TerraTours® Situational Awareness Via 3D Visualization

TerraSim’s TerraTours® interactive 3D viewer takes the next step in real-time, geospatial visualization, by including the efficient linking of multiple sources of information, providing users with a 3D display and the ability to query a geospatial environment. This linkage allows a visualization to become an interaction medium for data and knowledge access, while providing the end user with a sophisticated visual interface. Using TerraTours with the advanced capabilities of TerraTools® automated construction of annotated visualization databases, reduces the time, cost, and complexity of geospatial database generation, while giving users a way to interactively present their visual databases.

TerraTours extends TSGFly, the TerraTools viewer, to a higher level of user interactivity. TerraTours allows users to query and view multiple sources of attached information including movies, audio files and web sites. This provides a logical, structural organization for multi-intelligence data with a user-friendly interface.

TerraTours offers access to a range of multi-intelligence source data:
- Video clips: UAV Video, ground sources, news footage
- Still photography: aerial, ground
- Commercial satellite and NTM imagery snippets
- Any web-enabled text
- Arbitrary URLs: site information, government sites, etc.
- Plans and drawings: CAD models, facility and process layout
- Audio: site descriptions, newscasts
- All geospatial attribution processed during database creation
- Time-stamped and time-sequenced data sources

The Philadelphia Example

The above images demonstrates a TerraTours interface presented to an end-user. This example of a visualization of Philadelphia, constructed by the Institute for Defense Analyses (IDA) for training first responders, has been augmented with TerraTours links to allow for a real-time video feed that shows traffic congestion, a floorplan display of part of the Philadelphia Convention Center, and the evacuation plan for the Grand Hall of the Convention Center. All of these sources of information are linked via the TerraTours visualization as depicted with various visible “hot buttons” linked using TerraTools.
TerraSim is a high-technology company that provides software solutions and services for advanced geospatial visualization of complex environments utilizing imagery, GIS, and CAD design data. TerraTools® is the complete synthetic environment toolkit, used in the automated construction of dense urban environments for regional planning as well as large area simulation visualizations for military exercises.

For more information on our TerraSim product line and related database construction services, please contact us at:
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The TerraTours process works by first gathering cartographic source data and creating a TerraTools project. Through TerraTools, video, audio and text data are added to create multi-application links throughout the generated TSGFly visualization. TerraTools, combined with TerraSim’s GISLink technology, will compile the image, video and text information into a complete TerraTours visualization containing easy access references to each data source.

TerraSim can support your deployment of TerraTours in a number of ways. Our database construction services group can quickly generate a 3D visualization with base-level reference links that can be augmented with additional reference links, to satisfy your end user’s requirements. Alternatively, TerraSim can provide training, customer support, and software sales for an end-to-end situation awareness solution. TerraSim also supports systems analysis and data prototyping so that the transition from raw geospatial data to a TerraTours solution is rapid and cost effective.

**Advantages of TerraTours**

- Easily query cartographic source data attribution in a 3D real-time environment
- Uses familiar media playback applications that are familiar to nearly all Windows users
- Standard Windows formats keep the pace with technology upgrades, meaning no additional software modifications are necessary
- Familiar, easy-to-use applications keep user training requirements to a minimum
- Since all TerraTours links are URLs, there are no limits to the type or complexity of associated information
- TerraTours visualizations with associated intelligence sources can be produced and distributed to numerous end users
- TerraTours visualizations can be generated as editable or read-only to end users
- Distribution of CD's containing interactive visualizations gives your audience a better understanding of operations

**About TerraSim:**

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