TRBOnet Enterprise

Quick Start Guide

Version 5.4

Notices

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This document was last revised on October 8, 2019.

Contents

1 Introduction

1.1 About This Guide

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 by Neocom Software

TRBOnet is a suite of professional applications for dispatch centers of MOTOTRBO™ radio networks developed by Neocom Software since 2008. TRBOnet manages voice, text and data communication paths to network endpoints and provides a unified graphical dispatcher workbench interface for all the messaging and workforce orchestration tasks. Recognized as the Best Radio Application Partner by Motorola Solutions, TRBOnet enjoys a proven track record of success in business-critical radio network deployments worldwide.

The TRBOnet family of products deliver:

- Flexible, connection type independent cross-patching of subscriber groups, both preconfigured by network designers and improvised by dispatchers with a drag-and-drop ease.
- Extensive connectivity options for any mode MOTOTRBO networks with public phone, SIP and private VoIP interconnects, SMS and email gateways, intercom among multiple dispatchers.
- Comprehensive location awareness features which include integration with a variety of online and offline map providers, indoor positioning, geofencing, route and speed control and GPS event-driven workflows.
- Support for communication scenarios typical for key vertical markets, such as 'lone worker' monitoring, site alarms, job ticketing, RFID integration, field device telemetry collection and many others.
- Full audio and activity logging complemented by a rich set of configurable built-in reports.

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 technical support
Memory	2 GB	4 GB	4 GB	8 GB	
HDD	300 MB for installation files, +1 MB per 1 minute of voice recording				
Sound Card	No				
Supported OS	Windows 7/8.x/10, Windows Server 2008/2012/2016 Note: Windows Server 2008/2012/2016 requires Desktop Experience Role/Feature installed.				
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. M-Audio Delta 1010 LT 2. Roland OCTA CAPTURE Hi-SPEED USB Audio Capture
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 TRBOnet Enterprise Software and Dependencies Installation

TRBOnet runs on Microsoft Windows-based PCs. For the TRBOnet Enterprise Compatibility Table, see

http://kb.trbonet.com/public.pl?Action=PublicFAQZoom;ItemID=73

3.1 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 of 10 GB, RAM usage, and others).

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.

3.2 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.

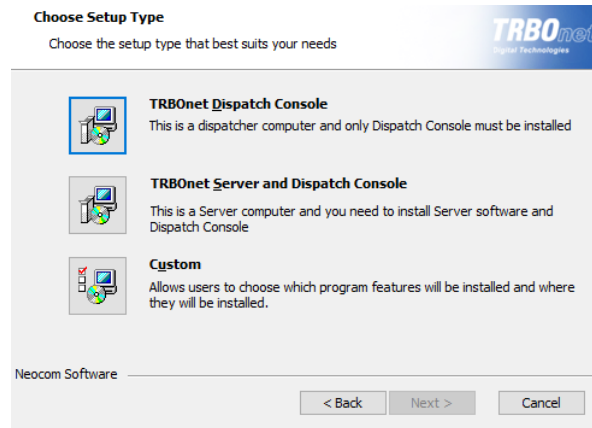For the TRBOnet Enterprise Compatibility Table, see
http://kb.trbonet.com/public.pl?Action=PublicFAQZoom;ItemID=73

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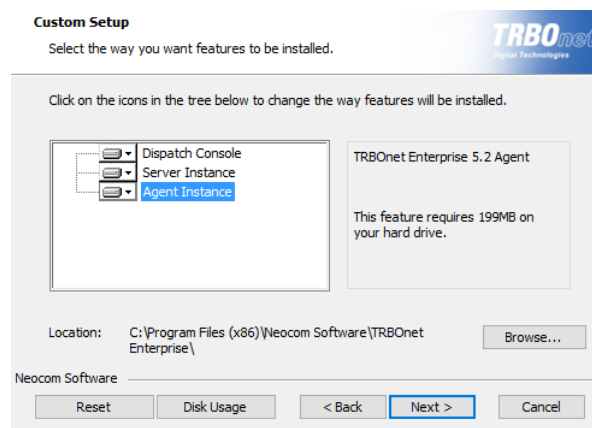https://www.microsoft.com/en-us/download/search.aspx?q=.net%20framework
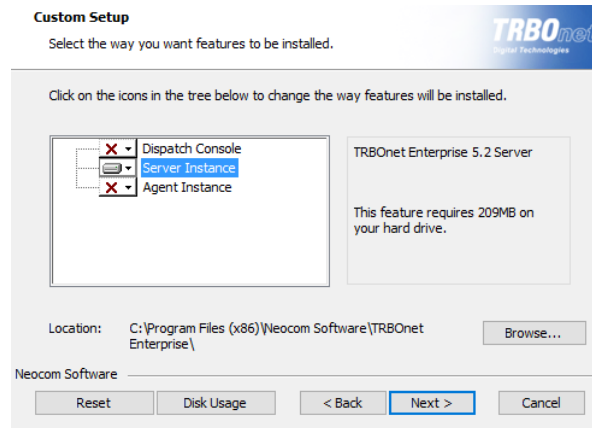
3.3 Installing TRBOnet Enterprise

- Contact **Neocom Software** to obtain the latest installation package of the TRBOnet Enterprise software, unzip, and run the setup file as a local administrator.

- When the **TRBOnet Enterprise Setup** wizard appears, click **Next**.

- On the **End User License Agreement** page, accept the terms of the license, and then click **Next**.

- 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.

For example, you may install only TRBOnet Server Instance:

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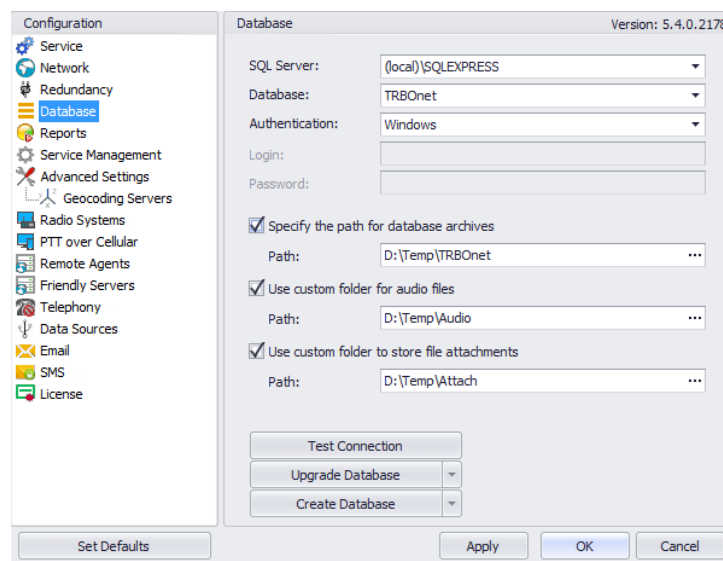- Accept the defaults for the rest of the setup and complete the installation.

4 Initial TRBOnet Configuration

After all the required software packages are installed, some settings need to be configured. Follow the steps below to create a fully operational installation of TRBOnet that is ready for testing.

4.1 Creating New TRBOnet Database

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

- In the **Configuration** pane, select **Database**.

- 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.

  - **Login** and **Password**
    Enter a valid SQL Server login and password if the SQL Server Authentication 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. Or, click the ellipsis (...) button and in the Browse For Folder dialog box locate the appropriate path.

- **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 voice calls/sessions. Or, click the ellipsis (...) button.

  > 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 Enterprise\Backups** – for database archives.
  >
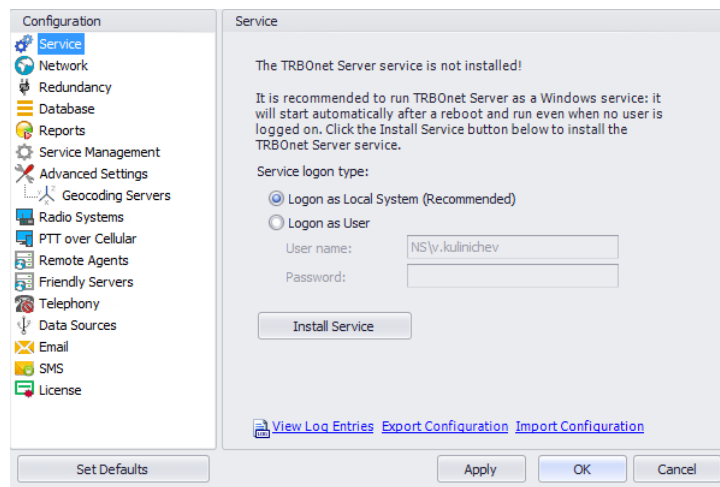 > **%ProgramData%\Neocom Software\TRBOnet Enterprise\Audio** – for audio.

- **Use custom folder to store file attachments**
  Select this option, and in the corresponding **Path** box enter the full path of the custom folder where text message attachments will be stored. Or, click the ellipsis (**...**) button and in the **Browse For Folder** dialog box locate the appropriate path.
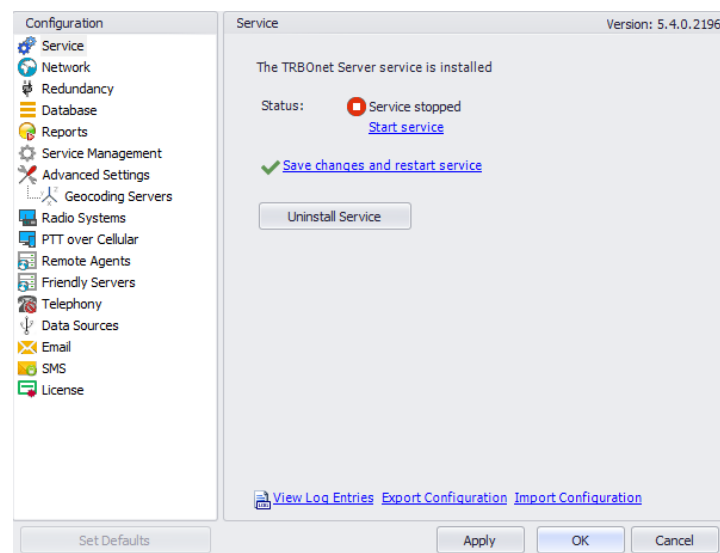
- When you finish configuring the required database parameters, click **Create Database**.

- After you create or upgrade a database, click **Apply** and then confirm to restart TRBOnet Server.

4.2 Installing TRBOnet Service

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

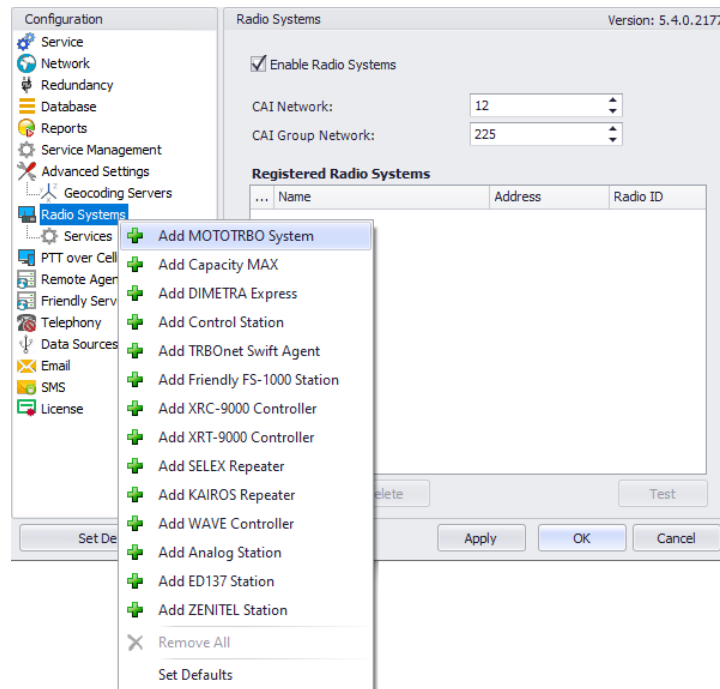- In the **Service** pane, click **Install Service**.

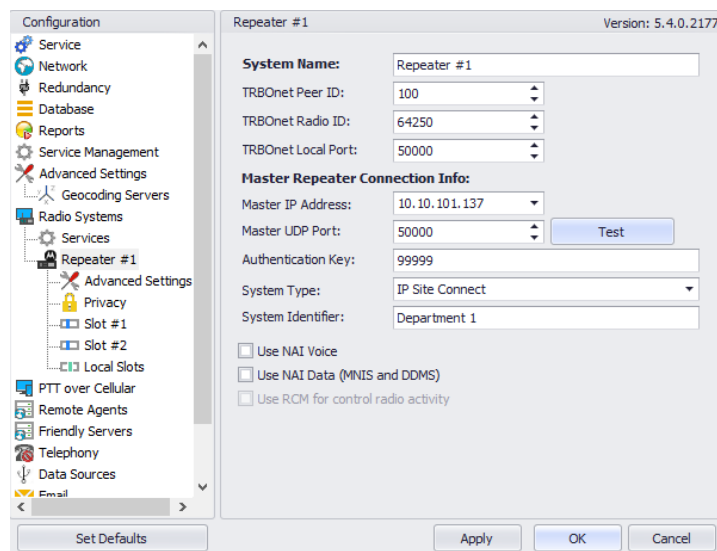- Click the **Start Service** link that appears in the right pane.

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4.3 Connecting TRBOnet Server to Master Repeater

Now TRBOnet Server must be joined to your radio network.

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

- In the drop-down menu, click **Add MOTOTRBO System**.

- In the **Repeater** pane, specify the connection parameters.
  To ensure your connection parameters match the actual configuration of your radio network, you may need to use Motorola CPS or Config Advisor tools to determine the values. Contact your radio network administrator, if you do not have this information.

- **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. Consult your radio network administrator to enter the correct value.

- **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. Consult your radio network administrator to enter the correct value. The recommended value is **64250**.

- **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**
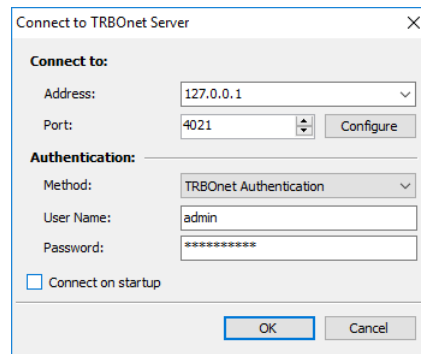 Enter the UDP port number of the master repeater.

  > 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 is successful, you'll see information on the repeater you are connected to, such as the serial number, firmware version, and other relevant information.

- **System Identifier**
  Leave this field blank.

- **Use NAI Voice**, **Use NAI Data (MNIS and DDMS)**
  Leave these options unselected.

Click **OK** after entering all the required values. A confirmation dialog will appear, prompting you to save the configuration and restart the TRBOnet Server service. You can also restart the service manually.

4.4 Connecting Dispatch Console to Server

The console is a client application that must be connected to the server. When you first launch Dispatch Console (**Start > All Programs > Neocom Software > TRBOnet Dispatch**), a connection dialog is displayed. Enter the required connection settings as explained below. If the Server is hosted on the same computer, you can safely accept the defaults and click OK to connect.

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. The default value is 4021.

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 Windows user must be registered in the TRBOnet Dispatch Console Users list.

- **User Name/Password**
  Enter the user name and password provided to you by the system administrator. The default credentials are **admin/admin**. Use the default account for the initial configuration and change the password later.

- **Connect on startup**
  Select this option to launch Dispatch Console without having to type the User Name and Password every time. Use this option if you regularly connect to the same TRBOnet Server and your workstation is in a secure location.