

Militaries around the world have recognized that harnessing technology during warfare and strategic or tactical operations enables force multipliers that will enable them to achieve their objectives. Modern day warfare, therefore is network centric with precision sensors, soldier and battlefield management systems and sophisticated communications.

MicroGenesis in association with DRDO has transformed the business to address the Core Military Solutions using INDIGIS technology platform developed indigenously under "Make in India" program. INDIGIS technology is available in the form of Software Development Kit (SDK) making it available to the application developers through 500+ Application Programmer Interface (API) and available in both Linux, Windows and Android platform.

In addition, MicroGenesis has **deep domain knowledge and in-house talent** having hands-on experience in leading technology and ensure that the military has access to state-of-the-art technology that can be customized and deployed for specific programs.

INDIGIS MIL Suite offers powerful, customized tools for field formations supporting both 2D and 3D Visualization and Analysis. The Solution addresses requirements of OPs, Int & OPs Logistic in a C2, C3, TacC3I environment. The Solutions has been implemented to support multiple users in Joint Operations. Seamless Integration of data from multiple sources for the Ops Briefing Room.

INDIGIS MIL Suite is positioned in the traditional business of providing geospatial-based solutions to the military, DRDO has utilized its deep understanding of Defense workflows to serve the requirements of much larger programs. To name a few, Artillery Command Control & Communication System (ACCCS) Command Information & Decision Support System (CIDSS),

Battlefield Management Systems (BMS). A common factor of all these Operations Information System (OIS) is terrain information which is available in digital form as spatial information through GIS.

INDIGIS Military Suite is a powerful & ready to deploy GeoSpatial solutions for the Defence Users, to access, display, analyse, and present spatial data. The Solutions assists the Commanders in assessing offensive and defensive situations for timely planning and effective decision-making. A full suite of powerful analysis tools to support 2D analysis and 3D analysis have been developed to meet the requirements of the field formations.



Key Features

- Core GIS MIL Solution deployable on Linux / Windows OS
- Data Preparation Seamlessly integrates GIS/map data from various military mapping and imaging agencies received in different file formats
- Offers 136 different end user military functions
- Available in the form of SDK having 500 API
- Customized tools for creation of military grids, Geo-referencing and display of map board
- Quickly and easily create operational Map Boards of areas of interest
- · Powerful inbuilt library of military symbols and military grid to create user defined overlays for operations, Intelligence & Logistics
- Enables the user to read data from a digital compass
- Computing Radio LOS between two points
- Dynamic view of UAV video along with foot print of the UAV on the Map window
- · Large scale real time visualization of sensors data, integration with GPS, INS, RADAR, LiDAR, SONAR and UAV





- Supports three levels of coordinate systems Storage Coordinate System, Warehouse Coordinate System & Map Window Coordinate system
- One click simple to use set of tools to display & update the battlefield scenario
- · Decisions support aids for planning patrols, suitable helipad sites, camping grounds, deployment of Artillery Guns
- Decision Support tools for planning operations- identifications of routes for logistics management, site suitability analysis etc
- The solution provides tools for advanced terrain analysis functions such as generating perspective views, computing minimum & maximum elevation, generation of color-coded elevation & performing line of sight analysis
- · Assists in undertaking threat analysis and operational briefing of Commanders
- Visualize 3D Fly-through models of areas beyond visual range
- · Communication and networking, sensor systems, operational information systems (intelligence, C2, Wargaming, Platform integration)
- · Connectivity and interoperability between mission capabilities on a single C4I framework

Benefits

- Seamless visualization of land and sea maps (Topo-bathymetry surface unified, projection and coordinate system) for amphibious
 operation planning
- Support for various Military maps in use by Indian Armed Forces
- Assists in quick planning of offensive / defensive operations
- Enables creation of tactical overlays for dissemination of operational information
- Simple to use ready to deploy solution for the Field Formations & Units
- · Enables quick creation of tactical overlays thus enabling accurate & quick dissemination of operational information
- · Planning movements of men and materials during operational mobilization is quick & efficient using Road Network Analysis tools
- · Arty Commanders can quickly deploy weaponry for neutralization of targets
- Generation of a 3D Terrain Model of the displayed map for launching missions
- Decision support to aid determination of suitable areas for helipad and other tactical installations & tools Inter visibility analysis
- · Display visibility fan for deployment of observation posts
- Military standardization (as per Indian Military Standards) and technology standards (OGC,IP, J2EE, XML and web services)



The result:

Shared awareness, collaborative fighting, and synchronized effects on the digital battle space thus providing a Common platform addressing various hierarchical levels of the chain of Command.

In addition, MicroGenesis has custom designed to meet the needs for disaster management, Border guarding and homeland security forces and other environs.

