



SkylineGlobe 6

Technology Overview

www.SkylineGlobe.com

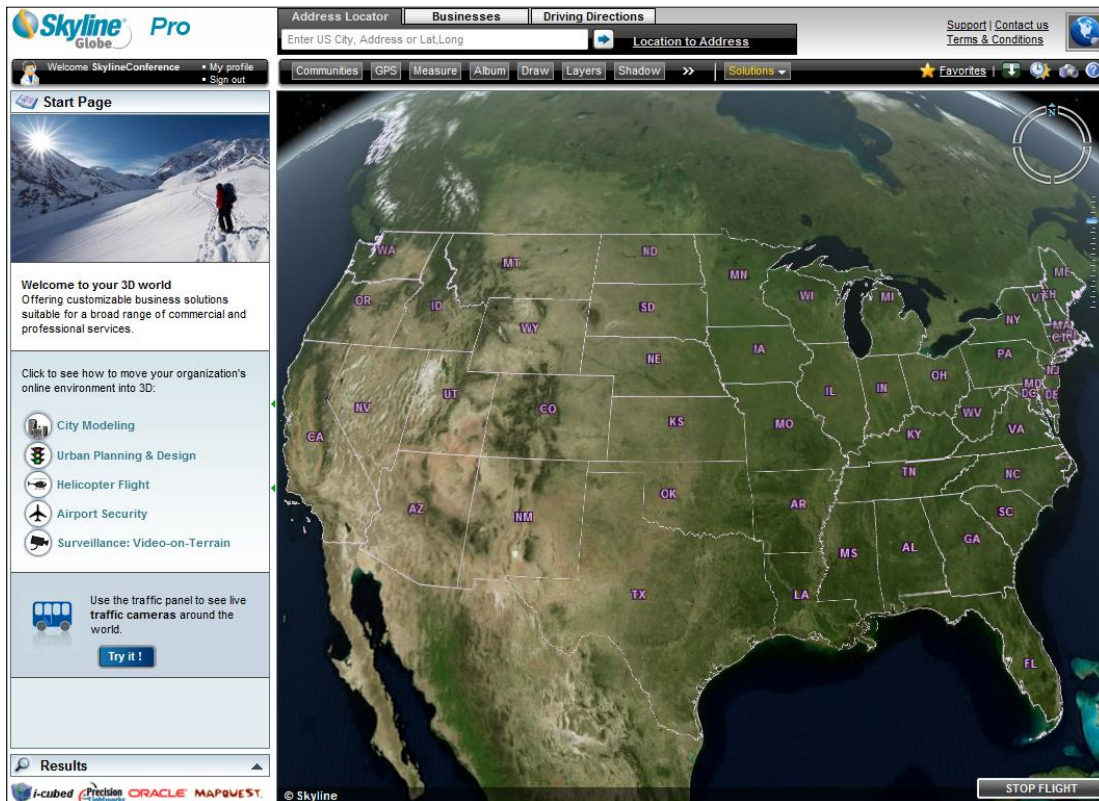
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SkylineGlobe Products

The SkylineGlobe suite of interactive applications allows you to build, view, query and analyze customized, virtual 3D landscapes. This 3D view is created by merging aerial and satellite photography and imagery, terrain elevation data and other 3D and 2D information sources, including geospatial data layers. Our software's unique capabilities allow "on the fly" data fusion from disparate and distributed sources without data pre-processing, allowing you to keep your 3D environment as current and relevant as the underlying data.

Skyline's range of products allows users to design an implementation customized to meet their unique requirements. Deployment options include the ability to work in a networked or disconnected (off-line) mode and make content available to the public or keep it restricted to secure networks and authorized users. Skyline's software also allows the creation of custom interfaces designed to support the needs of different types of users.



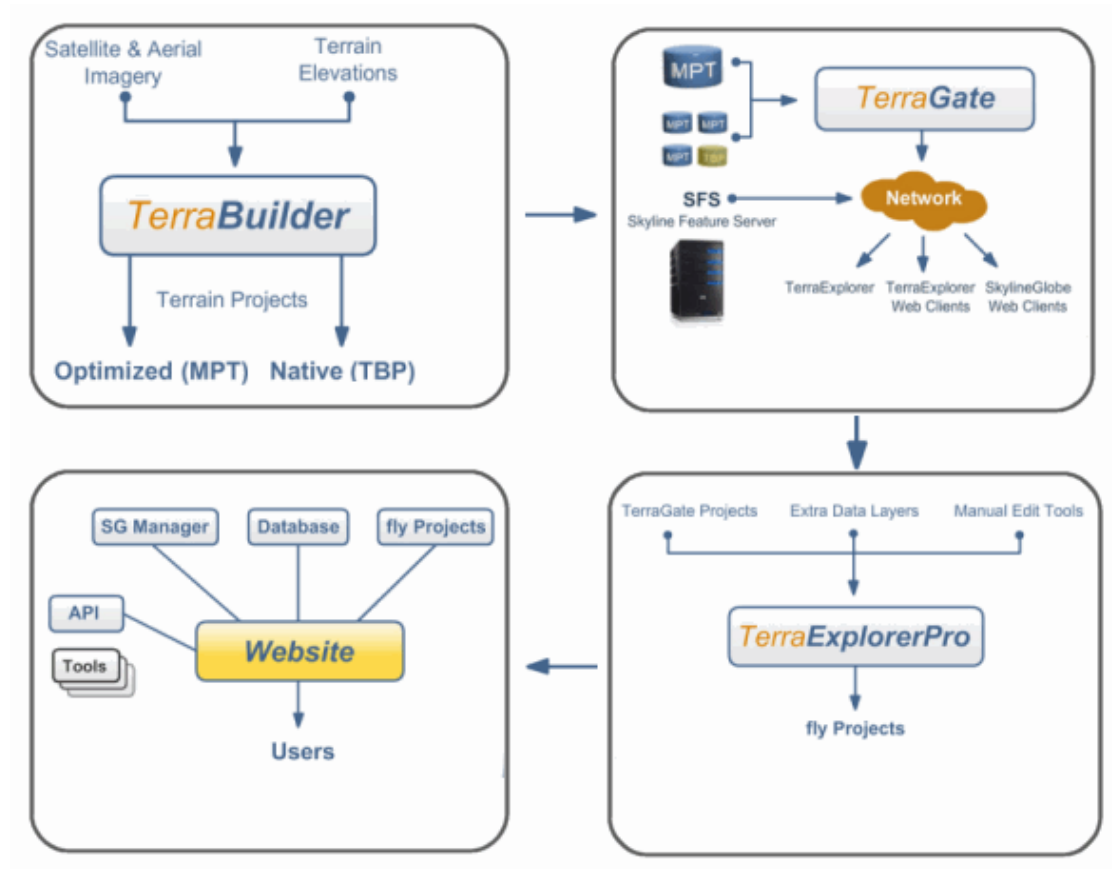
SkylineGlobe Enterprise

The **SkylineGlobe Enterprise** Bundle is an integrated software suite containing all of the necessary Skyline software components to set-up your own customized, privately-hosted 3D visualization solution. It includes the TerraExplorer Pro with TerraDeveloper, SkylineGlobe Viewer, TerraBuilder, and TerraGate with Direct Connect software packages. The SkylineGlobe Enterprise solution is scalable, with licenses to support from ten to tens of thousands of concurrent users.



SkylineGlobe Enterprise allows you to make your enterprise data instantly accessible to your users via an interactive 3D environment. With the capability to fuse massive amounts of raster and feature data "on the fly", SkylineGlobe Enterprise is a unique solution for a turn-key system that doesn't change the way you work or store your data. SkylineGlobe Enterprise supports data streaming in native formats, eliminating the need for time-consuming and expensive data pre-processing. As a result, a SkylineGlobe Enterprise implementation is quick to deploy, cost effective and the data available to end-users can easily be kept current.

Whether deploying a web based application or a desktop application, SkylineGlobe Enterprise provides a full Application Programming Interface (API) allowing you to customize it according to your requirements. Because SkylineGlobe Enterprise is based on OGC standards, such as WFS and WMS, it can operate as a seamless 3D interface with other existing, legacy systems within your organization.



SkylineGlobe Enterprise bundle includes the following components:

- **TerraBuilder**
Create 3D terrain models by fusing aerial/satellite imagery and elevation data.
- **TerraGate**
Powerful network data server technology designed to stream 3D terrain and feature data in real-time.
 - **TerraGate Component with DirectConnect**
Delivers 3D terrain data and hosts collaboration sessions for TerraExplorer users.
 - **TerraGate SFS Component**
Delivers feature and map data in OGC Web Feature Service (WFS) and Web Map Service (WMS) protocols.
- **TerraExplorer Pro with TerraDeveloper**
Powerful, easy-to-use tool for editing, analyzing, annotating and publishing photo-realistic interactive 3D environments. Allows users to fly over and edit geo-referenced 3D terrain databases created through TerraBuilder and overlay unique information.

- **SkylineGlobe Viewer**

A standard TerraExplorer Viewer that provides advanced API capabilities only when it is embedded in a SkylineGlobe web application. After installation, TerraExplorer Viewer can be run either as a stand-alone application, providing only standard capabilities, or from SkylineGlobe web application, using the Internet License to provide advanced API.

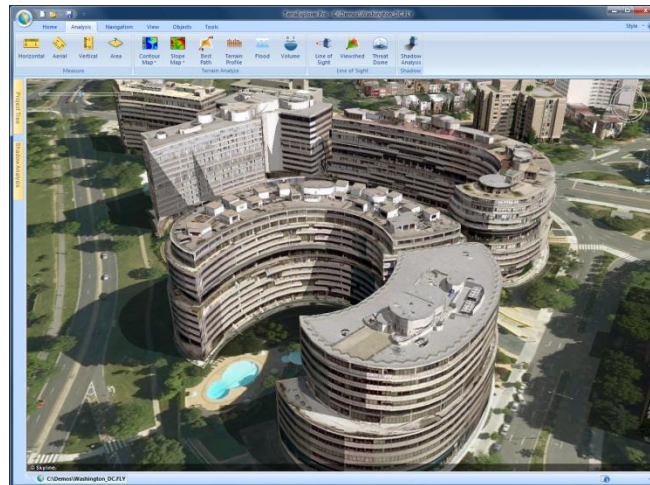
- **The SkylineGlobe Web Package**

Contains the main SkylineGlobe 3D web application and all the associated tools, including the SkylineGlobe Administrator interface and the Layers Manager tools as well as the Drawing and Measurement tools.

TerraExplorer

TerraExplorer® is a powerful, easy-to-use set of client-side applications for editing, analyzing, annotating and publishing photo-realistic interactive 3D environments.

The TerraExplorer set of products enables users to edit and annotate a geo-referenced 3D terrain database created through TerraBuilder. Users can customize the database with data from a network, a local drive or the Internet. Overlaying data specific to the user's requirements onto a 3D map creates a targeted, interactive picture that can meet the needs of a diverse user base and the specific requirements of each individual user.



TerraExplorer Family

All the products in the TerraExplorer family are built utilizing the same underlying technology. All tools, developed using the TerraExplorer Pro API, can be activated by all tools in the TerraExplorer family: TerraExplorer, TerraExplorer Plus, TerraExplorer Run Time Pro, and TerraExplorer Pro.

TerraExplorer: Available as either an integrated ActiveX control or a stand-alone application, is the base level viewer that provides the ability to navigate through, analyze, and perform basic editing tasks on high-resolution 3D environments. New to version 6, users can now add other FLY files and KML/Z files as layers, and save projects to those formats.

TerraExplorer Plus: Adds feature and raster layer importing, advanced editing, and access to the powerful TerraCatalog to the capabilities of TerraExplorer. Enables users to collaborate with other users in real-time over a network or over the Internet, viewing and flying over the terrain together, and making annotations that all participants in the collaboration session

can see and turn on or off. Exposes the advanced Pro API enabling the creation of a customized toolset and user interface.

TerraExplorer Pro: Adds advanced objects (video on terrain, terrain modification and dynamic objects), advanced drawing tools (Duplicate Objects, Create Pipe Lines, Create Power Lines), feature layer creation and editing, spatial and attribute queries, and additional publishing capabilities beyond the TerraExplorer Plus product.

TerraExplorer Products - Main Features

- The project (.fly) editor that works on terrains built by the TerraBuilder and (optionally) streamed by TerraGate
- A professional station and also a tool for publishing projects that can be viewed by other TerraExplorer product users offline, over a local network or over the Internet
- Efficient in streaming terrain and data overlays over any network
- Includes interactive drawing tools to create and add geometric shapes, user-defined objects, buildings, text, bitmaps and animations on a 3D terrain model
- Generates and imports static and dynamic 2D or 3D objects, symbols and geo-referenced information layers
- Loads online and offline GIS layers
- Saves layers to GIS standard file formats
- Communicates with external, local and web applications using standard COM interface Controls all static and dynamic objects, information layers and application content
- Provides a robust set of tools for measurement and terrain analysis
- Records a presentation in which you navigate through the 3D World, showing or hiding objects and layers, following dynamic objects, displaying messages and performing various operations
- Creates movies, as AVI from a recorded presentation
- Enables users to share geographical information with others by using the presentation tool or converting presentations to video recordings
- Controls speed, altitude and viewing angle using any combination of the mouse, keyboard, Ribbon commands, navigation controls, and joystick
-
- Takes snapshots of the 3D window and saves them to external files
- Hyperlink feature links specific areas or objects to web pages, applications or databases
- Integrates text and web content messages

- Provides connectivity to the TerraCatalog, which can be searched for layers and projects and updated with changes
- Allows users to export the 3D View, Information Tree, and side map windows as ActiveX controls
- Records and displays warnings, messages, and errors to help you troubleshoot any TerraExplorer issue
- Simplifies the translation of user interface text and icons

C2MP Products – Main Features

Each of the TerraExplorer products is also available in an export controlled Command & Control Mission Planning (C2MP) configuration which offers unique features for military and defense users. These include the following features:

- FalconView integration
 - Allow .RTE files to be imported and used as the basis for dynamic objects, which lets the user see and interrogate the RTE path within the TerraExplorer 3D scene, including any other data that may be loaded at the same time, such as ACO or other relevant features
 - Synchronize TerraExplorer with FalconView such that both applications are updated when the user changes viewpoint in one application or the other
 - Allow threat models to be rendered in TE
 - Allow local point models to be rendered in TE
- Multi-tracking tool
 - Provide one common user interface for all supported tracking feeds
 - ◆ Blue Force Tracking
 - ◆ Predator Tracking – includes support for Video On Terrain or Video Popup for Predator
 - ◆ Cursor-on-Target
 - ◆ GPS (NMEA protocol)
 - Simple interface allows users to easily incorporate additional tracking feeds
- Mil-Std-2525B symbols creator
- Coordinate Marker Tool

- Quick coordinate annotation utility, allowing users to drop variable size shapes with labels for a coordinate in the preferred coordinate system, along with an optional customized tag
- Provides a mechanism for simple real-time interrogation of points on the terrain

- Air Combat Order (ACO)
 - Provides support for many of the common ACO types, so that data can be viewed in full 3 dimensions, including altitude boundaries of zones

- Gridded Reference Graphic (GRG)
 - Based on pre-existing tools for GRG creation in the community
 - Provides for creation of a GRG from TerraExplorer, so that users can see POIs quickly and easily

C2MP for TerraExplorer viewer also adds the following TerraExplorer Pro tools:

- Draw tool
- Collaboration tool

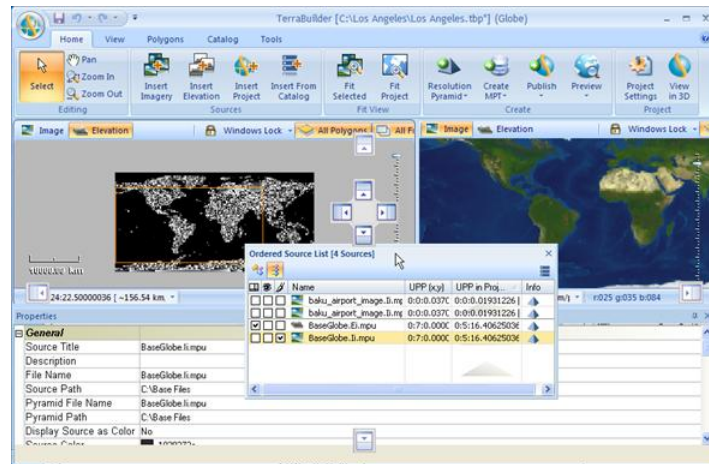
TerraBuilder

TerraBuilder®

allows users to quickly create, edit and maintain

Skyline 3D terrain databases.

This component of Skyline's product suite merges aerial photos, satellite images, and digital elevation models of different sizes and resolutions into a photo-realistic, geographically accurate terrain database. This 3D terrain database can then be used as the base terrain in a TerraExplorer project or added to a TerraExplorer project as an



additional Imagery or Elevation layer that is seamlessly integrated with existing terrain data.

In order to create the terrain database, raster files are imported to a TerraBuilder project, and then manipulated to achieve the desired 3D terrain database result. Possible manipulations include cropping using various TerraBuilder tools, geographic adjustment and reprojection, and color and elevation modification. When complete, the project can be processed into a single stream-optimized file (MPT), or it can be published for streaming from Skyline's TerraGate server. The published project, built from optimized and native source data, is streamed using the DirectConnect component, which employs advanced mechanisms to build data on-demand, and leverage cache technology for performance and scalability optimizations. Support for multi-core and multi-computer processing can be utilized to accelerate database creation and publishing of massive data sets.

Terrain databases, both MPT files, and TBP using DirectConnect, can be made available for 3D browsing to remote TerraExplorer clients using the TerraGate Terrain service. The same terrain databases can also be served to WMS clients with TerraGate SFS WMS service.

Users can easily share, post, find, and load necessary geographic data for a TerraBuilder Project by connecting to **TerraCatalog**, a catalog database available in version 6 products. TerraCatalog stores, organizes and manages connections to imagery and elevation sources and projects. All modifications to a source can be updated to the catalog, overriding the

existing catalog layer or creating a new layer as required ensuring that changes made can be captured and stored.

TerraGate

TerraGate® is a powerful network data server technology designed to stream 3D geographic terrain databases in real-time.

TerraGate Family

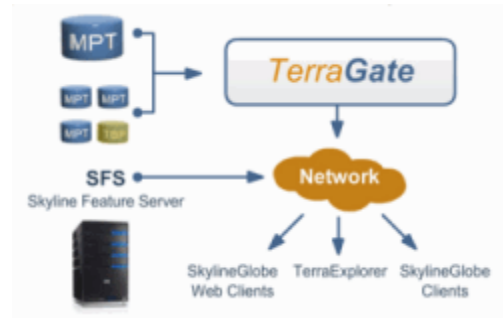
The TerraGate family of tools supports the client-server data delivery requirements of Skyline's 3D technology. This powerful network feature and terrain server technology efficiently streams massive amounts of 3D geographic and feature data to thousands of concurrent users, giving each user uninterrupted viewing.

TerraGate suite is compliant with the following OpenGIS Implementation Specifications:

- OpenGIS® Web Feature Service (WFS)
- OpenGIS® Web Map Service (WMS)
- OpenGIS® Catalog Service: Web (CSW)

TerraGate includes the following components:

- **TerraGate Terrain Streaming Server Component** - A powerful network data server technology that provides the following services, via the TerraGate server:
 - **TerraGate Terrain Service** - Streams terrain databases, both MPT (stream optimized) files, and TBP using DirectConnect (published TerraBuilder projects, built from optimized and native source data).
 - **TerraGate Internet License Service** - Enables the use of extended TerraExplorer Pro API capabilities from authorized domains.
 - **TerraGate Collaboration Service** - Hosts TerraExplorer Collaboration sessions to which multiple users can connect and work together in the 3D environment.
- **TerraGate Spatial Framework Services (SFS) Component** - A powerful network feature server technology that provides the following services, via the SFS server:
 - **Web Feature Service (WFS)** - Streams feature layers from Shape files and the Oracle, SQL server, PostGIS and ArcSDE databases, via the WFS server, to any application that reads the standard OGC WFS protocol. Remote clients have read-write access, to edit the feature layer and save changes to the data source. WFS also supports advanced spatial and attribute queries from its clients.
 - **Web Map Service (WMS)** - Provides an interface for requesting geo-registered map images from geospatial databases as well as for publishing map data as WMS services.
 - **Catalog Service: Web (CS-W)** - Provides TerraCatalog search interface for remote users. The catalog maintains detailed information about its layers including type, dimension, dates, metadata, and custom data.



SkylineGlobe Web Package

The SkylineGlobe Web Package is a complete ASP.NET project for building your own 3D web application, based on the SkylineGlobe technology. The SkylineGlobe Web Package contains the main SkylineGlobe 3D application and all the associated tools, including the SkylineGlobe Administrator interface and the Layers Manager tools, as well as the Drawing and Measurement tools. SkylineGlobe Web Package also includes the advanced tools available to SkylineGlobe Pro users.

The SkylineGlobe Web Package can be customized and expanded with additional tools you develop. The SkylineGlobe Web Package is managed using the SkylineGlobe Manager web application and powered by an Oracle or MS SQL Server database.

Main components

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

SkylineGlobe Solutions

SkylineGlobe Solutions include all the tools needed to build your own privately hosted, 3D visualization platform based on SkylineGlobe technology. Three different software bundles are available to meet your specific 3D visualization needs:

- [SkylineGlobe Enterprise Solution](#)
- [SkylineGlobe Plus Solution](#)
- [SkylineGlobe Basic Solution](#)

SkylineGlobe Enterprise Solution contains all the software necessary to create, view, annotate, edit analyze, and share 3D portals.. SkylineGlobe Enterprise includes TerraBuilder v6 with the Direct Connect Extension, TerraExplorer Pro with the TerraDeveloper extension, TerraExplorer Plus, TerraGate and Spatial Framework Server (SFS) and SkylineGlobe Web application.

SkylineGlobe Basic Solution and **SkylineGlobe Plus Solution** are alternative bundle options for use in facilities, which require a privately-hosted, 3D visualization solution but do not need some of the more advanced features of the SkylineGlobe Enterprise Solution. Both solutions provide a full Application Programming Interface (API) that enables you to customize your interface according to your requirements or easily build your own 3D web application based on SkylineGlobe technology.

SkylineGlobe Basic Solution includes TerraExplorer Pro with the TerraDeveloper extension, TerraExplorer Plus, TerraGate, and SkylineGlobe Web application.

SkylineGlobe Plus Solution contains all the software of the Basic Solution **plus** the TerraGate SFS component, which enables you to stream feature layers from a remote server and provides TerraCatalog search interface for remote users.

What's included in each of the SkylineGlobe Solutions?

	Enterprise Solution	Plus Solution	Basic Solution
TerraBuilder	✓		
TerraGate Component with Direct Connect	✓		
TerraGate SFS Component	✓	✓	
TerraGate Terrain Streaming	✓	✓	✓
TerraExplorer Pro with TerraDeveloper	✓	✓	✓
SkylineGlobe Web Package	✓	✓	✓

- [TerraBuilder](#)
Create 3D terrain models by fusing aerial/satellite imagery and elevation data.

- [TerraGate](#)
Powerful network data server technology designed to stream 3D terrain and feature data in real-time.
 - TerraGate Component with DirectConnect
Delivers 3D terrain data and hosts collaboration sessions for TerraExplorer users.
 - TerraGate SFS Component
Delivers feature and map data in OGC Web Feature Service (WFS) and Web Map Service (WMS) protocols.
- [TerraExplorer Pro with TerraDeveloper](#)
A powerful, easy-to-use tool for editing, analyzing, annotating and publishing photo-realistic interactive 3D environments. Allows users to fly over and edit geo-referenced 3D terrain databases created through TerraBuilder and overlay unique information. Included in this package is the Skyline TerraDeveloper software development kit, a set of ActiveX controls that provides full customization of TerraExplorer Pro applications.
 - [SkylineGlobe Viewer](#)
A standard TerraExplorer Viewer that provides advanced API capabilities only when it is embedded in a SkylineGlobe web application. After installation, TerraExplorer Viewer can be run either as a stand-alone application, providing only standard capabilities, or from SkylineGlobe web application, using the Internet License to provide advanced API.
- [The SkylineGlobe Web Package](#)
A complete ASP.NET project for building your own 3D web application, based on the SkylineGlobe Enterprise technology. The SkylineGlobe Web Package contains the main SkylineGlobe 3D application and all the associated tools and advanced tools available to SkylineGlobe Pro users.

Applications- Overview

Explore the Possibilities

The SkylineGlobe software platform provides users with rapid access to 3D geospatial data. SkylineGlobe's highly-efficient streaming technology enables unparalleled 3D realism while minimizing hardware and network systems requirements. The SkylineGlobe software is easy and quick to deploy in a variety of environments. Skyline's open architecture and robust API offer system developers a rich set of capabilities to utilize in a wide range of applications and systems. Skyline's software has been approved for use secure, mission critical systems including installation on a wide variety of secure military networks.



Uses for Skyline's Software Applications:

- For the military, intelligence services and law enforcement, Skyline aids in disseminating 3D geographic information for mission planning and execution, asset tracking, and training & simulation.
- For the civil engineer or architect, state and local governments, we provide the capability to see the impact of proposed development, visualize new projects, conduct wide scale planning and display information about an area to support economic development.
- For Utilities we offer a platform that can support the core operations with location services, the ability to visualize resources above ground, below ground or underwater, in a rich variety of devices and capabilities.
- In telecommunications our capabilities assist in deploying next generation services and provide a platform for deploying location based services.
- For the web designer and consumer markets we offer a way of increasing sales effectiveness by creating longer visits and providing localized information.

Benefits of Skyline's Software Applications:

End-to-end solution for 3D photo realistic visualization

- Easy to integrate and use
- Uses off-the-shelf PC hardware
- Quick to implement, net-based technologies

Easy to deliver

- Via standard TCP/IP networks

- On a wide variety of clients from handheld devices to desktops

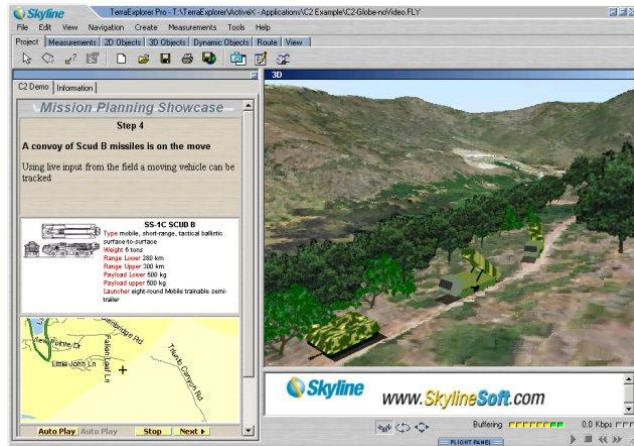
Scalable server environment

- Fuse and integrate very large databases
- Efficiently handles terabytes of data
- On-the-fly data integration for maximum flexibility

Applications - Defense and Intelligence

The ability to build, view and analyze the operational picture tied to a geospatial reference is critical for successful military and intelligence operations. As a defense-wide infrastructure, Skyline's software solutions simultaneously support mission planning, training and exercises, and command and control activities. Users can simulate future missions, present tactical ways to approach and execute missions, and analyze data before, during and after an operation. With Skyline products, any strategic plan can be visually realized in real-time, as the movements of assets can be tracked and put into a wider geographical perspective enhancing informed decision making.

The SkylineGlobe suite of applications serves every level of the military hierarchy, from the real-time visualization of the battlespace by senior commanders, to the rapid and easy-to-use tactical analysis capabilities necessary for the warfighter. Skyline supports the concept of a User Defined Operating (UDOP) wherein the user defines what information is needed and how it is presented.



Mission Planning:

Tactical planning/terrain analysis - Before a mission, Skyline's software can be used to evaluate potential approaches to a target based on surrounding terrain, possible choke points and other critical information. TerraExplorer comes equipped with both traditional terrain analysis tools and more advanced geospatial analysis abilities including: Slope and Contour Analysis, Line-of-Sight, Viewshed Analysis, and Threat Dome. These powerful analysis capabilities can significantly aid in providing a better geospatial understanding of the area prior to deployment. These tools also offer an effective visual way of marking safety zones, buffer zones and danger zones.

Mission training - Generate a ground or air representation of anticipated operational situations so troops can better envision what it will be like in the field. Multi-sensor data fusion combined with robust tools for collection and management of imagery, elevation, and detailed feature layers enable users to create 3D, photo-realistic, geographically accurate visualizations

of a mission site. This enables team leaders to walk troops step-by-step through a mission, avoiding the misconceptions that invariably result from depicting a 3D world in 2D.

Intelligence - Use TerraBuilder to create a terrain database on-the-fly using the latest satellite pictures of an area. Then mark off points of interest, share it via the Collaboration tools and plan the mission using TerraExplorer.

During the Mission:

Command and Control - Terrain can be updated on-the-fly from central command as GPS feeds the new information into the system.

Asset Tracking - Keep aware of friendly assets in the region using standard MilStd 2525b symbology

Real-time updates - With SkylineGlobe's powerful server applications, optimized cache databases, dynamic update and native data streaming capabilities, massive quantities of updated terrain data can be published and made available to soldiers in the field via a wireless connection.

In-cockpit aids - Even in the air, deliver rich 3D visualizations of the terrain to users who require real-time images of ground movement.

UAV interfaces - Video interfaces for UAV's such as the Predator, allow real-time video on terrain presentation to put video feeds into proper geographic context.

Mission Debriefing

Reenactment and analysis - Commanders can accurately reenact the mission, evaluating each progressive step of the operation, and make the required modifications for the next mission.

Collaboration with mission partners - Fly-through and study the 3D environment together with remote mission partners. Skyline's adherence to open standards enables users to share data with any application that reads the standard OGC WFS and WMS protocols.

Applications - Security

Using SkylineGlobe's robust and comprehensive API, users can easily design and develop a customized 3D geospatial web or desktop application that provides enhanced geospatial understanding of a facility's vulnerabilities and speeds up detection and response time in the event of a security breach. Rapid access to extensive data, displayed in a geospatial medium helps protect critical assets and infrastructure and ensure public safety.

Design an effective security arrangement

SkylineGlobe's technology is a powerful aid in identifying the vulnerabilities of a current or proposed security arrangement. Surveillance issues, such as the visual exposure of guard posts and patrol routes and the buffer zone necessary to insure defensible perimeters can be precisely and conclusively identified using SkylineGlobe's advanced analysis tools or with newly created tools, using SkylineGlobe's comprehensive API.

Command and Control

SkylineGlobe supports the use of 3D representations to rehearse intended response plans to anticipated operational situations, thus avoiding the misconceptions that invariably result from depicting a 3D world in 2D.

With SkylineGlobe's technology, disparate sources of security information can be integrated into a single command environment, to support rapid access to comprehensive data from multiple agencies and sources. As real-time data becomes available, imagery, terrain, asset, unit status and location, and evacuation route information can be updated on-the-fly. Evacuation routes, casualty clearing and access points and emergency personnel deployment can then all be modified to reflect the latest data.

Applications - Public Safety

Use the SkylineGlobe to build a customized 3D geospatial web or desktop application that provides public safety personnel with an interactive 3D environment and tools to better prepare and respond to a public safety incident. Rapid access to extensive data from multiple agencies and sources, displayed in a geospatial medium enables public safety personnel to mitigate the effects of natural and man-made disasters.

Assess risk

Integrate SkylineGlobe's 3D visualization capabilities into risk assessment software to enable accurate visualization of where emergencies are most likely to occur (based on terrain, weather or other factors) and what areas, if affected, will sustain damage to vital infrastructure, population centers, or important natural resources. This knowledge can be used to decide where new fire and police stations, and hospitals should be built, and what equipment they should be stocked with to allow them to effectively respond to future emergencies.

Plan and rehearse emergency response

Ground and/or air representations of anticipated emergency situations can be generated to give emergency service personnel the opportunity to envision and rehearse future field operations. Analysts can assess potential approaches and quickest evacuation routes based on surrounding terrain or physical structures.

Command and Control

With Skyline's software, unit status and location, and evacuation and transportation route information can be updated on-the-fly with data from sensors with live data feeds or from first-responders on the scene. This information can be streamed within minutes to the emergency personnel's Command and Control center so that they can modify evacuation routes and emergency personnel deployment as required. Skyline's video on terrain capabilities can facilitate the sharing of real time video information for air assets (helicopter or UAV) from the field to assets on the ground (first responders or command staff).

Dispatch

Skyline's software integrated with computer aided dispatch (CAD) applications can provide both dispatchers and first responders with a better understanding of how to respond to emergencies. By adding location specific information (terrain, building models, imagery, etc...) to traditional CAD inputs (available emergency assets and locations), first responders can operate more safely and effectively by being better informed about what to expect on scene.

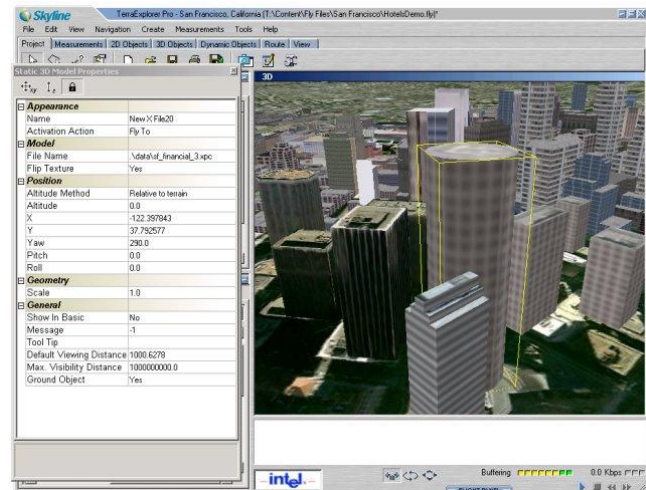
Applications - Urban Planning and Environmental Management

Leverage the SkylineGlobe applications to design a customized 3D geospatial web or desktop application that provides urban planners and environmental managers with the environment and tools to monitor environmental impacts, assess constituents' needs, and insure adherence to regulatory guidelines. By overlaying a wide range of geospatial data on actual terrain, users can create easy-to-understand 3D worlds that give concerned parties an accurate representation of a proposed project's aesthetic and environmental impact before work begins.

Share project designs over the Internet

Skyline's tools have a multitude of uses in civil planning, where there are multiple stakeholders. Provide concerned parties with easy access to amazingly realistic views of projects that are currently in design or review, by overlaying your own specific working drawings, GIS layers, and 3D models on the actual terrain. Users will be able to interactively navigate through a photo-realistic 3D model of the planned construction and compare it to the present condition and alternative proposals. Accurate representation in 3D allows users to more intuitively understand proposed development before construction begins, without the misconceptions that invariably result from picturing a 3D form based on 2D drawings. Does a proposed design obstruct a particular view? Does the shadow of one building fall on another at specific points in time? Do the height, form and design of the building fit in with surrounding architecture? Can the proposed density of use be adequately supported by local transportation infrastructure? What zoning variances are required for development? Engineers, architects, and surveyors involved in a project can collaborate with team members over the Internet or intranet. Designs can be unveiled, alternative proposals suggested, and the terrain collaboratively annotated with text labels, free hand drawing, and new 2D and 3D objects, until a successful design is produced.

Promote environmental concerns



SkylineGlobe can be used to assess and display the specific effects of hazardous waste disposal, pesticides, pollution, industrial development, etc. on water and air quality, fish population, wildlife, soil stability and more. Current data can be compared with historical data to demonstrate trends and patterns. Geographically accurate representations of polluted water bodies or receding coastlines, linked to local and Internet sources of information on causes and solutions of these problems, will significantly promote environmental awareness and activism.

Applications - Commercial 3D Geographic Portal

With Skyline's powerful, yet intuitive software, real estate agencies can offer their customers an opportunity to visually "visit" a potential property in its geographic context. Travel agencies can take customers on virtual tours of distant travel destinations from the comfort of their home or office. With the SkylineGlobe environment, travel services, property owners and local/city governments can create virtual cities including hotels, restaurants, features and points of interest tailored to the preference of their clientele. Skyline has been used to deliver the romantic wonders of Paris, the excitement of ski resorts such as Chamonix in the French Alps, or help users travel to the Holy Land for the trip of a lifetime, all to a user's desktop. Powerful tools for publishing geospatial data on-the-fly, as real-time data becomes available, keep your 3D environments current and up-to-date.

Your SkylineGlobe implementation can be designed to convey the same look and feel as your own site, displaying your logo, brand colors, fonts and styles. Also, it is easy to embed your own content in your SkylineGlobe page and integrate search engines and other applications into SkylineGlobe's environment.

Build precise, realistic, 3D environments

Overlay stores, restaurants, schools, parks, bus routes and stops along with prominent buildings and other landmarks on a street map, so users can visualize their specific property or tourist attraction. Skyline's photo-realistic environments immediately convey a sense of scale that can't be seen in 2D map solutions. Your clients can use SkylineGlobe measurement tools to measure planned travel routes or proximity to a shopping center, school, or busy intersection. With Skyline's 3D visualization of real estate listings, you help clients narrow their search, thereby more effectively utilizing valuable agent time.

Deliver data over the Internet

With SkylineGlobe's powerful server applications, optimized cache databases, dynamic update and native data streaming capabilities, massive quantities of geospatial data can be updated and published quickly to thousands of concurrent users in low to high bandwidth situations.

Link geographical locations to information layers

Clients can fly to the house or tourist site of their choice, and then click on the layers of interest to get more information. Displayed services can link to information layers with real-time data regarding menus, prices, specials and opening hours. Any information about a site (text, images, boundaries, area demographics, etc.) can be seamlessly linked within the Skyline environment to provide a realistic global experience online.

Applications - Government 3D Geographic Portal

Utilizing SkylineGlobe's extensive API, construct a 3D geographic web portal that provides municipal, local, and national governments with advanced visual and graphical information relating to the locality's landscape, infrastructure and facilities. You can display current and updated aerial images imported directly from the locality's server and integrated into the SkylineGlobe 3D environment. Additional information layers from the locality's database can be added to the local landscape, including police precincts, borders, schools, transportation networks, power grids and building project plans.

Increase constituency involvement

Multi-sensor data fusion, combined with advanced modeling capabilities, enable you to provide constituents with 3D building plans that bring to life the locality's future development plan. Thousands of local users can concurrently navigate through a photo-realistic 3D model of the planned construction, compare it to the present condition and to alternative proposals, and then vote for their favorite. SkylineGlobe technology is infinitely scalable to support as many users as required.

Promote environmental awareness and activism by displaying the specific effects of hazardous waste disposal, pesticides, pollution, industrial development, etc. on water and air quality, fish population, wildlife, soil stability and more.

Encourage economic development

Promote your local area by providing potential businesses with a better understanding of the benefits of an area. By building a virtual model of your locality, business looking at your area can better understand potential locations, traffic and pedestrian flows, features of the areas, available office or retail space and proximity to parking, public transportation. The entire user interface can be easily translated into your local language. All information about a destination (text, images, etc.) can be seamlessly linked to the SkylineGlobe environment to provide a realistic online experience.

Provide information

Your 3D environment can serve as a user-friendly and inviting repository of comprehensive data about your locality. You can add information layers about any subject your constituents are interested in, including weather, population density, and live traffic cameras. Visitors to your 3D geographic portal can toggle information layers on and off, according to their particular interests.

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