



Virtuematic Services

Proven expertise to help leaders design, build, and deliver geospatial solutions for the cognitive era.

[Virtuematic.com](https://virtuematic.com)

Table of Contents

01 Company Overview

- About Us
- Our Values

03 Services

- Our Expertise
- Changing Technology

06 Mobile LiDAR

- Services
- Application

08 2D Drawing

- Scan to 2D

10 GIS

- Survey
- Database
- Mapping

02 Industries

- Geospatial technology

04 Aerial LiDAR

- LiDAR
- Aerial LiDAR

07 BIM

- Scan to BIM
- 3D CAD

09 UAV

- Mining
- Mapping

11 Contact Us





Smarter Technology For a Smarter Planet

Fueled by expertise, Built with Quality, Ready for work

Who We Are?

At its core, Virtuematic is a geospatial and project management company that supports the professional needs of those responsible for creating and managing the world's infrastructure, including roadways, bridges, airports, skyscrapers, industrial and power plants as well as architecture and utility networks.

Virtuematic delivers solutions for the entire lifecycle of the infrastructure asset tailored to the needs of the various professions the engineers, architects, planners, contractors, fabricators, IT managers, operators and maintenance engineers who will work on and work with that asset over its lifetime. Our services are designed to ensure that information flows between workflow processes and project team members to enable interoperability and collaboration.

The values we live by

- Client Value
- Leadership by Examples
- Fairness
- Excellence




Across Industries

We serve professionals in many varied industries, from the surveyor measuring land boundaries to the archaeologist preserving historical sites. As an owner-operator, your infrastructure is mission critical to the success of your enterprise.

You must maintain or improve built assets, as well as construct new assets. You must address the full lifecycle of your infrastructure, from planning to design through construction and into operations.

You must execute capital projects, working with project delivery contracting firms. In operations, you need to ensure effective coordination between your engineering and maintenance processes.

Virtuematic understands your challenges and offers a complete portfolio to help you meet these requirements. Our multi-discipline design and analysis solutions span all major architectural, engineering, and geospatial disciplines

- 
- **Architecture**
 - **Mining**
 - **Aviation**
 - **Transportation**
 - **Oil and Gas**
 - **Energy**
 - **Infrastructure**



Spatial Intelligence

We are always on the lookout for new markets, technologies, services, and projects. As technology evolves, we provide cutting-edge technologies and domain expertise to assist our clients in achieving their objectives. We offer our client an integrated approach to their project by combining different technologies resulting in the best possible outcome, whether this includes data collection, data management, or providing additional data services, based on our strong presence in various industries and proven track record with the latest location technology.



Our Services

Our offers range from simple building drawings to complex VR ready projects & data for autonomous driving where we take ownership and responsibility for delivering quality data on time and on your budget. Our outsourcing led services can help you define the right strategies for your business. You could defer capital spending, reduce risk, reduce time-to-value for business projects and ease staffing pressures – freeing up resources and money for projects that drive longer- term business value.

Change is constant – and Virtuematic services can help you to adapt to those changes.

Change is Constant

Everything is always changing in the geospatial world, but today change is faster and more radical than ever. Increasing software power, new technology, unpredicted collaboration capabilities, emerging technologies such as VR and AR – a new phase of explosive growth is under way.

As companies explore the new possibility, improve customer experience, rethink strategies and make new investments for growth, they also have to focus on cutting spending, preserving capital and addressing quality issues and compliance requirements.

Setting quality standards is what the Virtuematic vision of spatial thinking is all about. Virtuematic services offer a comprehensive, world-leading portfolio of assessment, outsourcing, infrastructure and asset integration services designed to help creating strategies in sustaining public infrastructure assets such as water treatment facilities, sewer lines, roads, utility grids, bridges, aviation and railways.



BIM & 2D

3D models and 2D drawings for renovation, design, and construction projects.

LiDAR

LiDAR solutions provide highly accurate and detailed 3D data of the environment for various applications such as mapping, surveying, and monitoring.

UAV

Aerial data and imagery for various applications such as surveying, mapping, inspection, and monitoring.

GIS

GIS services can be used in a wide range of applications, including urban planning, environmental management, resource allocation, and emergency response.

Application

Designing and creating software applications that integrate geographic information and analysis tools for various industries and applications.



LiDAR Mapping

Today's important decisions about city expansions, emergency preparedness, utilities and asset management, and other long-range planning activities often require a comprehensive look at not only the specific area of concern, but also adjacent areas to properly evaluate impacts.

Virtuematic services enables business and government in understanding of the physical landscape for planning and infrastructure development, and the results bring significant long-term impacts.

Virtuematic offers complete suite of LIDAR processing services. Our solutions find wide acceptance across multiple industries and are focused on Transportation, Oceanography, Forestry, Geological mapping, land administration, utilities and location based services.



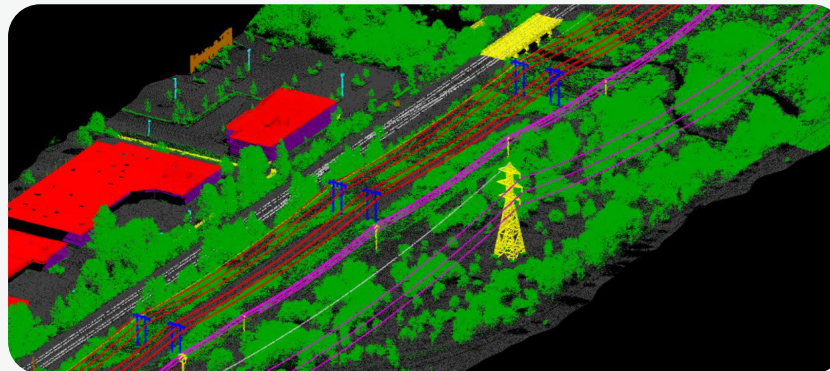
“ At Virtuematic, We pride ourselves on providing high-quality service to our clients, and our commitment to quality is reflected in the accuracy and reliability of our results. We understand that each client has unique requirements and goals, and we work closely with them to ensure that our services are tailored to meet their specific needs.”

Aerial LiDAR

Our aerial LiDAR mapping service can be customized to meet the unique needs of your project, no matter how complex or large-scale it may be. LiDAR sensors can capture data at a high resolution, enabling us to create precise and detailed models of the terrain, buildings, and infrastructure. We can also integrate other data sources, such as aerial imagery, to provide you with a comprehensive understanding of the area.

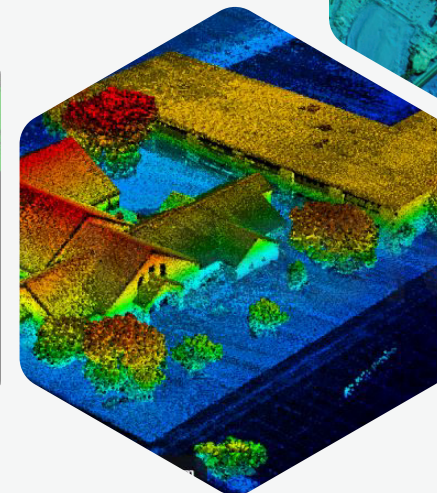
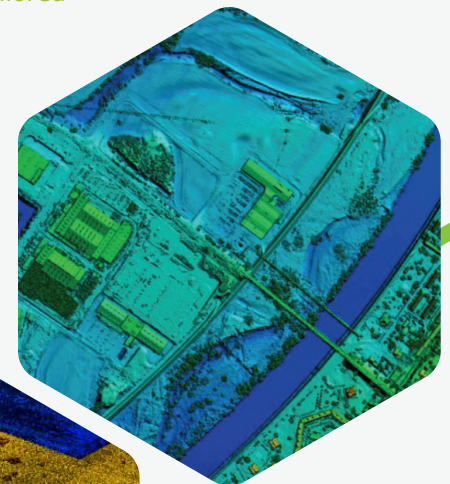
LiDAR Services

- Digital elevation models
- Classifications
- Intensity images
- Contours
- Hydro-flattening
- Hydro-enforcement
- Land use / land cover



Powerline classification

Advanced Classification



Mobile Terrestrial Laser scanning (MTLS)

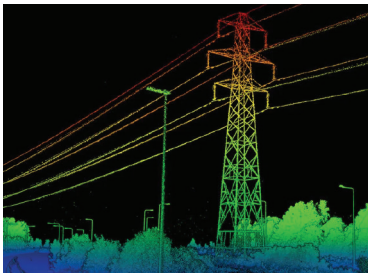
Mobile LiDAR surveys are commonly used in a variety of applications, such as transportation infrastructure mapping, urban planning, environmental monitoring, and construction site monitoring. The data collected from mobile LiDAR surveys can be used to create detailed digital terrain models, 3D models, and orthophotos, which can be used for various analysis and decision-making processes.

Virtuematic is continuously innovating and developing streamlined and seamless automated tools for Mobile Terrestrial Laser Scanning (MTLS) survey and data processing in order to enhance our deliverables that consistently meet international quality standards.

Virtuematic offer services to provide road asset intelligence products derived from mobile LiDAR point clouds. Road surface defects, such as potholes and road marking flaws such as marking paint wear can be extracted quickly in a semi-automated process.

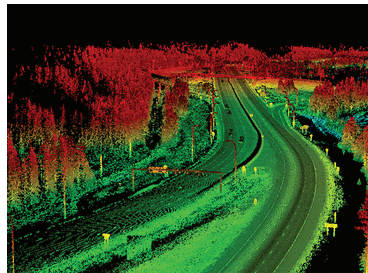
Applications

Utilities



Virtuematic Mobile Mapping provides robust 3D mapping of overhead wires, utility, and power infrastructure including substations and power transmission corridors.

Transportation and Highway

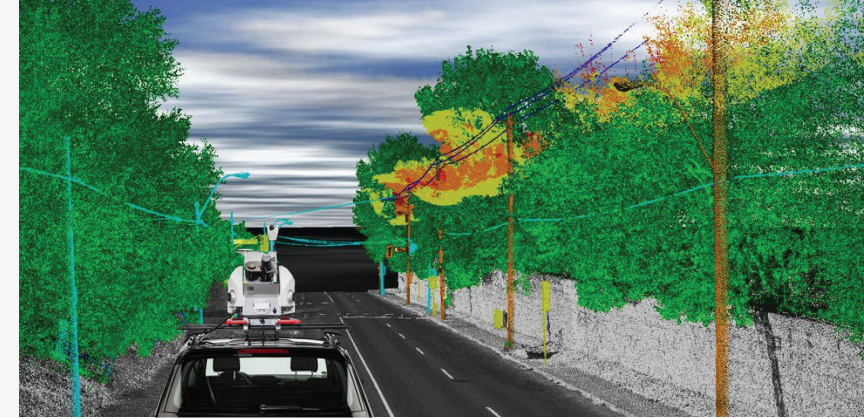


Virtuematic Mobile Mapping provides a remarkable capability for the rapid 3D mapping of transportation, highways, infrastructure, and buildings using vehicle-mounted lasers.

Aviation

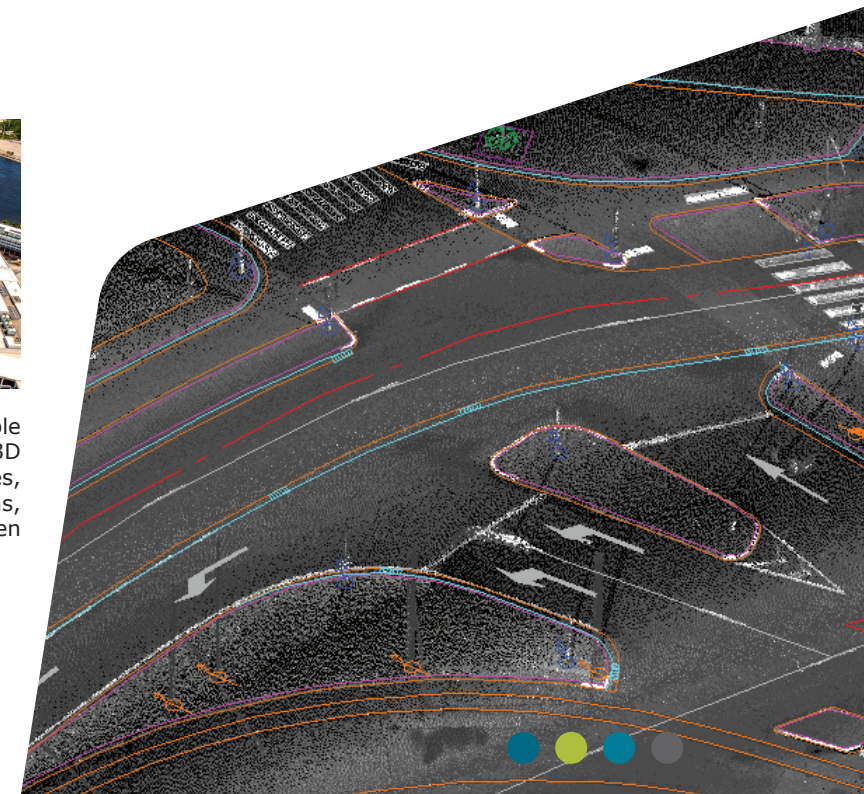


Virtuematic provides remarkable capability for the rapid 3D mapping of airports, structures, runways, terminals, access areas, to support Aviation NextGen Initiatives.



MTLS Services

- Corridor mapping
- Drive path alignments
- Utility mapping- Transmission line
- 3D Building modelling
- Cartography & Topography mapping and drafting
- Street assets mapping / Extraction of street furniture
- Railway network maintenance & mapping



BIM

3D Modeling

Building Information Modeling (BIM) is a powerful technology that enables the creation of detailed 3D models of buildings, infrastructure, and other structures. BIM models can be used for a range of applications, including design, construction planning, and facility management.

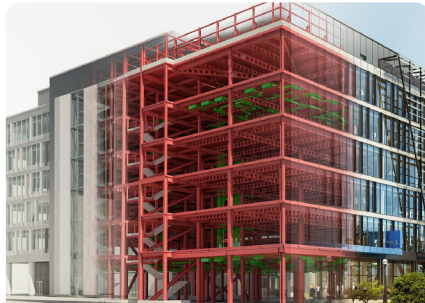
We specialize in providing high-quality BIM modeling services for a variety of industries including architecture, engineering, construction, and facility management. We can provide you with precise and detailed 3D models of buildings and other structures, allowing you to visualize and manipulate them in a virtual space.

Scan to 3D Services

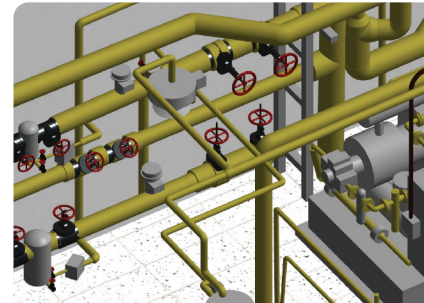
- Digital Twins
- Asbuilt BIM Modelling
- 3D City Infrastructure
- MEP Modelling
- 3D Textured model
- Revit Family Creation
- Oil and Gas plant designing



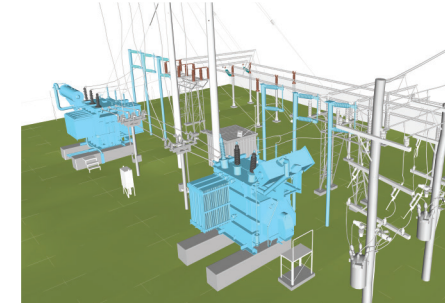
Architecture Modeling Virtuematic offers Architecture modeling using Revit and CAD software for different Level of Details (LOD).



Structural Design Our BIM Structural Modeling Services provides critical information and data points for design analysis and evaluation of a project.



MEP Modeling The creation of pipe and plant Revit 3D models using point cloud data provides a cost effective method of documenting.



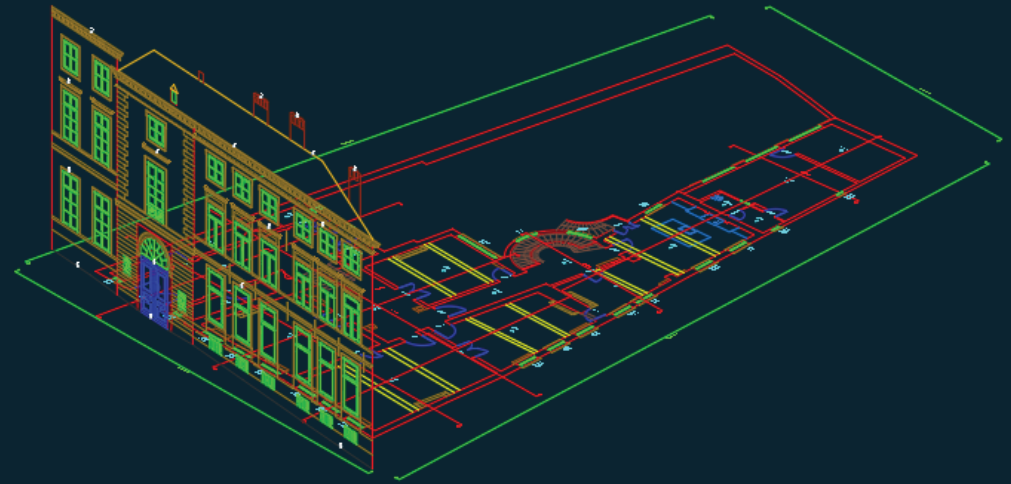
CAD Modeling We develop accurate AutoCAD models from point cloud, CAD Drawings, Google Images, oblique images, with various Level Of Detail.



2D CAD Drawing

Architecture, MEP, and plumbing design are just a few of the 2D CAD layouts and drawings that Virtuematic provides. We produce incredibly precise floor plans, sections, and elevations that may be prepared in a number of different formats and degrees of detail and are customised to meet your particular needs.

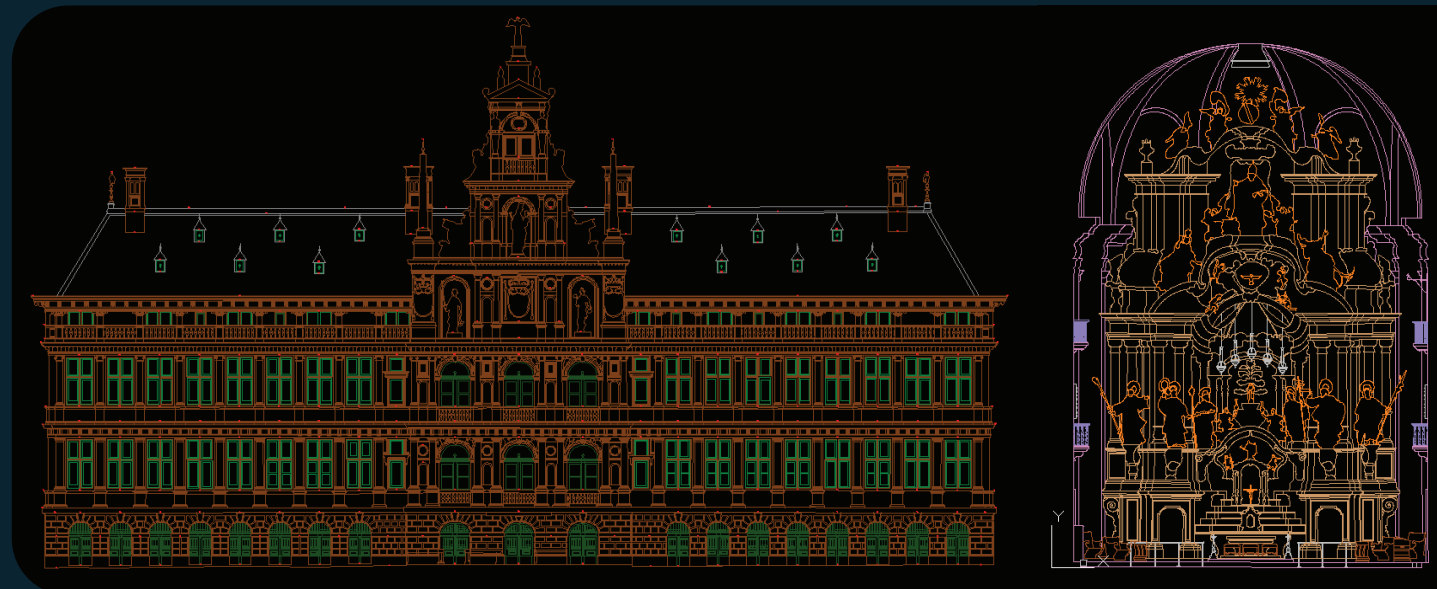
Utilising point clouds as a input, highly accurate and detailed 2D floor plan, section and elevation views can be produced. When compared with traditional methods of survey data capture, point clouds offer a far greater flexibility in terms of data production. As with other data extraction projects, specification is all important. Time and therefore, cost savings can be achieved by understanding the level of detail and accuracy required, both today and in the future.



"We use laser scan data to create highly precise 2D architectural drawings with consistent measurement across the drawing's floor plan, section, and elevation."

Scan to 2D Services

- Architectural drawings
- Structural design drawing
- Piping and Plumbing
- Mechanical drawing
- 3D to 2D Feature extraction
- Isometric drawing
- Revit to 2D CAD



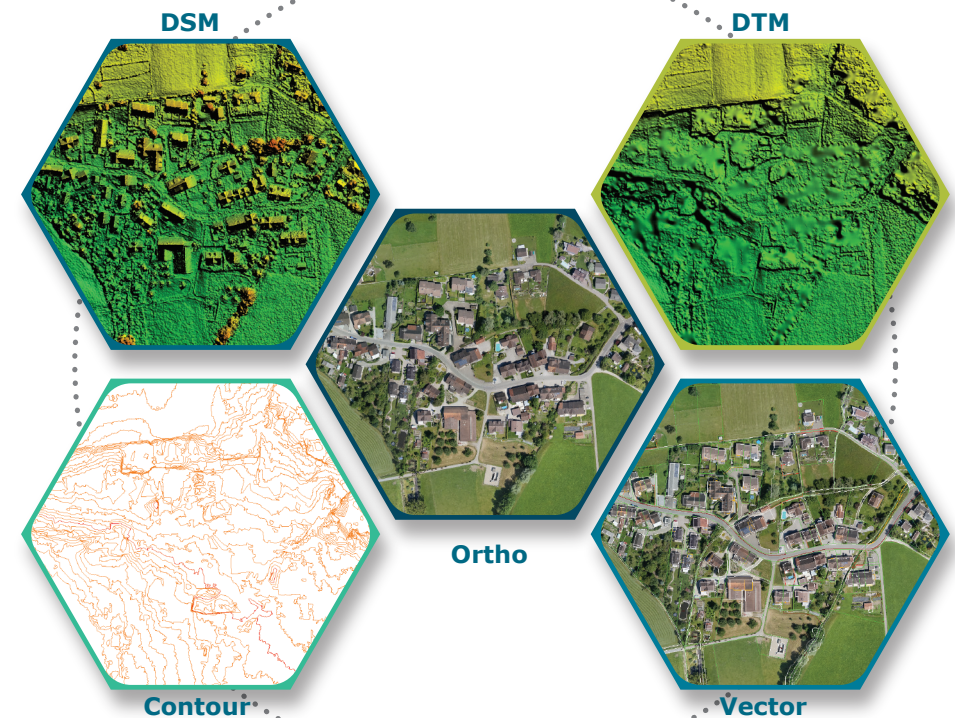
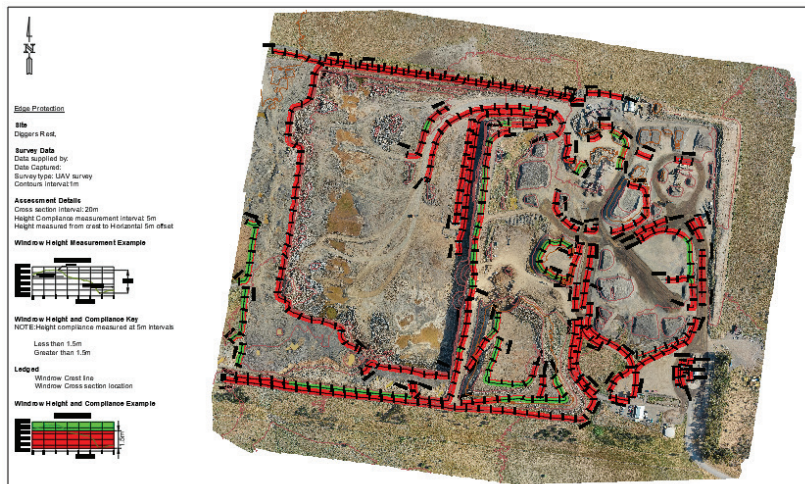
UAV Mapping

Surveying and mapping professionals are quickly turning to unmanned solutions to perform work better. UAV surveying has been proven to be faster, safer and more cost effective than traditional survey, making it the perfect addition to aerial surveying. Virtuematic offers complete UAV Solutions for Surveying, Mapping, and GIS applications. Drone surveying allow us to quickly perform the jobs such as corridor mapping projects involving roads, railways, powerlines, and other linear structures and locations. Whereas the deliverables are greater depth of information, such as high-resolution photography. Crucially, the data produced achieves an accuracy that is comparable to traditional laser scanning.



UAV Services

- Surveying
- 3D Mesh and Digital Terrain Models
- Asset Inspection
- Aerial and Oblique Photography
- Cadastral Mapping
- Stockpile Measurements
- Forest and Landscape mapping
- Haul Road map

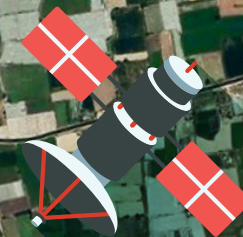


Haul Road map

"Haul road maps helps in identifying the most efficient way to design and integrate new transportation plans with current ones. Overlay design files with up-to-date drone surveys provide a bird's-eye view of the entire project and help calculate the most efficient haul routes. Whether the focus is on safety, minimizing cost, or expanding your site, haul road maintenance is easier and simpler with UAV survey."



GIS



Geographic Information System

Virtuematic offers comprehensive services spanning the GIS value chain:

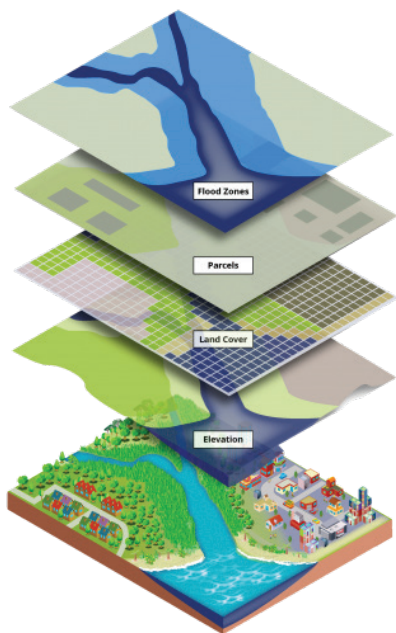
GIS strategy development and GIS assessment services; Surveying and enterprise spatial database design; custom application development; enterprise system integration of GIS with systems such as SAP, IoT, work and asset management system, and supervisory control and data acquisition; GIS application maintenance and managed services.

Relying on industry standard GIS platforms, such as ESRI's ArcGIS and ERDAS Imagine, Virtuematic has developed substantial experience in integrating analysis and modeling programs with GIS platforms based on formally defined user needs and functional requirements.

Much of this integration supports environmental assessments, resource analysis and scientific modeling activities. Virtuematic's Solutions specializes in developing market-specific analysis applications that adhere to each client's terminology and classification requirements.

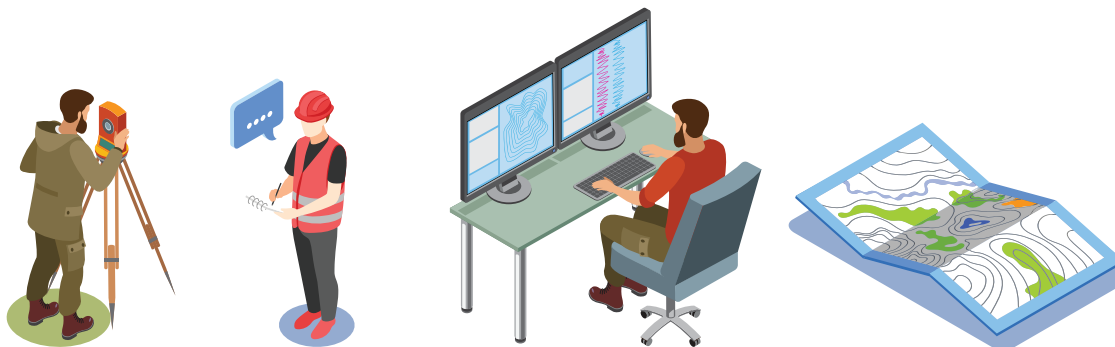
GIS Services

- Cadastral Maps
- Digitisation
- Application Development
- Satellite image processing
- Land Use Land Cover Mapping
- Forest and Landscape mapping



Hundreds of thousands of organizations in virtually every field are using GIS to make maps that communicate, perform analysis, share information, and solve complex problems around the world. This is changing the way the world works.

GIS technology applies geographic science with tools for understanding and collaboration. It helps people reach a common goal: to gain actionable intelligence from all types of data.





© Copy rights Virtuematic Geosolutions Pvt Ltd

Virtuematic Geosolutions Private Limited

#104, 3/12, BSK
Bangalore, Karnataka
India -560085

Virtuematic Geosolutions Private Limited Registered in Bangalore, Karnataka, India under company CIN U72900KA2019PTC121969

The Virtuematic home page can be found at Virtuematic.com

Virtuematic, the Virtuematic logo, virtuematic.com, information agenda are trademarks or registered trademarks of Virtuematic Geosolutions Private Limited in India, other countries or both.

This document is current as of the initial date of publication and may be changed by Virtuematic at any time.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NONINFRINGEMENT.

Virtuematic Services are warranted according to the terms and conditions of the agreements under which they are provided.

For more information

To know more about Virtuematic services, visit <https://www.virtuematic.com/service/>





VIRTUEMATIC


Mapping the world, one pixel at a time.



**Innovative minds,
sustainable finds:**

**"Crafting a renewable
future with creativity."**



 +91 9148 289 865

 Contact@virtuematic.com

 Virtuematic.com



Virtuematic Geosolutions Pvt Ltd
Bangalore, Karnataka
India - 560085

