WMS VERSION

Base
- Dedicated FTP folders
- Data collector
- Instruments
- Chart Manager
- Dashboards
- Basic User Administrator permissions

Advanced
- Dedicated FTP folders
- Data collector
- Instruments
- Chart Manager
- Preset chart
- Dashaboards
- Maps
- Document archivie
- System Monitor
- Advanced User Administrator permissions

ADMIN USER PERMISSION

Base
- Create Dashboards
- Public Dashboards
- Create Tickets
- Observe Tickets
- Apply as default
- Manage Pass Levels

Advanced
- Set Offsets
- Change the constants
- Save spreadsheets
- Forms
- Save Ref Offsets
- Change alarm thresholds
- Suspend alarms
- Set reference date of inclinometers
- Fill in job journal
- Import data

ADVANCED VERSION EXTRA OPTIONS

- **TUNNELS** section.
- Mono-bi-triaxial **VIBROMETRY** section (accelerometers, vibrometers).
- **INCLINOMETERS** section.
- Activation of cameras for traffic control
- Statistical/mathematical functions for data processing/analysis (offset, Noise, Trend Line, Moving Average, Smoothing and Covariate Adjustment).
- Preset Dashboards.
- Advanced reports with layout of texts, images, charts, self-filling tables and automatic sending.
- Synoptic tables, with the display of TBM parameters and related rings.
- Job journal with attachments.
- Customization with insertion of forms and spreadsheets.
- Flexorail (instruments for rail data management).
- Management of external alarm systems (sirens, traffic lights, etc.).
- Instrumentation georeferencing.
- Visualization of images and videos from video surveillance systems.
- Integration with CNR algorithm for cumulative/period calculation in the analysis of rainfall data.

YEARS OF EXPERIENCE AT YOUR SERVICE

FIELD is a service company for geotechnical, civil and structural engineering, that is part of the SISGEO corporate group. In addition to the consolidated supply activities and installation of monitoring systems, FIELD has successfully undertaken the adventure of **managing monitoring data** on behalf of third-party customers **since 2002**, thus starting a continuous research and development activity that has brought the **WMS** to today's reality in continuous evolution.
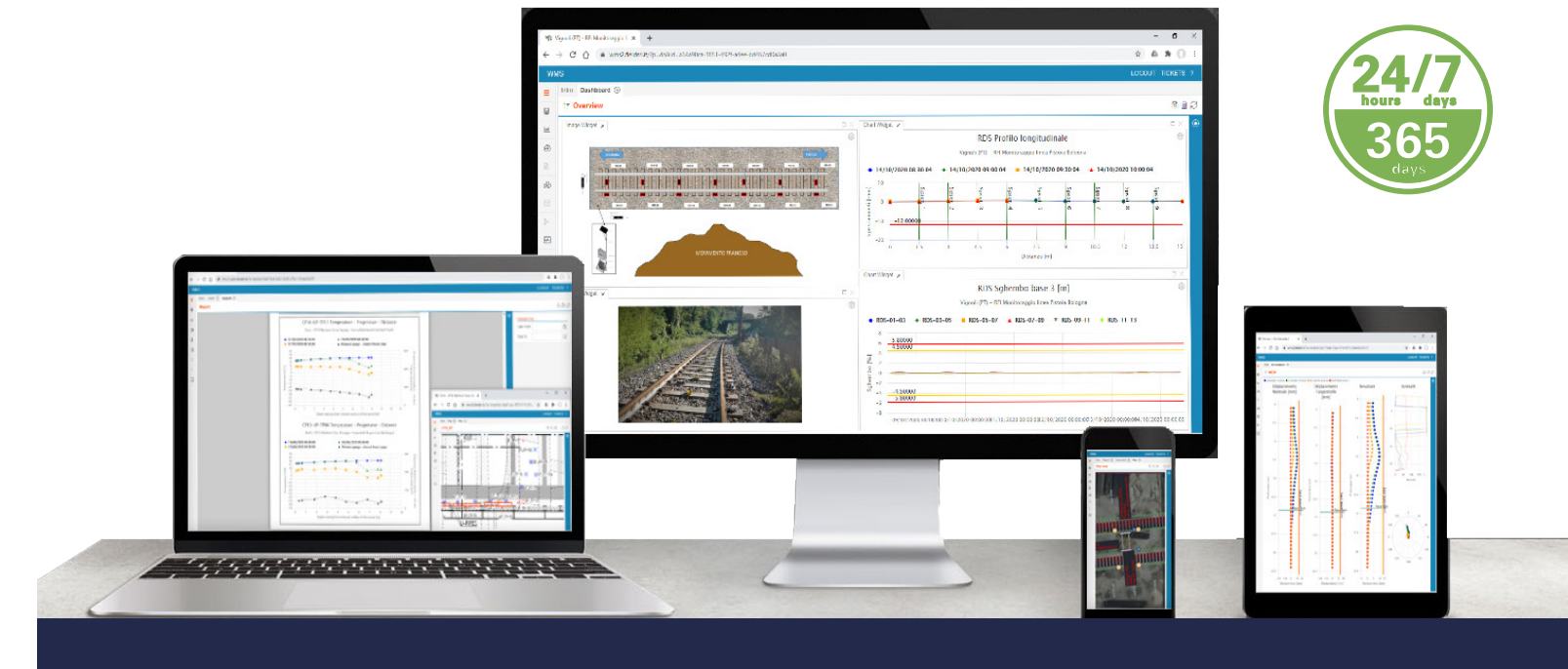

FIELD
MONITORING SYSTEM ENGINEERING
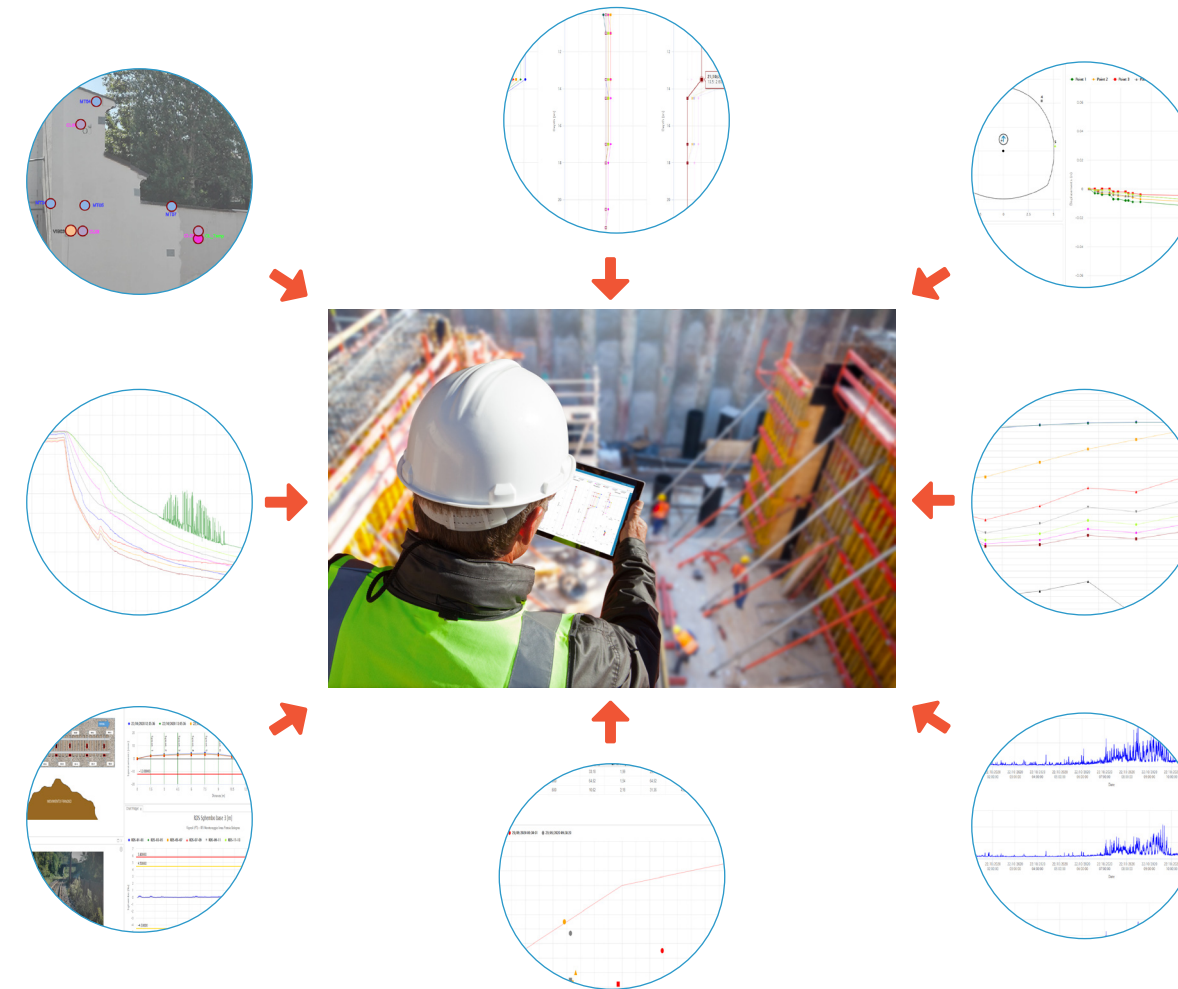
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FIELD
MONITORING SYSTEM ENGINEERING

24/7 hours days
365 days

WEB MONITORING SYSTEM

— MONITORING DATA MANAGEMENT SYSTEM —

DAMS STRUCTURES LANDSLIDES RAILS BRIDGES TUNNELS TBM
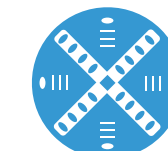
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WHAT IS WMS

WMS is a **software platform** for the management and visualization of data coming from monitoring systems. Through its **WEB pages** the data are available to the Customer at any time, in graphical and tabular format.

WMS is based on a **SQL Server database**, the most popular query language among those used for interacting with the main databases, especially relational ones.

HOW DOES IT WORK

The sensor measurements recorded by the data loggers in the field are sent to GPRS-F / O-LAN-Radio-Satellite technology with **dedicated FTP folders** divided by project.

The same applies for **manual measurements**, where the latter are manually entered into the dedicated FTP folders.

The files are read and processed according to the standards agreed with the customer and entered into the database.

24/7
hours   days
365
days

The system is fully automatic and allows you to view

and obtain updated and visible data 24h/365 days a year

Data are processed and undergoes a **first automatic validation** on the base of parameters set during configuration; then they are divided and sorted into groups according with the customer needs and the consultation areas are finally created.

Manual measurements
(.xlsx, .csv, .xml, etc.)

Server

FTP

SQL

Sensors

Dataloggers

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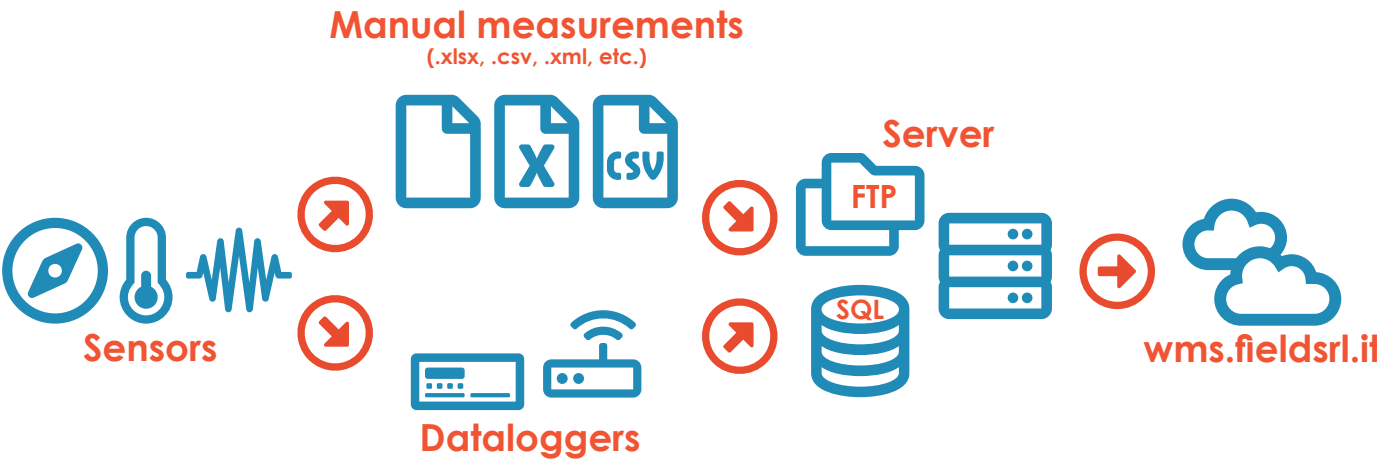
It is possible to set up until f**our types of alarm thresholds** and configure the way to **send alarm messages** via **SMS** and **e-mail** to authorized users when the measurement of an instrument exceeds the thresholds.

HOW TO USE WMS

Hosting solution
Data are sent to servers owned by FIELD and each user accesses their data via WEB browser.
Hardware and WMS maintenance are under FIELD's responsibility.

In house solution
WMS is installed on the Client server and data will flow into the database inside it. The same will always be available via WEB browser.
FIELD takes care of the maintenance of the WMS, while the Customer of the hardware maintenance.

MAIN FUTURE

Charts
Section for viewing of the preset graphs, with the possibility to save them and download the data.

Chart Manager
Section for creating customized charts, with possibility to save them and download data.

Inclinometers
Section for graphing of the inclinometer measurements in manual or automatic mode.

Tunnels
Section for analysis of convergence measure and deformation of the tunnel lining.

Vibrometry
Section for viewing and processing of vibrometric, according to UNI 9916-2004, and accelerometric measurements.

System Monitor
Section for consulting and managing the alarms generated

Maps
Section for interactive synoptic maps with visualization of the monitoring system instrumental network.

Report
TTool for the automatic documents creation in which charts and tables are included.

Dashboard
A user-customizable dashboard to get a personal project layout.

Archive
Section for sharing documents such as images, manuals, PDFs, calibration sheets and site journals.