

TerraTours Development Using GISLink

Interactively Access Your Geospatial Data

Interactive 3D GIS - Situation Awareness - Common Operational Environment

Imagine combining high-resolution 3D visualizations with the ability to query any information associated with objects in the scene:

- Point at a building and retrieve floorplans, tenant list, construction information, videos showing interiors, and points of egress
- Relate a motion video sequence to a 3D path through the virtual environment
- Precisely position a collection of photographs in terms of camera location and orientation
- Play back audio recordings describing the 3D virtual urban environment as you move through it

Whether the task is to support interactive 3D GIS, Situation Awareness, or Common Operational Environment portrayal to a lone decision maker or hundreds of physically distributed planners, TerraSim can provide software solutions based on its TerraTours viewing technology to rapidly build information-rich virtual environments and support sophisticated queries on low-cost hardware.

What is TerraTours?

TerraTours® is a real-time 3D viewer with **interactive query** capability, meaning that users can **interrogate objects** while navigating a 3D visualization to view **multimedia files, documents or site plans**, or any other relevant file. TerraTours also allows you to view objects' **GIS and TerraTools attributes**, and visualization-specific information. These types of information are available during **real-time navigation** of the TerraTours visualization.

What is GISLink?

GISLink™ technology allows TerraTools® users to create a **"linked" 3D environment** from their geospatial source data into a TerraTours visualization. In other words, GISLink organizes and compiles queryable files and data attribution automatically into the TerraTours run-time.



How can I use TerraTours and GISLink?

- Asset and facilities management
- Emergency management
- Disaster recovery planning
- Intelligence analysis
- Mission planning and rehearsal
- En route database update
- Security planning
- Site monitoring
- Telecommunications planning
- Transportation corridor planning
- Urban planning and design

TERRATOOLS® Query Window

Photo	Name	Description	Date	Time	Size
/PhotoLibrary/Scout.jpg	Front of Downtown Hilton Hotel	Wed Oct 15 2003	12:58:34 AM	268 Kb	
/PhotoLibrary/Back.jpg	Back of Downtown Hilton Hotel	Wed Oct 15 2003	12:54:06 AM	276 Kb	
/PhotoLibrary/Back2.jpg	Back of Downtown Hilton Hotel	Wed Oct 15 2003	12:29:12 AM	320 Kb	

Website	Name	Description	Date	Time	Size
/URLs/Website/PTTHilton.com/ptthilton/index.html	PTTBorough Hilton Home Page	Unavailable	Unavailable	Unavailable	Unavailable
/URLs/Website/PTTHilton.com/ptthilton/fansandreservations.html	PTTBorough Hilton Fans and Reservations	Tue Oct 21 2003	10:10:29 PM	30 Kb	

Source GIS Attribute Table	Attribute	Value
	BUILDING_Height	10
	BUILDING_Corner	1
	Number_of_Floors	10
	Number_of_Tenants	1
	Primary_Facade	concrete
	True_Construction	0000

TerraTools Attribute Table	Attribute	Value
	Building_identification	176_00
	Building_height	10_00
	Building_identification_height	176_00
	Building_identification_height	176_00
	Building_material	hilton_downtown
	Building_name	hilton
	Building_number	176_00_0000_00
	Building_number	176_00
	Building_name	1

Visualization Summary

File Name: C:\20\Downtown\PTTBorough\Downtown_PTH_041129_03\Downtown_PTH.jpg
File Size: 35,501 Kb

Video Clips

TerraTools Attributes

Web Pages

Documents

CAD Drawings

GIS Attributes

Still Images

IPIX

Red Hen

Web Video

The Power of GISLink



GISLink technology allows users to interact with their geospatial data in a real-time 3D environment dynamically through the TerraTours interactive viewer.



GISLink **generates a complete attribution table** derived automatically from the GIS and CAD source data used within TerraTools. Attribute-rich sources such as facility maps, land-use and ownership records, and commercial real estate records can be **automatically linked**, and will be accessible within the visualization. There is **no practical limit** to the number of attribute types that can be **associated with any cartographic feature** or point location.

The TerraTours viewing environment uses GISLink to present a **familiar web-based approach** for selecting information, allowing users to freely move between the 3D visualization and the associated project information and linked multimedia. GIS-Link allows you to **specify how diverse information should be grouped**, organized, titled, and presented to the end user.

GISLink: Features and Functions

- Plugs into TerraTools version 2.0 or higher
- Supports static linkage of interactive multimedia sources during the TerraTools database compilation process
- Creates a linked query layer to your GIS attribution
- Supports dynamic linkage of interactive multimedia sources within the TerraTours viewer when deployed in the field
- Runs on low-cost Windows 2000/XP workstations with single or dual monitor configurations, and can be packaged and delivered in web-enabled or stand-alone modes.

Technical Requirements

GISLink runs on a standard Windows PC with most commercially available OpenGL graphics cards. Your system should be configured minimally with:

- Windows NT/2000/XP
- Pentium 4 processor, minimum 1 GHz
- 20 GB Hard disk
- 512MB RAM
- Dual Monitors recommended

About TerraSim

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.



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