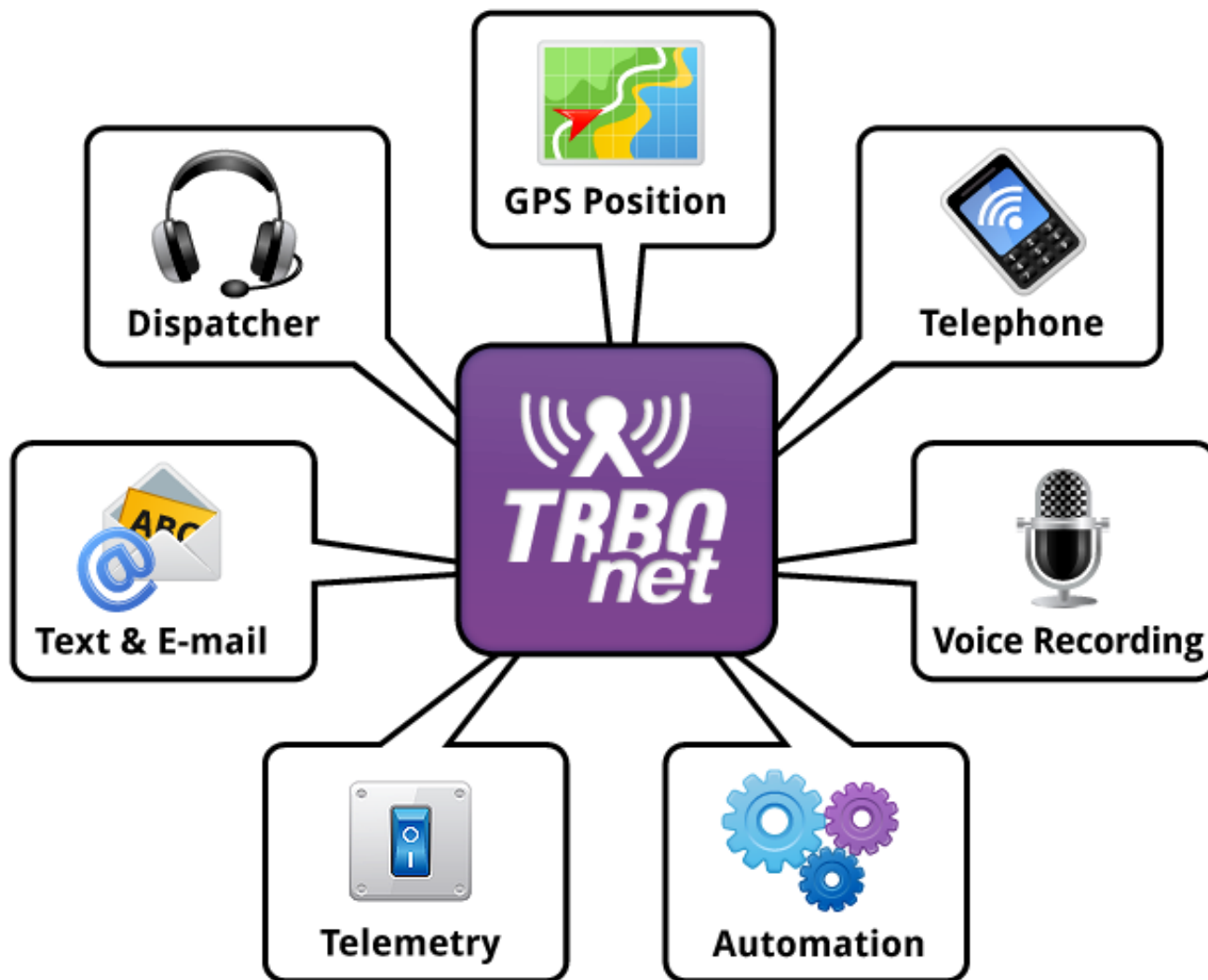
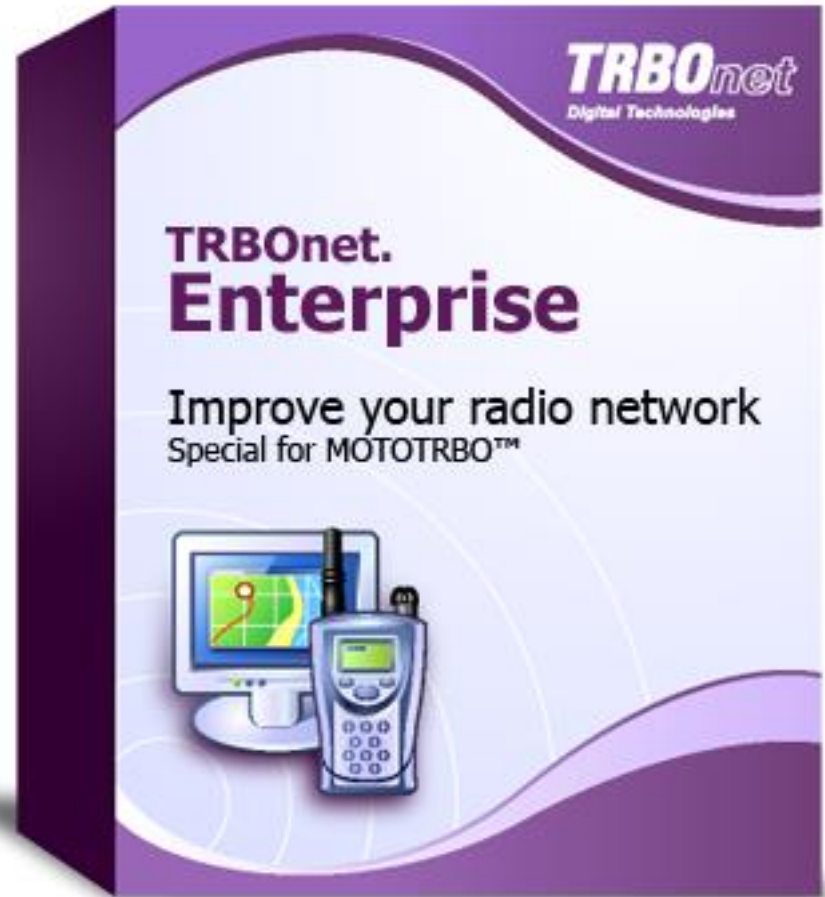




Feature List

- **Easy access to radio network via PC (Voice IP)**
- **Voice Capabilities. All type of calls.**
- **ISCP, Capacity Plus, Connect Plus**
- Remote Dispatcher
- Intercom
- **CrossPatch**
- **Voice Recording**
- **GPS Positioning**
- **GeoFencing**
- GPS Revert. Individual polling interval
- MapPoint 2009. Google Earth. ESRI. Raster Maps. etc
- ARS (online/offline)
- Event log
- Reporting
- **Lone Worker**
- **Radio Kill. Passive Mode**
- Text Messages
- **Email Gateway (SMTP/POP3 integration)**
- Telemetry
- Advanced Dispatcher's configuration
- **Telephone Interconnect**
- Canned Messages
- Evacuation Messages

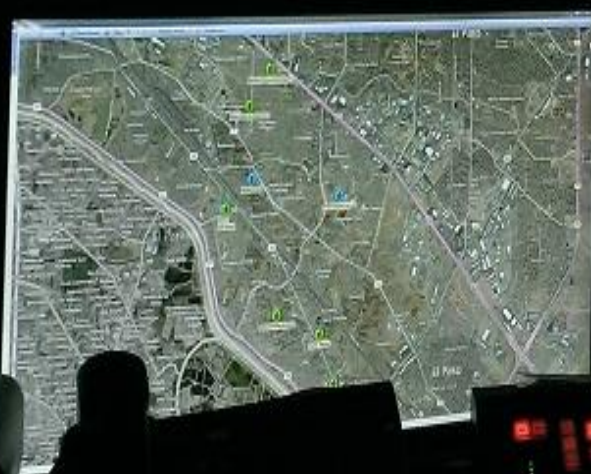




GPS Positioning

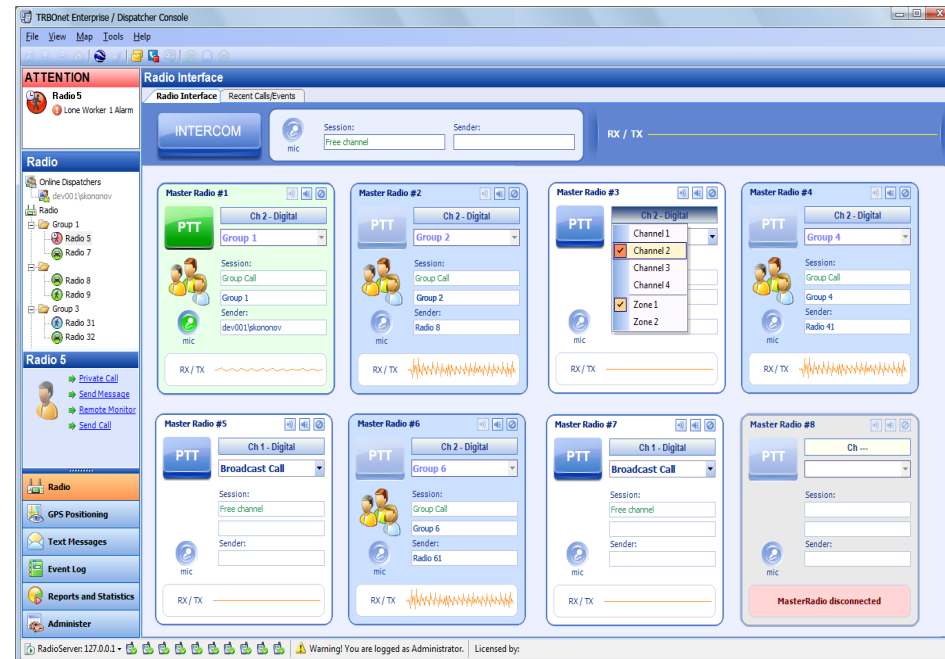
Radio Interface

Event Log





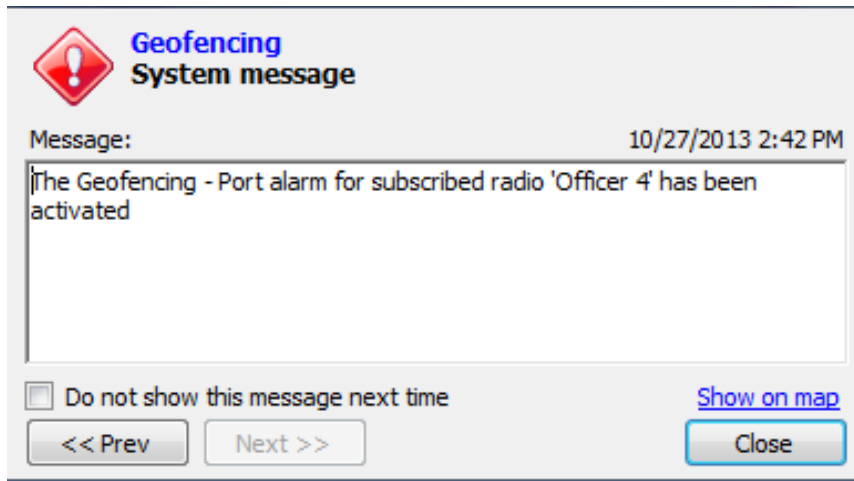
- **All type calls:** Broadcast, Group, Private, Remote Monitor, Emergency
- **Intercom**
- **Voice Recording**
- **Change Channel/Zone**
- **Cross Patch (Cross Band)**
- **TX Passive**
- **Phone Patch**
- **Voice Mail**
- **Evacuation Messages**





- PTT
- RX/TX
- Change Channel
- Select Talk Group
- Call Type
- Callsign (PTT ID)
- Alarm Tone
- Mute, Solo

- Man-down alerts
- No-movement alert
- Lone worker
- Immediate alerting via sound, pop-up, emails or SMS



Map

10	Saint-Petersburg	Part of Saint-Petersburg (city)
----	------------------	---------------------------------

- [illegible]

- Map Objects
 - New Map Object
 - New Map Object
 - New Map Object
 - Police
 - Repeater 1
- Map Regions
 - GeoRegion 1
 - GeoRegion 2

Policy	Radio	State
Lone Worker 1	Radio 7	17:45 17:47
Lone Worker 2	Radio 5	17:45 17:50

Administer

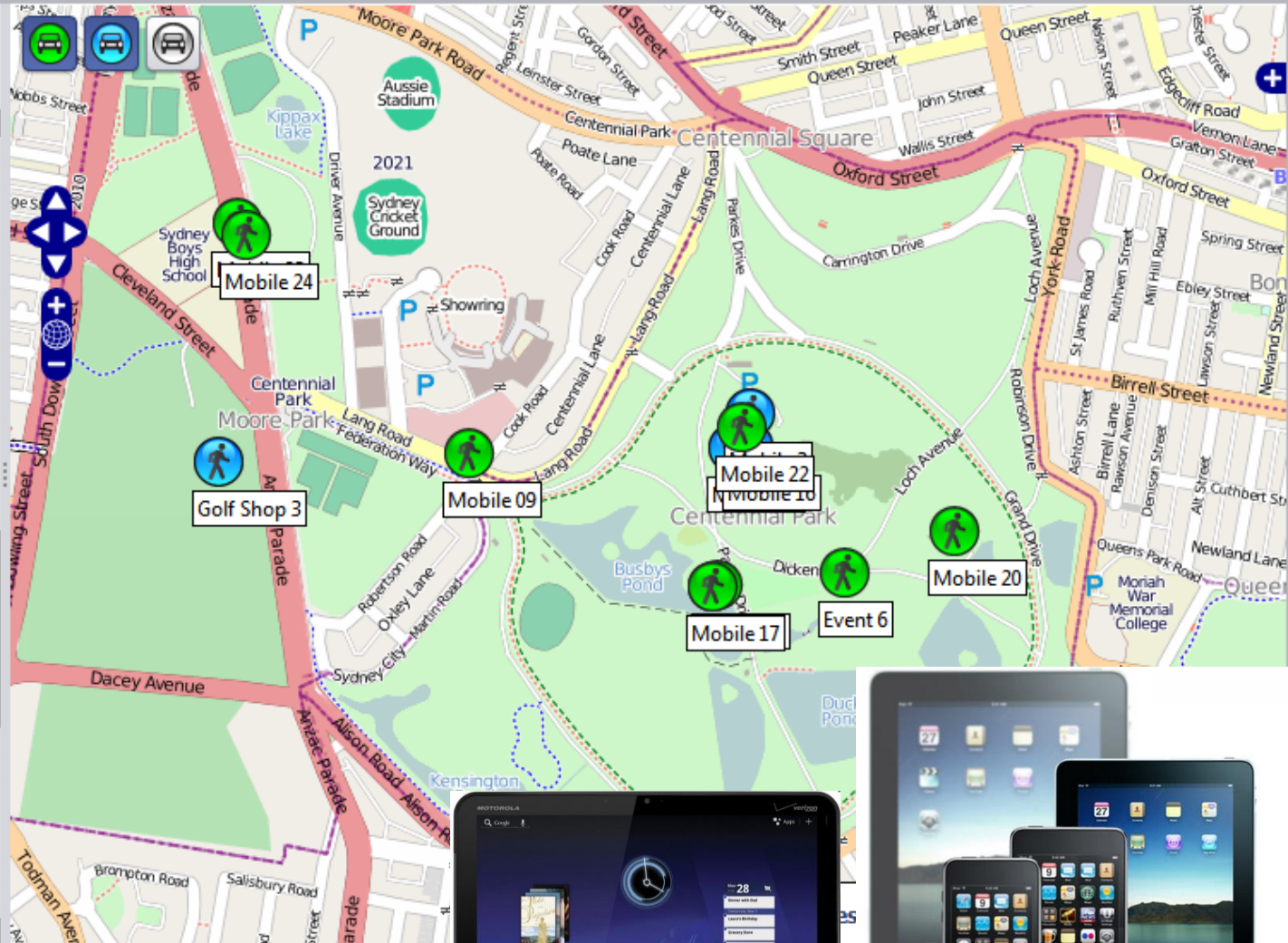
 Warning! You are logged as Administrator. Licensed by:

Licensed by:

- Current units location
- Preconfigured intervals, On demand by dispatcher
- Individual polling interval / Reset GPS trigger
- Location History and Routes
- Subscriber status (radio online/offline, GPS online/offline, alarm)
- Regions: GeoFencing and Speed Control Policies
- Additional objects on the map (check points, buildings)
- Enhanced GPS / CSBK GPS (7.5 sec Update)
- Vector, Raster, Online, Custom Maps (OpenStreetMap, Google Earth, MapPoint, Raster/Custom maps)



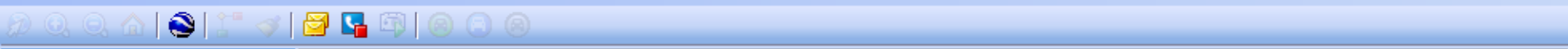
Radios





- Native MOTOTRBO Telemetry
- Utilizes rear accessory connector to connect to external sensors
- Acknowledgement
- State Changes History
- Configurable Schemas
- Two-way Telemetry

Car Status				
 Hawk 1				
- Safe closed - Engine started - Doors closed				
	Date ▾	Sender	Receiver	Message
	09.04.2008 16:36:04	Dispatcher1	Hawk 1	Lock doors
	09.04.2008 16:35:40	Hawk 1	Dispatcher1	Start engine
	09.04.2008 16:35:10	Hawk 1	Dispatcher1	Safe closed
Record 1 of 3				
Event Log Car State				



Text Messages

Online Dispatchers

Dispatcher #1

Dispatcher #2

Radio

Group 1

Radio 5

Radio 9

Radio

GPS Positioning

Text Messages

Event Log

Reports and Statistics

Text Messages

Clean

Reload

18.03.2010 16:18:27 RadioServer to Radio 5

Enter to region 'Map Region #2'

19.03.2010 11:26:43 Eugene_Desktop\Evgeny to Radio 5

Test Message

19.03.2010 11:27:11 Radio 5 to All

Ok

19.03.2010 11:32:50 Radio 5 to All

Test

19.03.2010 12:18:34 RadioServer to Radio 5

Leave region 'Map Region #2'

19.03.2010 12:19:06 RadioServer to Radio 5

Max speed is exceeded. GPS Speed: 60,5250015258789 km/h

19.03.2010 12:19:07 RadioServer to Radio 5

Max speed is exceeded. GPS Speed: 60,5250015258789 km/h

19.03.2010 12:19:38 RadioServer to Radio 5

Enter to region 'Map Region #2'

19.03.2010 12:27:08 RadioServer to Radio 5

Leave region 'Map Region #2'

19.03.2010 12:28:09 RadioServer to Radio 5

Enter to region 'Map Region #2'

Recipient: Radio 5

Online Dispatchers

Dispatcher #2

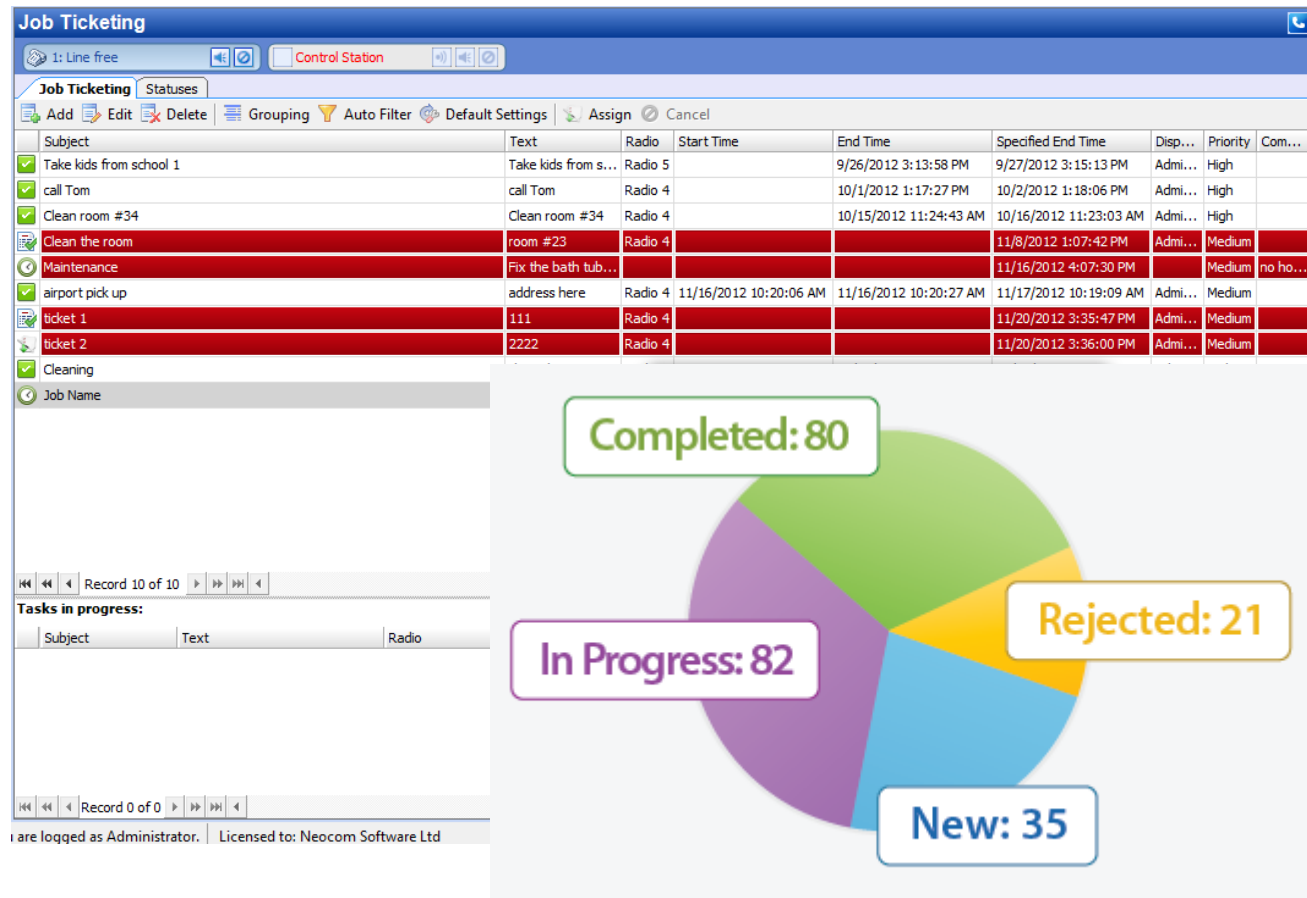
Group 1

Radio 5

Radio 9

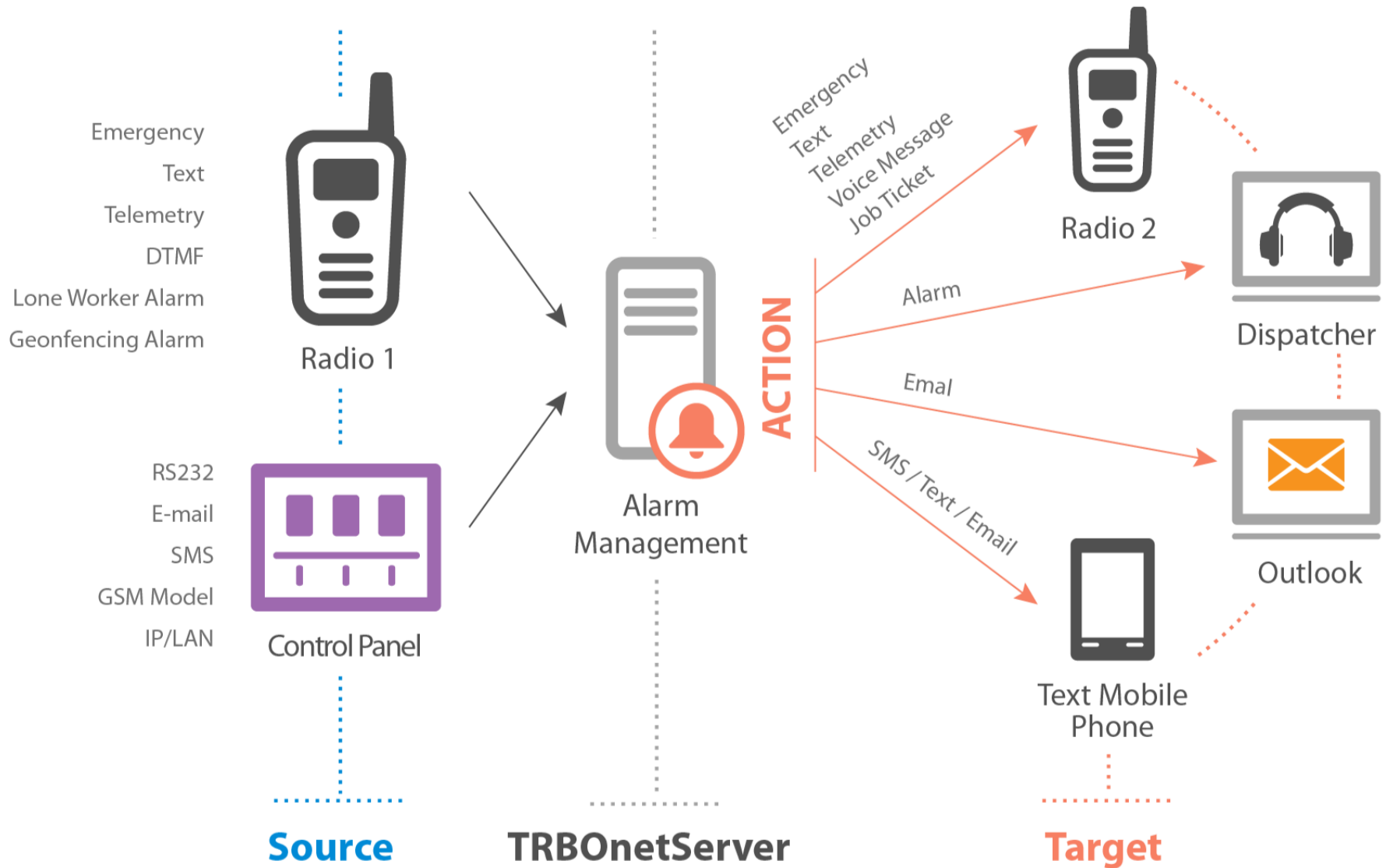
Send

- Integration with MOTOTRBO job ticketing
- Delivery Confirmation
- Remote status changes
- Flexible statuses
- Jobs tracking and alerting



All radios and platforms are supported

Alarm Management



- Different sources

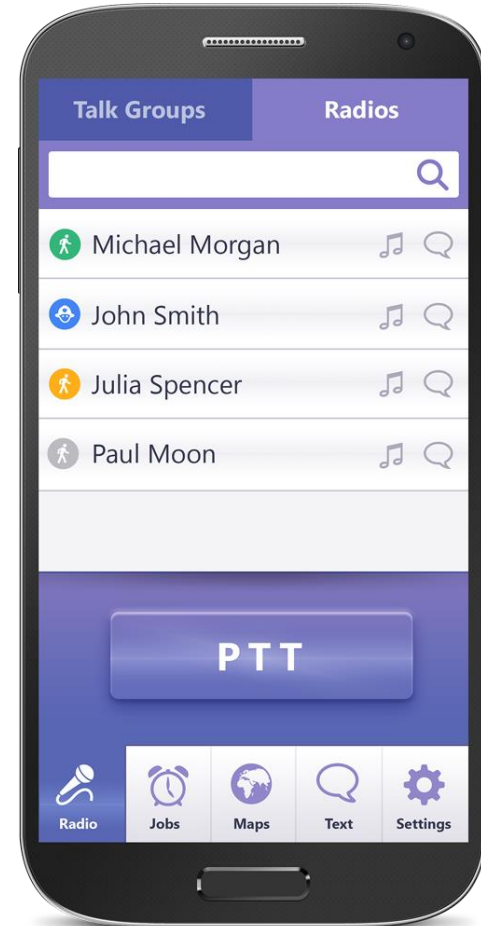
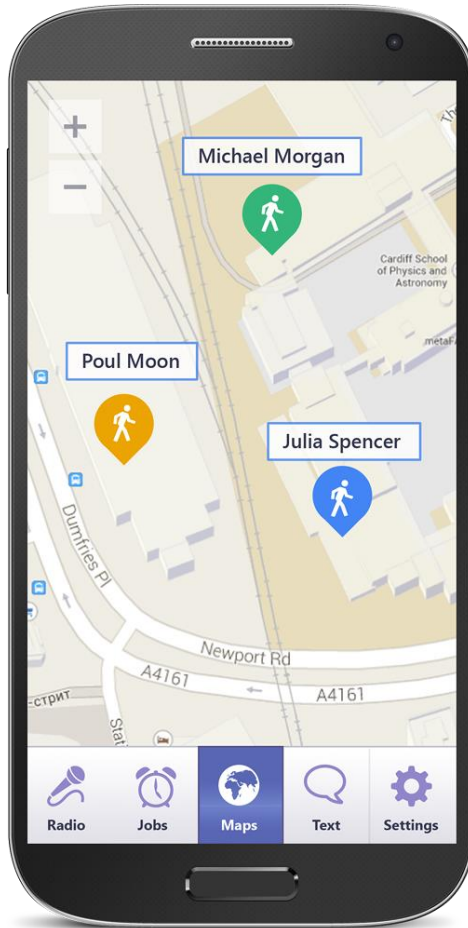
- Radio state – Turn On \ Off
- Radio activity – call, text, telemetry, DTMF
- Radio alarms – Emergency, Geofencing, Safety alarms
- External control panels



- Different actions

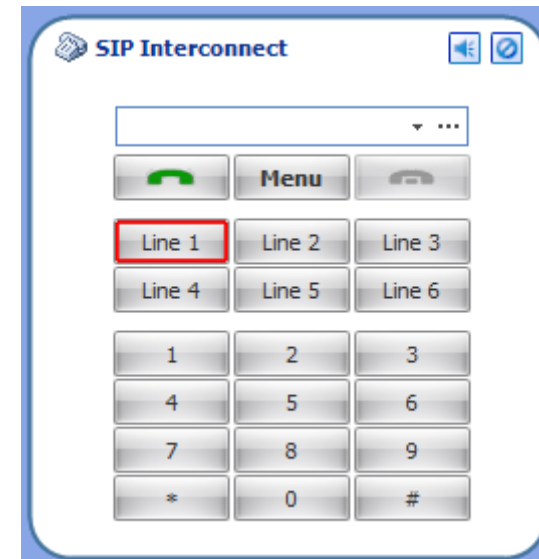
- Alarming, pop-up notification for the dispatcher
- Emails, SMS messages
- Text message to radio or group
- Automatic group \ private calls
- Automatic phone calls
- Telemetry

PTT, GPS, Text, Jobs



Available Now

- PBX with SIP or online SIP service
- No option board required
- Voice recording
- 6 lines per a dispatcher
- SIP Trunk
- Native MOTOTRBO phone system support



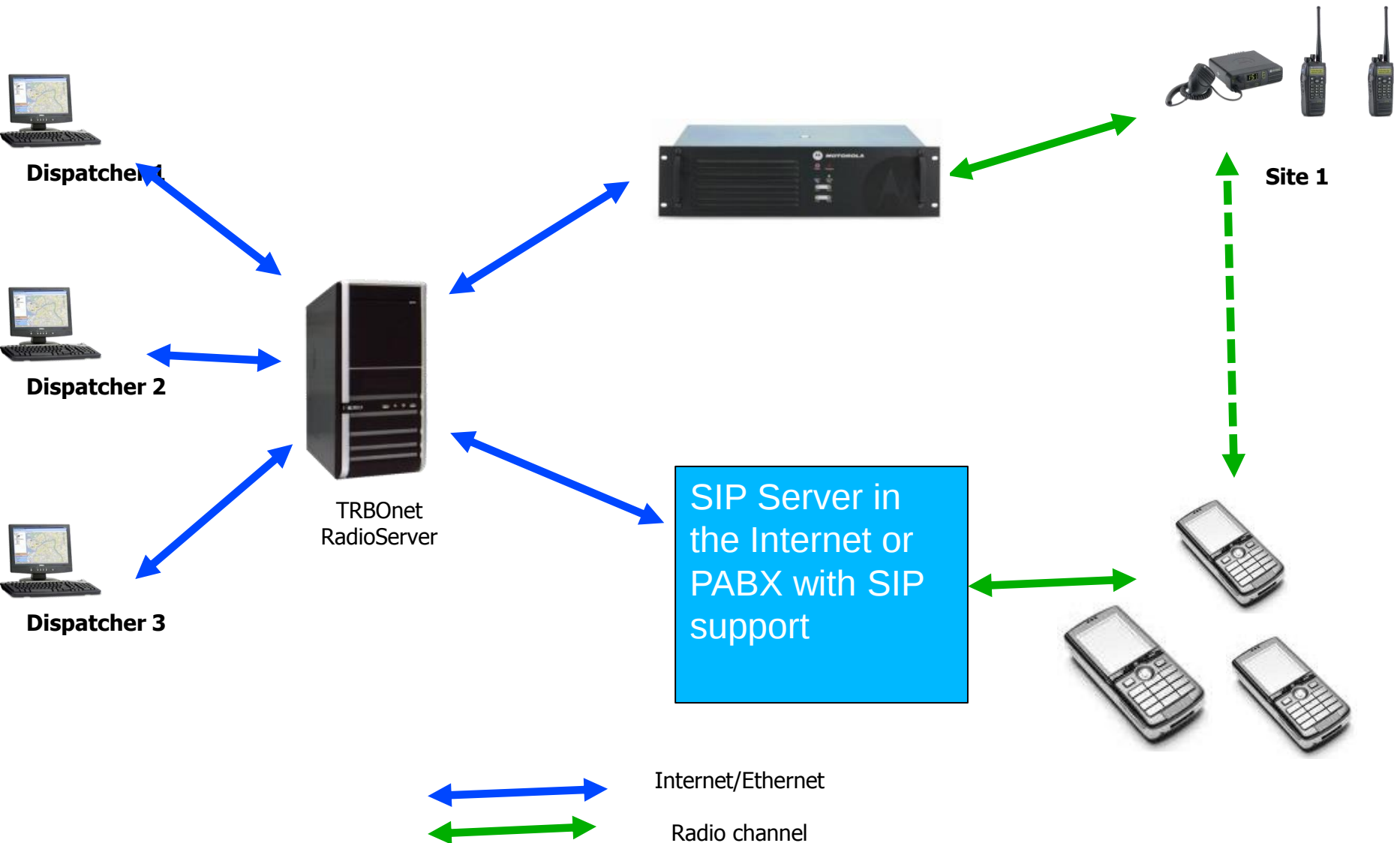
- Text and Voice Mail for Offline Units
- Evacuation Messages
- Scheduled Text or Telemetry Messages
- Lone Worker
- Geofencing
- Radio Kill Passive
- Export Data



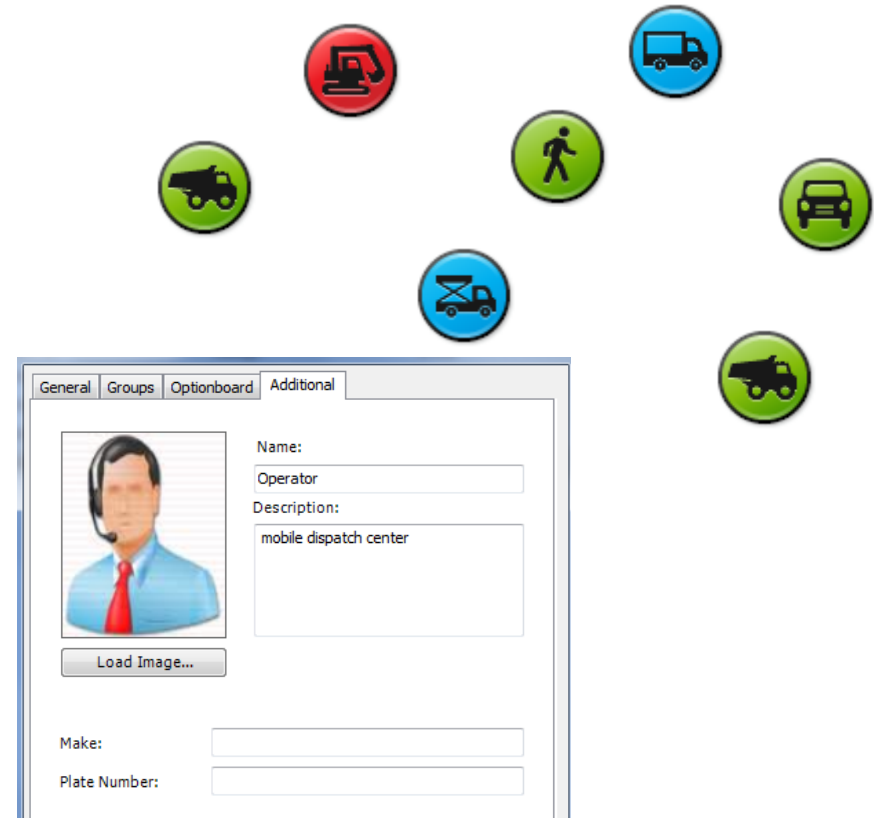
- All Information
 - Talk sessions (Voice Recording)
 - Text messages
 - Telemetry
 - ARS (online/offline status)
 - Dispatcher Activities
 - System events
- Group, Filter, Search
- Reporting



Telephone Interconnect



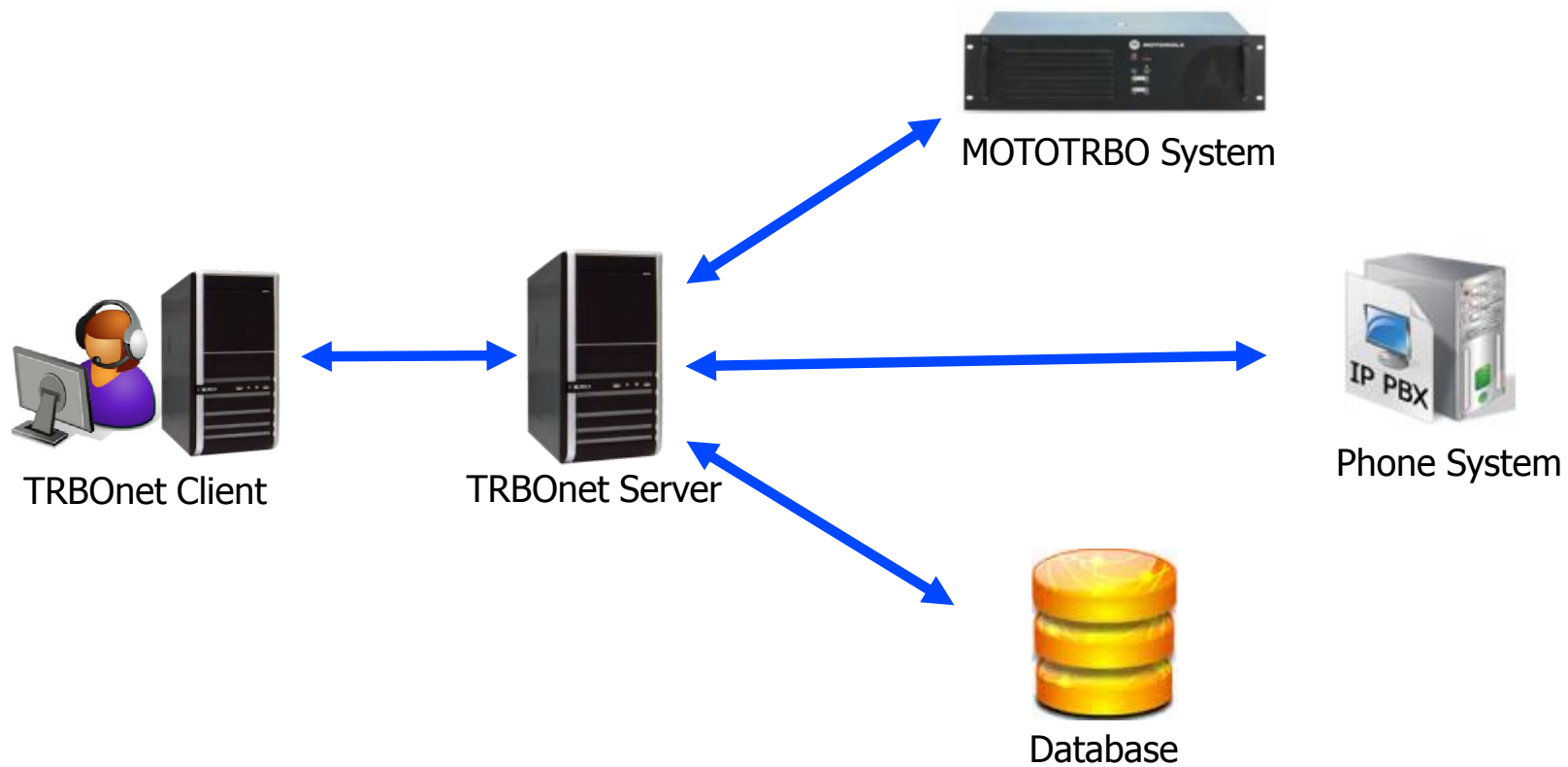
- Custom display icons (more than 20)
- Radio display name, custom information
- Radio allocation, personal password
- Reports on radio usage



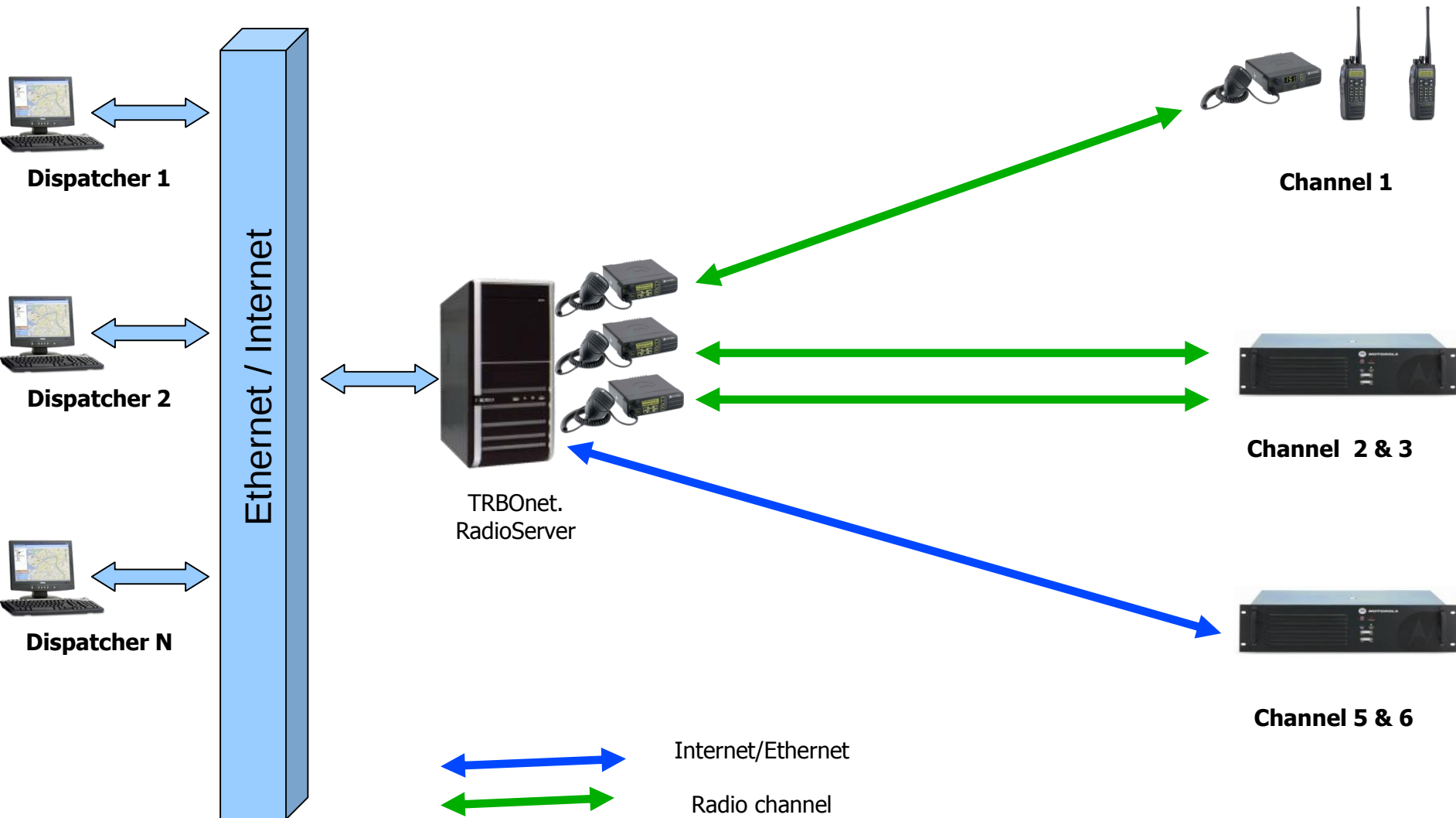
TRBOnet Enterprise - Architecture

- Classic Client-Server Architecture
- Three parts:
 - RadioServer
 - Client (DispatcherConsole)
 - Agent (RadioGateway)
- The best for Distributed Systems

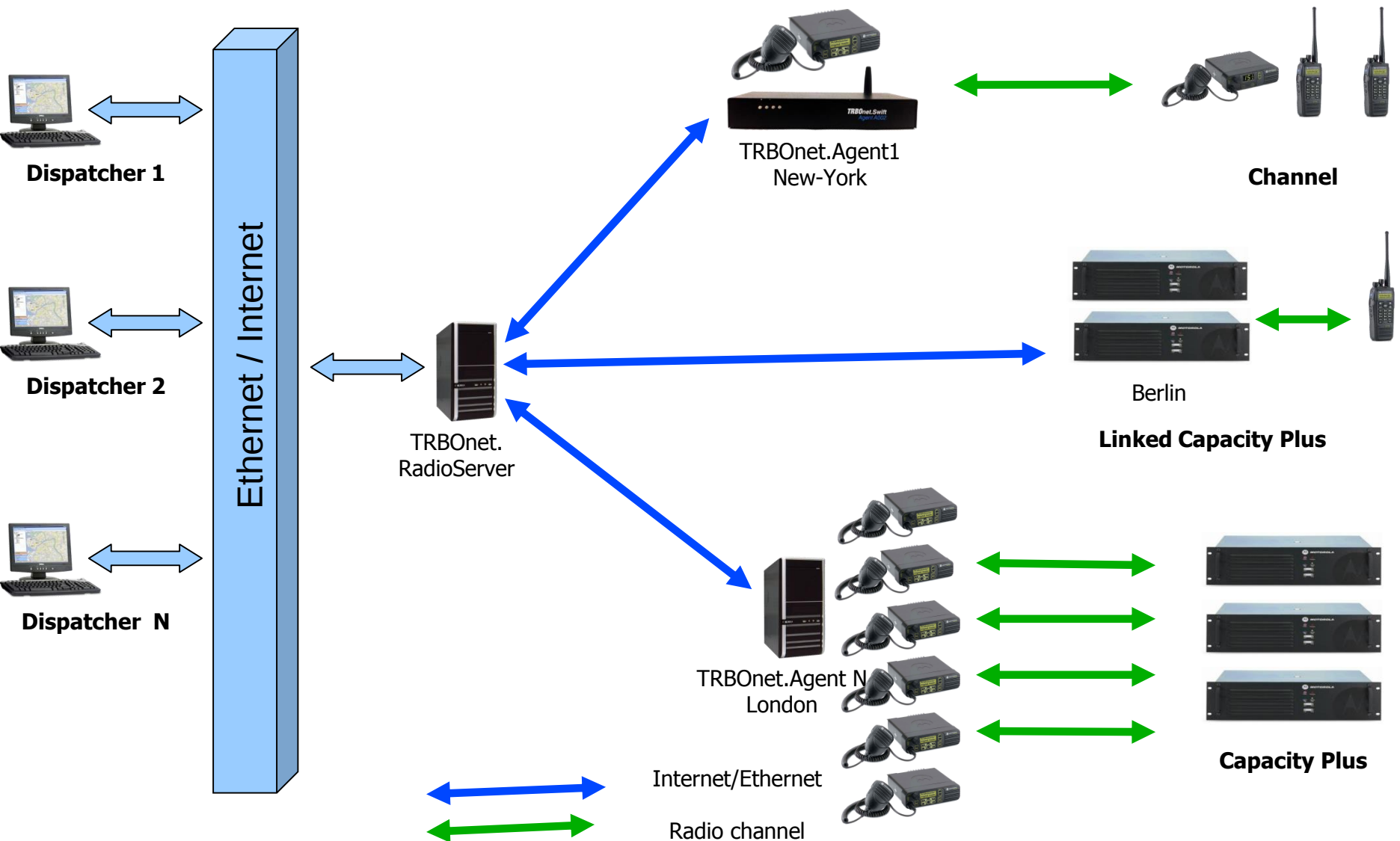
Client – Server Application



Single Site, Example

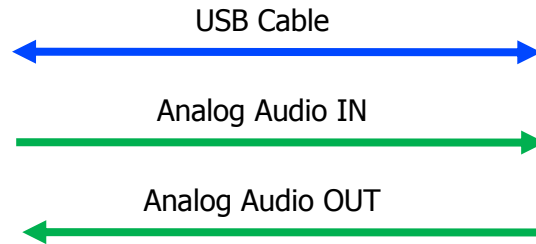


Multi Site System, Example





PC with
TRBOnet RadioServer Software



Mobile radio as Master Radio

MOTOTRBO



2,4 GHz
Voice + Data



Analogue Radio



Cable

- PTT
- SQL
- Audio out
- Mic In
- GND

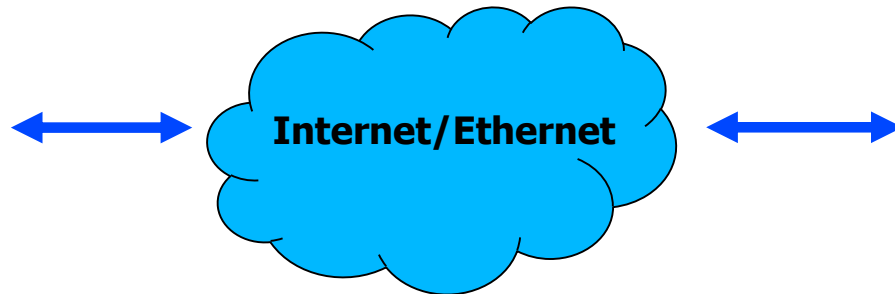


Voice and Data over IP

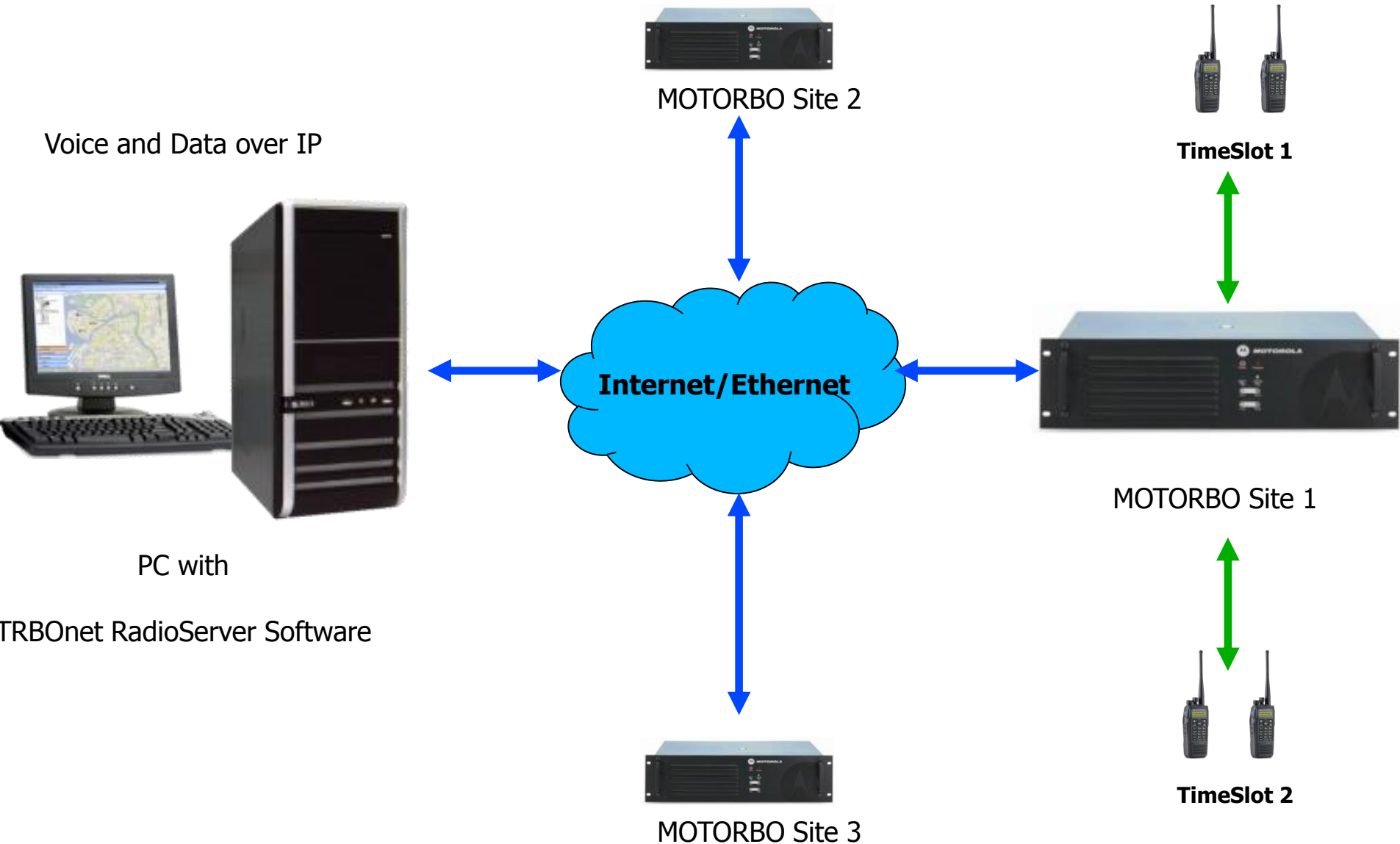


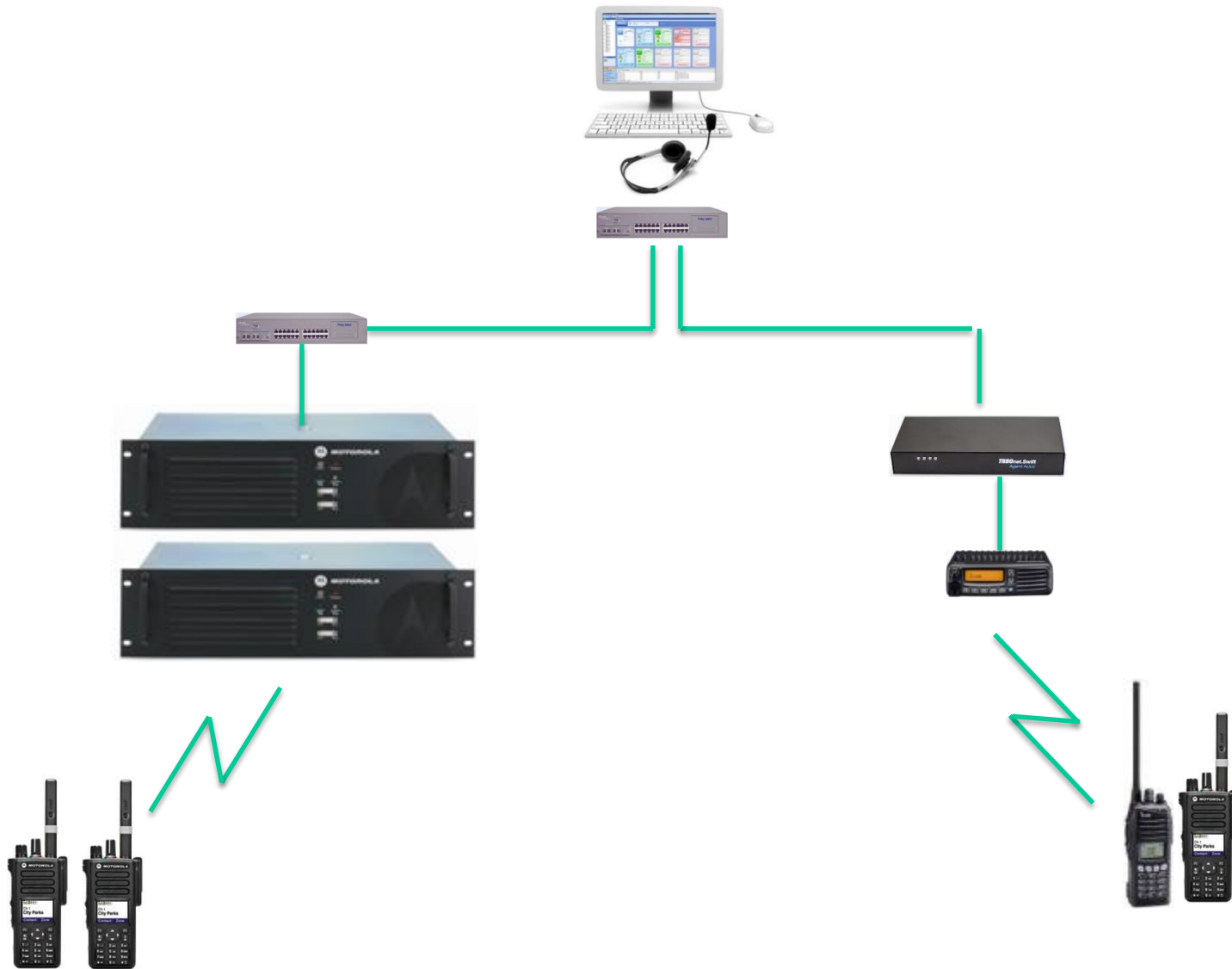
PC with

TRBOnet RadioServer Software



Capacity Plus / LCP





common radionetwork

analogue radionetwork



analogue



master
station

Voice call
via CrossPatch

digital radionetwork



digital



master
station

Voice call
via CrossPatch

TRBOnet CrossPatch

Voice call
via CrossPatch

MOTOTRBO Capacity Plus



Capacity Plus



master
station

Voice call
via CrossPatch

MOTOTRBO IP Site Connect

IP Site Connect



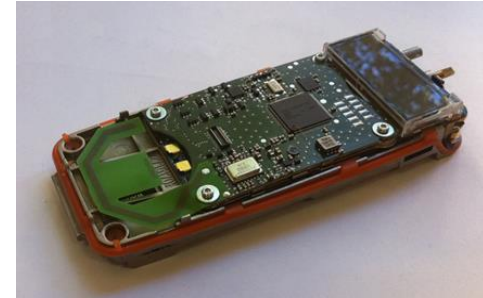
master
station

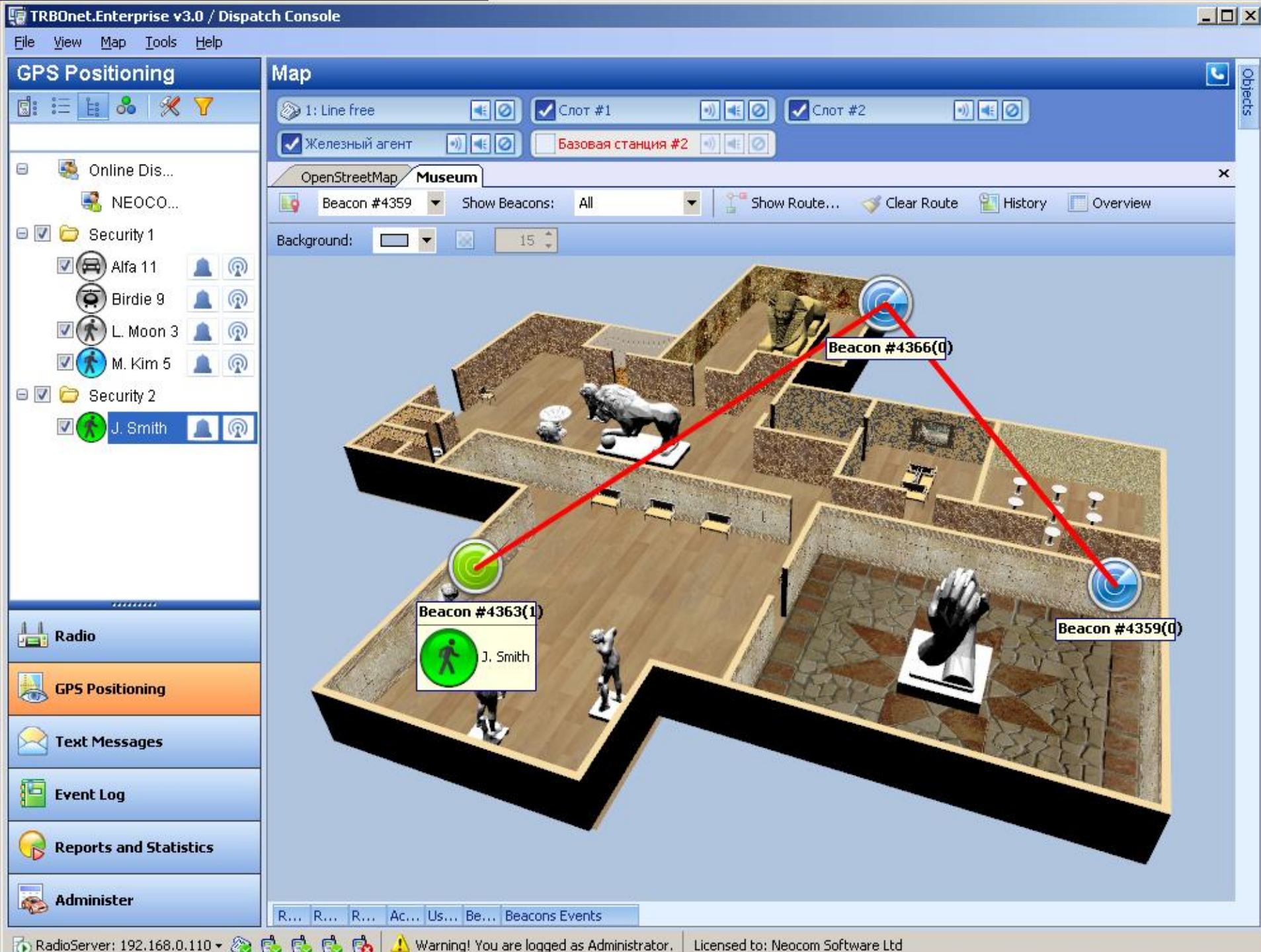


TRBOnet.InDoor



- TRBOnet Enterprise 3.0 or higher
- Hardware: Option Board + Beacon
- Beacon Battery: 2-3 years
- Beacon Range: from 0,5 meter to 25 meters
- Indoor & Outdoor solution
- 2D and 3D maps
- Two solutions:
 - Indoor Positioning
 - Guard Tour (October 2011)
- Availability: August 2011





TRBO*net*
Digital Technologies

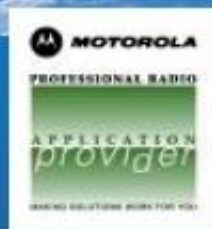
THE FUTURE OF DIGITAL COMMUNICATION



TRBOnet.Watch

*Solution for administering
digital radio systems*

*The Best Dispatch
Solution 2010*

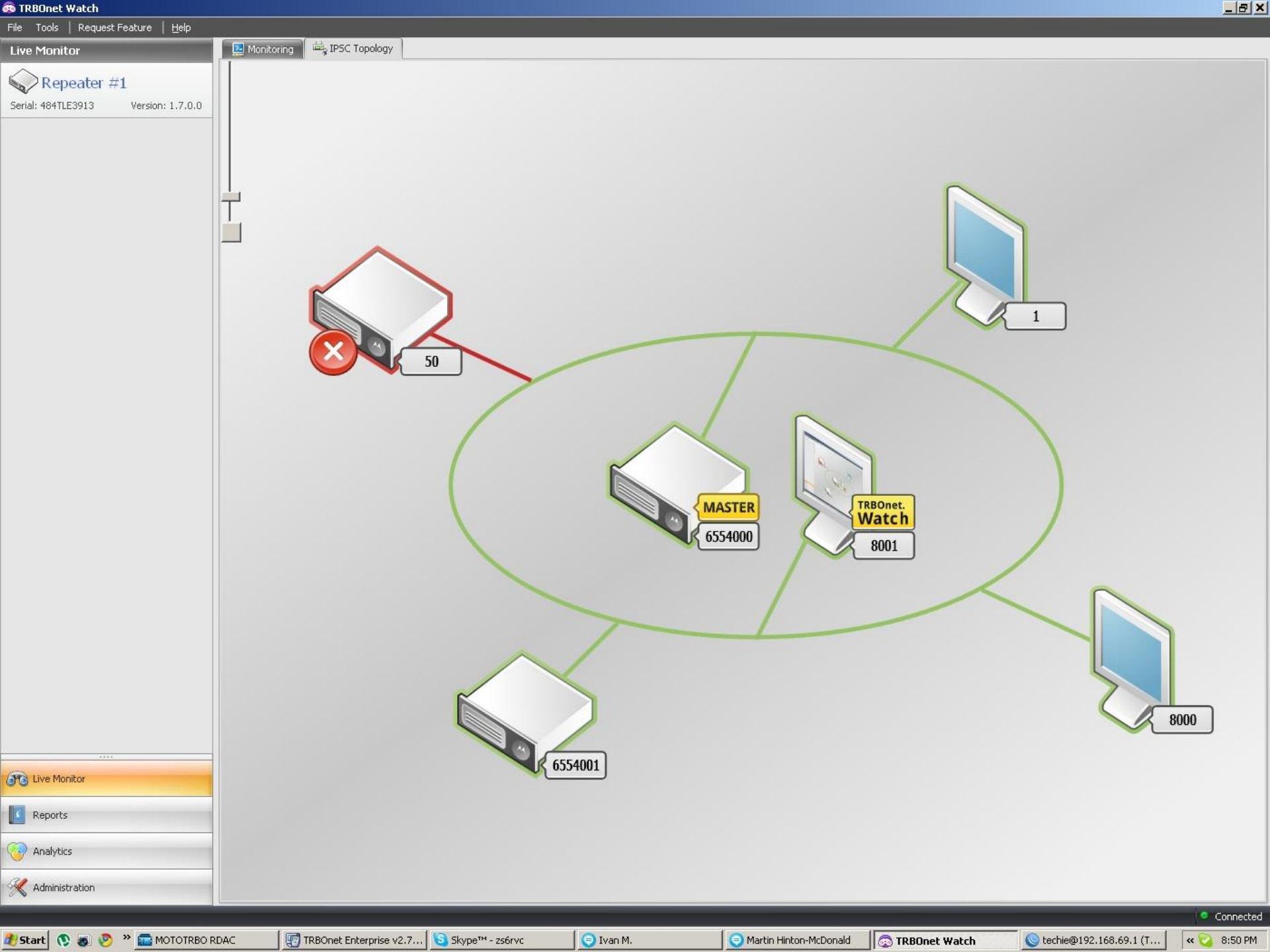


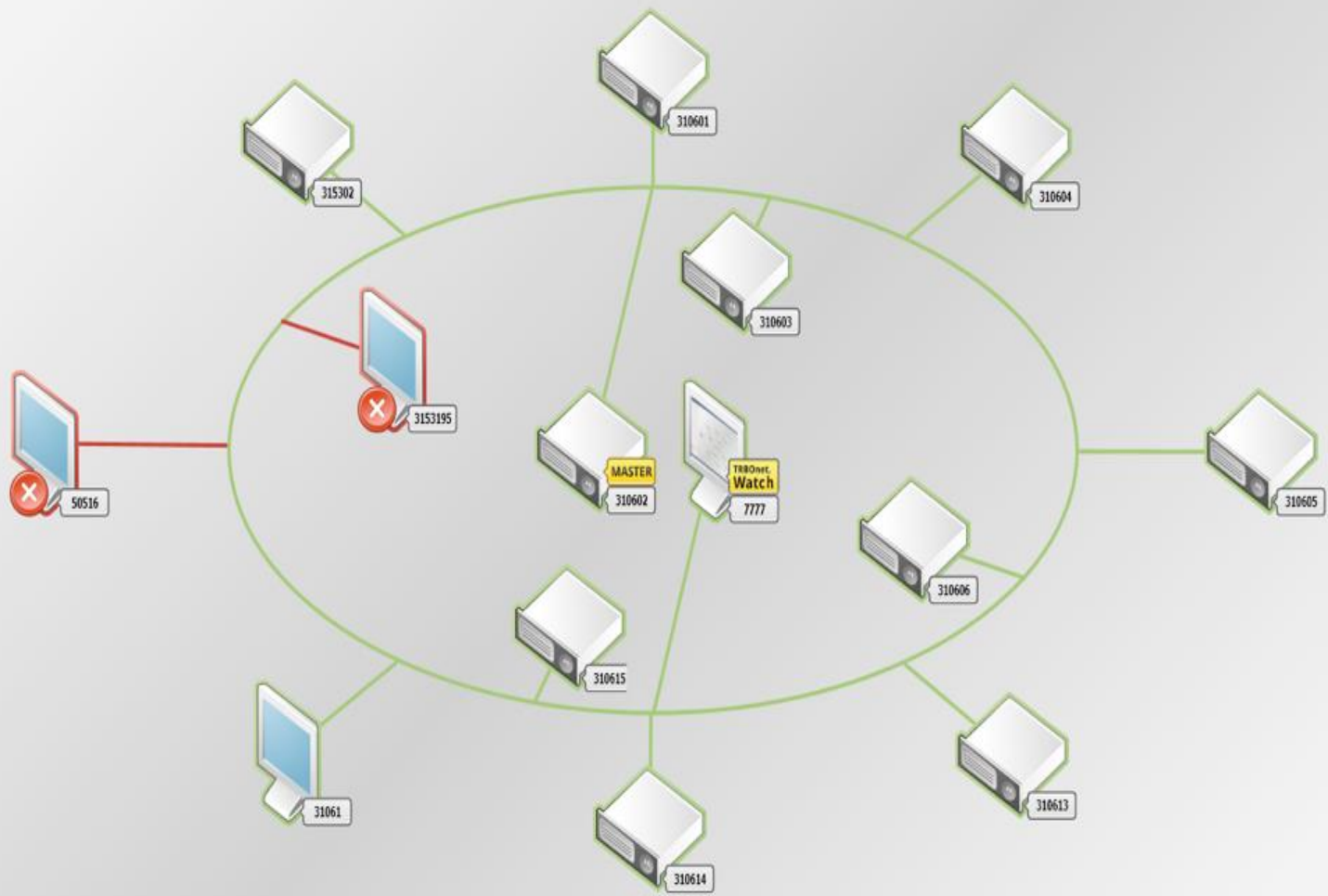
- Diagnostic and monitoring tool for MOTOTRBO
- Support: single repeaters, IPSC, Cap +

When to use:

- System installation, radio programming
- Troubleshooting
- System Monitor







Session Type	Start Time	Duration	Sender	Recipient	Peer ID	Slot ID	RSSI (dBm)
 Voice Call	17:51:56.376	00:02.433	Radio 11	Group 5	1022	Slot #1	-57.21
 Voice Call	17:51:54.400	00:01.020	Radio 11	Group 5	1022	Slot #1	-57.21
 Registration	17:51:54.179	00:00.360	Radio 43	Radio 64251	1022	Slot #2	-57.21
 Voice Call	17:51:52.476	00:01.020	Radio 11	Group 5	1022	Slot #1	-57.21
 Voice Call	17:51:51.099	00:01.020	Radio 11	Group 5	1022	Slot #1	-57.21
 Voice Call	17:51:49.358	00:01.020	Radio 15	Group 3	1021	Slot #2	-57.21
 Voice Call	17:51:47.062	00:00.660	Radio 43	Group 2	1021	Slot #1	-57.21
 Voice Call	17:51:44.367	00:00.660	Radio 43	Group 2	1021	Slot #1	-57.21
 Voice Call	17:51:42.353	00:00.660	Radio 43	Group 2	1021	Slot #1	-57.22
 Text	17:51:39.307	00:00.360	Radio 43	Group 1	1021	Slot #2	-57.21
 Registration	17:51:37.896	00:00.180	Radio 15	Radio 64250	1021	Slot #1	-57.22
 Text	17:51:29.677	00:00.300	Radio 15	Group 1	1022	Slot #1	-57.21
 Voice Call	17:51:26.295	00:01.380	Radio 11	Group 5	1022	Slot #2	-57.21

Record 6 of 24

● Connected

Analytics

Data review
Traffic sources
RSSI Levels
Coverage

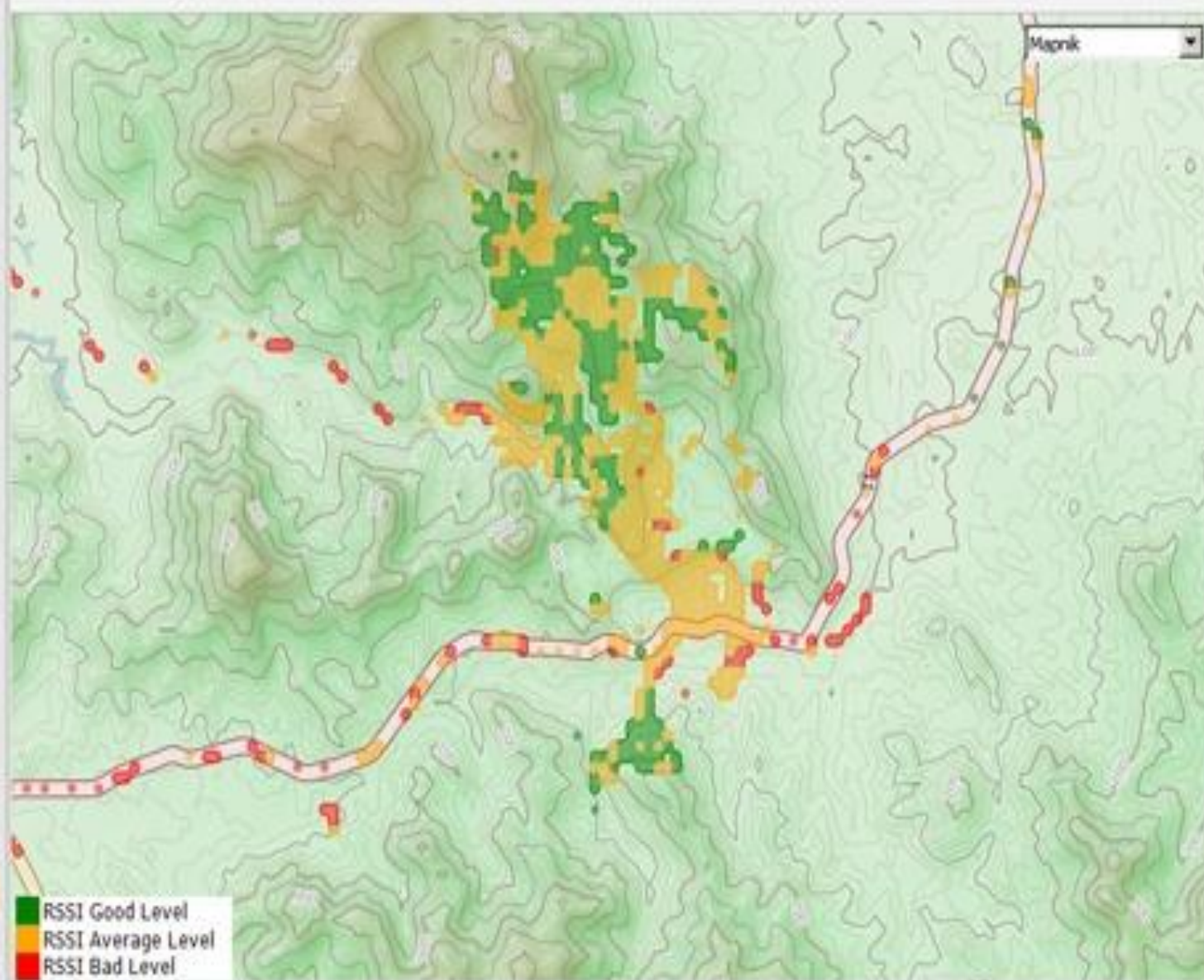
Repeater: Period:

Start

Back

Forward

Settings

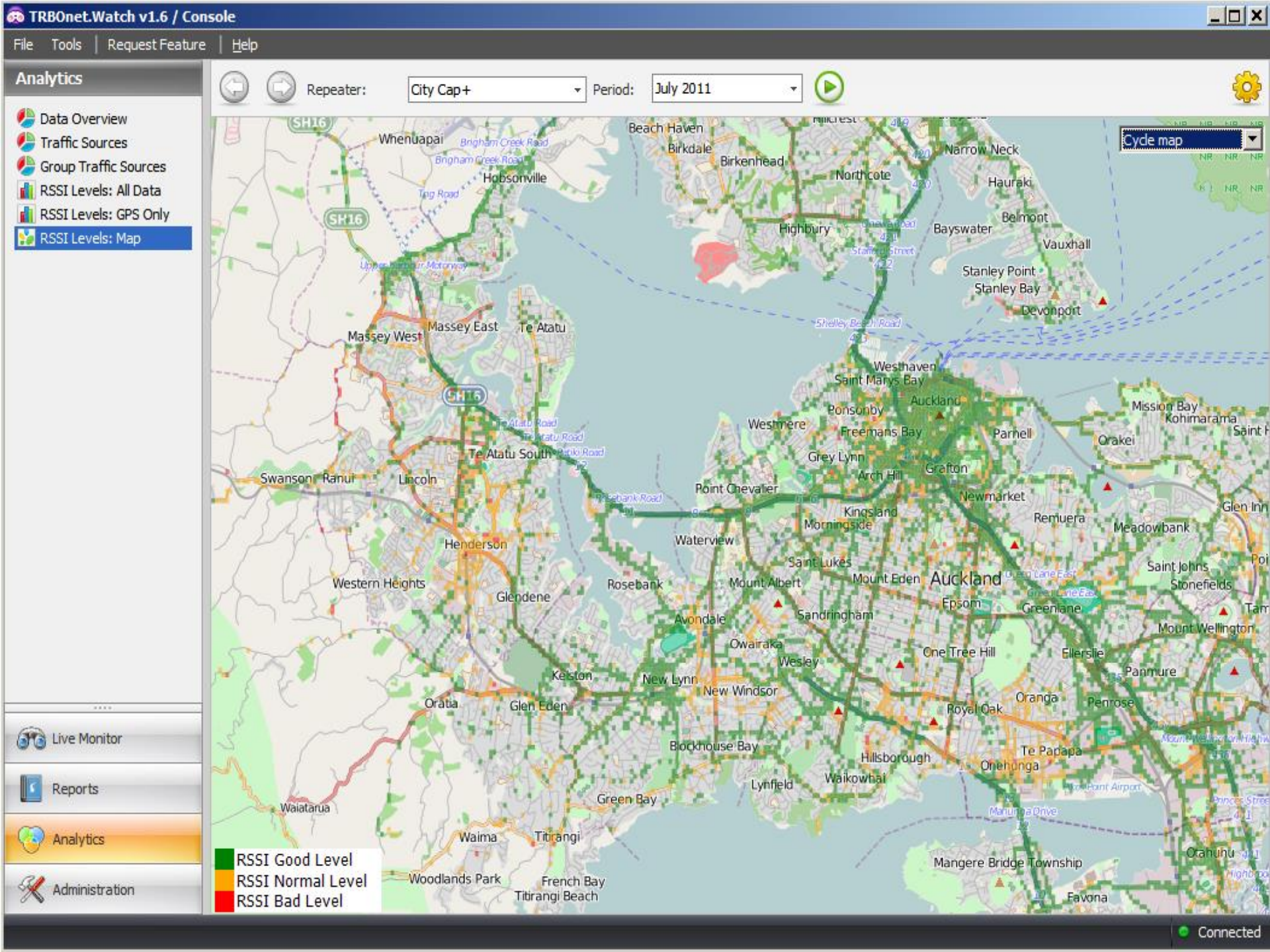


Monitoring

History

Analytics

Administration



Live Monitor


IPSC
 Serial: 484TMG0033 Version: 1.8.0.0


Cap+
 Serial: 484TLS5522 Version: 1.8.0.0


Airport Cap+
 Serial: 484TMG0031 Version: 1.8.0.0

 Live Monitor

 Reports

 Analytics

 Administration

Monitoring
Topology
Diagnostics

Current Channel: C+ TX Power: Low State: Enabled Knockdown: Repeat
Reset Write Reload

	Alarms	IP	UDP Port	Radio Name	Firmware Version	Serial Number	Service	State	Channel Name	Cha
		192.168.0.241	50000	2001	1.8.0.0	484TMG0033	Master	Repeat, Unlocked	Wide Both	Digi
		192.168.0.242	50000	2002	1.8.0.0	484TMG3851	Peer	Disabled, Repeat, Unl	Wide Both	Digi
		192.168.0.251	50000	3001	1.8.0.0	484TLS5522	Master	Repeat, Unlocked, Hil	C+	Cap
		192.168.0.252	50000	3002	1.8.0.0	484TKS6406	Peer	Repeat, Unlocked, Hil	C+	Cap

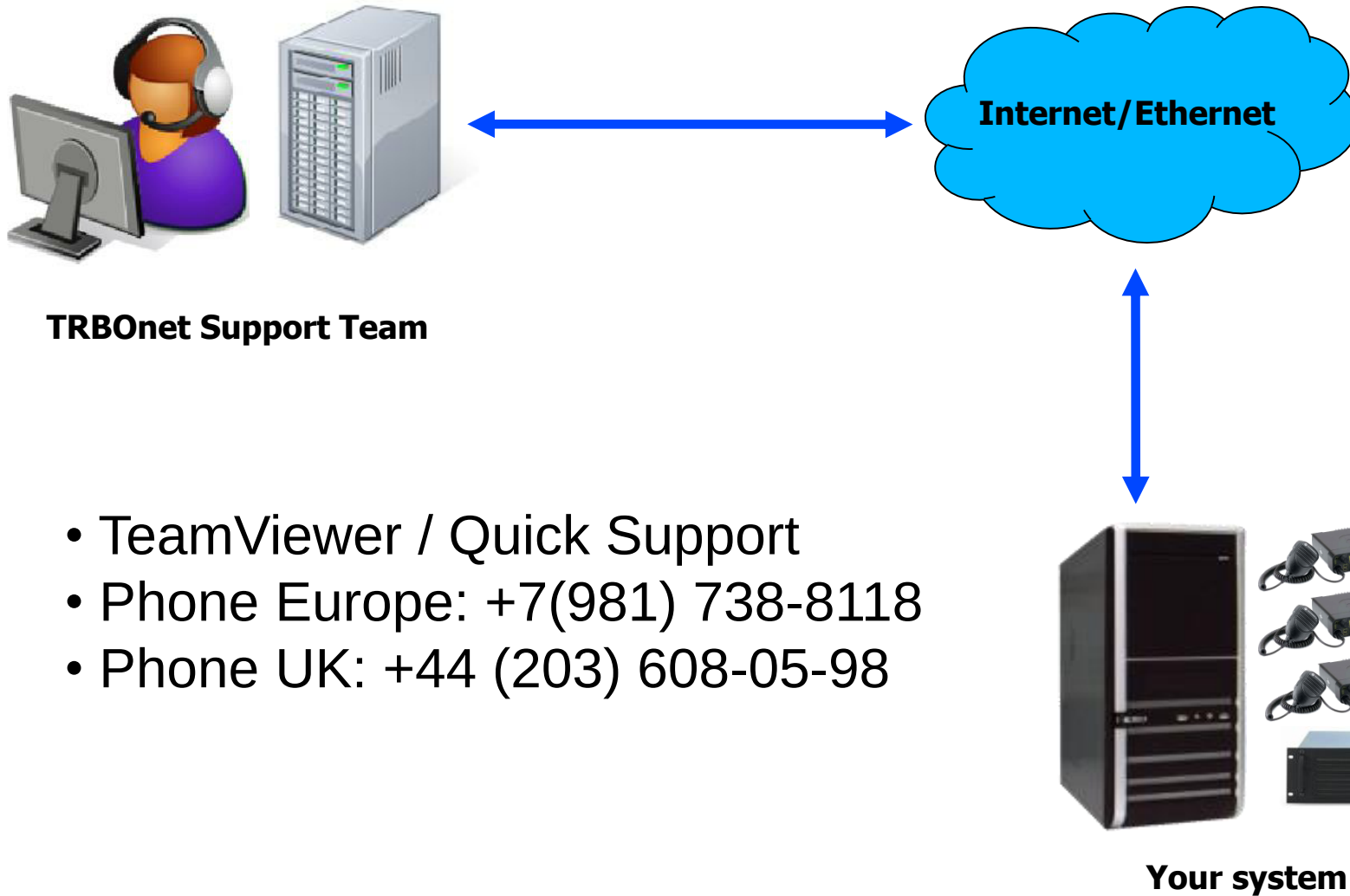
Column Chooser

- Exciter EEPROM Corruption Type 1
- Exciter EEPROM Corruption Type 2
- Exciter EEPROM Corruption Type 3
- Exciter Revision
- Incorrect Carrier Frequency
- Incorrect Codeplug for MTR2000 PA
- Interoperability Between Exciter and PA
- PA EEPROM Corruption Type 1

Peer 3002 Write Successful.

- Full range of solutions:
 - Voice Dispatch
 - GPS Positioning
 - Indoor Localization
 - ManDown & LoneWorker
 - Phone Interconnect
 - Diagnostic and Monitor (TRBOnet Watch)
 - Accessories
 - Custom Option Boards





Thank You!

