INSIGHT

Innovative Spatial Solutions

MEDVA GIS

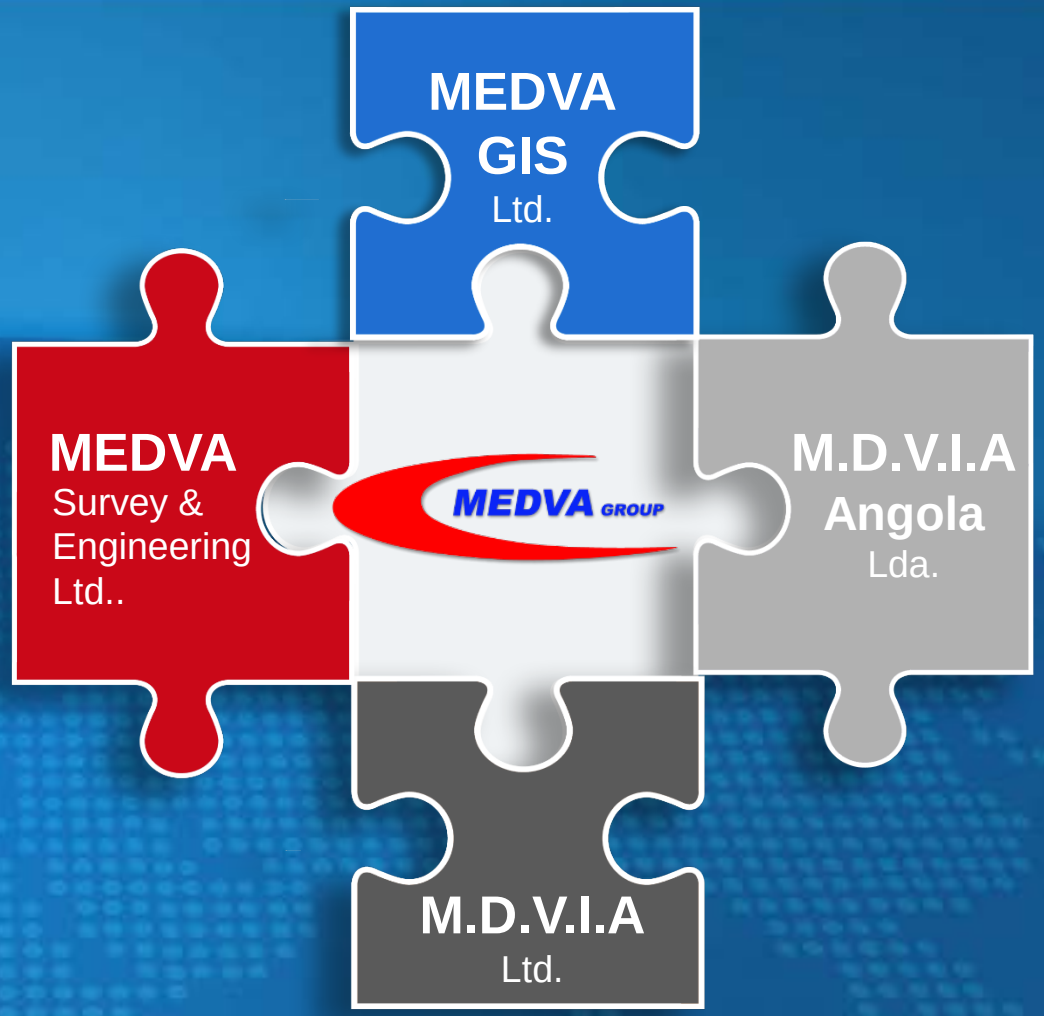
sight

MEDVA GROUP Profile

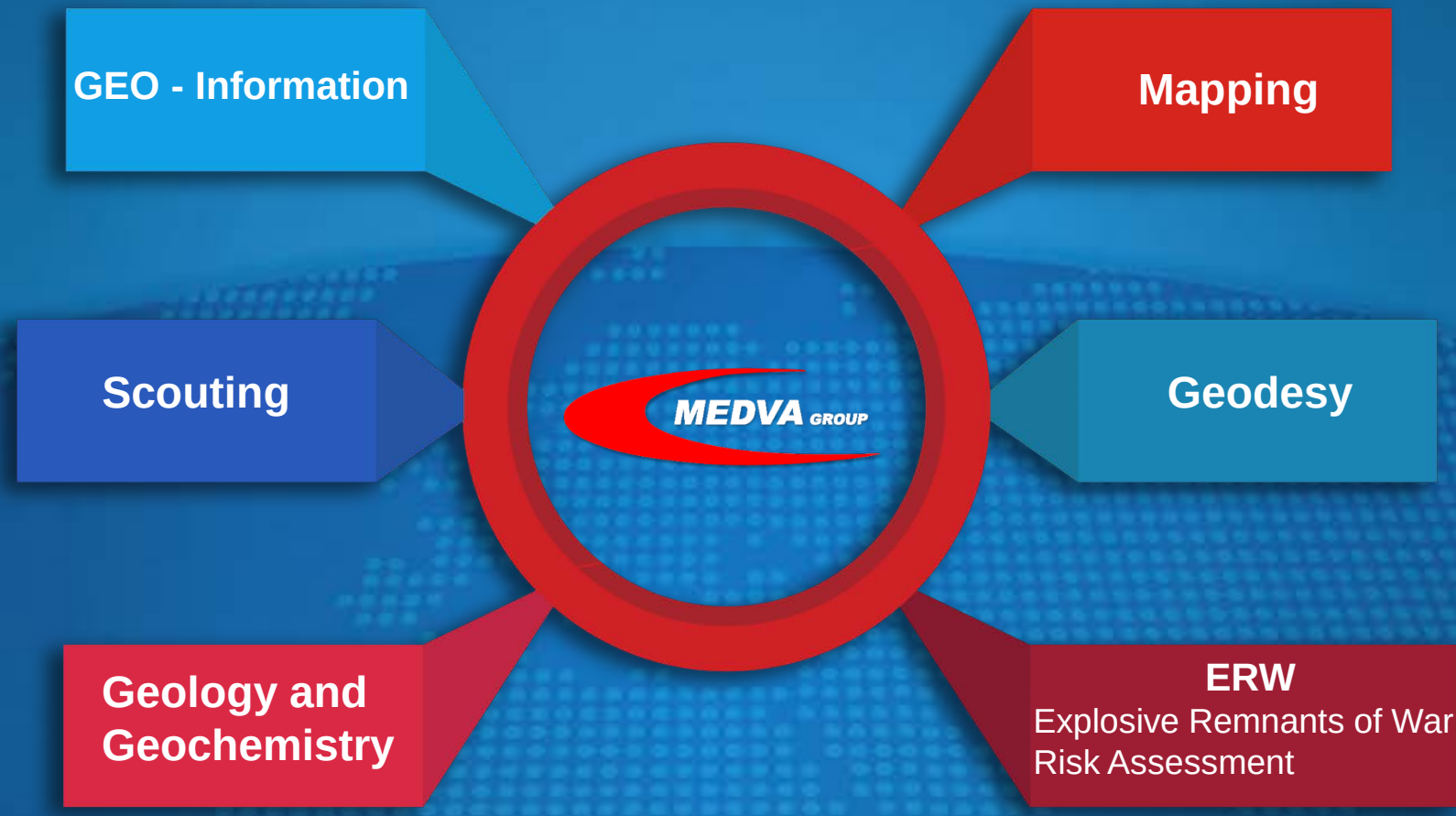
40 Years of Experience

100 Employees

Privately Owned



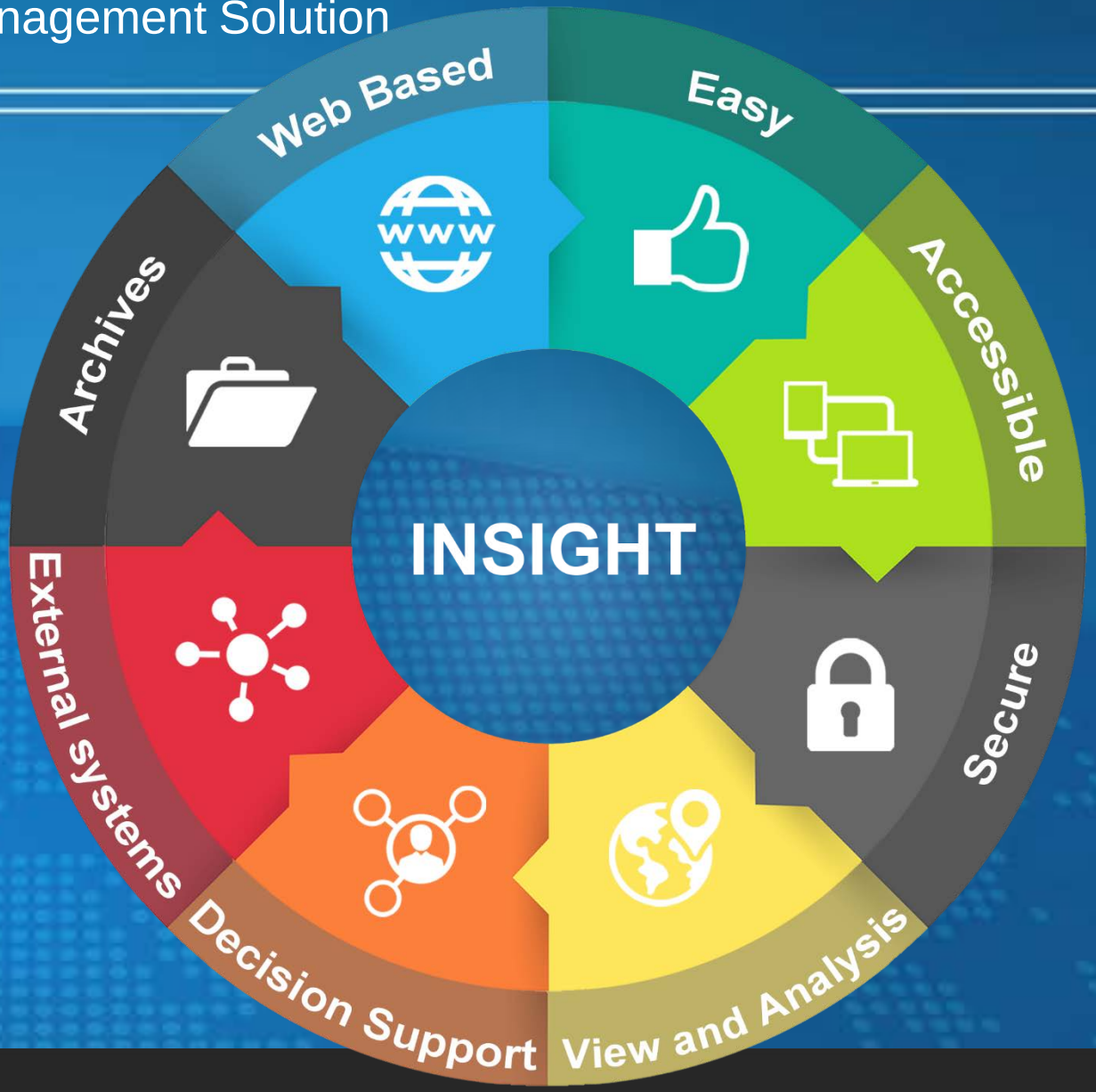
MEDVA GROUP Services



INSIGHT Comprehensive Management Solution

Web Based GIS for Decision Support

Developed by MEDVA GIS



INSIGHT System Characteristics

- Web Based- Access from everywhere
- Easy to use- Fast learning curve
- PC | Tablet | Smartphone
  Online | Offline
- Secured by authorization system
- Access, View & Analyze vector, raster & documents from multiple sources
- Access & Analyze up to date data
- Access data from external providers
- Data archiving throughout the project

INSIGHT System Advantages

- A to Z Centralized Data Base
- Field Plan Visibility
- Integrated Planning Tools
- Field Data Collection
- Task Collaboration
- Decision Support
- Assets Monitoring
- Management of Multiple Projects
- Constant Development
- Flexible for Tailored Solutions

INSIGHT Target Markets

Upstream Oil and Gas Industry

Engineering and Construction

Water Management

Municipalities

Agriculture

INSIGHT Implementations

Management support for natural resources exploration projects

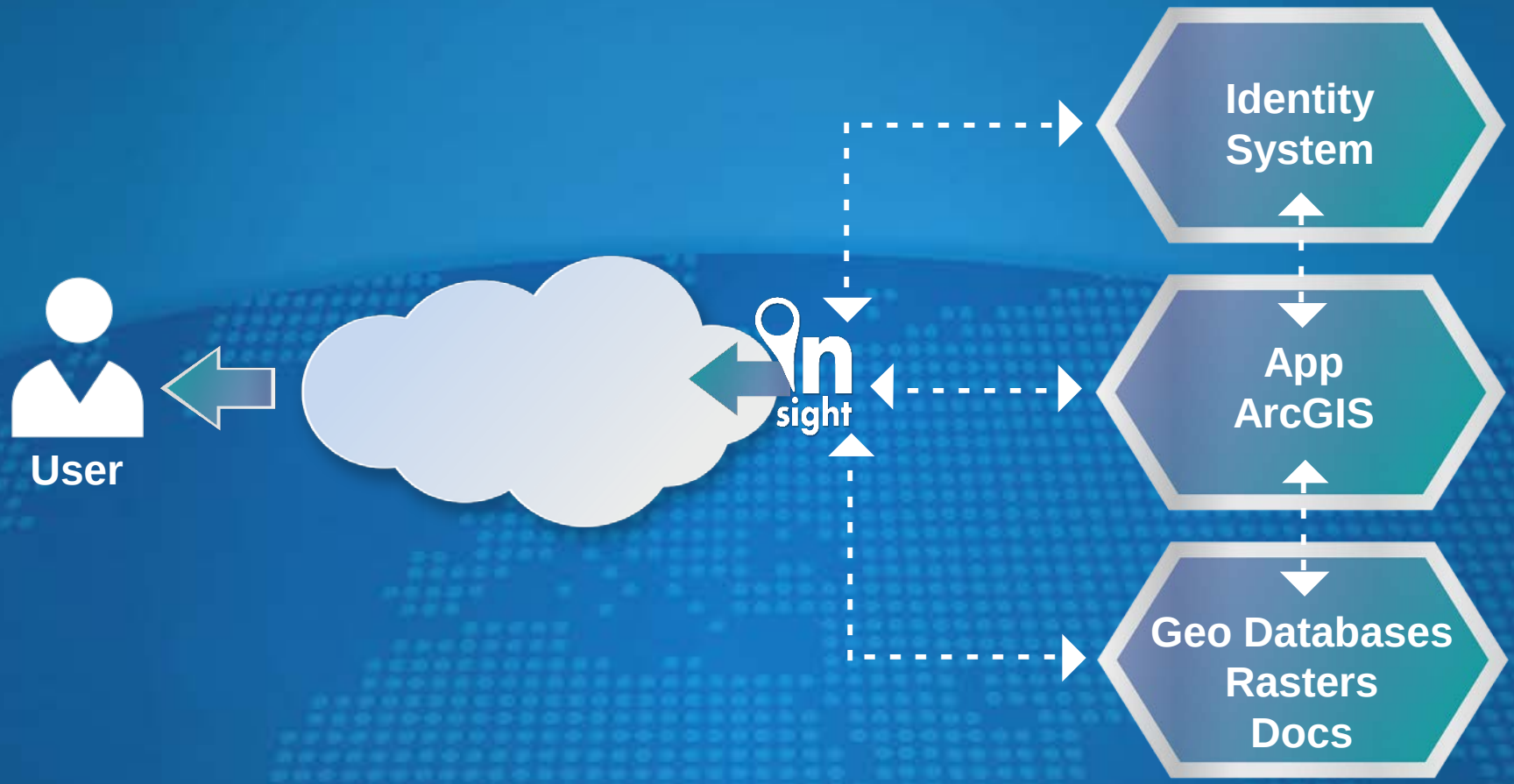
Decision Support System for construction projects

Monitoring and management of water resources

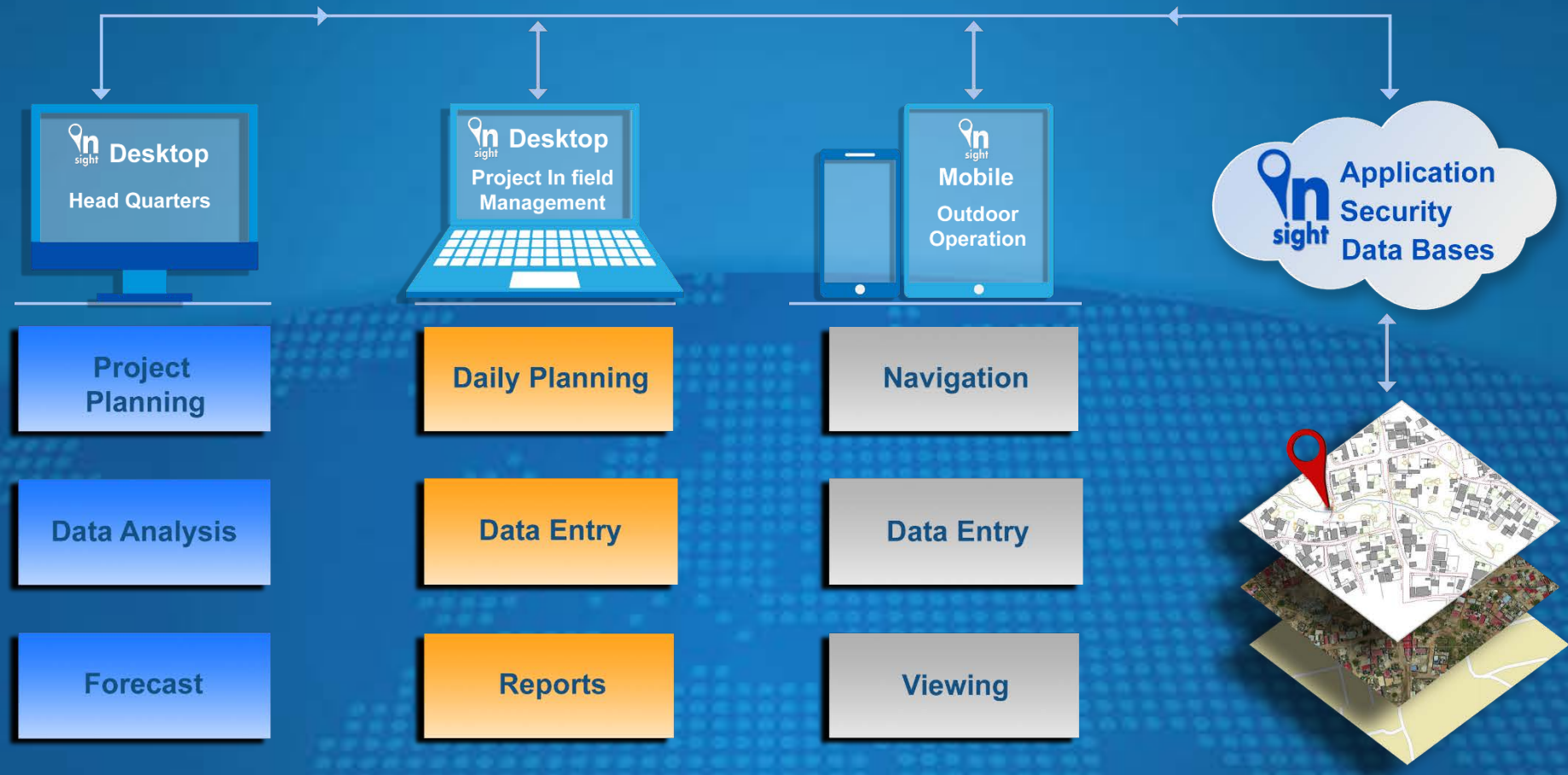
Municipal GIS for cities, towns and small entities

Management of soil, water and other agricultural resources

INSIGHT Structure

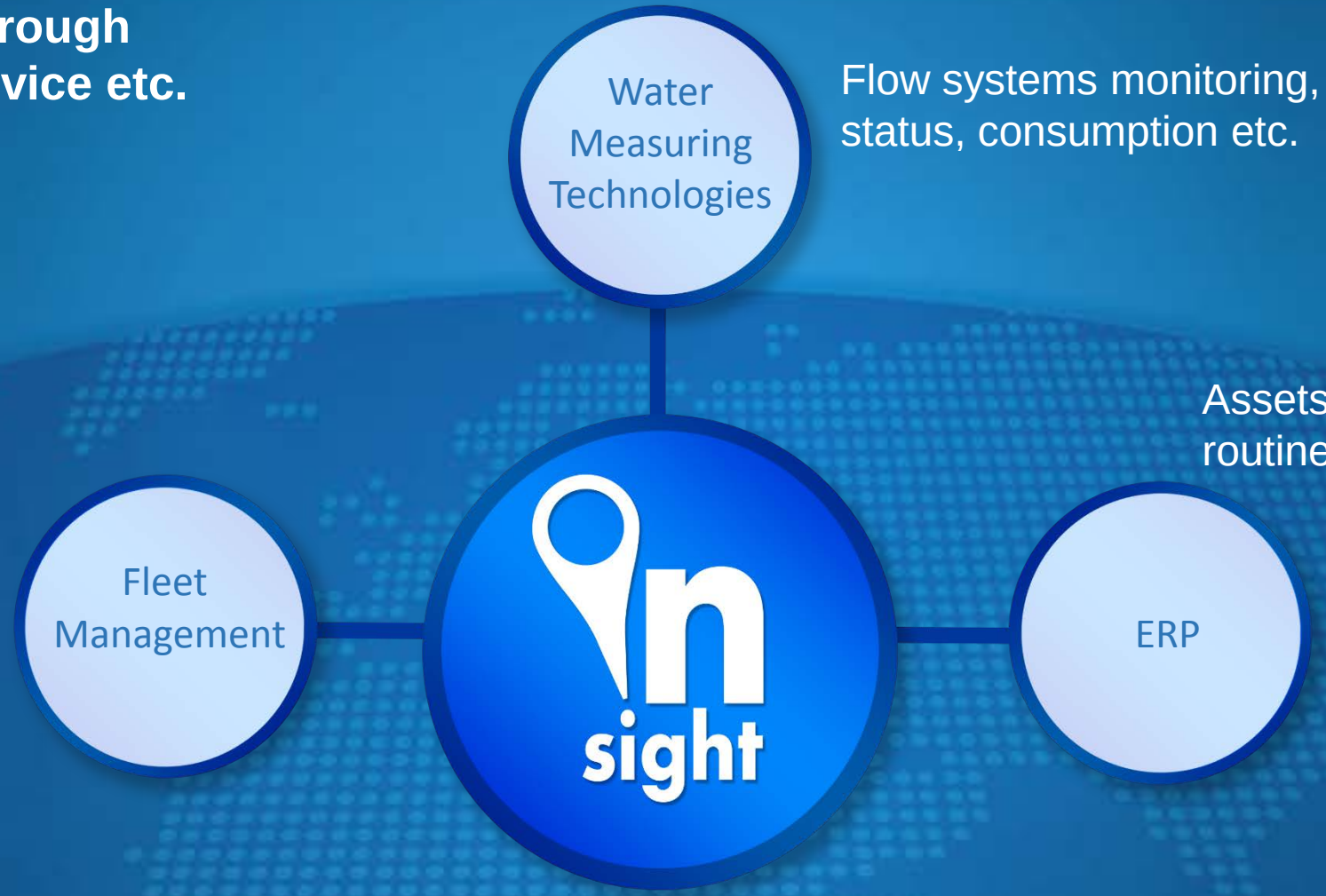


INSIGHT One Solution for All Project Levels and Locations



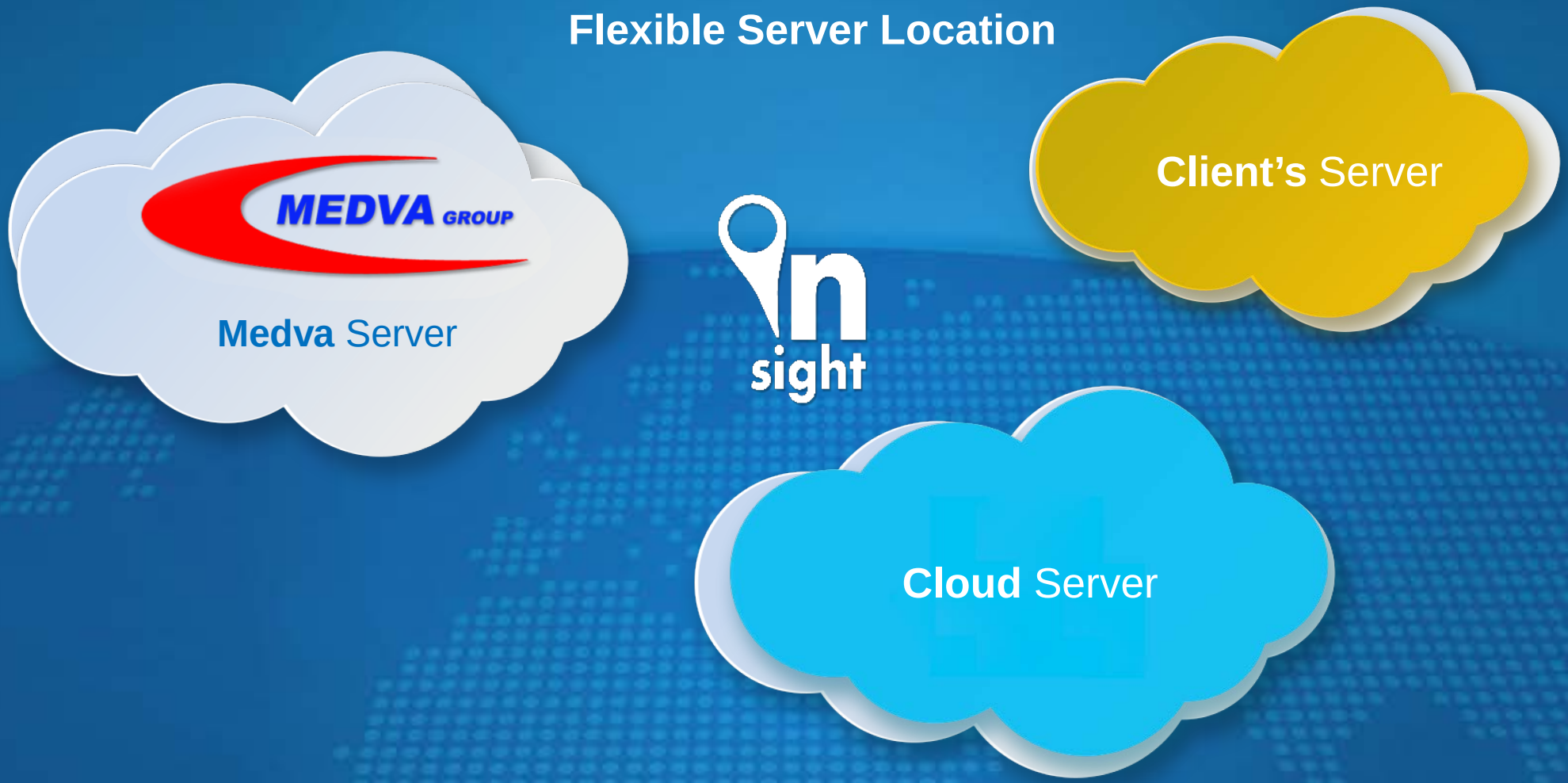
INSIGHT External Systems Interfacing

Interfacing through FTP/ Web Service etc.



INSIGHT Implementation Alternatives

Flexible Server Location



Contact Details

www.medva-group.com

Tel Aviv Office

Address: 3 HaBarzel St.
Tel Aviv 69710 ISRAEL
Phone: +972 3 644 3667

insight@mdvia.net

MEDVA GROUP – Profile

Medva Group offers its customers a variety of services in the fields of GIS, Web Based GIS, Orthophoto, Photogrammetric Mapping, Reconnaissance, ERW Surveying, Geology and Geochemistry, Cadastre and Land Surveying.
The Group was founded on a wide base of expertise, financial strength and a rich professional, commercial and logistic experience. We combine over 40 years of activity with the innovative spirit of both founders and employees.

The companies that form the group (fig. 1) offer high quality services using cutting-edge equipment and software. This wide base allows us to participate in the most complicated and demanding projects worldwide. Medva Group's personnel of 100 members includes Engineers, Land Surveyors, Cartographers, Aerial Photographers, Air-crew, Photogrammetric operators, and GIS experts.

Among our clients: National oil company, Private oil company, Geophysical institutes, Governments, Municipalities, Privately owned constructions companies, Water corporations and more.

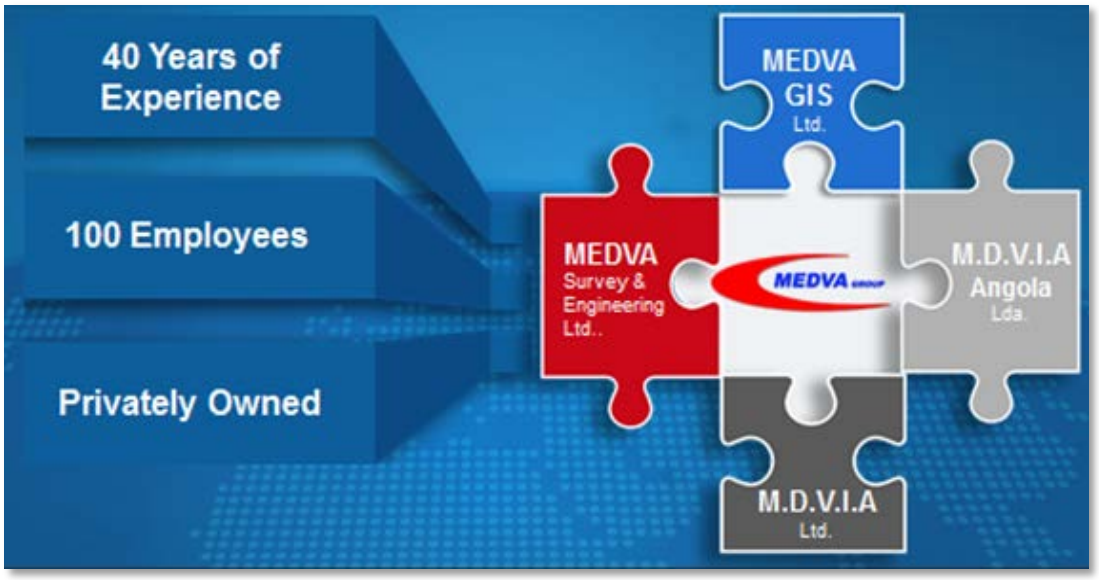


Figure 1: Medva Group Structure

MEDVA GROUP – Services

Medva Group, through its companies, takes advantage of its capabilities and perform various projects world-wide. The group companies create unique solutions in the fields of project management, geo-Information and logistics which assists its clients in effective project management (fig. 2).

Medva Group companies have registered success in projects such as:

- Reconnaissance and ERW risk assessment for 2D and 3D seismic projects in Angola.
- Large scale, high resolution orthophoto production projects of approximately 50,000 km² in Africa.
- Periodic high resolution Orthophoto production for progress tracking in construction projects.
- Construction of geodetic control networks in remote areas in Africa.
- 2D and 3D mapping from various data sources and creation of rich vector geo databases.
- Design and implementation of INSIGHT GIS for seismic projects in Angola.
- Design and implementation of INSIGHT GIS including CAD based data for large scale construction projects.
- Design and implementation of INSIGHT GIS in the domain of water management corporations.
- Design and implementation of INSIGHT GIS for medium and small municipal entities.
- Full service of line clearing and demining for large scale seismic projects.

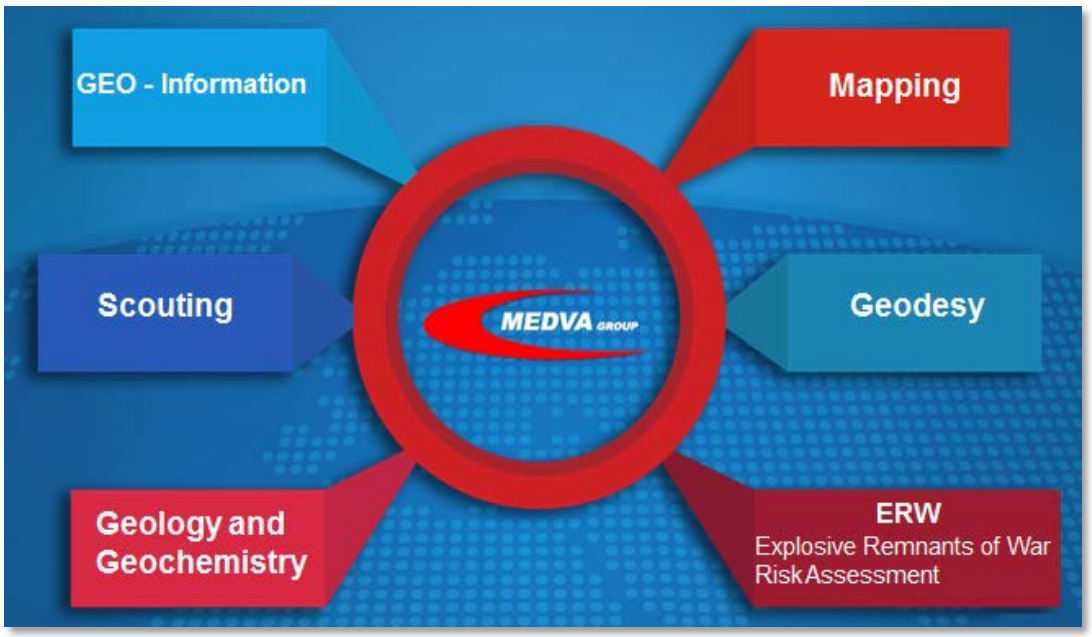


Figure 2: Medva Group services

INSIGHT GIS – Geographic Decision Support System

General

INSIGHT GIS is a web based, geographical management system designed to capture, store, manipulate, analyse, manage and present all types of geographically referenced data. INSIGHT GIS merges cartography, statistical analysis and database technology (fig. 3). INSIGHT GIS was designed and implemented as a Decision Support System for managers of various disciplines.
INSIGHT GIS is cross platform application so it can be operated on virtually any device: PCs, IoS devices (IPhone), Android devices etc. INSIGHT GIS can be used in the office and in the field and it has an offline application.

Its security system can handle many users with different viewing and editing permissions and enables access to any permitted user with an internet connection and browser.

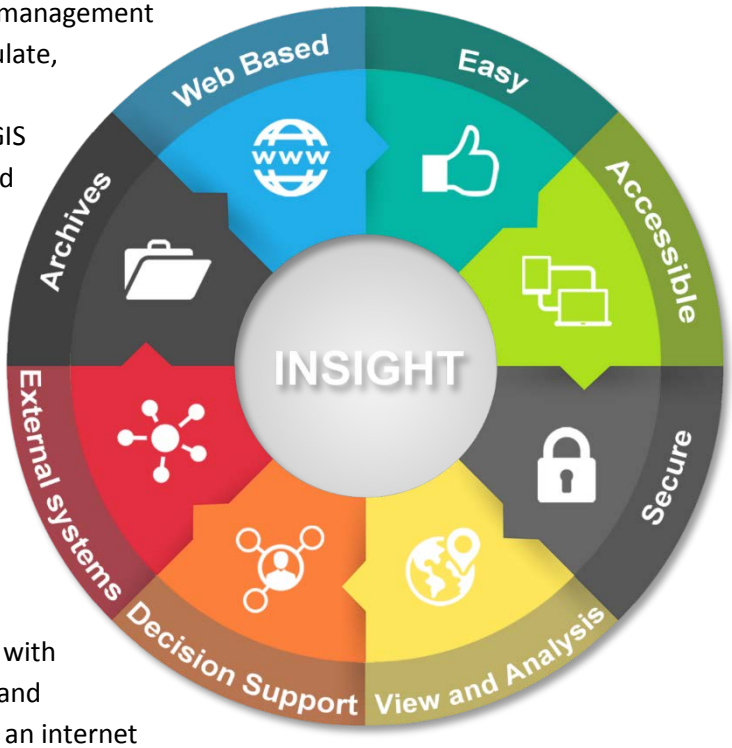


Figure 3: INSIGHT GIS key characteristics

Technology

The system takes advantage of the most modern tools: Professional web farms, Java/ HTML5, SQL Server data bases, ESRI based technology and more.
For remote areas with limited internet connectivity INSIGHT GIS has an offline solution.

INSIGHT GIS was developed as a shelf application product that can be easily modified and adapted to different organizations.

The system is self-developed and maintained by Medva GIS.

INSIGHT GIS – Comprehensive System across all users, platforms and Locations

Figure 4 describes the general concept, structure and data flow of INSIGHT GIS for project management. All project data, preliminary and on- going data is stored in centralized data bases hence everyone view and analyze the same data. Since Insight GIS is Java/HTML5 based it can be accessed from any device whatever operating system it runs. The system provide tools for task planning, data entry, analysis, collaboration and more in one place. Although INSIGHT GIS is dependent on internet connection, we have an offline application that can be used in remote areas with poor connectivity.

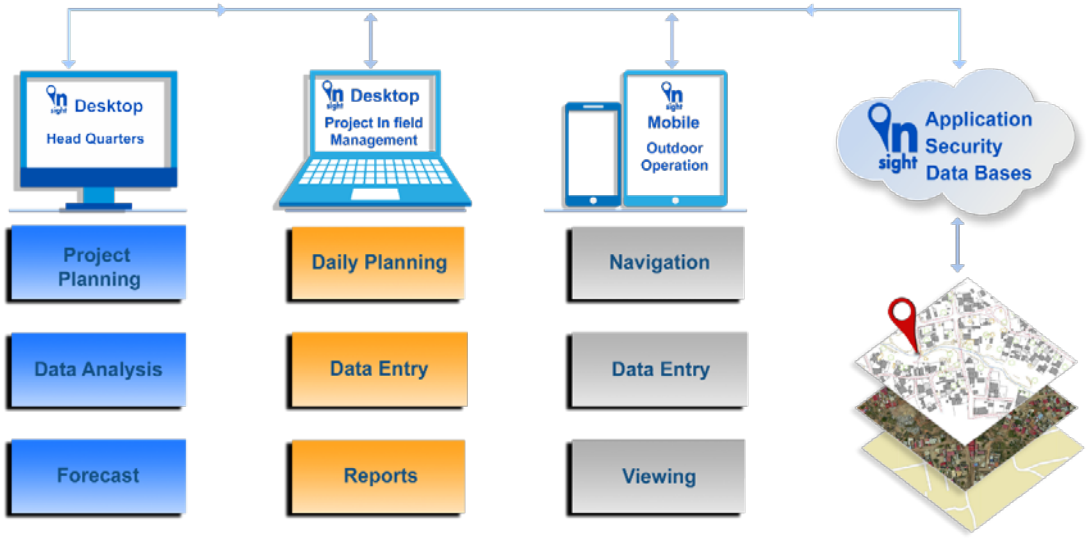


Figure 4: One data base and application for all user levels, everywhere

INSIGHT GIS – Implementations

Project Management

Data Access and Usage

INSIGHT GIS enables users to access project data, update data and analyze it, create and archive reports and more. For example, in an exploration project in Africa: users can access spatial and other data (fig. 5): Raster data (Orthophoto, Relief map, Topographic map etc.), vector data (exploration and thematic data, ERW data, population and logistic data etc.) and non geographic data (photos, reports, video clips etc.). Data can be viewed, analyzed and downloaded according to the user's permissions.

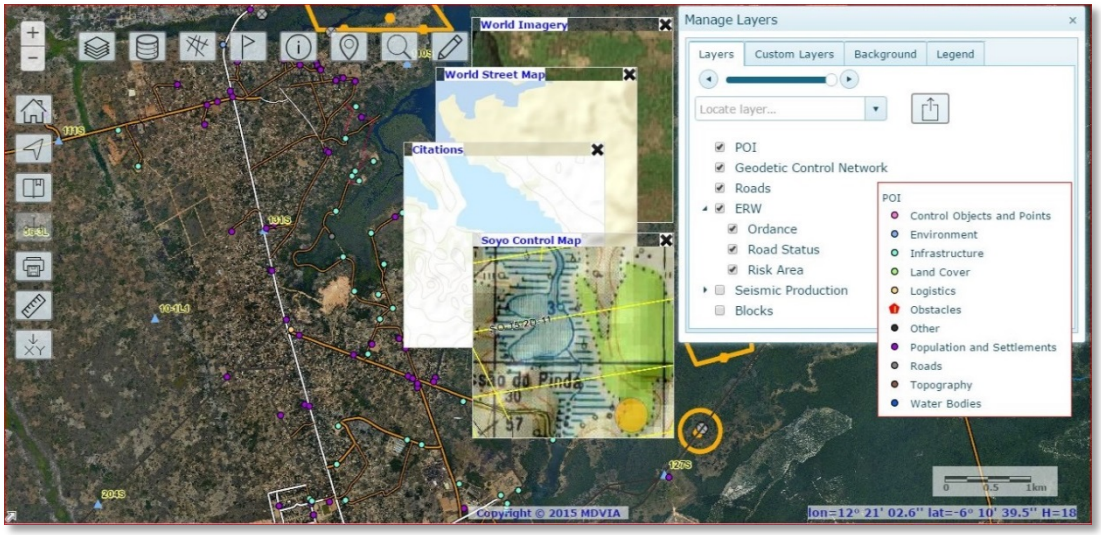


Figure 5: Raster and vector data in INSIGHT GIS

Reports and Archive

INSIGHT GIS includes embedded reports generator and automatically archives all daily reports generated by the system. Seismic projects can greatly benefit from capabilities such as constant progress tracking, reporting and analysis abilities. As such, INSIGHT GIS includes report generation tools and an archive system. The reports generator is partially auto-formatted, namely, it calculates predefined values (daily/weekly progress; Total progress of all project etc.) and allow the user to add and edit parts of the generated report. In addition, users may upload files (reports, data tables, maps etc.) to the archive for the benefit of all project members (fig. 6).

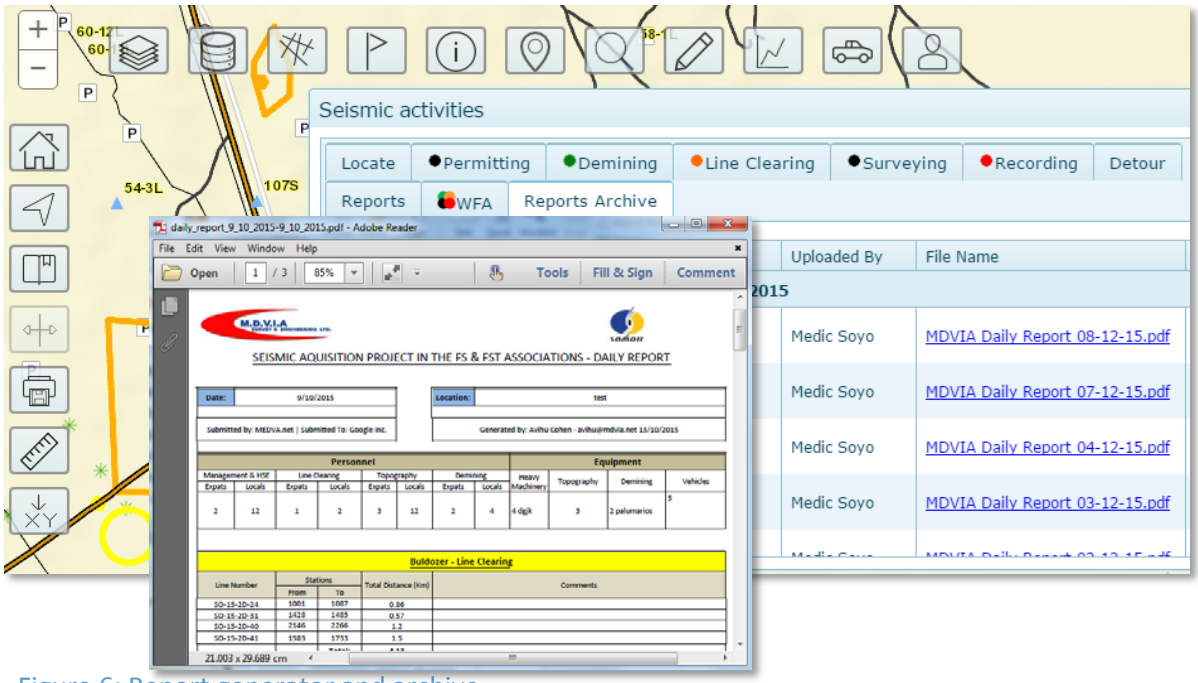


Figure 6: Report generator and archive

Project Progress and Planning Tools

INSIGHT GIS contains various monitoring and analysis tools. INSIGHT GIS contains advanced project progress and planning tools to help allocate resources according to project real progress and project needs (fig. 7). Activities progress can be viewed and analyzed separately to facilitate comprehension of single activity needs. Since sometimes activities are interdependent, two or more activities can be displayed together. Furthermore, each activity can be analyzed and forecasted with standby values to reflect realistic activity.

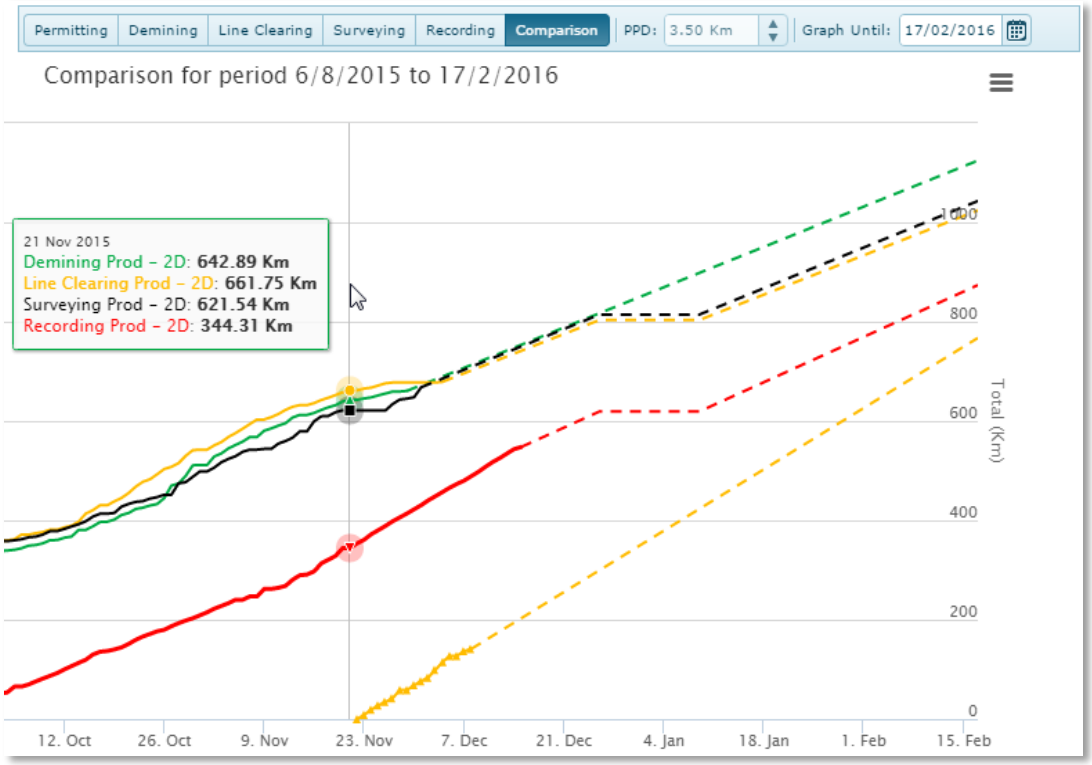


Figure 7: Project activities and forecast.

Engineering and Construction

In a large scale road construction engineers use INSIGHT GIS to view and analyze existing and planned infrastructures and overlay the planned position of the road on a background of high resolution (10 cm gsd) orthophoto (fig. 8). To track terrain changes and evaluate cut & fill activities users take advantage of detailed precise DTMs to visualize changes (fig. 9).

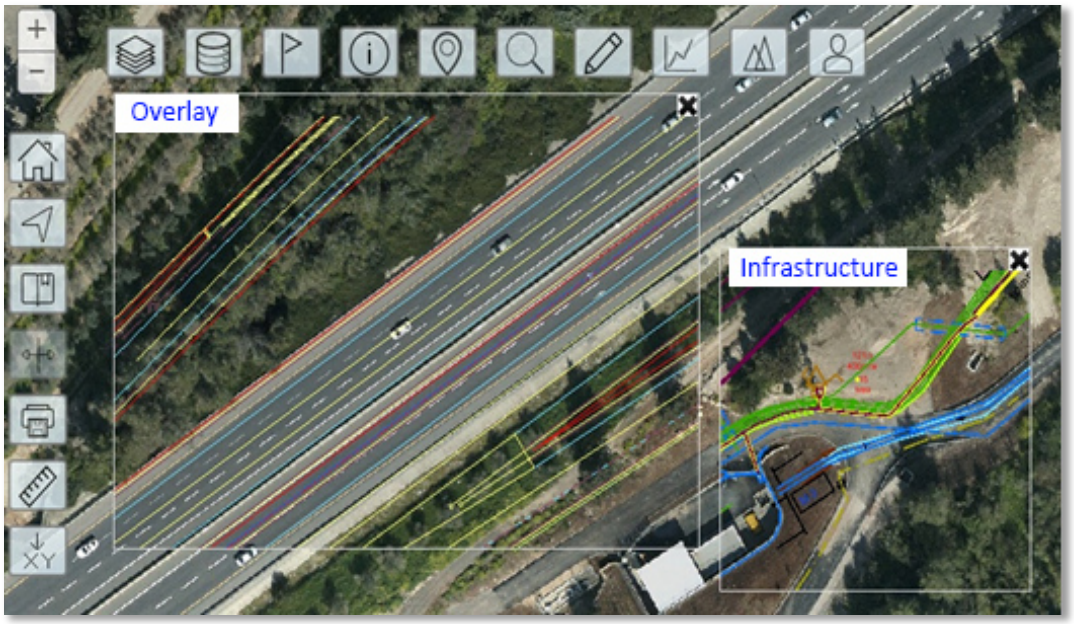


Figure 8: Overlay of existing and planned infrastructure and entities for better understanding of ongoing and planned tasks.

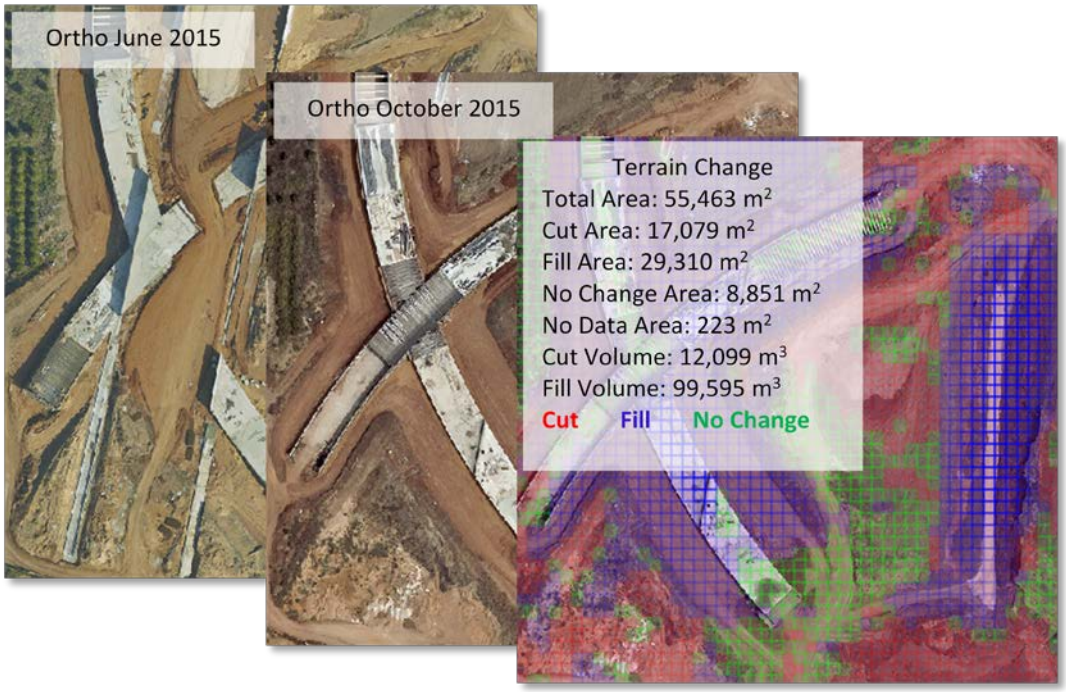


Figure 9: Terrain change monitoring and stock calculation through high resolution orthophoto and detailed DTM.

Water Management

Organizations that manage large quantities of water face water losses that can mount to as high as 30% and even more. To cope with such phenomena and identify water loss as soon as it happens, real time monitoring is needed. We developed a solution that combines INSIGHT GIS with water monitoring systems.

For a company that manages 12,000,000 m^3/year we implemented a solution that combines geo visualization of water type and water meter status. In addition the user can filter the data according to various properties (fig. 10).

Readings are frequently accepted from a third party, water monitoring system, where INSIGHT GIS visualize the data in a smart manner. For advanced data analysis and tabular layout, data can be downloaded as an Excel file.

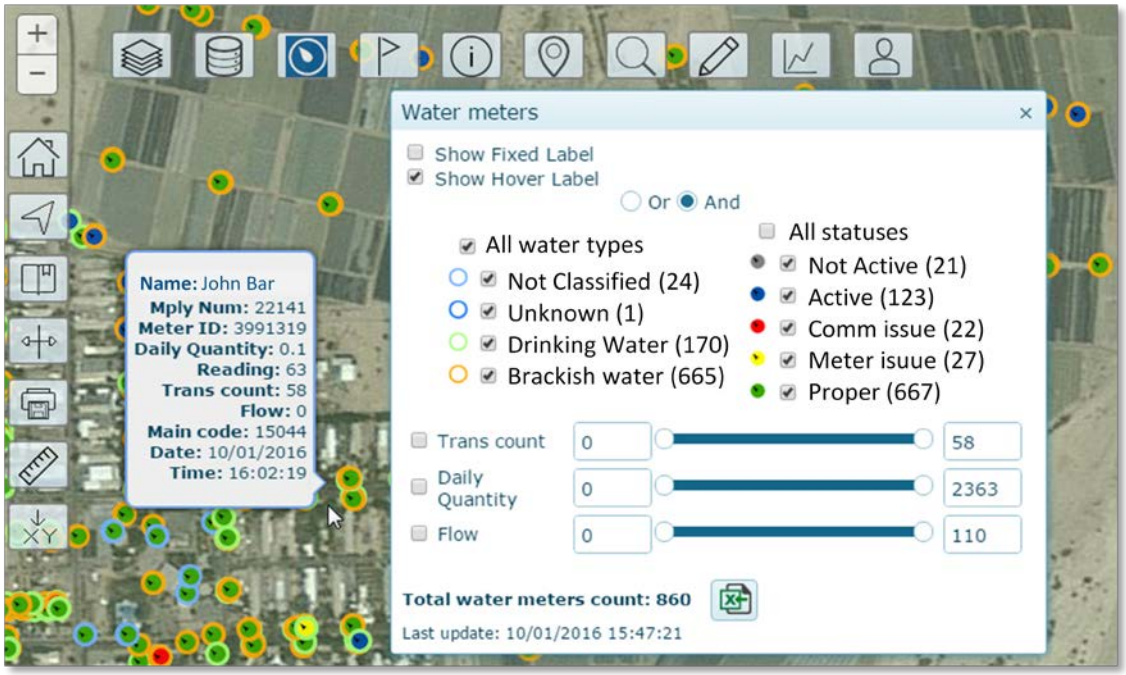


Figure 10: Spatial visualization of water meters- water types and real time consumption and status.

Municipal Management

INSIGHT GIS can serve as a main municipal GIS for cities, towns and even small settlements. The system can use data from various sources e.g. scanned maps, CAD drawings, GIS files. It enables users to access municipal data of many types like background mapping, planimetric mapping, constantly updated data etc. (fig. 11). In addition INSIGHT GIS contain methods to collect municipal geographic data in the office and by field workers (fig. 12).

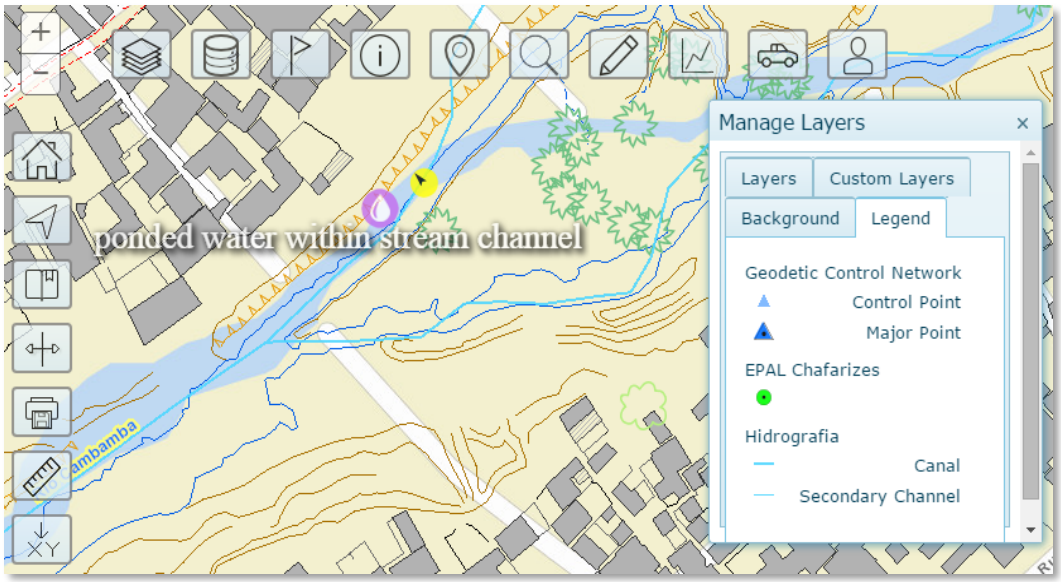


Figure 11: Municipal general and detailed data.

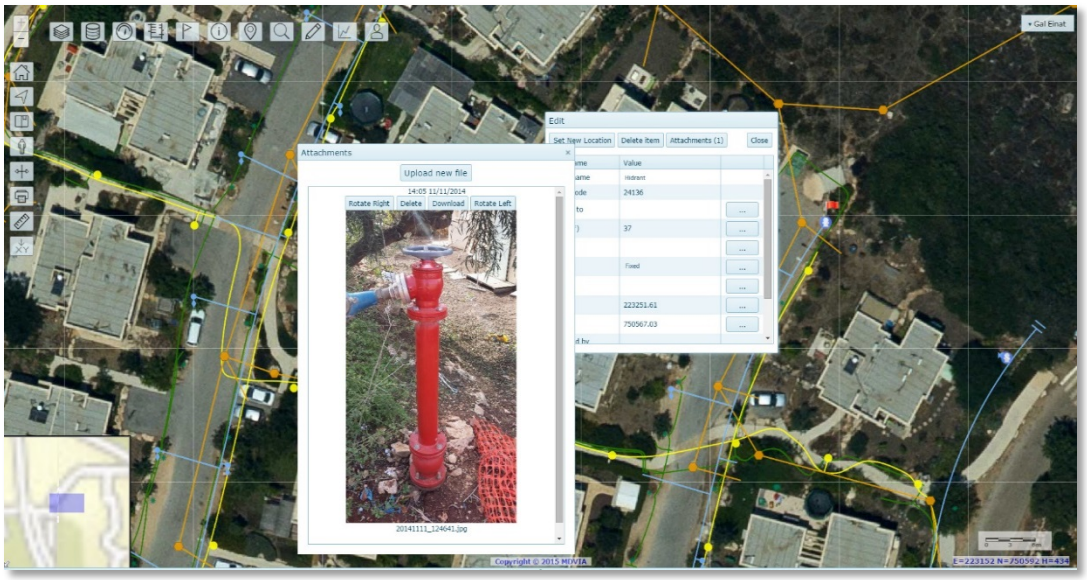


Figure 12: Municipal infrastructure data collection

Data Collection and Entry

INSIGHT GIS enables its users to update data of a project at the office or in the field (fig. 13, 14). Field users can upload photos and files using various platforms such as Laptop, Notepad or Mobile Phones. To make data entry easy and prevent data entry errors, INSIGHT GIS provides its users with formal data entry options. In an ERW (Explosive Remnants of War) project data collection is done with predefined forms (fig. 13).

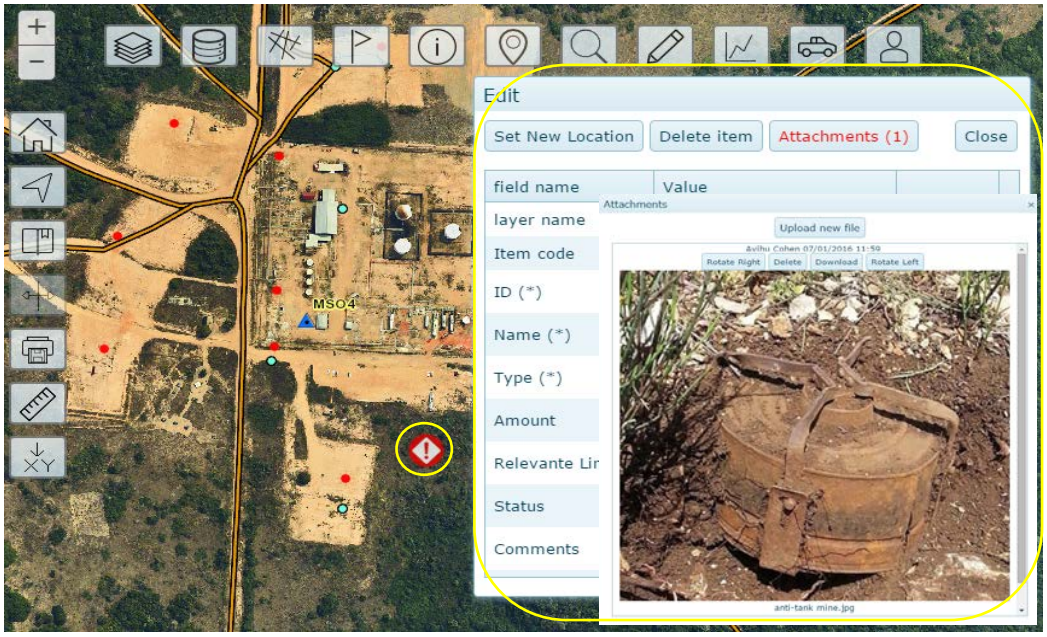


Figure 13: Data entry through forms and predefined files.

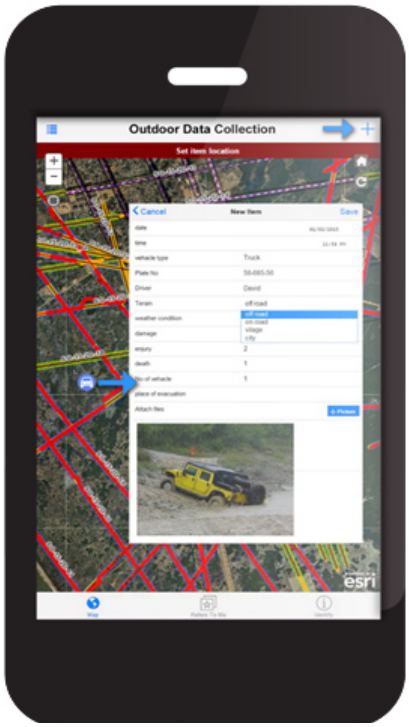


Figure 14: Data collection in the field- passability point of interest was recorded in an exploration project in Africa

Other System Tools

INSIGHT GIS includes further options and tools:

- Advanced drawing tools
- DTM analysis tools
- Measuring tools
- Printing and export tools
- Real-time asset monitoring
- Search tools
- Spatial data file export

  And more...

For more information please contact us:

Tel Aviv Office
Medva GIS

Address: 3 HaBarzel St.
Tel Aviv 69710 ISRAEL

Phone: +972 3 644 3667
insight@mdvia.net

www.medva-group.com