

mentura



MENTURA GROUP OY

TETRA MANAGEMENT SUITE

PRODUCT CATALOGUE

Our solutions help PMR user-organisations (TETRA, GSM-R) to improve and manage the security of their operations.

OUR CUSTOMERS INCLUDE:

- Public Safety Network Operators and Users
- Law enforcement and state security agencies
- Public Transport (Airports, Railroads)
- Energy Sector (Oil & Gas, Electricity)
- System Integrators

*Mentura
is located in Helsinki,
Finland and Dubai, UAE.*



We provide solutions for deploying, managing and utilising the TETRA network service. We help you integrate the communications tool to your operations seamlessly, giving you the maximum benefits.

The MENTURA TETRA MANAGEMENT SUITE (TMS) is our product platform for the PMR application needs.

- TNIB data management platform for reporting, service provisioning, billing and network monitoring.
- ROCS for Role Oriented Communications and automatic group management.
- TETRA Tracker for Operative Incident Management and AVL.
- Data messaging, data gathering and query solutions based on the Mentura Data Messaging Gateway.
- Custom Applications



Value Added Applications

- Data Queries
- Domain specific data clients
- Data monitoring
- Domain data transfer (e.g. Camera Control over TETRA)



Operative Systems

- Incident Management + AVLS
- Emergency Communications
- Public Alarm delivery



Common Services

- Network Reporting + Provisioning
- Location Platform
- Interface Servers

PARTNERS

We work with leading network vendors, terminal manufacturers and system integrators.



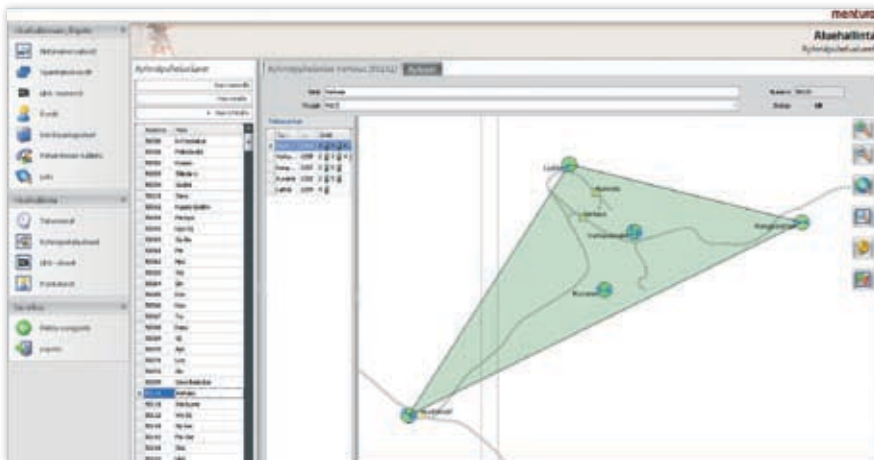
"We provide you with information about your network."

TNIB (TETRA NETWORK INFORMATION BASE)

is a solution for managing subscribers, network usage data, operative event data, network measurement data and alarms for different purposes. Whether you need to just know who is using the network, or bill for network usage, TNIB provides an answer to the question.

TNIB comprises of multiple application options, each integrating specific information sources to the system. When used together, the components can utilise the complete database.

We collect data from where-ever it is available (CDRs, Alarms, HLR, exchange, radios, server logs, subscriber and group tracking) and make essential information available in an easy and automatic way.



Product code: TNIB-04-X
 Platforms: Windows 2008 Server, Linux
 Database: Oracle, Postgres
 Networks: Cassidian, Rohill, NSN (GSM-R)
 Terminal: Cassidian (Java), Others (SDS)

TETRA Service Assurance with TMS



TNIB-T: Terminal Management and Service Provisioning

TNIB-R: Network Reporting and usage analysis

TNIB-M: Network and service monitoring, alarm management

TNIB Traffic Trace: Subscriber Tracking and event analysis

TNIB Optimiser: Visualise traffic and measurement data, signal strength data collection

TNIB-Rail: Subscriber Management for GSM-R

The Role Oriented Communications Server (ROCS) provides a dynamic communications model for dynamic processes.

Using this solution, organisations can efficiently communicate to people performing a task. There is no need to know, who is the person performing the task because that person is reached through the Role Number.

The subscribers can simultaneously carry both their personal and role addresses.

Teams working on a task are automatically in the same talk group. Using ROCS, any user can be given any terminal, and it will instantly receive all communications to that user and his roles.

Features:

- Radio Aliasing Service
- Dynamic Automatic Group Management
- Role Communications and Object Calling
- Terminal Inventory with full usage history of radios
- Dynamic Fleetmap
- Radio Client for user friendly MMI
- Dispatcher Client

Communications
adapts dynamically to the
changing situation

Right people
are reached at the
right time



Product code: ROCS-03
 Platforms: Windows 2008 Server, Linux
 Database: Oracle, Postgres
 Networks: Cassidian, Rohill, DAMM, Thales
 Terminal: Cassidian (Java), Others (SDS)

TETRA TRACKER

THE TETRA TRACKER is our answer to the need for Computer Aided Dispatching (CAD) and Automatic Vehicle Location (AVL).

THE TETRA TRACKER gives you control over the field force and incidents, providing seamless situation overview in the control room.

THE TETRA TRACKER combines the control room Incident Management and AVLS with efficient Field Clients for data delivery and status management.

THE SYSTEM SUPPORTS hierarchical management of larger operations.

Features:

Control room:

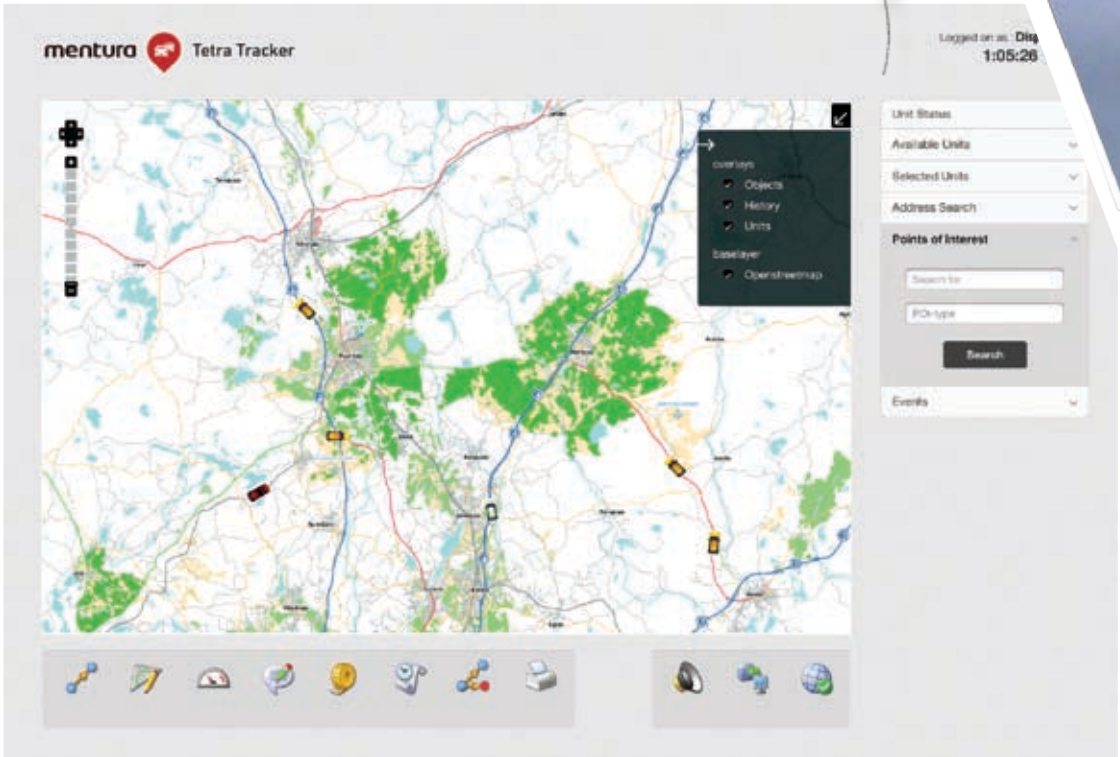
- Emergency Call Centre Integration
- Automatic or manual assignment of incidents to Control Room Dispatchers
- Incident History and analysis
- Supports shared situation screens

Control Room Dispatcher:

- AVL + GIS (unit locations and statuses, incident locations and history)
- Dispatching incidents to field units over data messages and voice
- Incident history and data management

Field units:

- Radio client for convenient view of incident data and status reporting
- Mobile Computer Client with map, AVL and data features for Field Command and other vehicles
- Joint operations via a central operations server (monitoring of individual operations and coordination), overall situation



Product code: THTR-04-X
Platforms: Windows 2008 Server, Linux
Database: Oracle, Postgres
Networks: Cassidian, Rohill
Terminal: Cassidian (Java), Others (SDS)



TETRA

NETWORK MONITORING

The TNIB-M network monitoring solution combined with the NetHelp Trouble Ticketing allows the operator to solve problems, streamline processes and serve the customer better.

TNIB-M gives real-time and historical information about service status and availability.

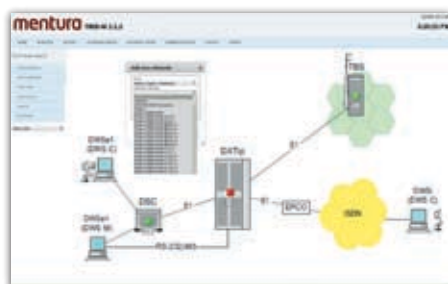
The NetHelp manages the correction of problems.

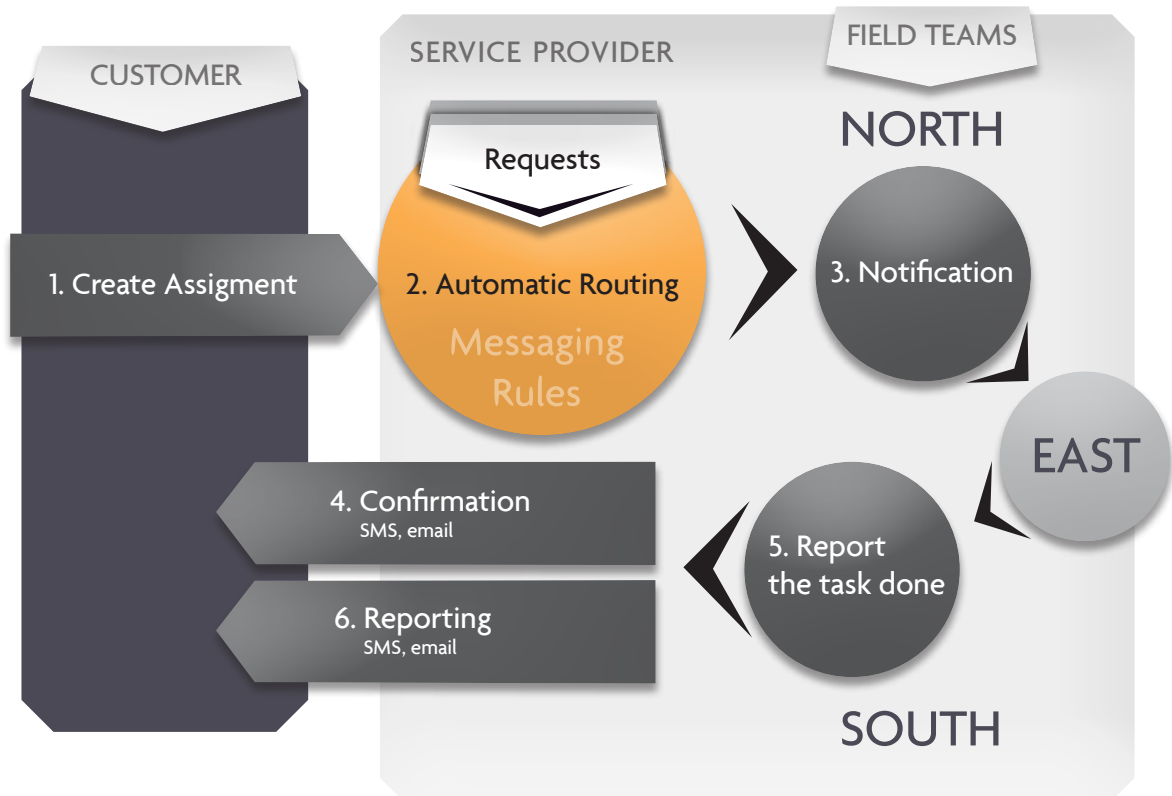
TNIB-M

Network Monitoring
Service Monitoring
Alarm Management
Signal Strength Monitoring
Subscriber Tracking

TETRA NetHelp

Trouble Ticketing
Workforce Management
Reporting





Product code: TNIB-M, TETRA NetHelp
Platforms: Windows 2008 Server, LinuxDatabase: Oracle, Postgres
Networks: Cassidian, Rohill
Terminal: Cassidian (Java), Others (SDS)

DATA APPLICATIONS

TETRA User Organisations have varying needs to access databases, gather information from the field, monitor systems and equipment etc.

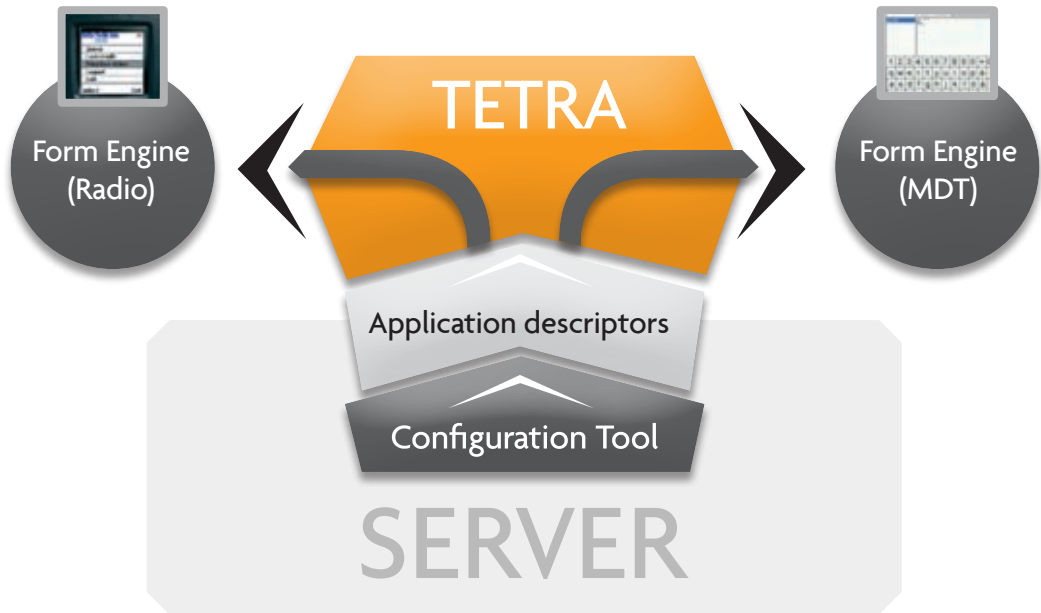
We use our standard gateway products and a customer centric approach to provide reliable data solutions efficiently. As the needs will vary, the flexibility of our tools will make the difference.

- Client or text messaging based field data solutions
(Mentura is a pioneer in utilising Java clients for TETRA needs).
- MDT based thick client solutions for the field force.
- Intelligence data gathering solutions
- Picture transfer solution
- Remote management and telemetry

Mentura partners
with manufactures of appliances
and field equipment to build
working end-to-end solutions.

Product code: SDS Service Gateway
TETRA DOWNLOAD CENTRE
QueryExpress
Platforms: Windows 2008 Server, Linux
Database: Oracle, Postgres
Networks: Cassidian, Rohill, Motorola, Damm
Terminal: Cassidian (Java), Others (SDS)

Dynamic update of the application features
- central control over what is used
Secure OTA update



Application example:

MENTURA QUERYEXPRESS AND CUSTOMER CONFIGURABLE CLIENTS.

1. In our experience the ability to make queries to the organisation's databases is a primary need in most PMR organisations when it comes to using data applications. These applications can be very straight-forward, so we have developed the MENTURA QueryExpress tool for creating organisations data applications without any programming.
2. The QueryExpress consists of an SDS Gateway for message routing, a configurable Java client for the radios and support for basic Over-the-air deployment of Java applications.
3. The customer can create their own data applications by simply configuring the services (defining the user parameters for the query) and the database operation using the QueryExpress GUI. The QueryExpress generates the client configuration and the dynamic Java client generates the actual user interface in the radio.
4. As new services and queries are defined, the radio user can simply refresh the configuration over-the-air, which is much more network friendly than downloading a completely new client.

SERVICES & SUPPORT

” The most important person
in our company: **THE CUSTOMER** ”

Consultancy

Our consultants help you clarify your requirements from business, technical, and operational viewpoint.

Services

We provide turn-key solution deliveries and tailor the project to your needs.

Support

We offer skilled and customer oriented support services via our local partners and our Support Center in Helsinki.

**Mentura provides high-level professional
expertise using a flexible, customer
oriented approach.**

| CODE | PRODUCT NAME | FUNCTION |
|------------|---------------------------------------|---------------------------------------|
| TNIB-04-R | TNIB Reporter | Reporting, analysis |
| TNIB-04-B | TNIB Organisation Billing | Billing |
| TNIB-04-T | TNIB Terminal Manager | Terminal management, provisioning |
| TNIB-04-M | TNIB Network Monitor (Traffic Lite-S) | Monitoring, alarm management |
| TNIB-04-L | TNIB LITE (Network Reporter) | Reporting (small networks) |
| TNIB-04-TT | TNIB Traffic Trace | Subscriber tracking |
| TNIB-04-O | TNIB Optimiser | Analysis, measurements |
| RAIL-02 | TNIB RAIL | Subscriber Management for GSM-R |
| ROCS-03 | ROCS Organisation | Role communications, automatic groups |
| THD-03 | TETRA NetHelp | Trouble Ticketing |
| THTR-04-X | TETRA Tracker | CAD, Incident Management, AVLS |
| SDSGW-03 | SDS Service Gateway | Data query Services |
| TQE-03 | TETRA Query Express | Data queries, instant java client |
| TDC-03 | TETRA Download Centre | Application deployment management |
| FDW-03 | Field Dispatcher Station | Field Command Post equipment |
| IGD-03 | Target Tag System | Intelligence Data gathering solution |

We provide detailed product information on request.
sales@menturagroup.com

We provide you with information about your network.

Mentura Group Ltd is a software and consultancy house based in Helsinki, Finland and Dubai, UAE and we operate globally.

Mentura has extensive experience in telecom systems management, mediation and data management, especially in TETRA.

Mentura's customers include telecom operators, PMR network operators, PMR user organisations and system integrators.



MENTURA GROUP LTD

Lönnrotinkatu 32 A 26 • 00180 Helsinki • Finland

www.menturagroup.com