











Corporate Overview

Founded	<ul style="list-style-type: none"> ▪ Founded in 1999 (1996) privately held 	 
Core Business	<ul style="list-style-type: none"> ▪ GIS integrated IT turnkey solutions ▪ 3D GIS, simulation and visualization software ▪ Large scale mapping ▪ Surveying, mapping and Civil Engineering software 	
Products and Solutions	<ul style="list-style-type: none"> ▪ GeoERP is a GIS based IT solution suite for the management of a country's most viable resources ▪ 3D GIS – 3D GIS web based/iPad Server solution ▪ CivilCAD – civil engineering software suite 	
Worldwide Locations	<ul style="list-style-type: none"> ▪ USA, Israel, Canada, Romania, Nigeria, Zambia, Portugal, India, Belgium, China, Kenya, Ghana, Ethiopia, Uganda 	
Solid Financial Backing	<ul style="list-style-type: none"> ▪ 15% Yearly Revenue Growth 	
Strategic Relationships	   	

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Target Markets

AEC

- Civil Engineering
- Surveying



UTILITIES & COMMUNICATIONS

- Water/Irrigation
- Sewage/Drainage
- Oil and Gas
- Electric
- Cables
- Telecommunications



GOVERNMENT

- Federal, State and Local Authorities
- Land Administration
- National Mapping
- Urban Planning
- Economic Development



TRANSPORTATION

- Roads and Highways
- Railways



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3D-GIS

3D GIS in the Cloud

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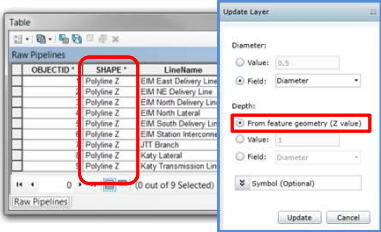

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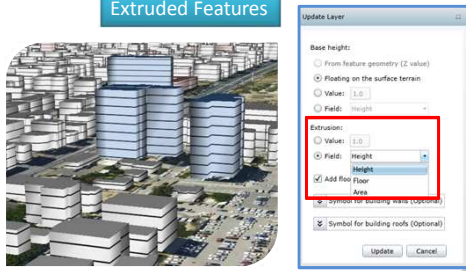
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3D GIS in the Cloud: Data Representation

Using Embedded Z Value


3D Models

Extruded Features



2D Representation/Draped on terrain



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3D GIS in the Cloud: Key Features

- Convert data/projects from 2D to 3D in few steps.
- Purely web application (3D GIS Studio, and 3D GIS Explorer) with no installation.
- Cloud computing approach.
- Viewing, Analyzing and Exploring in 3D.
- 3D Features.
- Support for the most common data formats and Geo-Spatial protocol.
- Available for iPad and mobile devices.






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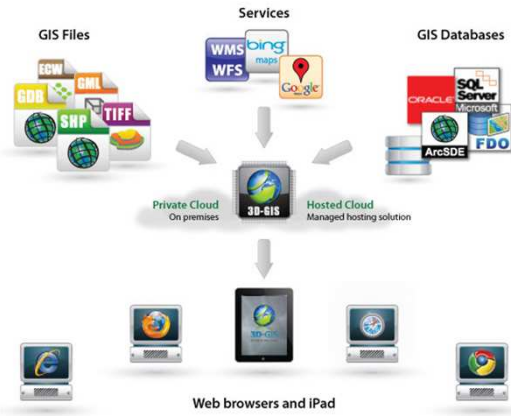
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3D GIS in the Cloud: Data Sources - Creating the 3D World



- **Terrain** - GeoTiff, DEM or TIN
- **Raster** - GeoTiff, ECW
- **3D Native Models** – Collada, Sketch-Up, KML, Multi-Patch, OBJ
- **Existing GIS data from:**
 - Shapefiles
 - FileGDB
 - ArcSDE
 - ORACLE Spatial
 - SQL Server Spatial
 - Web Map Services



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3D GIS in the Cloud: Main Purposes





City Planning

Upper and underground infrastructure



3D Cadastre

Highways and roads

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3D GIS in the Cloud: Application Benefits






**City Planning
3D GIS**

- ✓ Development control
- ✓ Web enabled for planning consent
- ✓ Design implications
- ✓ Animation




**Roads
3D GIS**

- ✓ Faster decision making
- ✓ Landscape integration
- ✓ Work efficiency and quality assurance
- ✓ Infrastructure Coordination
- ✓ Safety audits




**Infrastructure
3D GIS**

- ✓ Underground Infrastructure Coordination
- ✓ Traffic arrangements



**Cadastre
3D GIS**

- ✓ Spatial Parcels and Sub Parcels
- ✓ 3D boundary buffers
- ✓ Underground expropriation
- ✓ Level based topological rules



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3D GIS in the Cloud: City Planning - Main Advantages



- **Development control through 3D Visualization**
 - Existing Vs. Design test-case scenarios
 - Billboards and Masts
 - Skyline effects
- **Web Enabled**
 - Support local governments in achieving planning consents with communities and industries
- **Design Implications**
 - Shadow analysis
 - Line of Sight Analysis
- **Animation**
 - 3D flythrough animations for various uses such as touring

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3D GIS in the Cloud: Roads 3D GIS - Main Advantages



- **Decision Making Process**
 - Detailed 3D model of the designated road.
 - Real-time information per spatial object (land owner, zoning, etc.).
 - Birds eye view clearer for the non-technical.
- **Landscape integration**
 - Nature environmental costs .
 - Querying land culture.
- **Infrastructure Coordination**
 - Road affect on existing infrastructure.
 - Maintaining infrastructure safety buffers.
- **Safety Audits**
 - Line-of-sight and visibility region checks.
- **Work efficiency**
 - Automated quality assurance tests.
 - Reducing possible human errors.




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3D GIS in the Cloud: Infrastructure 3D GIS - Main Advantages



- **Underground Infrastructure Coordination**
 - Avoiding breakdown maintenance
 - Efficient preventive maintenance
 - Collision free planning
- **Design**
 - 3D Layers inspection
 - Slopes and minimum distances




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3D GIS in the Cloud: Cadastre 3D GIS - Main Advantages



- **Upper and Underground Cadastre**
 - Spatial lot, parcel, and sub-parcel.
 - Displacement distances.
 - Spatial registration plan.
- **3D boundary buffers** – of spatial lots, parcels, and sub-parcels.
- **Underground expropriation** - of spatial lots.
- **Level based topological rules** - as a result of subterranean space changes.



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