SkylineGlobe Web Package

Version 2.2

Datasheet

www.SkylineGlobe.com

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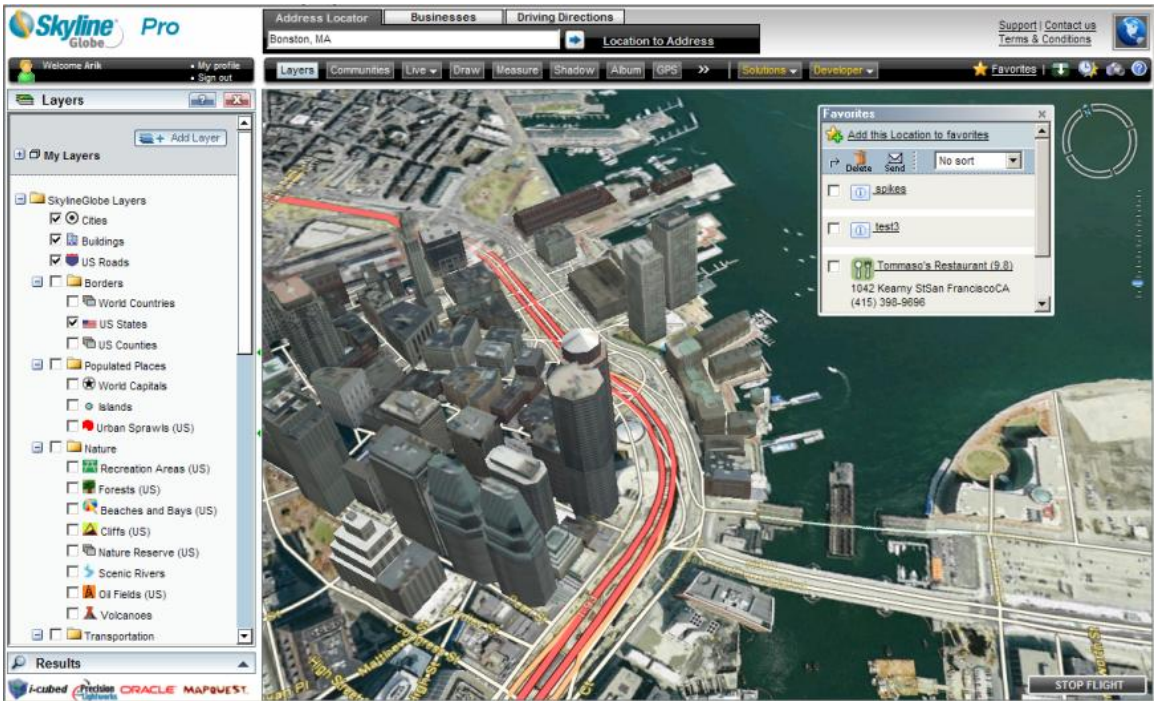
Overview

The **SkylineGlobe Web Package** is a complete ASP.NET project allowing you to instantly build your own 3D web application, based on the SkylineGlobe Enterprise technology. The SkylineGlobe Web Package contains the main SkylineGlobe 3D application, **SkylineGlobe WebViewer,** and all the associated tools such as the Layers Manager tool, Drawing tool and Measurement tool. SkylineGlobe Web Package also includes the advanced tools available to SkylineGlobe Pro users. The SkylineGlobe Enterprise Web Package can be customized and expanded with additional tools developed by the customer. The SkylineGlobe Web Package is managed using the SkylineGlobe Manager and powered by an Oracle or MS SQL Server database.

SkylineGlobe Web Package main components

- **SkylineGlobe WebViewer** – 3D web application with extensive set of tools and capabilities for your web users
- **SkylineGlobe Pro** – Provides additional features for your power web users
- **Developer Center** – Gives your advanced users the ability to develop tools for and extensions to your SkylineGlobe web application
- **SkylineGlobe Manager –**Manages the SkylineGlobe Web Package
- **Business Packages –** Allows you to create customized versions of your SkylineGlobe applications



SkylineGlobe WebViewer

SkylineGlobe WebViewer

SkylineGlobe WebViewer is a 3D web application, which enables users to navigate through high resolution 3D landscapes created by fusing aerial and satellite photography, terrain elevation data and other 2D and 3D information layers created with the SkylineGlobe Enterprise products.

SkylineGlobe WebViewer application Main Features:

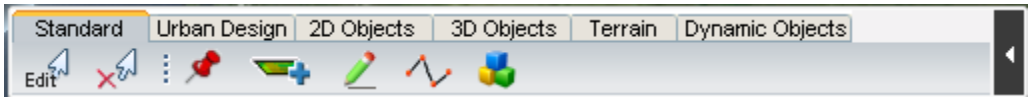
- **Customize** the User Interface
- **Ready to use tools** such as Draw Tool, Measure Tool, Layers Tool, Communities Tool and the Shadow analysis Tool
- **Favorites** and **Results** systems
- **Gazetteer** tool and database – search for places around the world
- **Localization** – easily translate the SkylineGlobe WebViewer application to your native language.

Draw Tool

This tool allows you to create simple and/or customized objects including markers, free hand lines, Mil-Std-2525b symbols, and urban designs. The set of tools in the Standard tab is designed for presentations and white board applications. The tools allow you to draw freestyle lines by tracking the mouse pointer movements, to create splined and thick lines, to simply and quickly add notes, and to point to locations on the terrain using the virtual cursor. The tool enables you to organize your drawings in drawing sheets and then display or hide your drawings in a mouse click.

Standard tab

This tool enables you to add lines, free hand drawings and markers.



Standard Draw Tool

Urban Design tab

This tool allows you to create an urban scenario with its own roads, junctions and traffic lights.

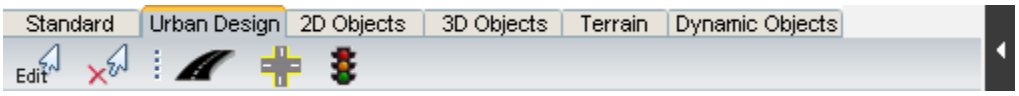
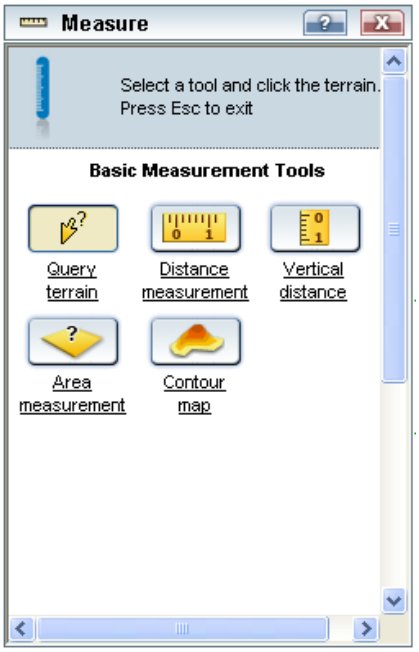


Figure 3: Urban Design Draw Tool

Measure Tool

Query Terrain

Displays the exact latitude, longitude, and altitude of any point in the 3D World. When an object is selected, the tool also displays general information about the object. If the object was loaded from a layer with attribute information, the object's attributes are also displayed.



Distance Measurement

Displays the horizontal distance, aerial distance, elevation difference and slope angle between two or more points in the 3D View.

Vertical Distance

Displays the elevation difference between two points in the 3D View.

Area Measurement

Displays the measurement of the horizontal projection of an area in the 3D View.

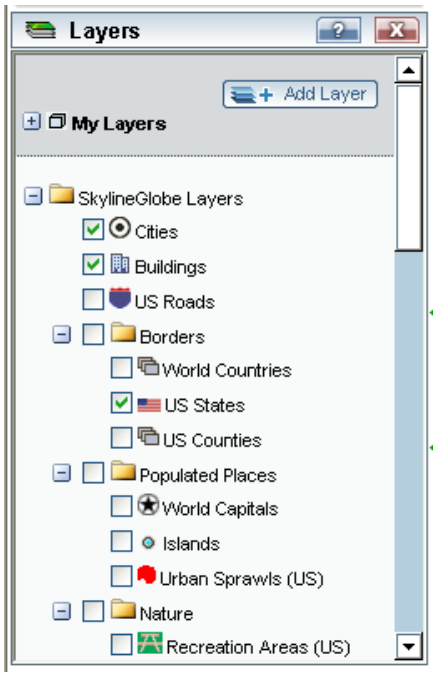
Contour Map

Displays a colorized terrain map and contour lines on a rectangular area, or the entire terrain. You can apply various colorized terrain pallets and/or contour lines to a rectangular area, or the entire terrain. The tool analyzes the terrain's altitude and dynamically applies the specified display style. In addition, after the contour map has been created, a contour map object is added to the information window.

Layers Tool

This tool enables you to add to the landscape various geographical information layers like state boundaries or freeways networks. You can add a layer from the SkylineGlobe layers catalogue or a SkylineGlobe layer (.fly), Google Earth (.Kml/.Kmz) or ESRI Shape layer (.shp) of your own.

Layers are added to the Fly project as elements in the Information Window that can be toggled on and off. You can import imagery layers from your local machine or from a remote server.



Layers Tool

Communities Tool

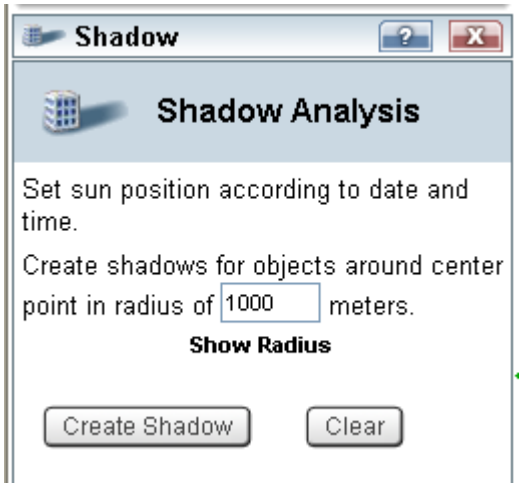
The Communities tool connects Skyline users on one collaborative network. Connecting over the internet/intranet, users can chat, annotate the terrain with text labels and free hand drawing, point using a virtual cursor, and synchronize their flight. One user serves as the manager of the session, and the rest connect as clients. You need to be a registered user in order to use the community tool.

Communities Tool

Shadow Analysis Tool

The Shadow Analysis tool calculates the shadow cast from buildings and 3D objects in a given radius based on the sun's position. The sun is positioned according to the time, date and time zone you set using the Date and Time controls.

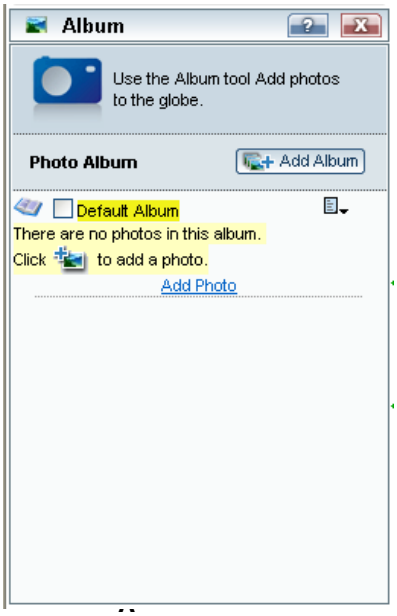
The shadows dynamically updates when the system date and time is changed.



Shadow Analysis Tool

Album

SkylineGlobe Pro enables you to create albums by which to group photos. You can then hide or show the group by turning on or off the album. You can place photos on specific locations on the terrain. The photos are displayed whenever you fly to those locations.



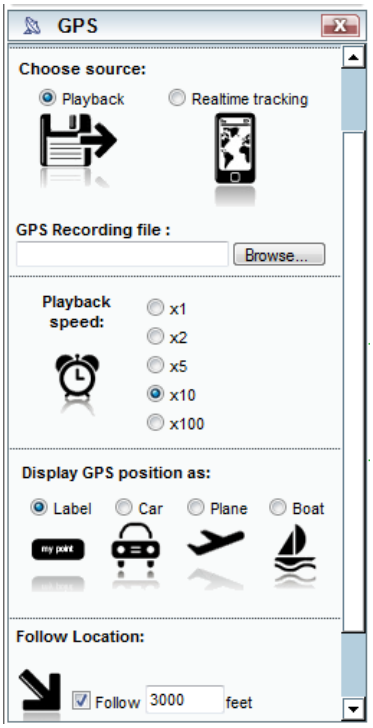
Album

GPS Tool

The GPS Tracking tool creates 2D or 3D objects and moves them according to position information, in NMEA format, it reads directly from a GPS or communication device through a USB or COM port or from a local or remote file.

The GPS tool supports multiple entities in a single device and allows fast forwarding capabilities when reading the information from files.

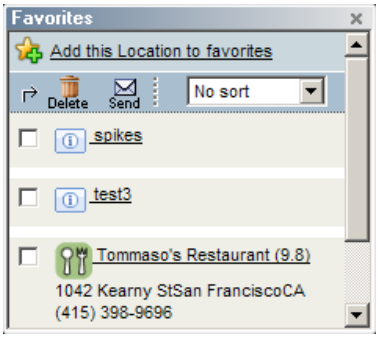
You can display the GPS-moving objects in a variety of 2D or 3D graphic representations, and add trace lines trailing the object routes.



GPS Tool

Favorites

In the Favorites list, you can save your search results, addresses, businesses and any other location for future reference. You can email a favorites listing to another person.



Favorites

Localization

The SkylineGlobe project is designed to easily change the default English text any other language. All the User Interface text is separated from the code and stored in external text files. You can translate the text and these files and attach it to the SkylineGlobe Web Package project.

SkylineGlobe Pro

SkylineGlobe Pro, an extension to **SkylineGlobe**, offers users advanced tools for editing, analyzing, and annotating photo-realistic interactive 3D environments. With SkylineGlobe Pro, the user can import feature, imagery, and elevation layers from a variety of sources. SkylineGlobe Pro enables the user to create terrain overlay information such as text and image labels, buildings, point cloud models, 2D and 3D entities, and predefined routes from standard GIS files and databases.

SkylineGlobe Pro also provides advanced tools for terrain analysis. This enables a user to easily calculate the best path between two locations and determine all visible segments or areas from a given viewing point.

SkylineGlobe Pro Main Features

SkylineGlobe Pro has the following features:

- Extends the SkylineGlobe WebViewer 3D application
- Loads standard online and offline feature layers
- Loads standard online and offline imagery layers
- Loads standard online and offline elevation layers
- Provides all the tools necessary to create rich, 3D terrain visualizations
- Includes interactive drawing tools to create and add geometric shapes, user-defined objects, buildings, text, Point Cloud models, and video clips on a 3D terrain model
- Generates static and dynamic 2D or 3D objects
- Provides a robust set of tools for measurement and terrain analysis

Developer Center

SkylineGlobe Web Package's Developer Center enables you to extend your application by developing your own HTML tools, which use the SkylineGlobe API. The Developer Center provides you with an API reference guide as well as code snippets, to help you create custom tools that address your own or your customers' specific needs. Your tool can add function to the standard interface or execute any custom code. You can share your tools with specific customers or publish them on the SkylineGlobe public site.

Business Packages

SkylineGlobe Web Package allows you to use the open API to create and host customized 3D geo-spatial applications for other businesses. With support for real-time fusion and streaming of massive data sets, open standards and a full API, you can use the SkylineGlobe tools to easily add interactive 3D capability to your customer's application.

The SkylineGlobe Web Package contains two types of business packages:

Customization Platform

SkylineGlobe Web Package's Customization Platform enables you to fully host for your customers a 3D web application that is based on the SkylineGlobe WebViewer UI. You can easily customize the interface and functions of the SkylineGlobe WebViewer according to your customers' needs. Using this platform, your business customers can then set up a comprehensive 3D application with minimal effort. The SkylineGlobe API allows your customers to extend their application with additional tools that interface with their organization's data.

Skyline Globe Customization Platform includes:

- Customized logo and branding
- Control over the set of tools
- Control over layers that appear in the Layers tool.
- Ready-to-go templates and tools to enable customization and configuration without hard coding
- Powerful API to support custom tools and service development
- Web based monitoring tools to track your customer's activities

Integration Platform

SkylineGlobe Web Package's Integration Platform enables your customers to freely design and develop a 3D web application based on the SkylineGlobe technology and data. With the Integration Platform your customers can use our powerful API to create new 3D geo-spatial, interactive applications and embed them within their web site.

SkylineGlobe Integrator Package includes:

- Ready-to-go templates and tools to get your customers started
- A set of SkylineGlobe ActiveX controls for your customer to embed in their application
- Powerful COM based API for custom tools and services development

- Full API documentation and a SkylineGlobe developer community for support
- Streaming access for your customers to all terrain and feature data directly from your SkylineGlobe Enterprise servers

Web based monitoring tools to track your customers account activities

SG Manager

SkylineGlobe Web Package provides you with SkylineGlobe Manager, a back-end, web-based application, which allows a user to control, customize and monitor different elements in the operation of SkylineGlobe Enterprise. From the SkylineGlobe Manager, you can manage users, menu sets, tools, business packages and control the layers tree for each account. You can also control the development center and post additional tools.

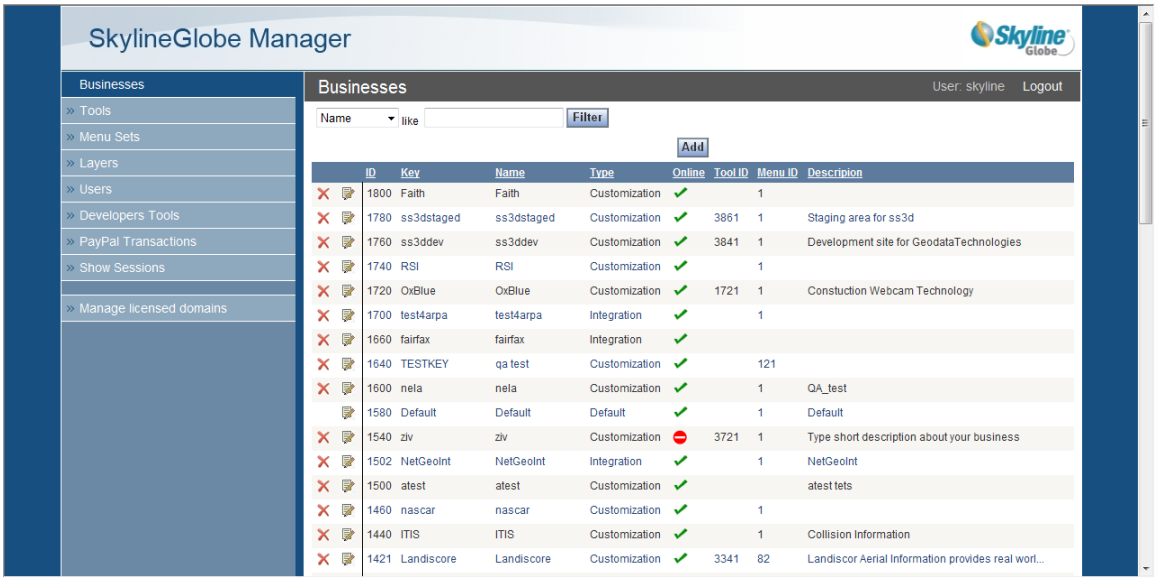


Figure 12: SkylineGlobe Manager

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