

Integrated software tools suite that enables rapid and realistic 3D synthetic environment generation.



Automatic 3D terrain modeling tool for multi sensors simulation application (OTW, EO, RF)

SE-AGETIM benefits:

- **Ease of use:** *Integrated with Geoconcept™ GIS and its powerful and friendly GUI. Capacities to load the main digital geographical data format of the civilian and military market*
- **Scalability:** *Adapted both to study and training simulation and for different sensors (Electro Optical, Radio Frequency, Out of The Windows)*
- **Interoperability:** *compliant with worldwide standard as SEDRIS, FLT, VRML, CHORALE, OSG*



SE-AGETIM enables full integration of heterogeneous geographical data. through GEOCONCEPT™ GIS user interface that enables also powerful automatic or manual data manipulation. For example, a bad correlation between any feature location and the matching elevation can be corrected at the source data level. It is also possible to draw vector data directly on a raster photo information, to enhance the feature data quality and consistency.

Some physical database extensions mechanisms are also provided for a highly automated multi sensor generation process.



SE-AGETIM FEATURES

Data Import Capacities

- Load major geographical digital data format used by civilian and defence market:

Elevation data (terrain grids / terrain lines)

Vector data (vector information)

3D models

Photos (satellite or aerial images)

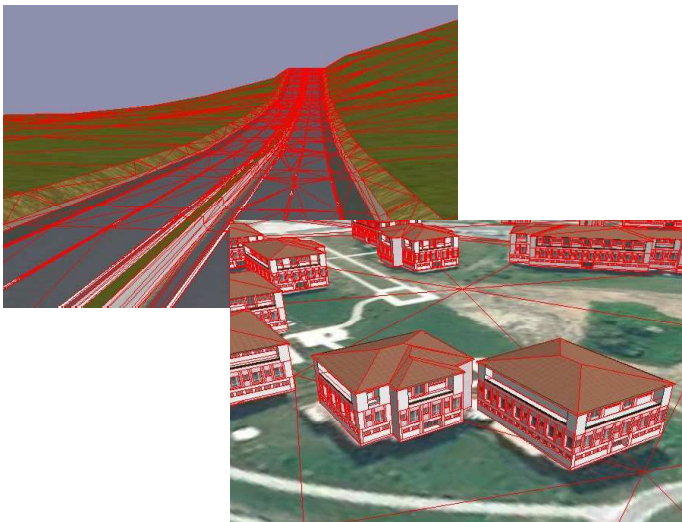
Data Edition functions

- Includes all GEOCONCEPT™ GIS data edition capacities in term of simplification, correlation, correction and data enhancement.

Automatic generation process

- Project construction that enables easy re-generation following geographical data update
- The user defines how all artificial and natural element of the landscape will be generated through template association to geographical data
- Objects instantiation mechanism from a 3D shared object library
- Powerful templates profiling

SE-AGETIM enables to model vector data with complex templates. Their geometrical complexity is independent from the terrain and increases features realism like roads or buildings, while avoiding all the terrain integration constraints



Coverage shaders Implementation

- The SE-AGETIM multi representation capacities apply to forests, trees, profiled roads, and buildings



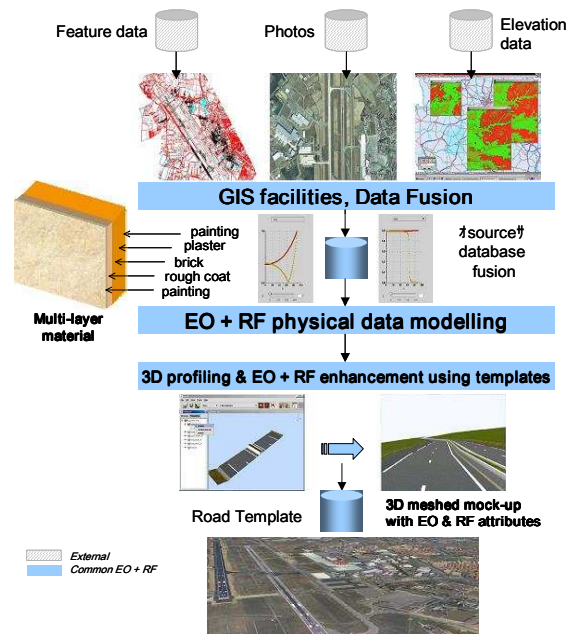
Documentation and data delivery

- 3D objects library included
- 3D templates library included
- Specification 3D generation tutorials included

Urban generation

- Includes SE-AGETIM-INDOOR and SE-AGETIM BUILDING module dedicated to urban 3D site generation

Multi sensors enhancement



- Allows database characterization in parallel to the terrain modelling. The template geometrical effects are associated to physical materials. During the 3D terrain modelling process, roads are created and automatically textured using road templates and the associated road textures. At the same time, the physical properties coming from the road template is automatically attached

At the end of the terrain generation process the virtual 3D scene is ready for exploitation.