Alarm Management in TRBOnet 5.1

A comprehensive toolset

for abnormal situation awareness

and automated response actions

neocom software

Introducing TRBOnet Alarm Management

What you will learn:

- Overview: what it is, what it does, what its strengths are
- Key concepts and principles of operation
  - o Event types and sources
  - o Alarm-triggering conditions
  - o Automated response actions
- Proven in production: a case study
- Configuration UI walkthrough

Alarm Management Overview

- Optional, separately licensed TRBOnet module

- **Abnormal Situation Management** (ASM) for MOTOTRBO and beyond: alarm setup, activation, shelving, flood suppression, dynamic conditional routing / escalation / annunciation, response actions and logging

- **Scalable and adaptable**: unlimited upstream listeners, source-specific trigger options and multiple downstream outputs
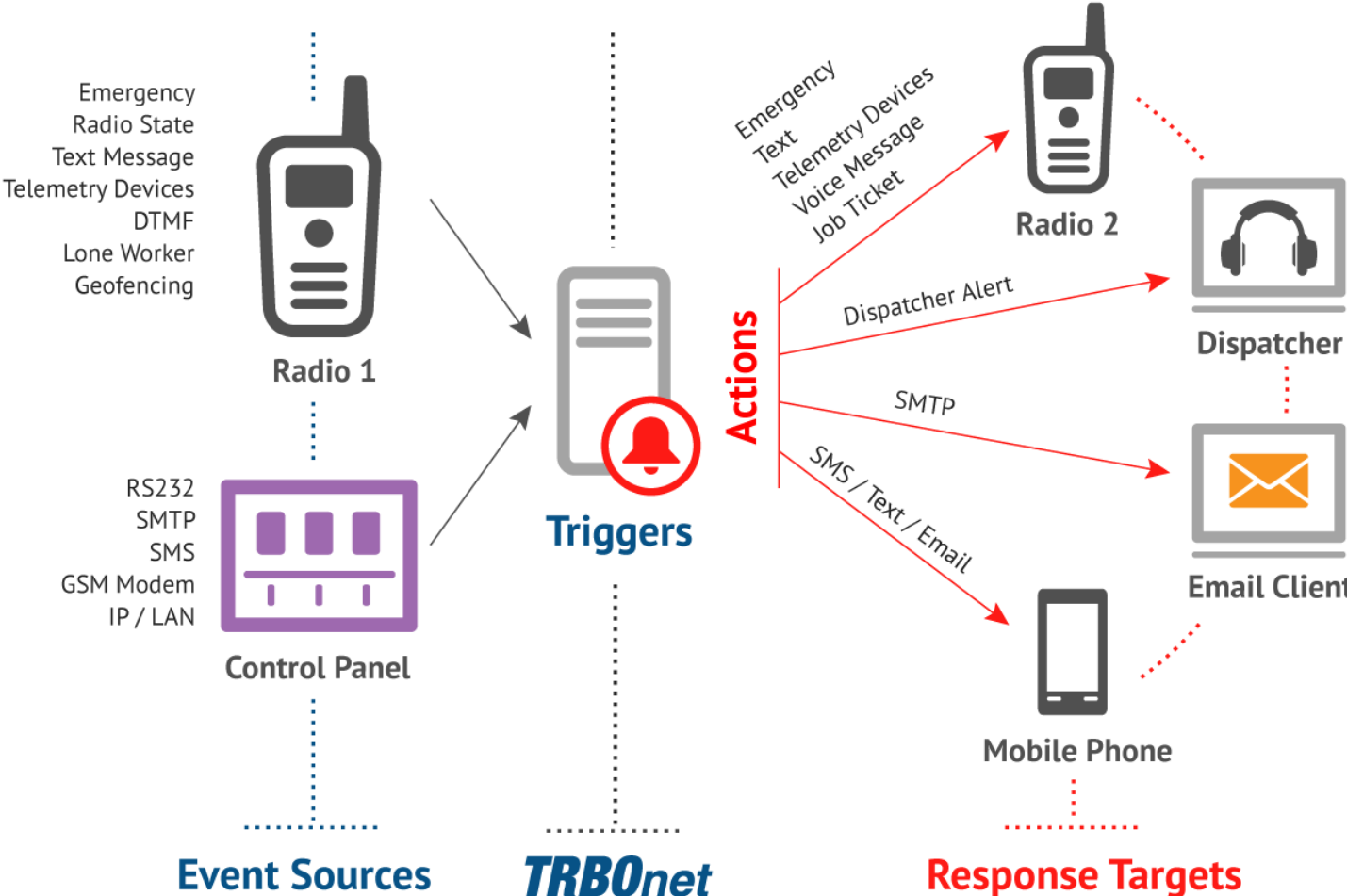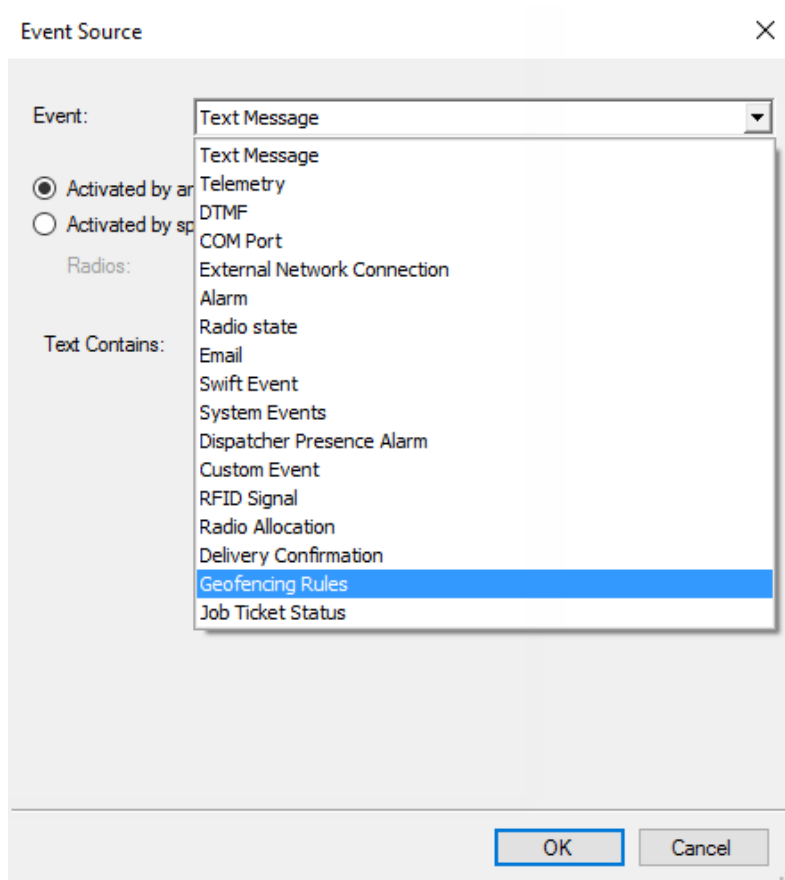
TRBOnet

Three-Step Alarm Setup

1. Select event types and event sources to track

2. Define trigger conditions

3. Configure response actions

General Integration Diagram

Emergency
Radio State
Text Message
Telemetry Devices
DTMF
Lone Worker
Geofencing

Radio 1

RS232
SMTP
SMS
GSM Modem
IP / LAN

Control Panel

Triggers

Actions

Emergency
Text
Telemetry Devices
Voice Message
Job Ticket

Radio 2

Dispatcher Alert

Dispatcher

SMTP

SMS / Text / Email

Email Client

Mobile Phone

Event Sources

TRBOnet

Response Targets

Extensive Choice of Event Sources

Event Source

Event: Text Message

- Text Message
- Telemetry
- DTMF
- COM Port
- External Network Connection
- Alarm
- Radio state
- Email
- Swift Event
- System Events
- Dispatcher Presence Alarm
- Custom Event
- RFID Signal
- Radio Allocation
- Delivery Confirmation
- Geofencing Rules
- Job Ticket Status

Activated by ar
Activated by sp
Radios:
Text Contains:

OK   Cancel

Alarm Control Panel LAN Connection

- TCP/IP connection to TRBOnet Server or Dispatch Console
- RS232 via Moxa NPort
- Email

MOTOTRBO Data Connection

- Text with a matching pattern
- Telemetry signal
- Predefined DTMF sequence
- ARS (Status change: on/off)

Native MOTOTRBO Alarms

- Emergency Call
- Emergency Alarm
- Man Down
- Lone Worker Alarms
- Geofencing Alarms

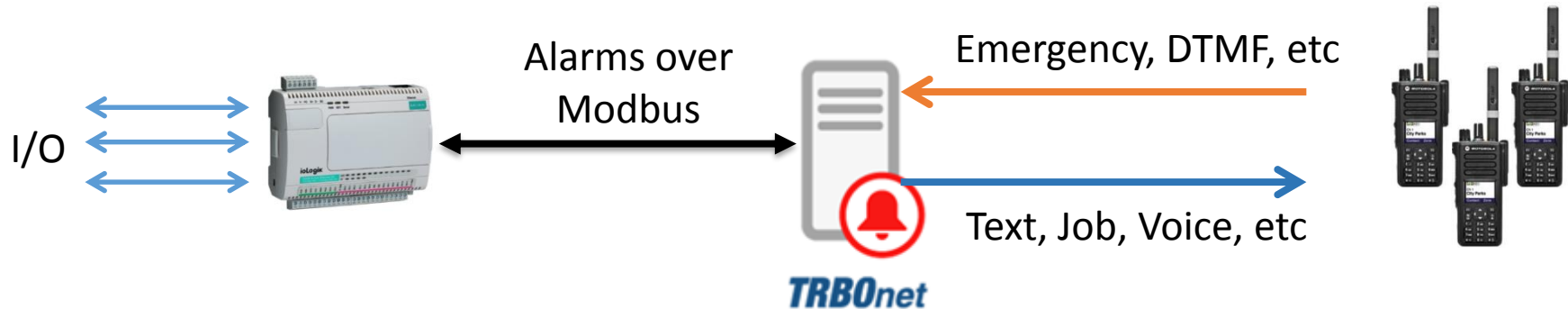# Signal Path from Multiple Serial Devices
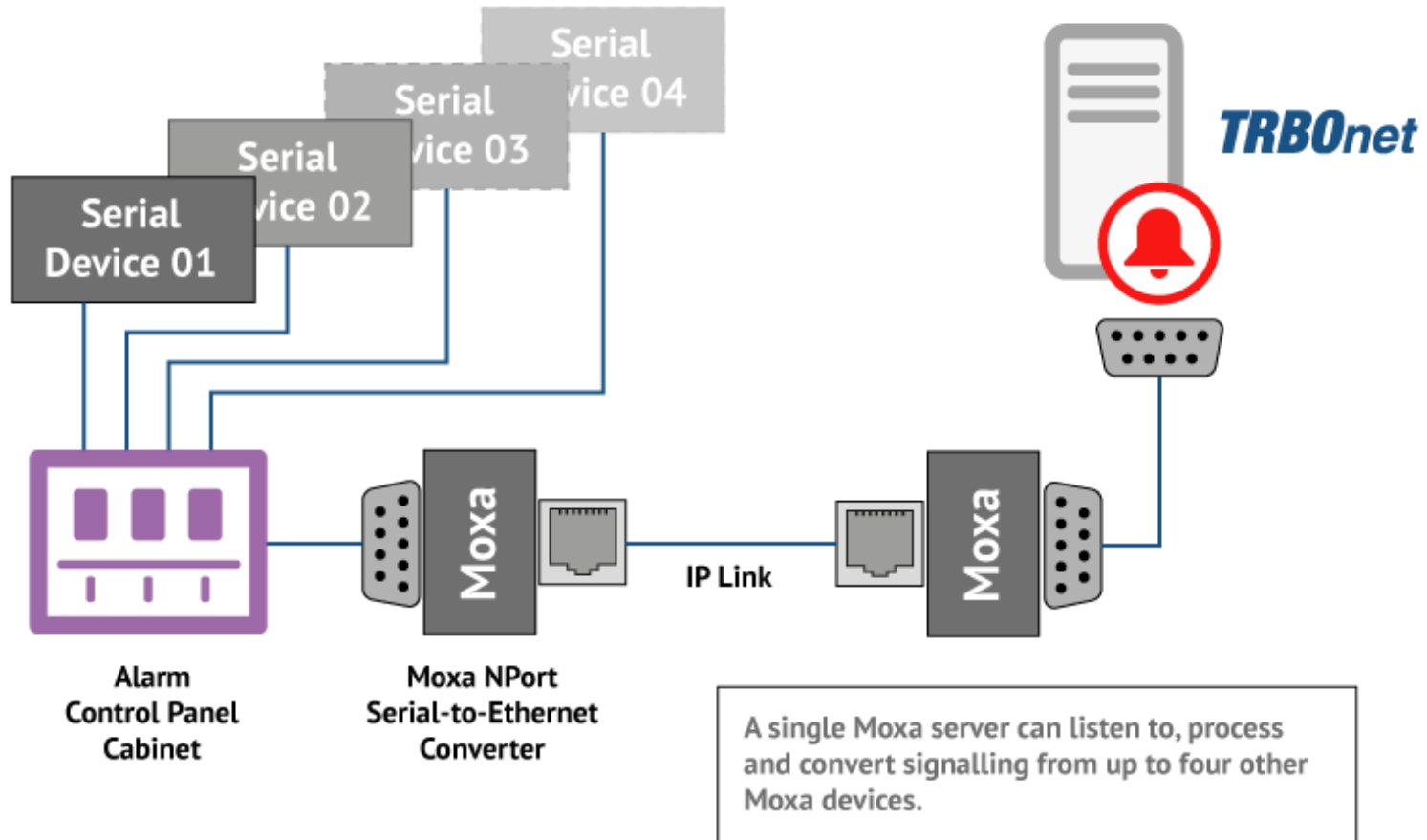
RS232 to TCP/IP convertor

Modbus

TRBOnet fully supports Modbus protocol. TRBOnet Server can work as Modbus Master or Slave.

READ: Alarm from Modbus device (RTU) can initiate an action (e.g., voice/text message to radios)

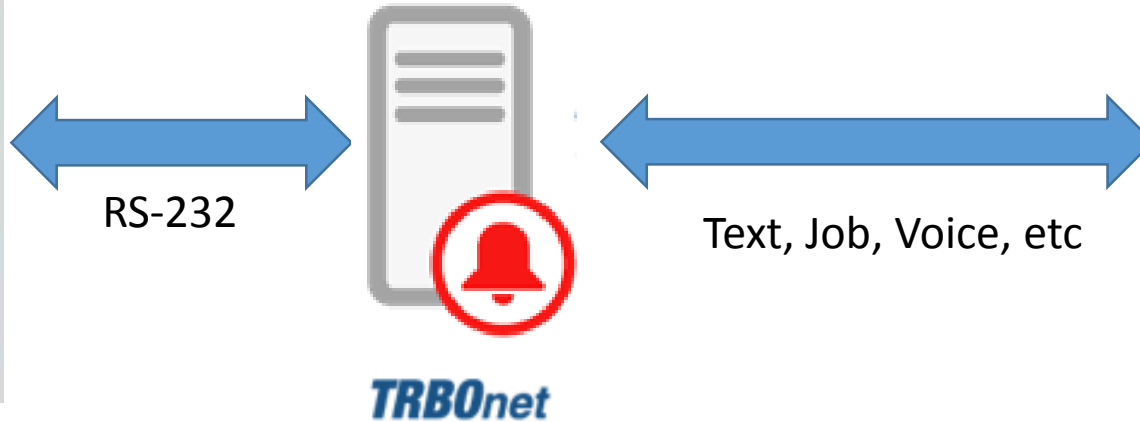WRITE: in case of radio alarm TRBOnet sends command to Modbus device (RTU)

I/O

Alarms over Modbus

Emergency, DTMF, etc

Text, Job, Voice, etc

TRBOnet

TRBOnet
Smarter Radio Networks

Support for ESPA 4.4.4

Type: fire; floor: 3, room 225; datetime

RS-232

Text, Job, Voice, etc

ESPA Control Station

TRBOnet

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Smarter Radio Networks

Interfacing with IP Network Sources

- Easily integrate with any enterprise operations management system, BMS, ERP or line of business software capable of sending/forwarding text messages over a TCP/IP connection

- TRBOnet parses the messages for configurable regular expressions (text patterns) and triggers the rules as necessary

IP Network Text Event Integration

Any type of line of business or operations mgmt software that can send messages

ERP

Text Message

(.*?) TRBOnet regexp parser

Triggers

Actions

Emergency
Text
Telemetry Devices
Voice Message
Job Ticket

Dispatcher Alert

SMTP

SMS / Text / Email

Network Event Source

TRBOnet

Response Targets
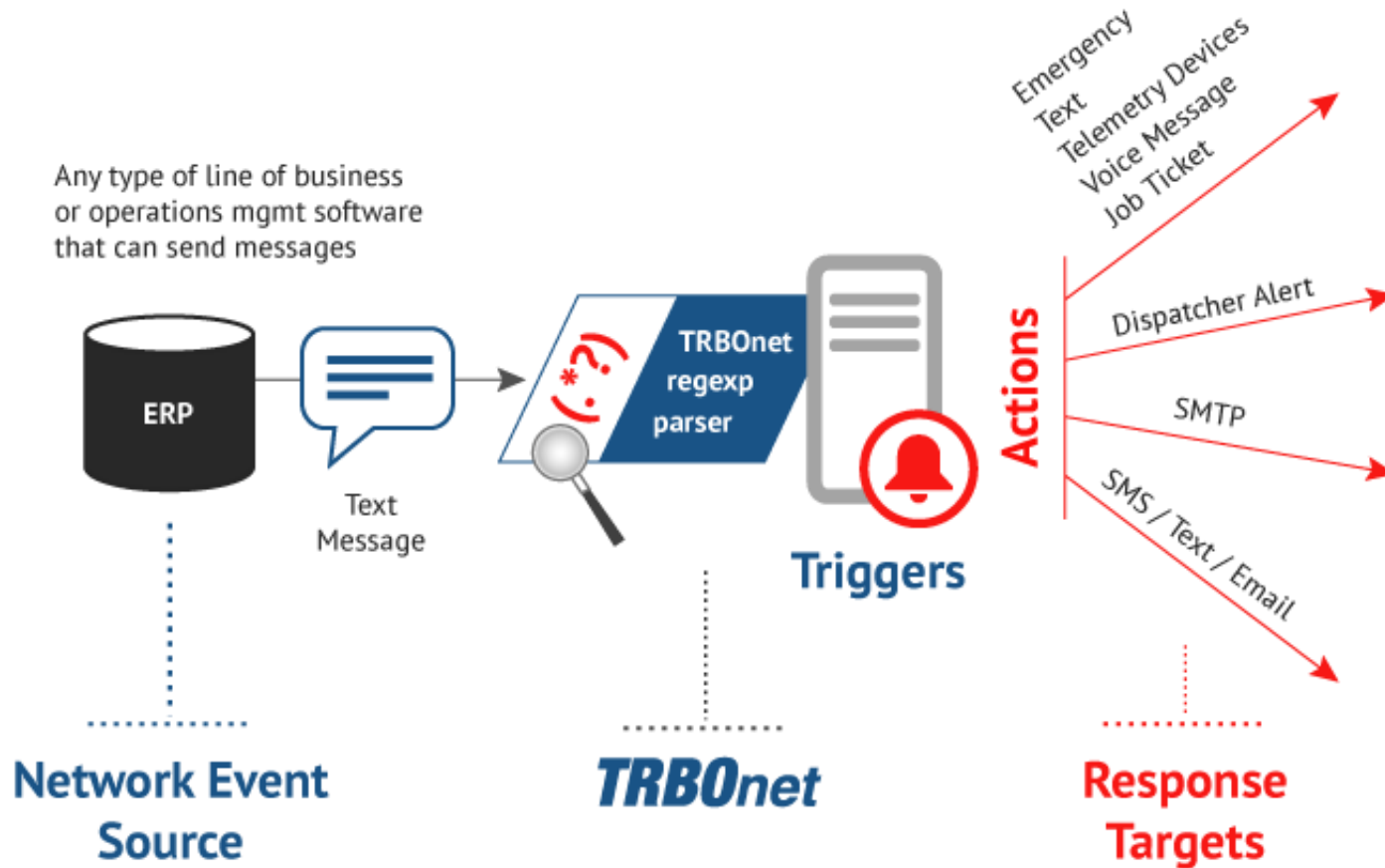
Multiple Alarm/Alert Target Outputs

MOTOTRBO Radio

- Text Message
- Job Ticket
- Voice Call
- Remote Mic Monitor
- Radio Kill

GSM Mobile Phone

- SMS

SMTP Server

- Email message

Regular Phone

- Phone Call

Action   ×

Action Type: | Alarm   ▼ |

Set alarm mode for the

| Alarm |
| Email |
| Job Ticket |
| Lock Radio |
| Notification |
| Private Call |
| Remote Monitor |
| Request Location |
| RFID Signal: Emergency Contact |
| RFID Signal: Supervisor |
| Route |
| Set Logical Groups |
| SMS |
| System Bridging |
| Telemetry |
| Text Message |
| Text to Speech |
| Voice Message |
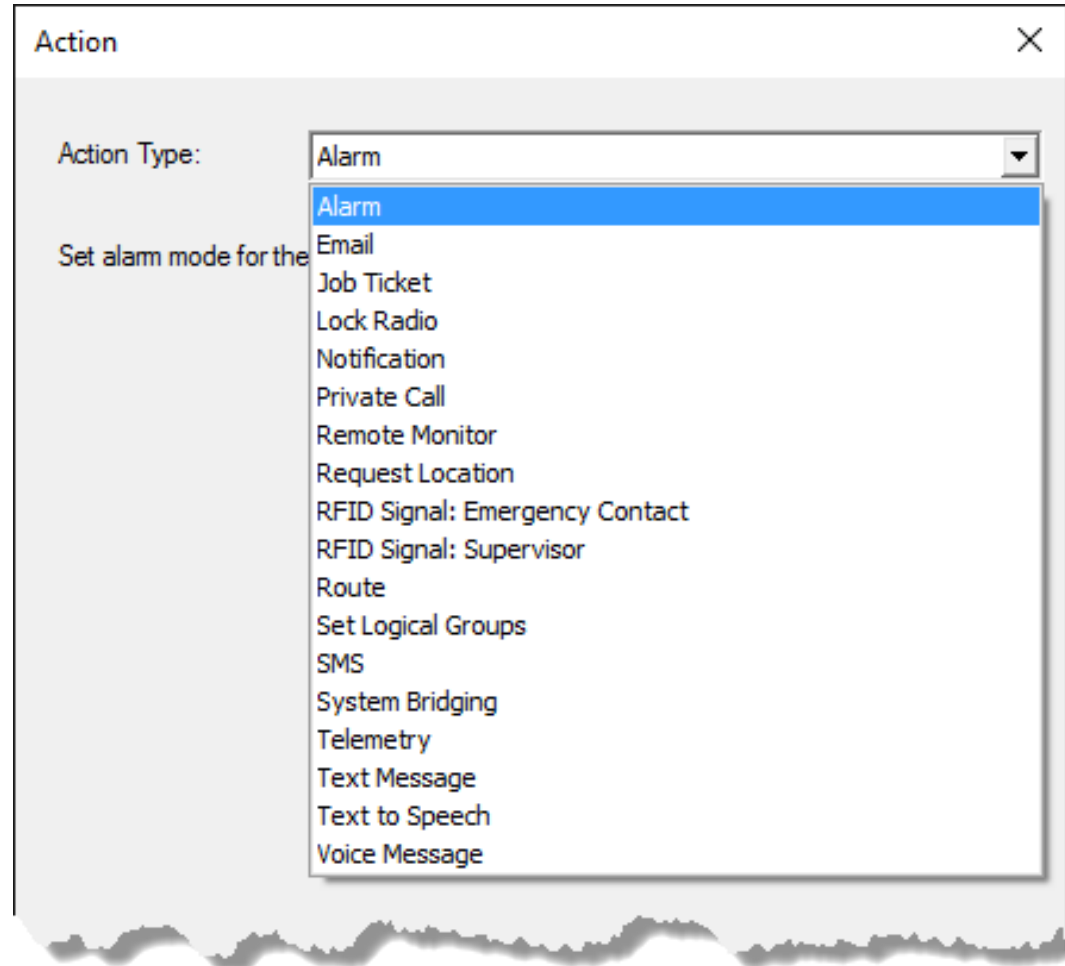
Alarms and Job Tickets:
[Integrated for Responsive Customer Care](#)

CASE STUDY
SUN INTERNATIONAL PLACES ITS BETS ON MOTOTRBO

SUN INTERNATIONAL PLACES ITS BETS ON MOTOTRBO™

DIGITAL RADIO WITH TRBONET JOB TICKETING APP AUTOMATES GLOBAL GAMING OPERATIONS

The Sun International Group has a diverse portfolio of assets including world class five star hotels, modern and well located casinos, and some of the world's premier resorts. Its destinations offer experiential luxury, enduring quality and adventure, supported by an authentic dedication to personal service.

Dedication to personal service underpins Sun International's competitive edge and the group has strengthened its leadership in gaming, following the migration to a MOTOTRBO digital radio system with a custom-designed TRBOnet automated

CUSTOMER PROFILE
Company
Sun International

Partners
Danimex South Africa
(Motorola Distributor)
Olympic Communications
(Reseller Partner)
Neocom Software Limited
(Application Developer)

TRBOnet
Smarter Radio Networks

SOLUTION SHOWCASE

TRBOnet
Best Radio
Application Partner

MOTOROLA
PROFESSIONAL RADIO
APPLICATION
partner
MAKING SOLUTIONS WORK FOR YOU

Paging

- Based on Telephony and Alarm/Event Management modules

Direct Phone Number
Or
Extension

TRBOnet

Action
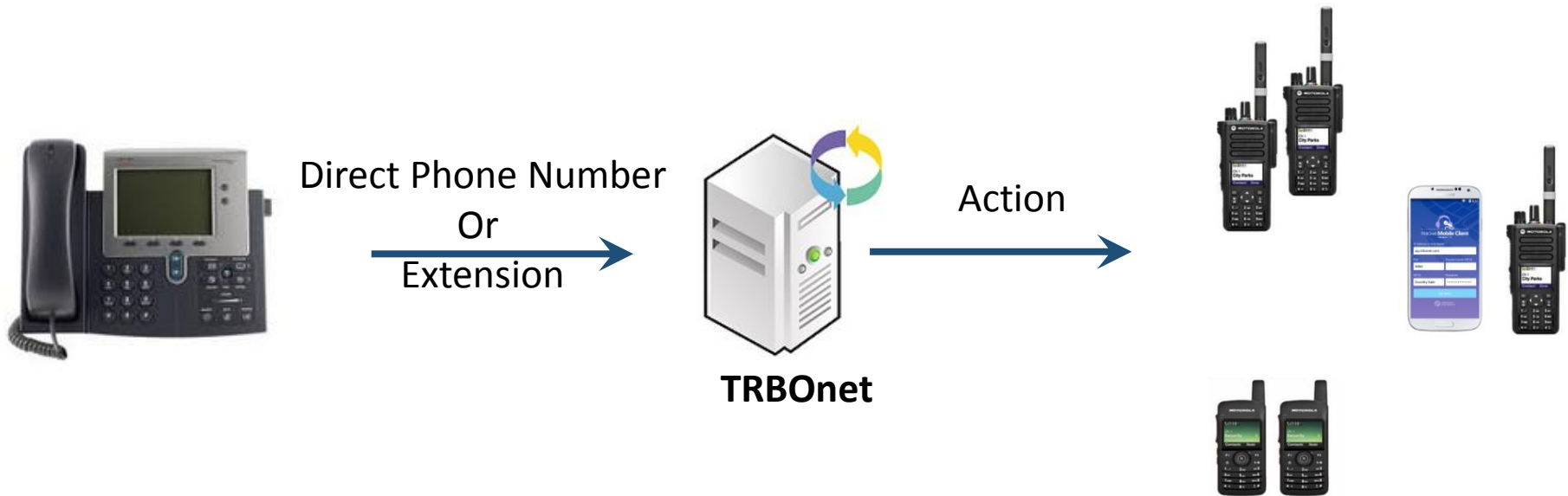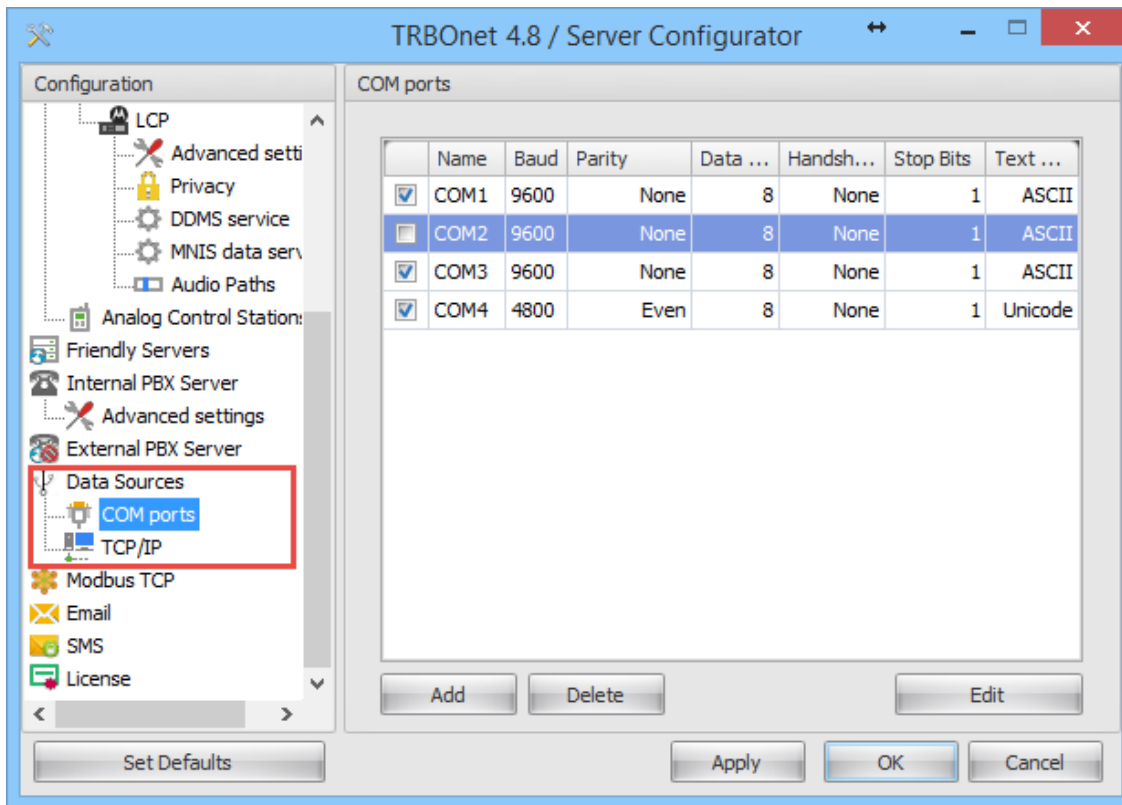
Configuration UI Walkthrough

License Check

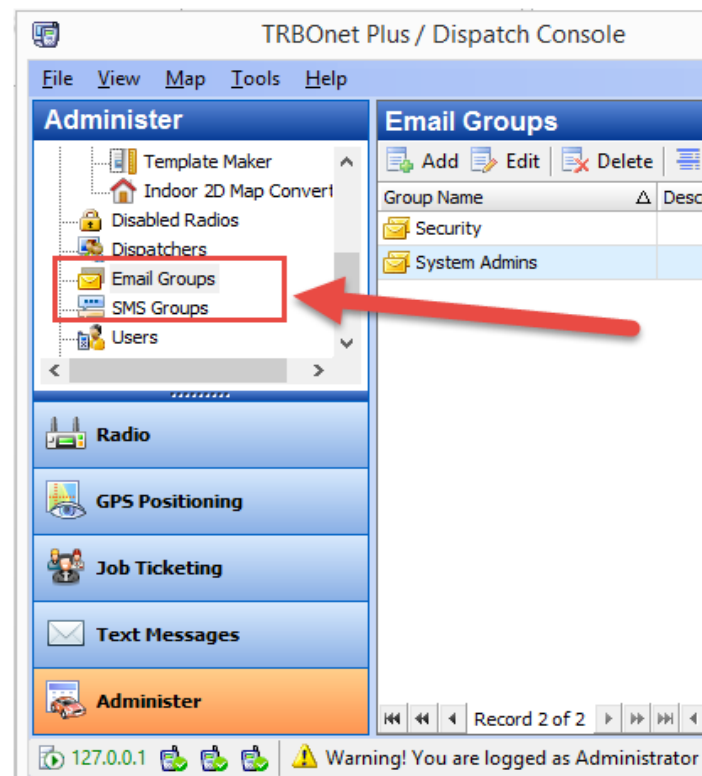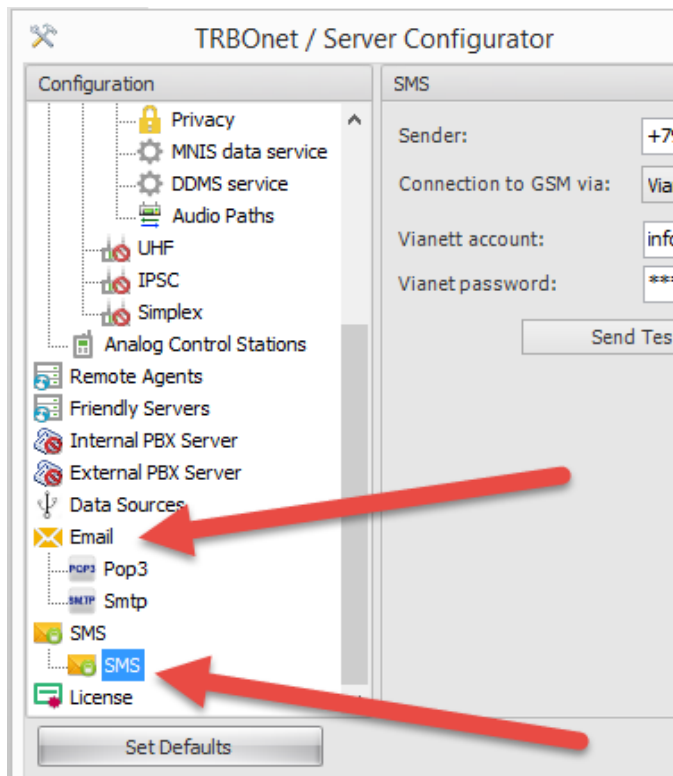Make sure your installed license includes Alarm Management
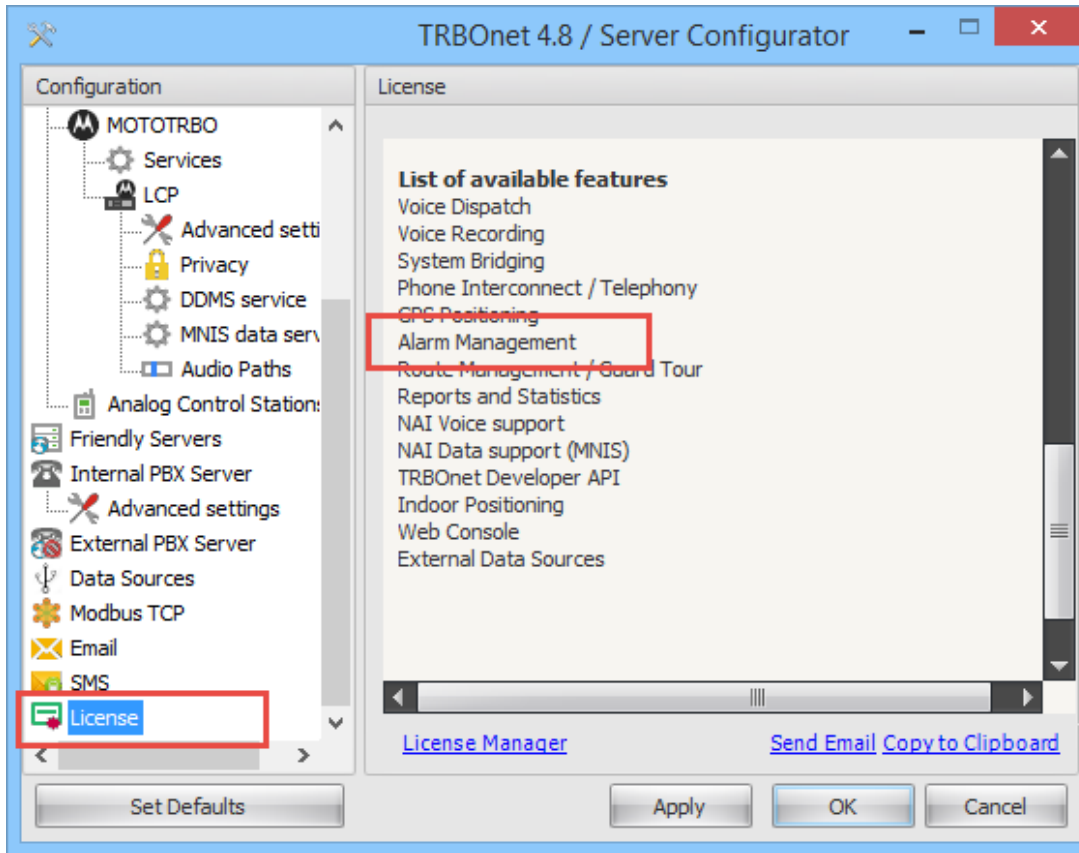
Assign COM Ports to Serial Devices

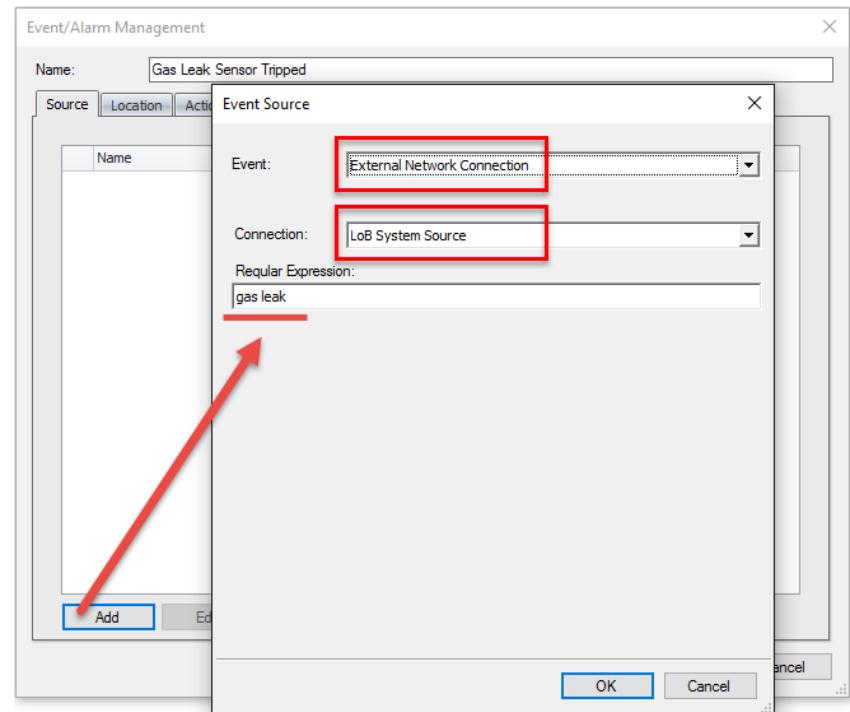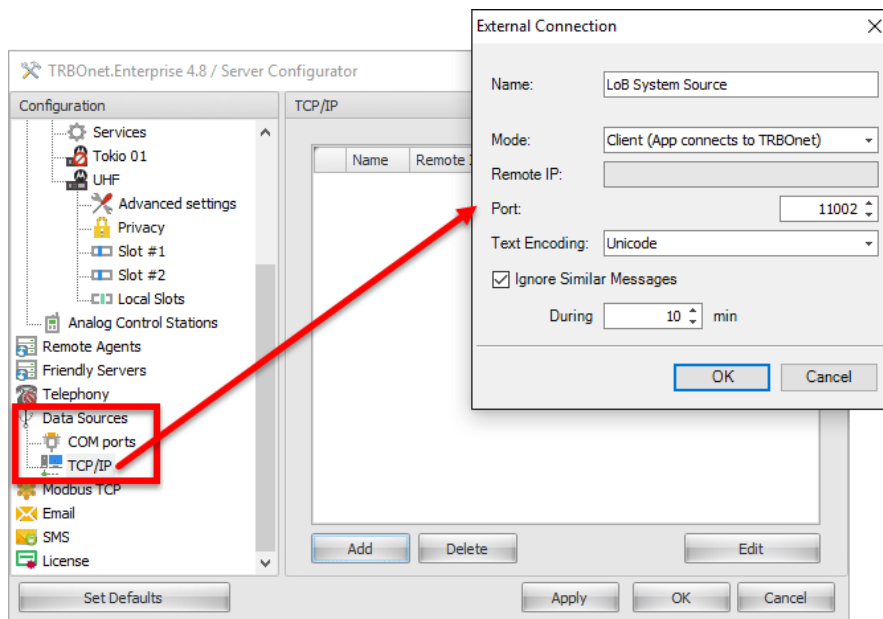Configure RS232 inputs in TRBOnet Server to listen to field telemetry devices

TRBOnet

Smarter Radio Networks

Dispatch Software for MOTOTRBO™

Set up SMTP/POP3 and SMS Transport

- Gateways in Server

- Profiles in Dispatch Console

Set up TCP/IP Text Source Transport

- Gateways in Server

- Rules in Dispatch Console

Define Alarm Rules

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Smarter Radio Networks

Dispatch Software for MOTOTRBO™

Define Response Actions

TRBOnet is Your One Stop Shop!
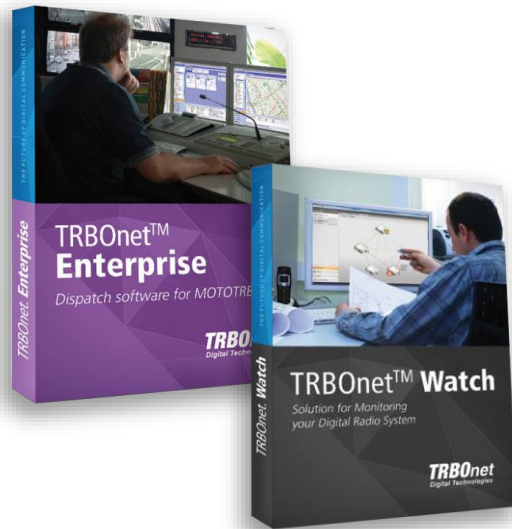
TRBOnet Enterprise/PLUS: **Voice Dispatch & AVL**
- Award-winning control room with emergency and call centre
- AVL tracking with geofencing control
- Reports and incident tracking

TRBOnet Watch: **Radio Network Management**
- Radio network troubleshooting
- Load analysis and capacity planning
- Real-time health monitoring

GOB Solutions
- Man Down, Crash Detect, No Movement
- GPS tracking
- Extended telemetry

TRBOnet Hardware
- *DT500* Telemetry Event Preprocessor
- *Agent* Radio-to-IP gateway
- Foot pedals, mic connectors, cables

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Q & A

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www.TRBOnet.com