SkylineGlobe Server
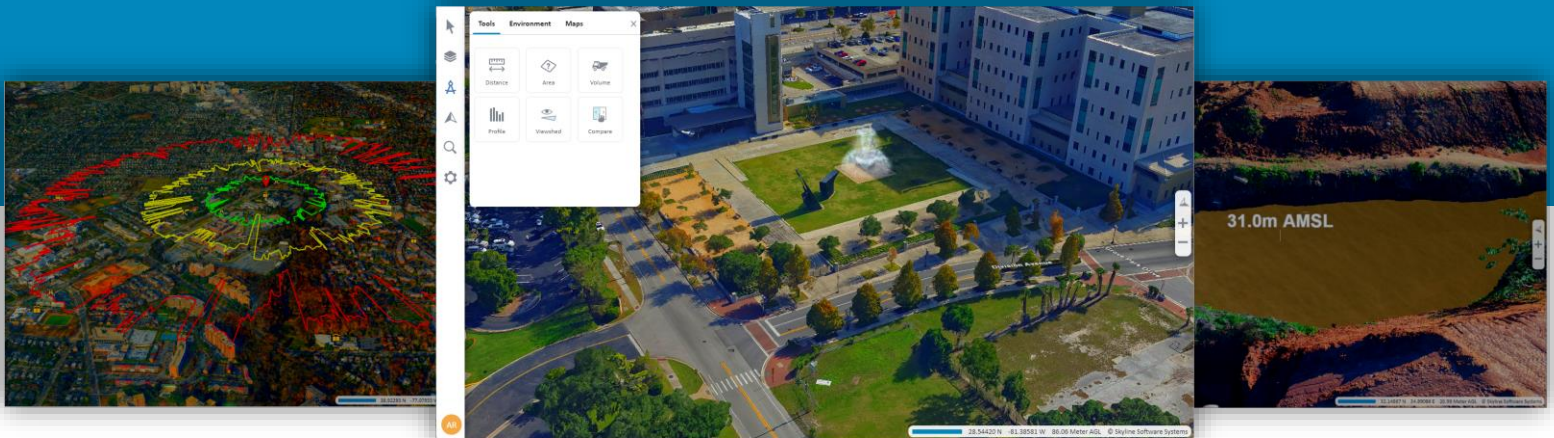## Release Notes
V 8.0.2

CONTENTS
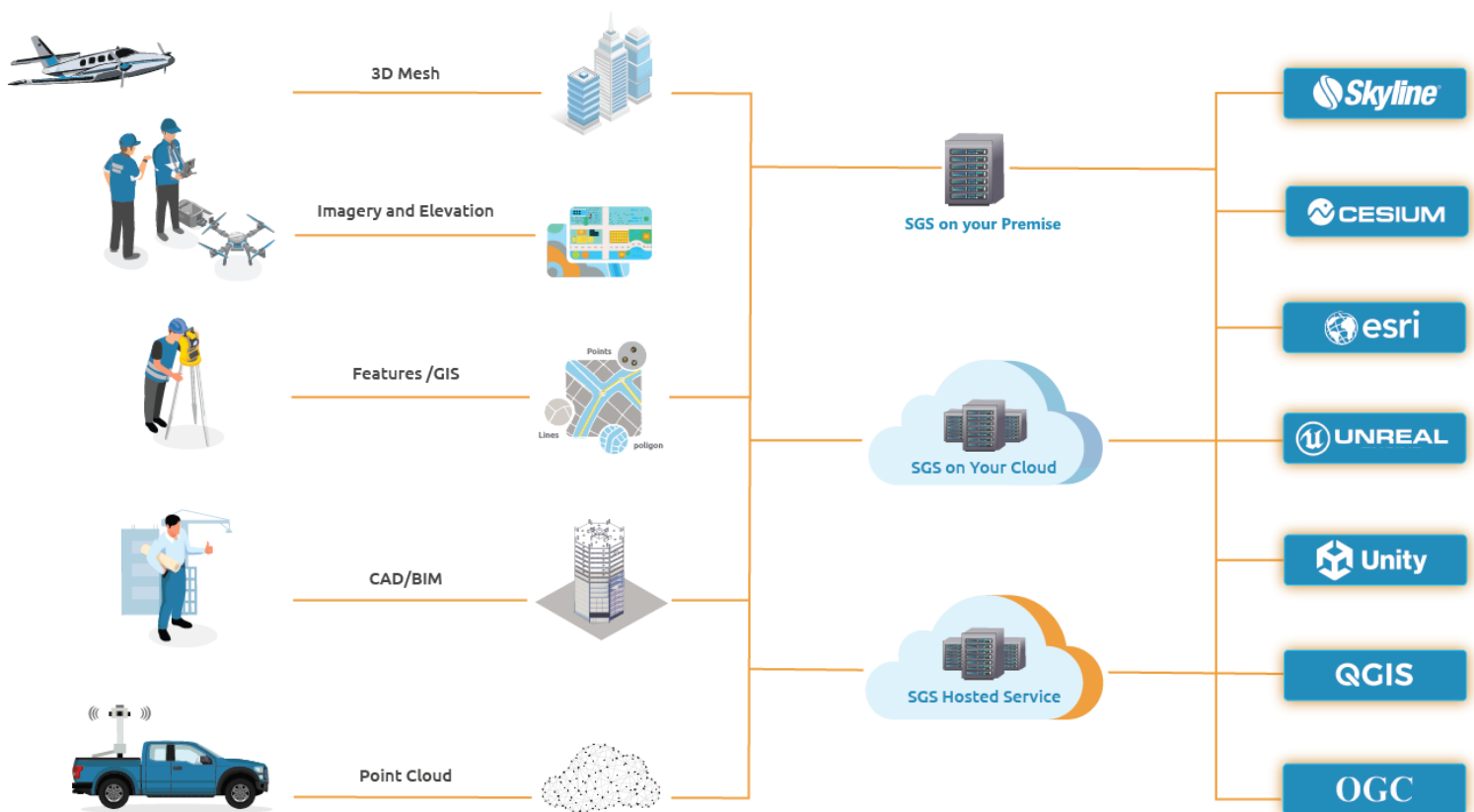
- Overview
- Stability and Bug Fixes in 8.0.2
- New SkylineGlobe Server Deployment Options
    - SkylineGlobe Server Edge
    - SkylineGlobe Server for Linux
- Integrated SSO/OpenID User Authentication
- Postgres Catalog Database
- Categories Mechanism
- Project Update Option
- Integration with the New TerraExplorer Fusion
    - Publish once, use many
    - Configuration control
- Vertical Datum Grid Shift (TIFF/GTX/GSB) Repository
- Streaming Photos for Photo Inspector
- Manage Project Layers
- API Enhancements
- Bug Fixes and Stability Improvements
- Hardware and Software Requirements

SkylineGlobe Server is a private cloud solution that provides a comprehensive set of web services for publishing, storing, managing and streaming 3D spatial data. All your spatial data types can be streamed including imagery (MPT/TBP/WMS/WMTS), elevation (MPT/TBP/WMS/WMTS), feature (WFS/WFS-T), 3D Mesh (3DML, OGC 3D Tiles, Esri I3S/SLPK), point cloud (CPT, OGC 3D Tiles), project files and other resources. Through a single publishing operation, data is made ready for consumption by all TerraExplorer clients: Desktop, Web and Mobile, as well as other geospatial applications including Esri, QGIS and Cesium-based viewers.

Stability and Bug Fixes in 8.0.2

- Added the missing proj.db file in the installation kit

- Fixed an issue related to TerraExplorer Desktop 8 'remember me' login option

- Modified the SGSProvider JavaScript library to enable SGS layers with the latest Cesium version

- Fixed an issue related to backward compatibility with TerraExplorer for Web configuration settings

- Fixed an issue related to GTX/GSB automatic download mechanism from SGS when the request exceeds data range

- Blocked the option to restart the server using an API call

- Fixed an issue related to SGS Manager logout with FireFox and Safari browsers

New SkylineGlobe Server Deployment Options

SkylineGlobe Server Edge

The new release introduces SkylineGlobe Server Edge for Windows, a new and convenient way to get started with SkylineGlobe Server. With this version, we provide you with everything you need to run SGS on any Windows platform in an installation-free click and go package, eliminating the requirement of Windows Server or IIS installation. Simply download the SGS – Edge version, and you'll have all the necessary components pre-configured and ready to use. This streamlined setup process saves you time and effort, allowing you to focus on leveraging the powerful features of SkylineGlobe Server without any installation hassles.

SkylineGlobe Server for Linux

Based on our new SkylineGlobe Server Edge, which requires no installation or web server software, SkylineGlobe Server is now available for Linux operating systems. This SGS deployment provides users with greater flexibility and the ability to run the software across a variety of on-premise and cloud-based Linux platforms for improved cost optimization. Our SkylineGlobe Server for Linux has been thoroughly tested and verified on the Ubuntu Linux distribution, assuring reliable performance. Support for other Linux distributions will follow in upcoming releases.
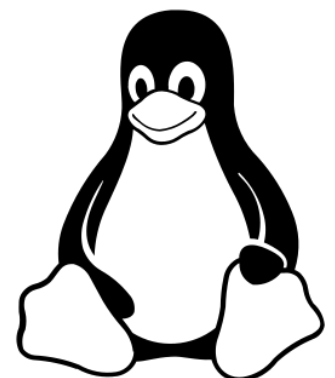
Integrated SSO/OpenID User Authentication

SkylineGlobe Server 8.0 features integrated Single Sign-On (SSO) user authentication. Users can now sign in using a commercial Identity Provider (IDP) like Google Workspace and Facebook or using an enterprise identity provider server. The new SkylineGlobe Server SSO authentication mechanism is based on an OpenID protocol to simplify the login process and improve security.

For full control over the authentication process, you can use the new SkylineGlobe Server API to create and manage Sites, Groups and Users to match your IDP database.

Postgres Catalog Database

SkylineGlobe Server 8.0 features the PostgreSQL open-source database as the main catalog database for multi-computer setups. PostgreSQL offers enhanced performance, scalability, and reliability, providing seamless integration and efficient data retrieval across multiple servers. With the new SkylineGlobe Server database management tools, you can easily setup your enterprise PostgreSQL database schemas to support your multi-computer on-prems or cloud setups.

Categories Mechanism

The new categories mechanism included in SkylineGlobe Server layers catalog enables users to organize and categorize their layers and projects for easy retrieval. With this feature, a category tree is displayed on the Layers page, allowing users to easily filter layers according to their assigned category. Administrator type users can create new categories and organize the category tree to match their organization's requirements.
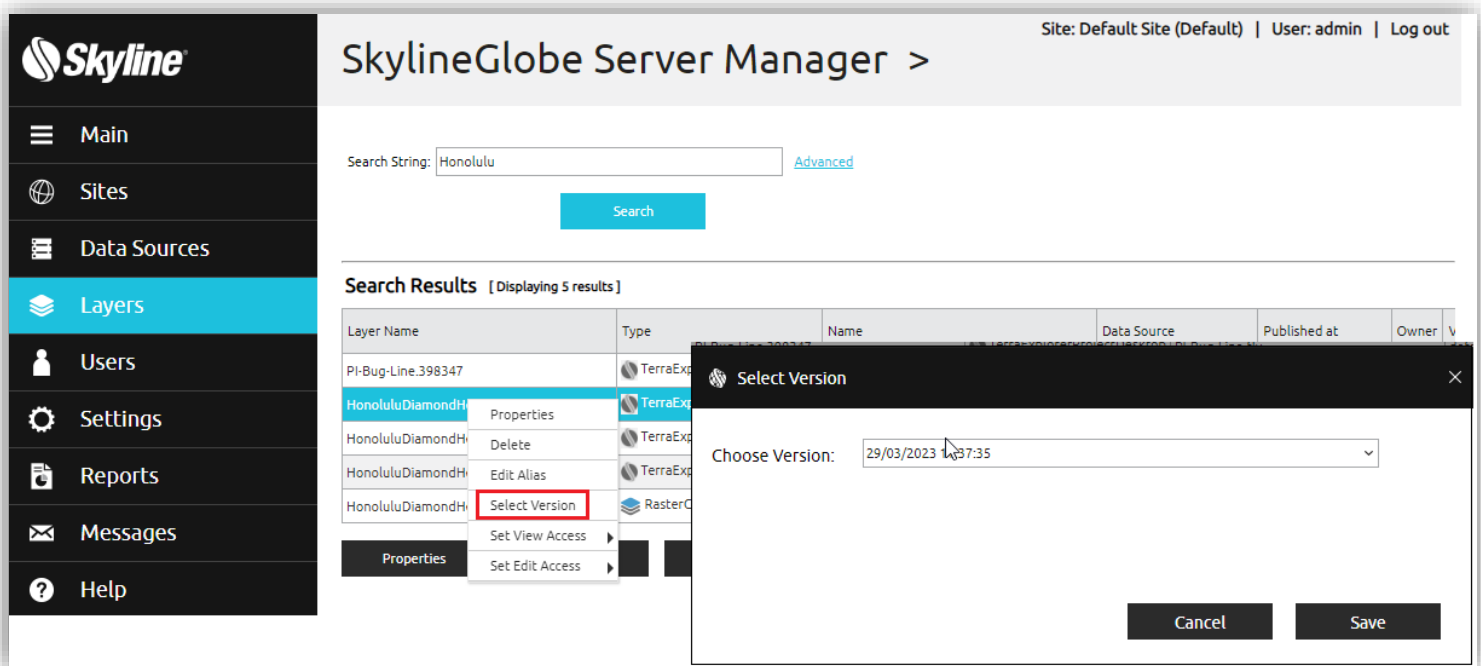
To activate the categories mechanism, turn on the "Enable Categories Mechanism" option in the Settings page.

Project Update Option

New project update option provides greater control and agility when managing and updating your online projects, facilitating a seamless and efficient workflow. Now you can easily edit and update your TerraExplorer project and save it back to SkylineGlobe Server while maintaining the same URL. This ensures that users automatically get the latest version of the project. This option also maintains a history of all previous project iterations, offering the ability to revert to any prior version when necessary.

Integration with the New TerraExplorer Fusion

SkylineGlobe Server 8.0 bundles and integrates with TerraExplorer Fusion, our new web-based viewer. TerraExplorer Fusion allows you to view and analyze high-resolution, stunningly realistic 3D content right in your web browser with no download or installation required. TE Fusion takes the capabilities and performance of our previous web app to new heights with faster application loading times, smoother and faster rendering of even the most massive layers, and full support for TerraExplorer Desktop layer styling, objects, and API.

Publish Once, Use Many

With the new TerraExplorer Fusion, and the new TerraExplorer for Mobile, there is no need to publish and manage multiple project versions. Now, a single project file (.fly) that is published from TerraExplorer Pro 8.0 is compatible across all different TerraExplorer clients.

Note that if you're working with TerraExplorer Pro 7, you can use the TerraExplorer for Desktop URL (.fly) for the new TerraExplorer Fusion and TerraExplorer for Mobile.

.
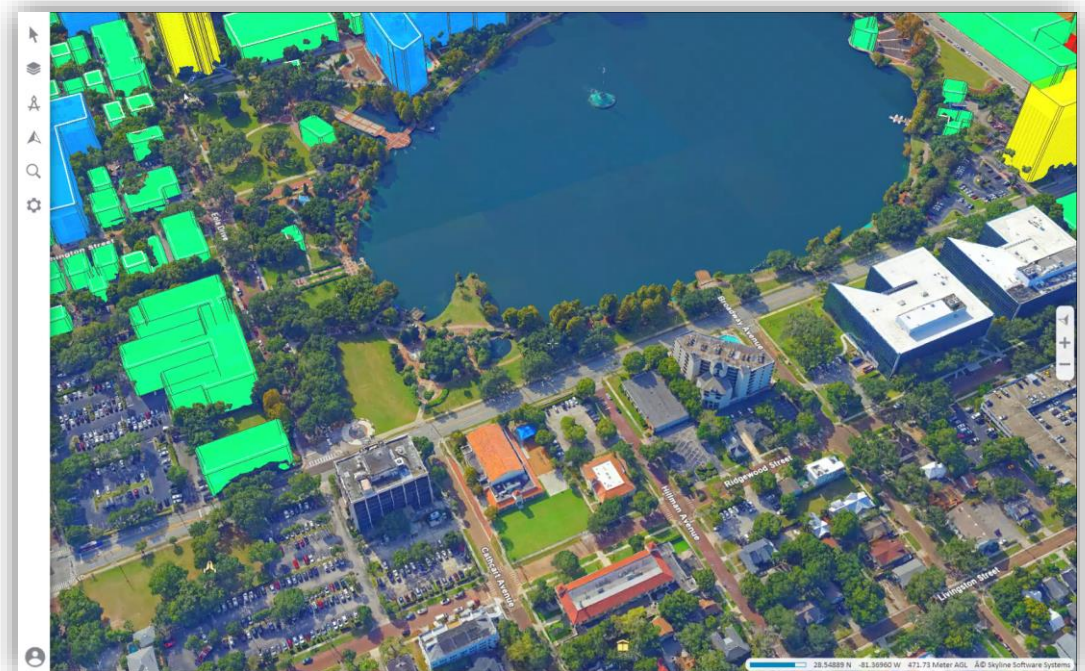
Integration with the New TerraExplorer Fusion

Configuration control

SkylineGlobe Server 8.0 features a new set of configuration and customization options for your TerraExplorer Fusion application. These options allow you to control the TerraExplorer Fusion login mode, select the GUI language, add a startup script and even control the GUI elements using a CSS section. The new Fusion setting option features two code editors to insert custom JavaScript code and Cascading Style Sheets (CSS) scripts.
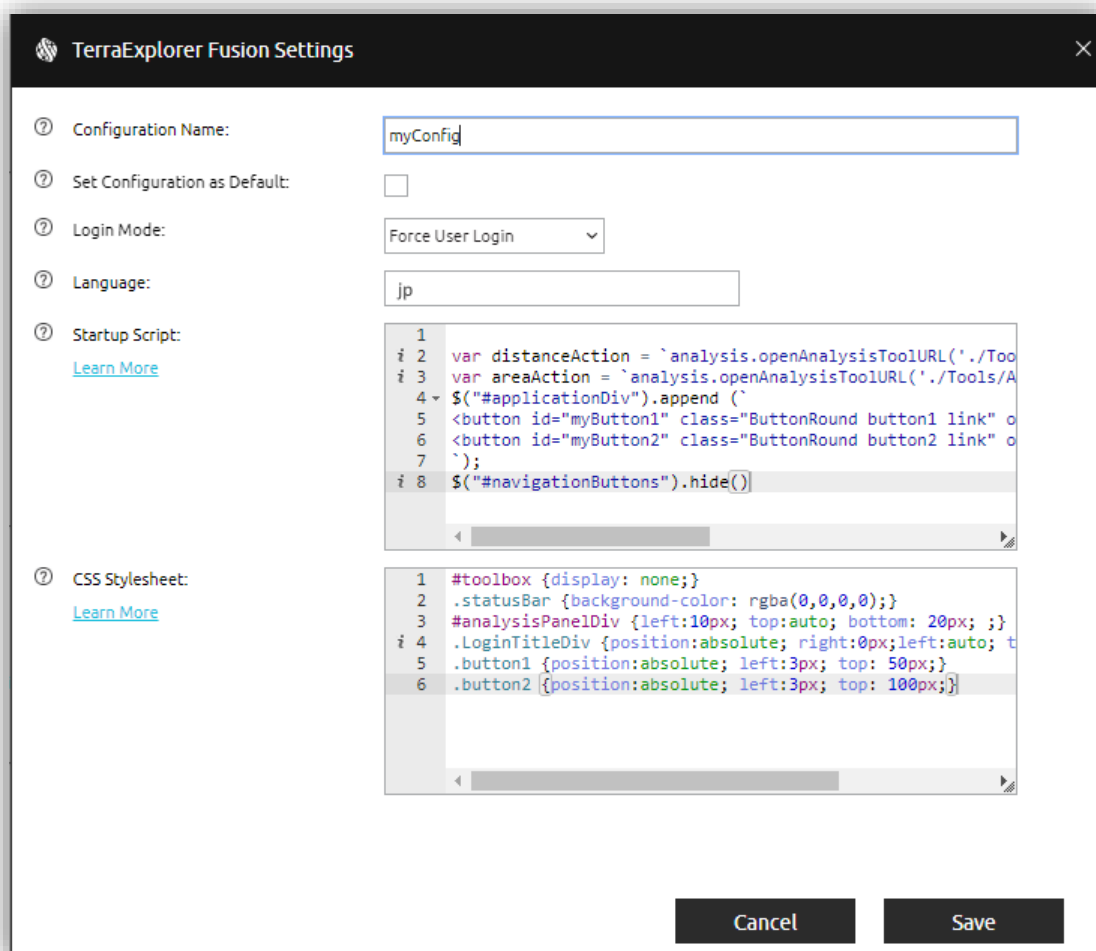
Vertical Datum Grid Shift (TIFF/GTX/GSB) Repository

SGS now includes a repository of grid shift files which are streamed dynamically to the various TerraExplorer clients. Grid shift files (TIFF, GSB, GTX) are used for accurately shifting and transforming layers and data between coordinate systems that have a vertical grid file, as part of their vertical datum definition.

Streaming Photos for Photo Inspector

The latest update to Photo Inspector introduces support for streaming photos in a multi-resolution-tiled format (SMPT) created by PhotoMesh. This enhancement significantly improves the performance of Photo Inspector. Instead of loading entire JPEGs or TIFFs, Photo Inspector now requests only the required tiles at the appropriate zoom level. This feature also enables support for additional photo formats, previously not supported (e.g., RAW and IIQ).

Manage Project Layers

Using the new TerraExplorer Pro 8.0 publishing tool, a publisher user can easily manage the published project and all layers published with this project. This new option in the publishing dialog opens the SkylineGlobe Server Layers page with all associated layers, allowing better access control management, category ordering, tagging and other SGS layer settings.

API Enhancements

SkylineGlobe Server 8.0 provides a new set of REST API functions to remotely add and control Sites, Groups and Users to support the new authentication options. In addition, several new API functions for retrieving the server version, the owner of a layer and more were added.

Bug Fixes and Stability Improvements

- Added SGSProvider support for latest Cesium versions

- Solved bug that prevented the serving of a PostgreSQL layer with a period in the layer's name

- Resolved issue causing 3DML layers (SLPK) loaded in ESRI Earth to show blocks with gaps in them

- SGS now serves PNG MPTs as WMS/WMTS PNG

- SGS notifies when application pool is running with Worker Processes greater than 1

REQUIREMENTS - SKYLINEGLOBE SERVER

Hardware Requirements

System Memory	8 GB RAM (16 GB or more recommended)
Processor	4 cores (8 or 16 cores recommended)

SkylineGlobe Server

Operating System	Windows Server 2016 / 2019 / 2022 (64-bit)
User Privileges	Administrator privileges required for installation and configuration
Additional Software	Microsoft IIS8.5, IIS10 with Net 4.8 and ASP.Net

SkylineGlobe Server Edge

Operating System	Windows 10 / 11 , Windows Server 2019 / 2022
User Privileges	Administrator privileges required for running the service

SkylineGlobe Server for Linux

Operating System	Ubuntu
Additional Software	Wine v7 and up, .Net 4.8

For additional information, check out the SkylineGlobe Server section and TerraExplorer Fusion section of our knowledge base.

www.skylinesoft.com