

What's New in TerraBuilder v1.7

This new version of the TerraBuilder marks major improvements in the capabilities for working in large-scale projects from local sources and database environments as well as much stronger functionality. A big emphasis has been placed on interfacing with other spatial data systems to turn the TerraBuilder and the DirectConnect components into a powerful, database-enabled, 3D data producer and integrator.

1. Database Quality

- User selectable Jpeg2000 compression for image and elevation data for better quality and reduced size.
- Ability to control the compression ratio and quality
- Improved Scale and Reproject quality

2. Additional Formats

Ability to read imagery and elevation data to create MPT databases or to fly directly using the DirectConnect from the following sources:

- New Imagery Formats:
 - □ Oracle 10g GeoRaster Database
 - OpenGIS WMS servers
 - Graphics Interchange Format (.gif)
 - □ NITF
 - □ JPEG JFIF (.jpg)
 - □ JPEG2000 (.jp2, .j2k)
 - □ JPEG2000 (.jp2, .j2k)
 - □ Single Cell CIB

New Elevation Formats:

- **Oracle 10g Database**
- □ Non-regular Grid with break lines.
- DTED single cell (Including NIMA DT0-DT3 formats.)
- □ USGS DEM (.dem)
- □ USGS SDTS (.ddf)
- □ ESRI ArcInfo Binary AIG (.adf)

Improvements to current Formats

- □ TiFF / GeoTIFF Added support for indexed color (palette)
- $\Box \quad MrSid Support for version 3.1.10$
- □ IMG Added support for ESRI Float RLE compression.
- □ Projection Supports additional coordinate systems.
- □ TLT Plug Grayscale sources now support automatic colorization (pan-sharpening) from low-resolution sources.



b map server brows	er	
erver Address: http://	/globe.digitalearth.gov/viz-bin/wmt.cgi?	Add Remove
_ayers		
🗄 - 🚞 The GLOBE	Program Visualization Server 📃 📘	A CONTRACTOR OF THE OWNER OF THE
🗄 🖸 Contex		
🗄 🗠 🧰 Physiog		
🖻 – 🧰 Air Tem		
	ximum Temperature	
	OBE Maximum Temperature	
	OBE Minimum Temperature	Contraction of the second s
	OBE Current Temperature	
	OBE Mean Temperature	
	OBE Temperature Range	
	OBE Dew Point	
📘 GL	OBE Relative Humidity	
	OBE Surface Temperature	
🗄 🗋 Pressu		
	(Liquid Precipitation)	
En Cloud (III (Solid Precipitation)	
Layer Datails		
Units Per Pixel	Not Available. Please select	
Abstract	Color on map indicates data value.	
Monochrome	No	
Image Format	image/gif	
Style	Color map	
Transparent	Not defined	
Backround color		
Name In Project		
Layer names	RATMAX	
Style names	REFERENCE	
leady		Open Cancel

Selecting Sources for import from the WMS Plug Browser:

3. Multi Viewing and Editing

- Ability to work on groups of sources to create and edit shared polygons.
- Ability to edit common parameters for groups of sources.

4. New Clipping Mechanism

- Combines the Clip Rectangle and polygons to a single easy to use system
- Ability to add Fill Color areas (rectangle and polygon shapes)
- Ability to add key color clipping (rectangle and polygon shapes) to filter out illegal/no-value color or elevation values.



5. New Applications Layout

Three optional layout



0.703125 [u/p]

Enhanced Menu and Toolbars

Ready

New Settings and Options dialogs

r:099 g:097 b:071

(4.5703125,10.8984375)



- 6. Navigation and Editing in the Working and Reference windows
- Three tabs for Imagery, elevation and vector views.
- Ability to view and edit several sources (from the same type) at the same time
- Zooming and Panning using the mouse wheel button
- Right click popup menus provide easy access to sources and polygons operations.
- Three viewing modes
 - **D** Source quality normal
 - □ Source fast scale
 - □ Source single color
- Measurement tools
 - D Measure distance across a multi-point line
 - □ Measure area

Editing Clip Polygon in the Working window:





7. Property Sheet

- The Property Sheet dialog collects all editable parameters in an easy-to-use form.
- Direct access to all resources and polygons from the Property sheet.
- Ability to view and edit common parameters for groups of sources from different types.

🗆 General		
Source Title	baku_airport_image.li.m	
File Name	baku_airport_image.li.m	
Source Path	V:\TB-Sources\Europe	
Pyramid Path	V:\TB-Sources\Europe	
Pyramid Include Source	Yes	
Use in Output	Yes	
Dimensions		
Source UPP	1.028224273119e-005	
UPP in Project	5.364418029785e-006	
Max Visible UPP	1.40625	
Size in Pixels (W,H)	(3956,3728)	
Lower Y	40.451694940219	
Geographic Width	0.040676552245	
Geographic Height	0.038332200902	
Polygons		
🗆 Color Adjustment 👘		
Channel	Master	
Gamma	1	

8. DirectConnect

- Ability to run the DirectConnect Fusers (Agents) also as a Windows Service (can still work when in logout mode).
- Automatic translation of all local storage device names to generic network names (UNC).



9. Source List Window

- Display sources in a tree model.
- Mark sources for view, editing or reference
- Multi selection and editing capability
- Ability to view the sources in regular (logical) order or according to the visualization priority level.
- Right click popup menu provides easy access to source operations.

The Source List window in a Project Tree mode:

Source List [19 Sources]								
⊒ @ ∥	Name	UPP	UPP in Project	Pyramid				
	🖃 🗋 Europe							
	🖻 🗋 bosnia							
	🔤 🗾 sarajevo_cibl	1.0342735	5.364418029785	 Image: A second s				
	🖻 💼 Azerbajan							
	🔤 🗾 baku_airport_	1.0282242	5.364418029785	V				
	🚊 🗋 America							
	🚊 🗋 Texas							
	📴 32097h35.tif	9.1401111	5.364418029785	 Image: A second s				
	🚊 🗋 san francisco ve							
	🔤 🌄 Roads_LL.vi.	N/A	N/A	 Image: A second s				
	🔤 🛃 Miami Oracle	5.3644180	5.364418029785	 Image: A second s				
	🚊 🖸 🗋 Globe							
	— 🔀 BaseGlobe Image	0.1333333	0.087890625 U/F	 Image: A second s	-			

10. Tools

- ConvTRI Convert several Irregular formats to TRI
 - **Converts Irregular XYZ ASCII files to Triangulate mesh files (TRI)**
 - Converts Irregular XYZ points in DXF to Triangulate mesh files (TRI)
 - Converts Irregular XYZ points with break lines in DXF to Triangulate mesh files (TRI)
 - **Converts TIN DXF to Triangulate mesh files (TRI)**
 - **u** Supports for other formats
- TLT tool Support most TerraBuilder plugs.
- Improved Elevation Color Scheme editor (Pseudo editor)
 - Ability to create dynamically stretched schemes
 - **D** Ability to create shaded schemes



11. Additional features

- Limit source visualization in output (MPT) to maximum UPP. When the user is out of the source range he will view the area from source in lower resolution (using the fade mechanism).
- Control Saturation of image sources.
- Display the estimated MPT size and compression time.
- Ability to work in Grid or Area coordinate systems.
- Security tool enables user/password locking of MPT databases.
- New Licensing Mechanism supports network license as well as machine dependant software license