NEW FEATURES IN RELEASE 6.6

BIM Layer Support

TerraExplorer reads industry standard, FBX BIM files (preserving all geometry and attribute data), and converts them to the 3DML format for optimized viewing and streaming on desktop and mobile applications, with full support for spatial and attribute queries and indoor navigation. TerraExplorer's support for Building Information Models (BIM) enables you to easily add model information to your project and update model attribute data for enhanced collaboration and efficient management throughout the entire building life cycle.

Powerful Analysis Capabilities

New capabilities provide precisely the information you need:

The new **Slope Map Query** graphically represents slope values in a specified area, outputting a highly-accurate color coded point feature layer that is listed in the Project Tree and can be exported to a shape file or SQLite layer.

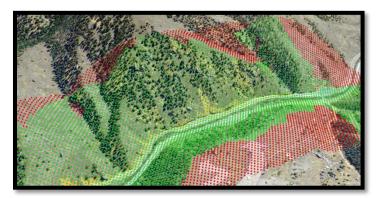


One-click **Global Contour Map** displays map with contour colors and dynamically placed contour lines.

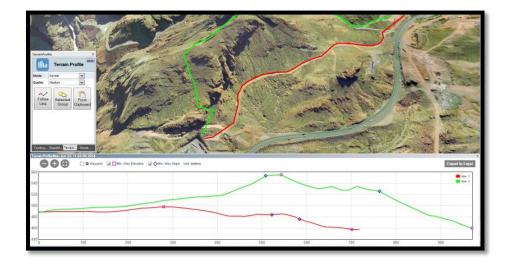


Viewshed on Route tools menu include the following new tools:

- 3D Viewshed on Route By Speed
- 3D Viewshed on Route By Time
- 3D Viewshed on Route Query

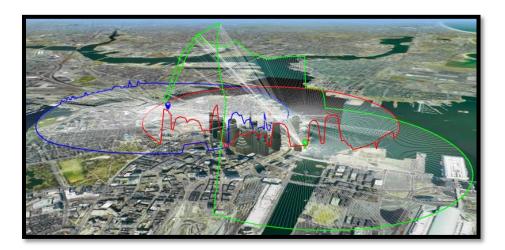


The all-new **Terrain Profile** tool supports simultaneous analysis of multiple lines and comparison of the base terrain to an elevation layer. The new tool provides multiple methods for designating the polylines to be analyzed as well as an option to export results to a shape file.





Redesigned **Threat Dome** tool offers expanded display options (dome, dome base, and skyline) so that the particular information required can be easily visualized. The new tool provides multiple methods for designating the threat dome area as well as an option to export results to a shapefile.



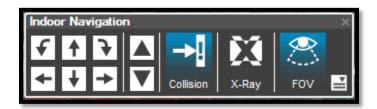
You can now **Create Measurement Objects** that are listed in the Project Tree and can be exported to FLY, KML/KMZ, or shapefiles.





Indoor Navigation

New Indoor Navigation toolbar offers more intuitive navigation through your indoor spaces, with controls for more precise navigation, collision detection, x-ray vision, and Show/Add locations.



Timespan Tags

Powerful timespan tool visually displays the timeline for all the objects in a timespan group and enables you to easily set and modify the sequence and length of time for which they display.



Data and Services from the SkylineGlobe.com server

Address search - Search for a specific address on our OpenStreetMap (OSM) database.

Point to Address - Obtain address details for a selected point.

OSM layers - Load OSM raster layer and various feature layers (e.g. Amenity, Buildings, Tourism, Roads...).

Models - Load online models from the expanded Data Library.



Visual Effects

New particle system engine enables you to create simulations of natural phenomena such as rain or fire, which transform a standard virtual 3D environment into a stunningly realistic 3D visualization. New visual effects include animation presets and custom objects, water effects, and weather elements:

- Weather effects Fog, rain, snow
- **Animation presets** Smoke, fire, explosion and water effects
- **Custom objects** define you own particle animation
- Water body display water animation on polygons



Infrastructure Improvements

Stereo vision - Side-by-side stereo view on any supporting displays provides added depth and realism to the 3D visualization.

Touch screen optimization – New navigation controls and analysis and editing capabilities.

Native TerraExplorer Plug-in for Chrome and Firefox



Working with 3DML

TerraExplorer 6.6 provides **powerful new capabilities** for working with 3DML layers, including:

- **New Hole on terrain** (that removes the terrain texture) and Modify terrain with offset capabilities enable you to draw objects on the terrain that follow the terrain contour and yet still show close to the 3DML surface.
- Drawing of "On terrain" lines and polygons on the floor surface (e.g. street layers)
- Manual repositioning and scaling of the 3DML database.

TerraExplorer 6.6 also features **improved performance** of 3DML layers:

- Reduced memory load
- Minimized bandwidth to accelerate web streaming
- Support for analysis and drawing tools in 3DML datasets

Interoperability

- TerraExplorer 6.6 supports import of several additional feature, raster, and model formats:
 - **Feature**: SQLite, GeoPackage, File Geodatabase (*.gdb).
 - Raster: GeoPackage3D Model: .Obj, .Ply
- TerraExplorer 6.6 adds a new layer format for new feature layers, enabling you to easily create feature layers in TerraExplorer in either shapefile or SQLite format.

Object Improvements

Video projection on 3D models – Includes option to calculate which surfaces are visible to the projector, and project video only onto these surfaces for a more realistic result with only minimal performance penalty.

Dynamic object – New method for setting object's route, "**Move by Time**" allows you to precisely define the start and end times of the route, and then use the time slider to control the object's position on route.



Publish to Mobile

Publish Project as Mobile Kit – Gather local files and objects to a kit folder, maintaining references to all network resources, for use on a mobile device, and then upload the kit to a mobile device.

Extract and Publish Area as Mobile Offline Kit - Extract a geographic subset of the project, copy all of its local and network resources to local files, for use on a mobile device, and then upload the kit to the mobile device.

Upload Existing Kit to Mobile Device – Upload an already published kit to a mobile device.

Modern GUI

TerraExplorer's redesign not only provides a new updated look but is better organized so that you can easily find the command or tool you need.



API

TerraExplorer API was updated to support all 6.6 improvements. In addition to all the property and method changes, the API features two new interfaces:

- _3DMLCreator66 This .NET interface is responsible for creating a unified, stream optimized 3D Mesh Layer (3DML) database from point shapefiles with individually referenced 3D model files.
- **ITerrainEffect66** This interface gives the client access to the animation effect object.

Drag and Drop

New drag and drop capability lets you easily load MPT, FLY, KML, KMZ, TBP, and MPT files into your project or into TerraExplorer when no project is loaded.

