

Skyline PhotoMesh and 3DML Technologies

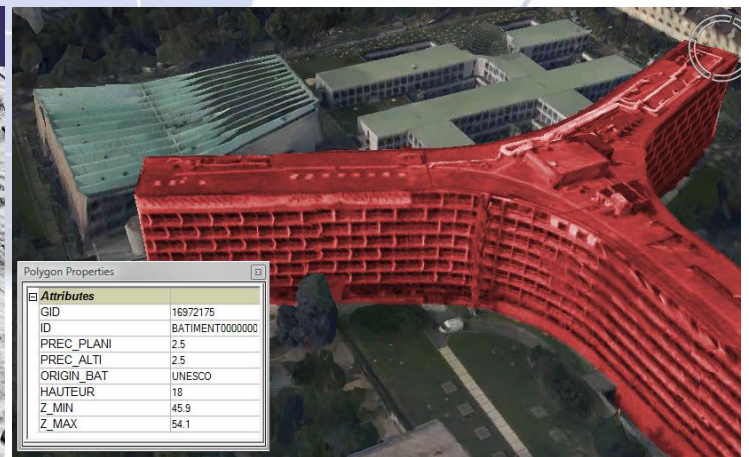
With the addition of the new, breakthrough PhotoMesh and 3DML technologies, Skyline's suite of applications now offers a fully-automated creation process for high-resolution 3D city models and a revolutionary management and rendering platform to view and query unlimited 3D city layers.

Skyline's **TerraBuilder PhotoMesh** automatically converts standard 2D photographs into high-resolution, fully textured 3D mesh models. The PhotoMesh technology is based on high performance photogrammetry, computer vision and computational geometry algorithms. The new **TerraBuilder CityBuilder** product merges PhotoMesh layers and/or layers with individually referenced 3D models into a stream-optimized and fully textured urban model that can be viewed and queried using the TerraExplorer 3D browser.



TerraBuilder PhotoMesh

TerraBuilder PhotoMesh allows rapid and intuitive generation of complete 3D mesh models from a set of standard photographs. **PhotoMesh** tool can combine any number of photographs, in a wide range of formats and resolutions, converting them into a set of high resolution and photo textured 3D mesh models. The conversion operation is entirely automated, offering a significant reduction in cost and time, compared to traditional modeling methods. The resulting photo-realistic, consistent 3D model can be viewed and queried using TerraExplorer's advanced analysis and spatial query capabilities.



TerraBuilder CityBuilder

TerraBuilder CityBuilder, the latest addition to the SkylineGlobe product suite, merges layers of 3D city models generated by TerraBuilder PhotoMesh, together with individually referenced 3D models into a single stream-optimized 3D mesh layer database (3DML). These layers are combined in CityBuilder with mesh layer classification information to create a 3D mesh layer database (3DML) that fully supports spatial and attribute queries. Multi-core and multi-computer processing can be utilized to accelerate the 3DML database creation and publishing of massive data sets. The 3DML data set can be made available to local TerraExplorer clients as well as remote TerraExplorer clients using the TerraGate SFS 3DML service.

Additional 3DML Creation Tools

The new 3D Mesh Layer (3DML) technology that is at the core of the new CityBuilder application has also been integrated within TerraExplorer itself. The new TerraExplorer Make 3DML tool allows users to generate a stream-optimized and fully textured urban model from point layers with individually referenced 3D models.



Viewing and Querying 3DML Data Sets

In addition to providing a superior 3D visualization, the new 3D Mesh Layer (3DML) technology also enables powerful geospatial analysis capabilities, allowing users to perform spatial and attribute queries as well as complex measurements and analysis operations on unlimited size 3D mesh models. Models are combined into stream-optimized tiles, providing accelerated loading speed and lower memory consumption. The 3DML technology is optimized for mobile devices, thin clients and other low memory devices.

Technical support: support@skylinesoft.com
General information: info@skylinesoft.com
<http://www.skylinesoft.com>