Specify the **Alias** and **Physical path** for the application:

Add Application	?	×
Site name: Default Web Site Path: /		
Alias: Application pool:		
TRBOnet Web Console DefaultAppPool	Select	
Example: sales		
Physical path:		
C:\WebConsole		
Pass-through authentication	< ·	
Connect as Test Settings		
Enable Preload		
ОК	Cancel	

- Browse for the folder with unarchived Web Console.
- Click OK.
- Select **Application Pools** (1) and click the **Set Application Pool Defaults** link (2):



File View Help	-				Actions
onnections		Application Pool Defaults	?	×	
\$0142 (NS\v.kulinichev)	19	(-	Add Application Pool Set Application Pool Defaul
Application Pools	This page	✓ (General)		ols are	
	associated different a	.NET CLR Version	v4.0	bong	😢 Help
V . Default Web Site	carrierent a	Enable 32-Bit Applications	Integrated		
SRECYCLERIN	Filter:	Managed Pipeline Mode			
5 1	Name	Queue Length	1000 3	oplication	
3 2 1	I.NET V	Start Mode	OnDemand	application	2
5.003		V CPU			
> - Acrobat Pro DC	INET v	Limit (percent)	0		
> - Docs	INET v	Limit Action	NoAction		
> - inages	INET v	Limit Interval (minutes)	5		
> i Manual of Style	Classic Classic	Processor Affinity Enabled	False		
> - Portable	Defaul	Processor Affinity Mask	4294967295		
> · C SmartPTT	Defaul	Processor Affinity Mask (64-bit	t c 4294967295		
>		Process Model			
> - Styles		> Generate Process Model Event			
> - Construction System Volume Inform		Identity	ApplicationPoolIdentity		
> - Comp		Idle Time-out (minutes)	20		
> 🔚 TRBOnet_4.8_setup		Idle Time-out Action	Terminate		
TRBOnet_5.1.01124_se		Load User Profile	True		
> 🔛 Walt		Maximum Worker Processes	1	~	
Webconsole		"Service Unavailable" Response	Type		
> i Win10			HttpLevel and the application pool is ITTP 503 error. If set to TcpLevel, HTTP		
			OK Cancel		
			ON Canter		

• Set Enable 32-Bit Applications to True (3).

The Web Console will be added as an application to under the Default Web Site:

🍓 Internet Information Services (IIS) Manager		– 🗆 X
← → [() + S0142 + Sites + Defau	It Web Site + TR8Onet Web Console +	🖬 🗟 🕲
File View Help		
Connections	/TRBOnet Web Console Home	Actions Explore Edit Permissions
Control of the second sec	Fore • • • • • • • • • • • • • • • • • • •	bar Vermalokt Basic Settings View Vintual Dectories Manage Application Browse Application Browse 10, 10, 100, 99-80 (http: Advanced Settings Http: Http:
> Cog v		6

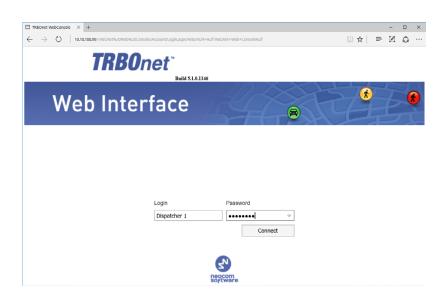
Note: Make sure your account has sysadmin privileges and the database connection is successful (see <u>Database</u> <u>Authentication</u> section).

To open Web Console, right-click your application, choose **Manage Application > Browse.**

File View Help					
Consultant Consul	Filter: ASP.NET 	et Web Console Ho	All Group by: Area	T Roles	Actime Captor East Permissions East Settings View Vietu Neterolosis Manage Application Browne Navio 0000 (https:// Advanced Settings Poly

TRBOnet Web Console is now ready for operation:





• Enter the Login and Password, and click Connect.

7.2 Configuring Web Console

• If TRBOnet Dispatch Console is not installed on your PC, select the application and click **Application Settings**:

← → ② → S0142 → Sites → Defa	It Web Site + TRBOnet Web Console +	🖬 🖻 🕼 🕼
File View Help		
Connections	/TRBOnet Web Console Home	Actions
	TRBONET WED CONSOLE HOME	Discrete Explore
S0142 (NS\v.kulinichev)	Filter: • 🐨 Go - 🕞 Show All Group by: Area •	Edit Permissions
Application Pools	ASP.NET	Basic Settings
✓ Sites ✓ Default Web Site		View Virtual Directories
> - 🛄 temp		Manage Application
TRBOnet Web Console	.NET .NET .NET Error .NET .NET Profile .NET Roles Authorizat., Compilation Pages Globalization	Browse Application
App Themes		Browse 10.10.100.99:80 (http
> - 🔛 Audio		Advanced Settings
> - bin - Controls	NET Trust .NET Users Application Connection Machine Key Pages and Levels Settings Strings	Help
> Controls > CustomData	Levels Settings Strings Controls	
> - Does	🔝 🍒 🖳 🔪	
> - Commission - Commis	Providers Session State SMTP E-mail	
> - GeocodingScripts	v	
> Canada Salara Salar	Features View 💦 Content View	

• Specify the **IP address** and **Port** of the PC with TRBOnet Dispatch Console installed:

⊢ → 🕜 + S0142 + Sites + Del	fault Web Site 🔸 TRBOnet Web	Console +			🖬 🗉 🟠 🖡
File View Help					
ionnections	Application	Settings		A	Add
S0142 (NS\v.kulinichev) Application Pools Sites	Use this feature to store nam runtime.	ne and value pairs that man	ged code applications can use at		Edit Remove
V 😧 Default Web Site	Group by: No Grouping	*			Help
> -🛄 temp	Name	Value	Entry Type	^	
V 😚 TRBOnet Web Console	dateTimeFormat		Local		
> - Account	GoogleClientId		Local		
> App_Themes	GoogleSignature		Local		
> - Hudio	ip	10.10.161.131	Local		
> Controls	port	4021	Local		
S - CustomData	UrlGetCoordinatesCustom		Local		
S - Docs	UrlGetCoordinatesGoogle		Local		
> - Forms	UrlGetCoordinatesNomi	http://nominatim.open	Local		
> - GeocodingScripts	UrlGetStreetNameCustom		Local	~	

• Right click **TRBOnet Web Console** and choose **Edit Permissions**.



← → ⑦ + S0142 + Sites + Def	ult Web Site + TRBOnet Web Console +	🛄 🖾 🟠 😥
File View Help		Actions
2	/TRBOnet Web Console Home	Discrete Explore
Solid2 (NS\v.kulinichev)	Filter: • T Go - C Show All Group by: Area • C	Edit Permissions Basic Settings
Orfault Web Site Site	🐴 🔄 🖪 🍨 🖬 🗞	View Virtual Directories Manage Application
TRBOnet Web C Account Account App_Theme Edit F	e It .NET Error .NET .NET Profile .NET Roles ermissions	Browse Application Browse 10.10.100.99:80 (http)
> - 🛄 Audio 🔗 Add i	pplication	Advanced Settings
> - Controls Manu > - Docs With Manu - Docs With Manu - Porms With	a Application	😯 Help
> 🔤 Images 💦 Switc	to Content View	

• Click the **Security** tab and then click the **Edit** button to edit permissions:

General Sharing	Security	Previous	Versions	Customi	ze
_	×				
Object name: 0	:\WebCoc	isole			
Group or user nam	nes:	\mathbf{i}			
Authenticate	d Users				
SYSTEM					
🞎 Administra	tors (S014	2\Admir	nistrators)	
SO1 Users (SO1	42\Users))			
To change permis	sions click	c Edit		Ed	3
2 .			-	EO	K
Permissions for Au Users			Alloy		n Denv
Permissions for Au			Allov		
Permissions for Au Users			Allov		Deny
Permissions for Au Users Full control	uthenticate		Allov		Deny
Permissions for Au Users Full control Modify	uthenticate				Deny
Permissions for Au Users Full control Modify Read & execut	uthenticate				Deny
Permissions for Au Users Full control Modify Read & execut List folder control	uthenticate				Deny
Permissions for Au Users Full control Modify Read & execut List folder conte Read	e ents	d		w [Deny
Permissions for Au Users Full control Modify Read & execut List folder conte Read Write	e ents	d			Deny
Permissions for Au Users Full control Modify Read & execut List folder control Read Write For special permis	e ents	d		w [Deny

• Select User in the Users list. In the Allow column, select Write:

Permissions for WebConsole	2	×
Security		
Object name: C:\WebConsole		
Group or user names:		
Seal Authenticated Users		
SYSTEM		
Administrators (S0142\Admi	inistrators)	
Solution (Solution (Solution)		
	Add	Remove
	Auu	Nelliove
Permissions for Пользователи	Allow	Deny
Read & execute	\checkmark	
List folder contents	· ·	
Read		
Write		
111100		
Special permissions	(
		· ·

- Click Apply.
- Click OK.



Appendix A: Backing up and Restoring Database and Audio Recordings

Configure Backup

TRBOnet Dispatch Software has an embedded mechanism for database and audio recordings backup. Initially, it already has two paths to store database and audio recordings:

%ProgramData%\Neocom Software\TRBOnet.Plus\Backups and %ProgramData%\Neocom Software\TRBOnet.Plus\Audio.

For your convenience, the default paths can be changed:

• Open TRBOnet Server and stop the TRBOnet Server service.

Configuration	Service
🔗 Service 🗸	
S Network	The TRBOnet Server service is installed
🛱 Redundancy	
Database	Status: 🜔 Service started
Reports	Stop service
Service Management	
Advanced settings	Save changes and restart service
Geocoding Servers	
Radio Networks	Uninstall Service
Digital Systems	
Services	
Repeater #1	
-X Advanced setti	
Slot #2	
EII Local Slots	
< >	View Log Entries Export Configuration Import Configuration
Set Defaults	Apply OK Cancel

 To customize backup folders, go to Database and select custom directory for the database (e.g. C:\TRBOnet\Backup\DB) and audio files (e.g. C:\TRBOnet\Backup\Audio). The database backups will be stored to selected directories.

Configuration	Database	
💣 Service	^	
S Network	SQL Server:	(local)\SQLEXPRESS -
🛱 Redundancy	Database:	TRBOnet •
Database	Authentication:	Windows
😪 Reports	Authentication:	vvindows
Service Management	Login:	
💥 Advanced settings	Password:	
Geocoding Servers		
Radio Networks	Specify the path	n for database archives
Digital Systems	Path:	C:\TRBOnet\Backup\DB
Services	Paul:	c. (Robiet packup (pb
Repeater #1	Use custom fold	er for audio files
X Advanced setti	Path:	C:\TRBOnet\Backup\Audio
Privacy		5
	Test Con	nection
Local Slots	Upgrade Da	tabase 🔻
	Create Dat	abase 🔻
< >		
Set Defaults		Apply OK Cancel

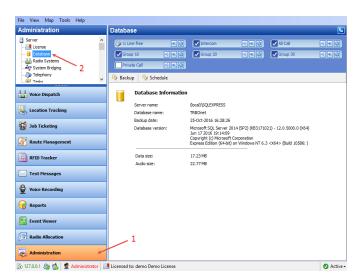
• Save your changes and restart the service.



Back up Database and Audio Recordings

To back up the database and audio recordings, do the following:

- In the Dispatch Console go to **Administration** section and select **Database** in the Navigation tree.
- Click the **Backup** button:



• Specify the backup details:

Database maintenance	×
Remove old data and shrink da	tabase
Path: C:\ProgramData\Neocom Software\TRB	Onet.Enterprise\Backups
🗹 Backup data	
🗹 Backup audio	
Remove	
Remove all data older than date:	10-Jul-2016 💌
Audio files	
Data	
	OK Cancel

Backup audio

Select to back up audio recordings.

Remove

Select to remove audio files and data from the database.

- Remove all data older than date
 Specify the date to remove data older than that specified date.
- Audio Files

Select to remove audio files.

Data

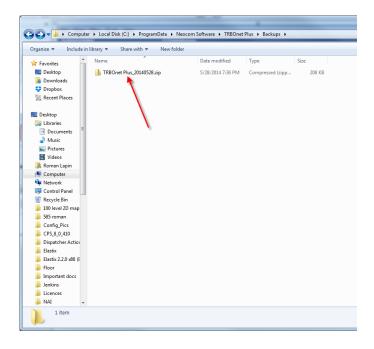
Select to remove data.

• Click **OK** to run the backup procedure.

The Backup progress bar will be displayed in the lower-right corner.



- 4. In a while, a ZIP archive will be created in two possible directories:
 - The default directory is %ProgramData%\Neocom
 Software\TRBOnet.Plus\Audio for Audio files and
 %ProgramData%\Neocom Software\TRBOnet.Plus\Backups for backup files.
 - The custom directory is specified in TRBOnet Server settings.
- 5. The archive includes the database backup file and audio recordings files. The archive name contains the date of backup. New backup files will be placed in the same directory.



Restore Database

To restore the database

• Open TRBOnet Server and stop the TRBOnet Server service.

Configuration	Service	
Image: Service Image: Service	The TRBOnet Server service is installed Status: O Service started	
Reports	Stop service	_
Radio Networks	Uninstall Service	
····· Services ···· Properties ···· Properties ···· Privacy		
Slot #1 Slot #2 Correct Slots		
< >	View Log Entries Export Configuration Imp	
Set Defaults	Apply	OK Cancel

• Unzip the backup archive and open the folder:

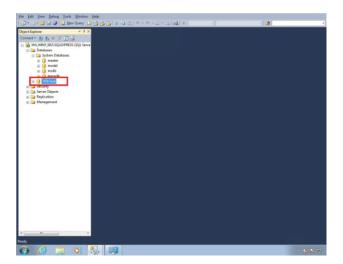


Organize 🔻 🛛 🎇 Open	Include in library Share with	New folder			100	- 1	. 8
Favorites	Name	Date modified	Туре	Size			
Cesktop	🍌 Audio	8/9/2013 1:09 PM	File folder				
Downloads	🗋 Info.txt 👇	8/9/2013 12:54 PM	Text Document	1 KB			
Secent Places	TRBOnet.Enterprise.bak	8/9/2013 12:54 PM	BAK File	1,939 KB			
	TRBOnet.Enterprise_20130809.zip	8/9/2013 12:54 PM	WinRAR ZIP archive	164 KB			
Cesktop							
🧊 Libraries							
Documents							
J Music							
Pictures #							
Videos							
🎉 Roman Lapin							
: Computer							
🗣 Network							
Control Panel							
Recycle Bin							
CPS_8_0_410							
🗼 Elestix							
lmportant docs							
Pics							
SASPlanet_12080							

• Run **SQL Server Management Studio Express** with sufficient rights to manage databases.



• Select **Database** in the navigation tree (e.g. **TRBOnet**):



• Right-click the selected database, and go to **Tasks/Restore/Database**:



oript - Die Help ource Digtabase: Ogtabase: Bestore to: estore plan Bagkup sets to resto						Timdina
eurce		189Cuet				•
	ore					
leatore Na	me	Component	Type	Server	Detabase	Position
					Yes	* Wy Backup Media
					а. ОК	<u>k</u> e

Select Database backup properties:

- In the **Destination** group, type in or select **Database** name to back up to from the drop-down list (e.g. **TRBOnet**).
- In the **Source** group, click **Device**.
- Click ... to select the directory with database backup:

	tored.		
Select a page	Script + DHelp		
🔮 General 🚰 Film	Source		
P Options	O Detabase		
	· Device	*	-
	Dgtabasec		
	Destination		
	Database	1980net	÷
	Bestore to:	Janda	1
	6 - Select backup devic		ł
	Backup media type:	da and its location for your restore operation. Plan •	-
	Backup media		
	Backup geda	AM Brease Congeta	
Connection Sun_unter_ptp:(sqt_ptPatess [VM_WDRT_ptp2:admin]	Backup geda	Bemove	
W.WIN7,002/SQLEXPRESS	Boxiup geda	Bemove	
VM_WENT_002/SQLEXPRESS (VM_WENT_002/admin)	Bookup geda	Bemove	

 Click Add and select the directory to which you unarchived the database backup (e.g., C:\TRBOnet\Backup\DB).

	(m)	
Backup media type:	File	•
Backup media:		
		Add
		Bemove
		Contents

Note: Select the *.**bak** file type.

• Click **OK** to add the directory.



No backupset selected to be res	tored.	
Select a page	Sorpt - Help	
Ceneral Files	Source	
P Options	Qatabase	
	Device:	
	Dgtabase	•
	Destination	
	Datagases	TRBOnet
	Restore to:	Timeline
	Select backup devic	
Connection	Backup medatype: Backup gede: C:\/hogram/Data\/Nec	Re
VM_WD/J002\SQLEXPRESS (VM_WD/J002\admin)		
View connection properties		
View connection properties Programs		
		OK Cancel Help /

• Click OK.

The database is added to the list of restored databases.

Script - DHelp				
Source	TRBOnet TRBOnet The last backup tak	ien (Tuesday, August 16,	2013 11:21:27 ,	0 Jimeine
Database	Full \$001\SQLE	IPRESS TRBOnet 1	24000000219000	37 24600009
e1			Yerity	Backup Media
	C Database © Database Optimis Detington Detagase Botore ton Restore plan Restore Restore Restore Restore Restore Restore Restore Restore Restore Restore Restore Restore Restore br>Restore Res	Defabuse Option Option Option Option Option Option Option Default Default	Defathere Deprine Deprine Deprine Deprine Deprine Deprine Deprine Deprine Defathere Defathere Defathere Defathere THEOret Defathere THEOret Defathere THEOret Defathere THEOret Defathere THEOret Defathere Defathere	Defalsee Dyskee Dyskee Dyskee Dyskee THBOnet Dindysee THBOnet ThBONE ThBONE

- Select the checkbox and click **OK** to restore the database.
- In the **Configuration** pane, select **Database**.
- From the **Database** drop-down list, select the restored database.

Configuration		Database	
🛷 Service	•		
S Network		SQL Server:	(local)\SQLEXPRESS +
Database		Database:	TRBOnet22222
Service Management		Authentication:	TRBOnet
X Advanced settings		Autrenucation:	TRBOnet_Test
Map Servers for Geocoding		Login:	TRBOnet_Test1
Local Agent		Password:	TRBOnet_Test11
MOTOTRBO	Ξ		TRBOnet222
Services		Specify the path for	TRBOnet22222 TRBOnet222222
Repeater #1		Path:	C: \Users \r.lapin.NS\Desktop \Inportant docs
Advanced settings		Paul:	e, baera (inapinino (peaktop (inportant dota
Privacy		Use custom folder f	for audio files
III Slot #1		Path:	
III Slot #2		- Court	
Local Slots	-		
Analog Control Stations		Test Connec	tion
Remote Agents		Upgrade Data	base
Friendly Servers		Create Data	Dase
7 Internal PBX Server		Ci Cate Data	June 1
🕿 External PBX Server	•		
Set Defaults			Apply OK Cancel



- Click **Test Connection** to check the connection to the database.
- Click **Upgrade Database** to upgrade the database if the current database was restored from the database version lower than current.
- Click the Save changes and restart service link.

Configuration	Service
🔗 Service 🔺	
S Network	The server Windows Service is installed on this computer
Database	
Service Management	State: 🜔 Service started
🔀 Advanced settings	Stop service
Map Servers for Geocoding	
Local Agent	Save changes and restart service
🗘 Services	Uninstall Service
Repeater #1	
III Slot #1	
Slot #2	
Local Slots	
Analog Control Stations	`
Remote Agents	Niew log entries
Friendly Servers	
📷 Internal PBX Server	
🕿 External PBX Server 🔹	
Set Defaults	Apply OK Cancel

Restore Audio Recordings

To restore the audio file:

• Launch TRBOnet Server and stop the TRBOnet Server service.

Configuration	Service
🔗 Service 🔺	
S Network	The TRBOnet Server service is installed
🛱 Redundancy	
Database	Status: 🜔 Service started
😪 Reports	Stop service
Service Management	A Course of a second and a second secon
🔀 Advanced settings	Save changes and restart service
Geocoding Servers	
Radio Networks	Uninstall Service
Digital Systems	
Services	
Repeater #1	
Advanced setti	
Privacy	
III Slot #1	
III Slot #2	
EI3 Local Slots	
	C View Log Entries, Export Configuration, Import Configuration
< >	View Log Entries Export Configuration Import Configuration
Set Defaults	Apply OK Cancel

• Go to **Database** section in the navigation tree and specify custom directory for audio files (e.g. C:\TRBOnet.Plus\Backup\Audio).



Configuration		Database	
🖗 Service			
🕞 Network		SQL Server:	(local)\SQLEXPRESS +
Database		Database:	TRBOnet22222
Service Management		Authentication:	SOL Server 🗸
Advanced settings		Audientication:	SQL Server +
Map Servers for Geocoding		Login:	sa
. Local Agent		Password:	*************************
🐼 MOTOTRBO	Ξ		
Services		Specify the path fo	r database archives
Repeater #1			
		Path:	C:\temp\TRBOnet ····
🔒 Privacy		Use custom folder f	for audio files
III Slot #1		Path:	2:\temp\Audio ····
III Slot #2		Paul;	p. (temp youdo
Local Slots			
Analog Control Stations		Test Connec	tion
🕺 Remote Agents		Upgrade Data	base
Friendly Servers		Create Data	200
👸 Internal PBX Server		Create Data	Jase
External PBX Server	Ψ.		
Set Defaults			Apply OK Cancel

- Go to the directory you specified to store backup audio files.
- Unzip the backup archive:

Organize 👻 🛛 🏹 Open	Include in library Share with	New folder			80.	-
🖈 Favorites 👘	Name	Date modified	Туре	Size		
E Desktop	🎍 Audio	8/9/2013 1:09 PM	File folder			
bownloads	🗋 Info.bt 🔶	8/9/2013 12:54 PM	Text Document	1 KB		
Secent Places	TRBOnet.Enterprise.bak	8/9/2013 12:54 PM	BAK File	1,939 KB		
	TRBOnet.Enterprise_20130809.zip	8/9/2013 12:54 PM	WinRAR ZIP archive	164 KB		
Desktop						
Cibraries						
Documents						
J Music						
Notures =						
Videos						
🚴 Roman Lapin						
🖳 Computer						
👊 Network						
Control Panel						
Recycle Bin						
CPS_8_0_410						
🎍 Elastix						
Important docs						
Pics						
SASPlanet_12080						
Mean manage Mart						

• Copy unarchived audio files to the folder specified in TRBOnet Server settings (e.g., C:\ProgramData\TRBOnet Dispatch Software \Audio):

Organize • Inclu	de in library • Share with • New f	older	1		H • 🔟 (
👔 Downloads	* Name	Date modified	Type	Size	
Recent Places	2012 01 31 12	1/31/2012 12:27 PM	File folder	\	
	2012.01.31.18	1/31/2012 6:05 PM	File folder	\	
E Desktop	2012 01 31 20	1/31/2012 8:13 PM	File folder	1	
词 Libraries	2012_02_01_10	2/1/2012 10:48 AM	File folder	1	
Documents	2012 02 01 18	2/1/2012 6:55 PM	File folder	\	
Music	Jacob 2012_02_01_19	2/1/2012 7/56 PM	File folder	· ·	
Pictures	2012_02_01_20	2/1/2012 8:20 PM	File folder		
Videos	2012 02 02 17	2/2/2012 5:29 PM	File folder		
B. Roman Lapin	2012 02 03 15	2/3/2012 3:53 PM	File folder		
M Computer	2012_02_03_16	2/3/2012 4:10 PM	File folder		
Network	E 2012_02_03_18	2/3/2012 6:43 PM	File folder		
Control Panel	2012_02_06_15	2/6/2012 3:58 PM	File folder		
🗑 Recycle Bin	2012_02_06_16	2/6/2012 4:54 PM	File folder		
CPS_8_0_410	2012_02_06_17	2/6/2012 5:24 PM	File folder		
Eastix	2012_02_06_18	2/6/2012 6:02 PM	File folder		
Pics	2012_02_07_13	2/7/2012 1:35 PM	File folder		
Pics SASPlanet 12080	2012_02_07_15	2/7/2012 3:45 PM	File folder		
SASPlanet_1208 Microgeneral Mad		2/7/2012 4:06 PM	File folder		
Cooperate Mat across	2012_02_07_18	2/7/2012 6:34 PM	File folder		
(m. 14010)	2012_02_08_13	2/8/2012 1:47 PM	File folder		
	* 3010 00 00 14	2/8/2012 2/40 064	EllaRabbas		

• Click the Save changes and restart service link.





Configuration	Service
Service Network Database Service Management Advanced settings Away Servers for Geocoding	The server Windows Service is installed on this computer State: Stop service Stop service
Local Agent Local Agent Local Agent Avanced settings Privacy Slot #1 Slot #2 Cl Local Slots	Save changes and restart service Uninstall Service
Analog Control Stations Remote Agents Friendly Server Setver Set Defaults	View log entries Apply OK Cancel

Thus, the audio files are restored.

Schedule Backups

To set a scheduled backup for the database and audio recordings, do the following:

- In the Dispatch Console, go to **Administration** section and select **Database** in the Navigation tree:
- Click the **Schedule** button:

Administration		Database				
Server		I: Line free	Group 20	*) *(0	All Call	• • •
Tacke	×	🦻 Backup 🛛 🎯 Schedule				
Voice Dispatch		Database Informat	ion			
		Server name:	(local) \SQLEXPRESS			
Location Tracking		Database name:	TRBOnet			
		Backup date:	25-Oct-2016 16:28:26			
😵 Job Ticketing		Database version:	Microsoft SQL Server 20 Jun 17 2016 19:14:09 Copyright (c) Microsoft (Express Edition (64-bit)	Corporation		
RFID Tracker		Data size:	17.23 MB			
		Audio size:	22.77 MB			
Context Messages						
🔓 Voice Recording						
Reports						
Event Viewer						
Badio Allocation						
Administration						

• In the dialog that opens, specify the Backup details:



Configure the database backup scheduler Capage of week:	chedule Database Backup)		×
Days of week: Vertical vertical vertic	Configure the data	base backup scheduler		
Image: Start time: 0:00 Image: Start time: 0:00 Image: Start time: 0:00	Enable scheduler			
✓ Backup data Backup audio	Days of week:	 Tuesday Wednesday Thursday Friday Saturday 		
Backup audio	Start time:		0:00	+
	Backup data			
	Backup audio			
Remove	Remove			
Remove all data older than [X] days: 180	Remove all data o	lder than [X] days:	180	*
Audio files	Audio files			
Data	Data			
OK Cancel				

• Enable scheduler

Check to enable the database backup scheduler.

• Days of week

Select the days of the week on which to back up the database.

• Start time

Enter the start time for database backup.

- Backup data Check to back up data.
- **Backup audio** Check to back up audio recording.
- Remove

Check to remove audio files and data from the database.

- Remove all data older than [X] days
 Select the number of days to remove all data.
- Audio Files Check to remove audio files.
- Data

Check to remove data.

• Click **OK** to run the backup procedure.



Appendix B: SIP Setup for Motorola Phone System

The native MOTOTRBO phone system is supported in the case of a direct IP connection to the repeater. Mototrbo Phone system is recommended for IP Site Connect mode.

Note: No extra license per repeater is required for Digital Phone Patch from Motorola.

TRBOnet Server

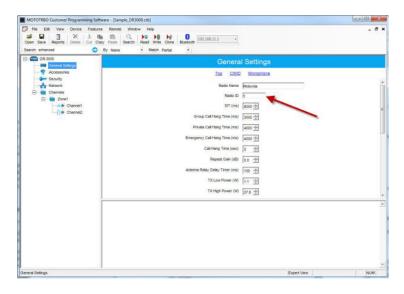
TRBOnet Server requires a specific setup for a repeater in the IP Site Connect mode as well as for SIP in order to make the phone system work properly.

Open TRBOnet Server, and go to SIP Interconnect / Advanced Settings page:

Set DTMF Access Code to **0** and DTMF Deaccess Code to **#**.

Note: Mototrbo Phone System is available for repeaters in IP Site Connect mode. For a system based on the control stations, use TRBOnet Phone System.

Launch Mototrbo CPS and go repeater General Settings page:



The Radio ID of actual repeaters in CPS must differ from the TRBOnet Peer ID. TRBOnet Dispatch Console acts as another virtual peer repeater with Peer ID (e.g. IPSC network consists of 1 master and 3 peers. The repeaters' IDs (Radio IDs in CPS code plugs for repeaters) in this case would be 1, 2, 3, 4. The TRBOnet peer ID must differ from all the repeaters (the master and all peers), otherwise a conflict will happen in the network as peers have the same ID). The TRBOnet Peer ID is 64250.

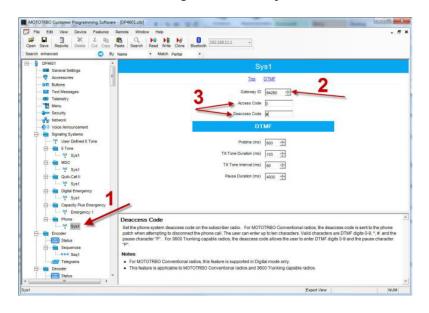
Open TRBOnet Dispatch Console. Go to Administration (1), Telephony (2), Radio calls configuration (3) – Configure (4) and set DTMF Access and DTMF Deaccess codes (5) to 0 and #, respectively:



File View Map Tools Help		
Administration	Telephony	•
Server Server Stabase Radio Systems Stabase	(j) 11: Inte free (j) <	9)
Tasks 2 Virtual Modbus Devices Event/Alarm Management	Radio calls configuration 3 Allow subscribers to make outgoing calls: Yes Allow to use DTMF: Yes	
Voice Dispatch	Allow to use Text Messages: Yes, Prefix: 'sip:' Backward call to radio: Radio calls configuration X	
GPS Positioning	Initialize call to radio: Initialize call timeout: Execute Check Radio before ca	
3ob Ticketing	Send Text Message if cannot er	
😥 Route Management	Play tone when PTT changed: Play tone when PTT changed: DTMF Access code: Prefix: sip:	
RFID Tracker	DTMF Deaccess code: Play the incoming call tone on the radio: After the called party answ	
Text Messages 4	Initialize call to radio: Send ring tone Initialize call to radio: Unimited Send ring tone Initialize call timeout: Unimited Seconds	
Voice Recording	Call to Dispatch Center: Execute Check Radio before call Call to external number: Send Text Message if cannot establish call	
Reports	Extension numbers (voice Start call automatically:	
Event Viewer	Maximum number length: DTMF Access code: 0 Number 5 #	
Radio Allocation	0 OK Cancel	
Administration	Configure	

Programming Radios

A special setup is required for radios in MOTOTRBO CPS. Read a subscriber's radio in CPS and go to **Phone Systems (1):**



Make sure that **Gateway ID** (2) is equal to repeater Slot IDs in TRBOnet Server as well as to TRBOnet Peer ID in TRBOnet Server.

Set DTMF Access Code to **0** and DTMF Deaccess Code to **#**, respectively (3).

Go to **Repeater/Channels** (1) and specify the phone system you have set up (2):



MOTOTRBO Customer Programming Software - (DP4601.ctb)	
The Edit View Device Pattures Remote Window Help Car Image: Seven Remote Device Out Corp. Patte Mage Magee <th>- 6</th>	- 6
-#\$ SPECIAL OP-9	Channel1
- A & ROFFICER &	e ex ix
-n & Cal3 Voice Announcement	rie filone -
E - Capacity Plus Usil Capacity Direct	tade 🗀
CIR MANAGMENT Timing Leader Prefer	ence Eighte
E 🖶 Phone Scen/Roam	List None
Auto	Scan I
Color	Code 1 🗄 🙎
List1 Repeter/Tim	Slot 1 💌
- a ⁸ P List Phone Sy a ⁸ P List2	item Sjut
E 🖶 Channels	ARS Disabled
E- CID Enhanced	
- CA MANAGMENT	Sea []
Phone System	
Channel Pool Associates any available Phone System to the channel for use with the None option disables the user from initiating or receiving phone	en initiating or receiving a phone call on a conventional channel. Selecting the calls on this channel. This is a channel-wide feature.
O Store 3+4 Notes This feature in disabled when the Dual Connectly Direct Mode.	
This feature is supported in Digital mode only.	DCDM) feature is enabled.
G tata revert	
List	
anel1	Expert View NUM