

TerraBuilder

TerraBuilder provides professional-grade tools for manipulating and merging aerial photos, satellite images, and digital elevation models of different sizes and resolutions. The resulting photo-realistic, geographically accurate terrain database can be made available to local TerraExplorer clients or published directly from TerraBuilder to SkylineGlobe Server for serving to remote TerraExplorer and WMS/WMTS clients.

Load

Load imagery and elevation layers in a wide range of data formats. TerraBuilder uses multi-core and multi-computer processing to support massive data set publishing while maintaining high performance.

Create

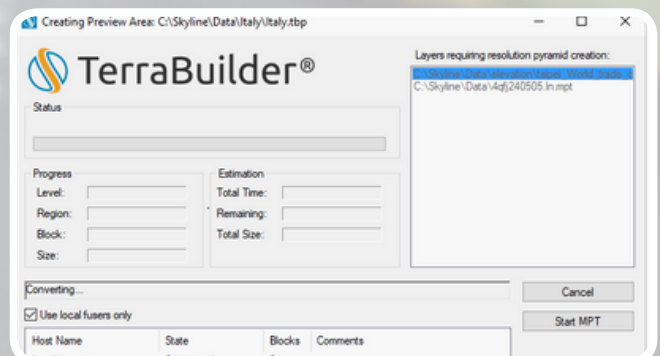
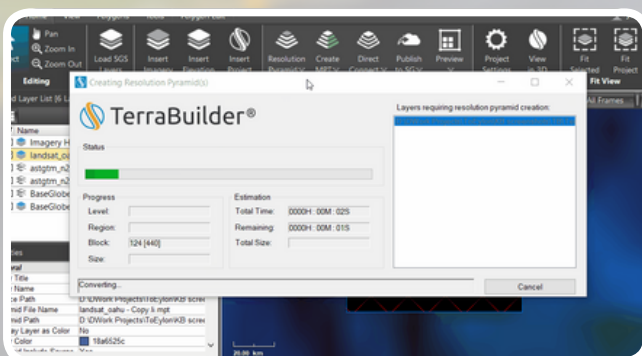
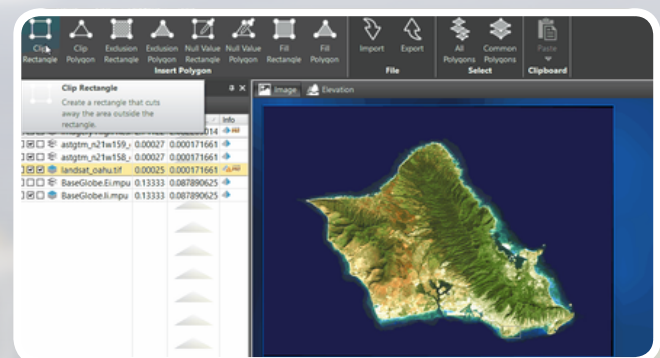
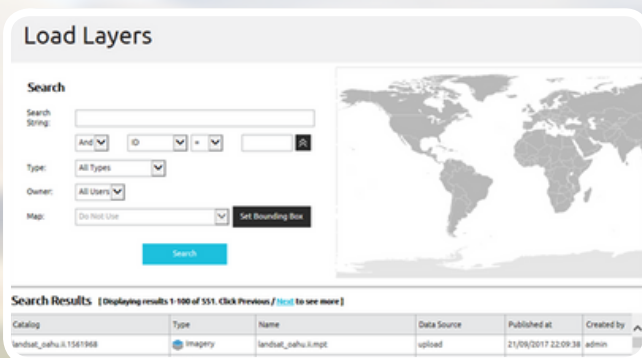
Merge all adjusted layers into a geographically accurate, multi-resolution terrain database. Optimized imagery and elevation formats can be generated for use by the on-the-fly, server-side terrain generator.

Manipulate

Powerful tools to crop, adjust, replace, resize, and reposition your photos, images, and digital elevation model to ensure maximum precision in the 3D terrain database result.

Publish

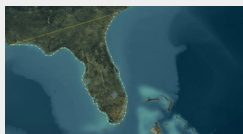
Publish the terrain database (MPT) to SkylineGlobe Server, Skyline's private cloud solution. The published MPT is available for use by TerraExplorer clients and standard geospatial clients, or as layers for a TerraBuilder project.





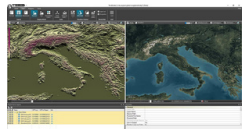
Interoperability

TerraBuilder's extensive plugin support allows you to load your data in the file format or database/server you need. Numerous formats/databases are supported including: Tiff (.tif, .tiff), ERDAS Imagine (.img), MrSID (.sid), ER-Mapper JPEG2000 (.jp2, .j2k, .jpc), Oracle Spatial Database, ECW Image Web Server, ArcSDE Raster Server (.sde)



Robust Tools for Manipulating Your Data

TerraBuilder provides a range of editing tools with which to manipulate the imported raster files, enabling maximum precision in the 3D terrain database result. Possible manipulations include cropping, resizing, moving, feathering, adjustment of geographic coordinates, and more.



Scalability and Elasticity

Share the workload of massive 3D database creation between several computers and processors on your local network.



On-Demand, Server-Side Terrain Generator

For projects whose source data is constantly being updated or modified, terrain databases defined by the TerraBuilder project file (TBP) can be served to TerraExplorer clients and any application that reads the standard OGC WMS/WMTS protocol, using SkylineGlobe Server's DirectConnect Service.



Streamlined Workflow

Upload and publish geospatial layers to the cloud server directly from TerraBuilder. The published MPT is available for use by TerraExplorer desktop, mobile and web clients and standard geospatial clients such as WMS/WMTS, or as layers for a TerraBuilder project.



High Performance

Multi-core and multi-computer processing are supported to accelerate massive data set publishing. Use of network fusers dramatically reduces processing time.



Resolution Pyramids for Rapid Display

TerraBuilder creates a series of increasingly reduced resolution representations (pyramid), for each raster layer, to enable rapid display of the raster at various resolutions. When zoomed out of the layer, a reduced resolution is displayed that draws faster. When zoomed in, levels with finer resolutions are drawn but performance is maintained because successively smaller areas are being drawn.

