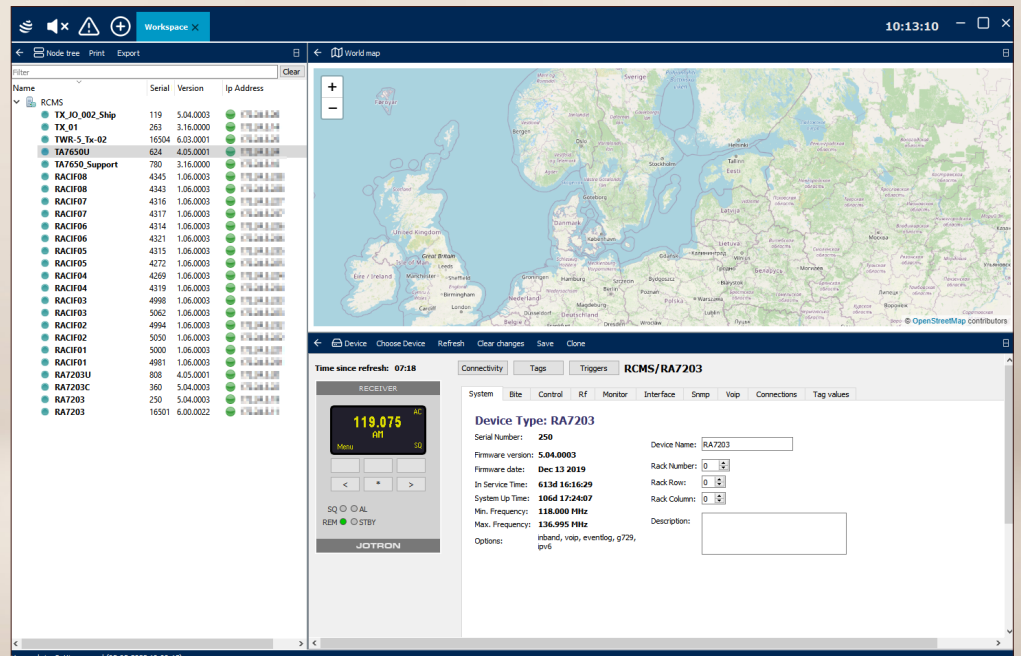


RCMS

Remote Control and Monitoring System



- ➔ Monitoring
- ➔ Configuring
- ➔ Maintenance
- ➔ Reports

RCMS

Remote Control and Monitoring System

- System status
- System bite
- Remote maintenance
- Control and configuration
- Operating status
- IP and VoIP configuration
- SNMP v3
- Built in SNMP agent
- Multi server available
- Multi clients

Technology at work for you!

The RCMS (Remote Control and Monitoring System) not only let the users monitor alarms and real time BITE information, but is a complete radio test and measurement system that allows the technician to remotely do complete qualifying measurements just as easy as if he was physically present at the radio site.

Together with the comprehensive reporting tool built into the RCMS system, this saves time and energy for the operators of the radio network.

Various configurations

Various configurations are possible from the simplest solution that monitors one radio to a nationwide system that monitors 100s of radios using a single or multi server configuration.

The radios in the network do not require any additional hardware or software to be controlled, they already include necessary firmware to be controlled using SNMP v3 or lower from one or more (redundant) servers.

Connecting your desktop computer with the communication system

The Jotron RCMS system is designed to remotely access, monitor and control ATC and coastal communication equipment from Jotron AS.

Currently the products that can be connected, include: Radios, radio gateways and ICU in the Jotron 7000 series.

Any computer that has access to one or more of the RCMS servers, can access, monitor and control connected equipment by logging in to the server. The user privileges gain the right access to the equipment.

The server and control store all information as it arrives from the radio as SNMP traps contain a database with event history. Databases stored on the server allow the generation of reports and historical statistic information reports to document the availability of the communication system.

Solutions

Custom solutions

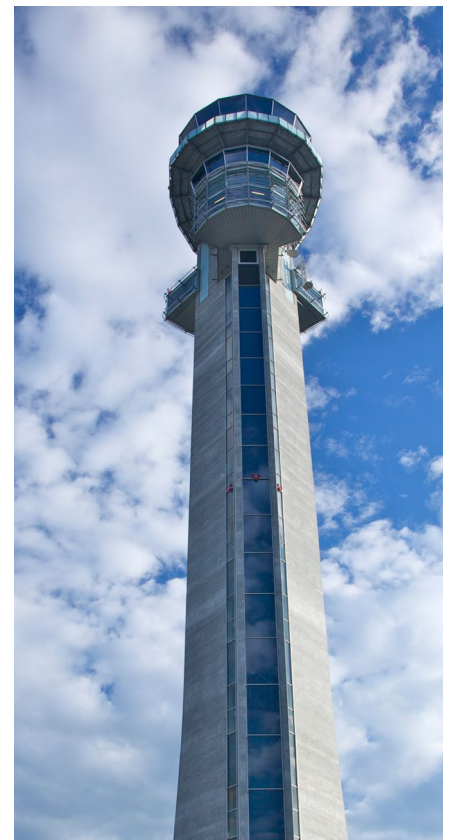
3rd party SNMP enabled devices may be connected to the system. This may require customization. Availability and feasibility studies upon request.

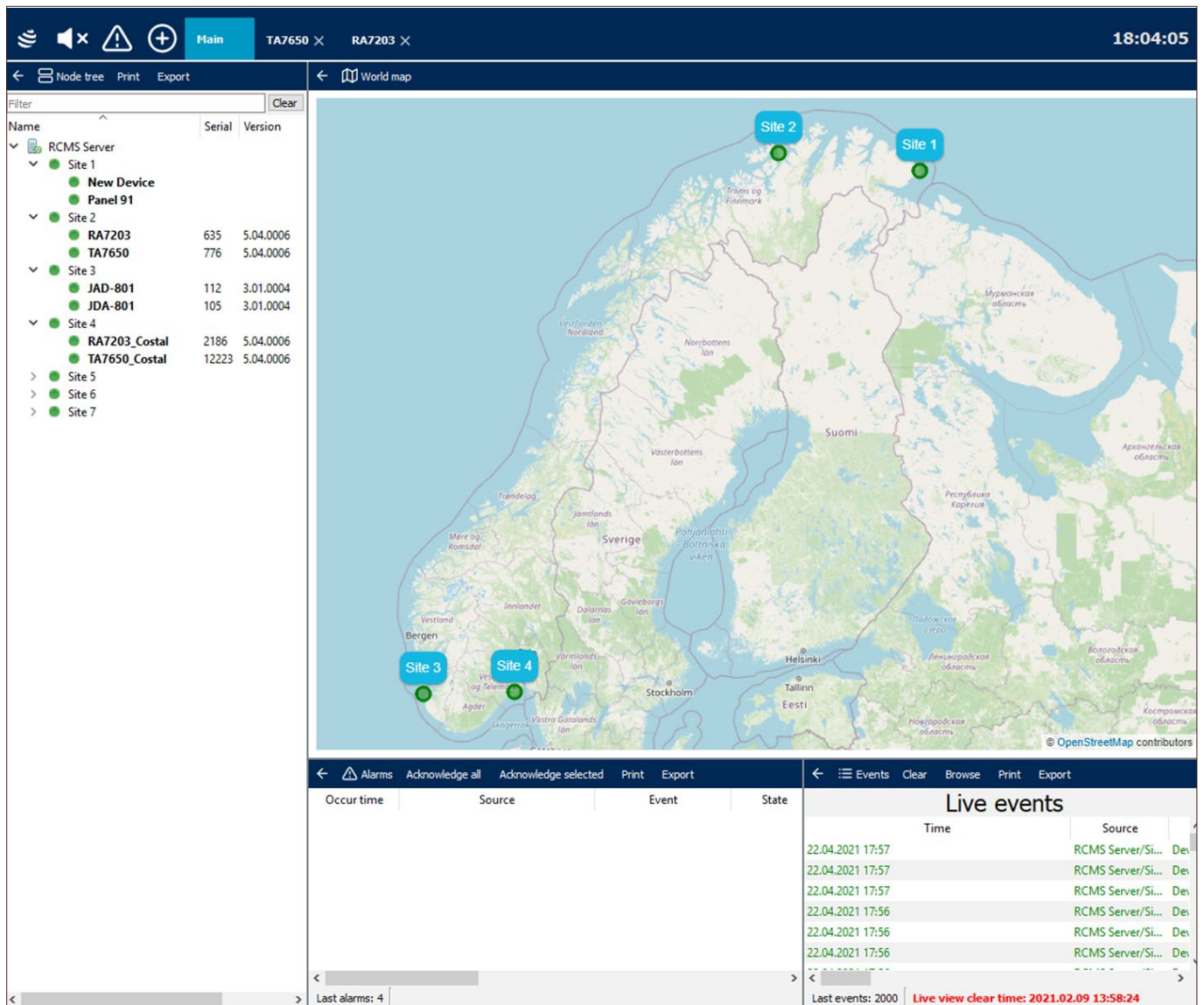
SNMP agent

The RCMS system can integrate with a higher level system, by its internal SNMP agent that will send traps to the higher level system upon any change to the communication system.

More info

See our complete system description that explains the various scenarios using the Jotron RCMS. The system description is available upon request from Jotron.





Cyber Security

Jotron is ISO 27001 certified and all our products are designed and developed with a strong focus on cyber security. Some of the measures Jotron has implemented in our RCMS software are:

- Layered structure to enhance security and isolation
- Secure software coding practices (Static code analysis, threat modelling, security testing)
- Role-based access control and authentication
- Secure monitoring through SNMP v3
- Encrypted communication and storage protection

RCMS Remote Control and Monitoring

System features

SYSTEM STATUS

Frequency
Serial numbers, firmware release data, timers
Operational status: OK, STBY, ALARM
Current use: Live PTT and SQUELCH info
Active alarms
Alarm status for voltages, currents, temperatures and synthesizers

SYSTEM BITE

Power output, reflected, SWR (int or ext)
Analogue line levels
Modulation levels (sent and received)
Temperatures, voltages, currents, LO levels
RSSI and AGC operation
Frequency accuracy
Carrier/noise

SYSTEM MAINTENANCE

Activation of TX testtone, TX PTT and RX SQ
View internal event log in radio
Calibrate internal LO frequency based on remote measurements
Remote audio monitoring allows remote audio measurements like S/N and distortion on transmitters (sidetone) and receivers

CONTROL/CONFIGURATION

Frequency, offset and channel space
Modulation type and parameters
Audio and PTT sources for transmitter
Time out and advanced RF parameters
Output power
Squelch adjustments
Mute levels
Blocked frequencies
Store/recall parameters to/from PC
Store/recall user default settings
Single channel mode
Control local access
Language settings

VoIP AND IP CONFIGURATION

SNMP ports and trap configuration
Enable/disable secure mode (SNMP v3)
Configure NTP server
VoIP protocol and codecs to use
Control jitter buffer in radio to optimize the audio connection
View active SIP sessions
Control ED-137 parameters

