RELEASE NOTES FOR SKYLINEGLOBE SERVER AND TERRAEXPLORER FOR WEB 7.2.3

Bug Fixes and Stability in Release 7.2.3

This release improves overall stability and performance, and provides the following bug fixes:

- Corrected problem with altitude of 3D Tiles loaded into TerraExplorer for Web (SGS-1740).

- Fixed the dynamic updating of 3DML SGS layers in TerraExplorer for Desktop (SGS-1764).

- Resolved issues that affected the setting of default sites in SGS (SGS-1767).

- Fixed problems with TE4W display of attribute messages for feature layers published to SGS from TerraExplorer Pro (SGS-1779).

- Corrected bug that affected resizing of 3D Window of custom TE4W application when showGUI was set to false (SGS-1732).

- Fixed display of Links message in intranet environment (SGS-1830).

- Resolved bug that prevented projects with restricted access from opening in TE4W custom configurations when login mode was set to User/Password Set by Configuration (SGS-1859).

- Resolved issues in display of TerraExplorer for Web and Mobile help files (SGS-1850).

- Resolved errors that occurred when loading classified 3DML layers from SGS (SGS-1858).

- Only in "Isolated TE4W" mode: when using the configuration "User/Password Set by Configuration", non-public projects failed to be loaded.
  "Isolated TE4W" = TE4W is hosted inside a client custom HTML.

Bug Fixes and Stability in Release 7.2.2

This release improves overall stability and performance, and provides the following bug fixes:

- Resolved an issue relating to display of elevation layer quality (SGS-1658).

- Fixed display of SGS Layer List in ESRI clients (SGS-1680).

- Fixed streaming of 3D Tiles from SGS in ESRI clients (SGS-1657).

- Fixed terrain floor issue that resulted in incomplete display of the 3DML (SGS-1679).

- Improved smoothness of navigation to 3D Tiles (SGS-1684).

- Resolved issues relating to video on terrain object (SGS-1671, SGS-1681).

- Corrected localization problem in TE4W's sidebar menu tabs (SGS-1672).

- Fixed display of 3D Tiles floor surface (SGS-1691).

- Corrected problem with subdomains that caused 3D Tiles floor surface not to display properly (SGS-1642).

- Resolved bug affecting the loading of SGS Base Layer included in TerraExplorer project published to TE4W (SGS-1649).

- Fixed bug that incorrectly changed SGS Setting for Default 3D Tile version for Cesium clients to v0.4 after SGS upgrade (SGS-1640).

New Features in Release 7.2.1

Loading 3D Mesh Layers in Esri and Cesium Viewers

SGS 7.2.1 offers improved data services to external applications. After a 3DML is published to SGS, in addition to streaming the layer to remote TerraExplorer clients, SGS also exposes the layer as i3S for access by all Esri clients and as 3D Tiles for TerraExplorer for Web and other Cesium based clients. The SkylineGlobe Server permissions mechanism supports Esri and Cesium authentication protocols, enabling you to access protected layers in Esri and Cesium viewers using your SkylineGlobe user name and password.

Loading SGS WMS Layers in Esri and QGIS Clients

WMS raster layers published to SGS can now be accessed in all QGIS and Esri viewers: ArcGIS Earth, ArcGIS Pro and ArcGIS Online. The SkylineGlobe Server permissions mechanism supports Esri and Cesium authentication protocols, enabling you to access protected layers in Esri and Cesium viewers using your SkylineGlobe user name and password.

### Loading SGS WFS Layers in QGIS Clients

WFS feature layers published to SGS can now be accessed in all QGIS viewers.

Improved Performance

SGS 7.2.1 features powerful performance improvements in the exposure of 3D mesh layers as 3D Tiles and i3S for Cesium and Esri clients, enabling the conversion of the 3DML without generating multiple cache datasets. The new release also offers improved performance in the generation of statistical information on data access or upload storage on the server.

Granting Cross-Sites Permissions

New view/edit access option enables you to grant other sites access to a layer or data source from the Default site.
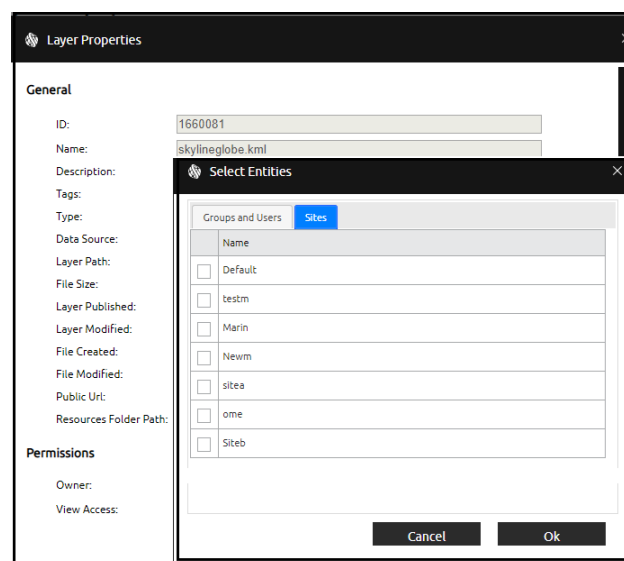
Bug Fixes and Stability

This release improves overall stability and performance.

New Features in Release 7.2.0

Virtual Sites

New virtual sites mechanism provides a scalable, resource-efficient solution for hosting multiple sites. Each site is distinct and separate, with its own content (data sources and layers), permissions (groups/users), settings and administrator.

User/Group/Site Management

SGS 7.2 simplifies management of users, groups, and sites, enabling you to easily activate or deactivate a site or user or group account, as well as allocate and set limits on storage and concurrent users and expiration date for each.
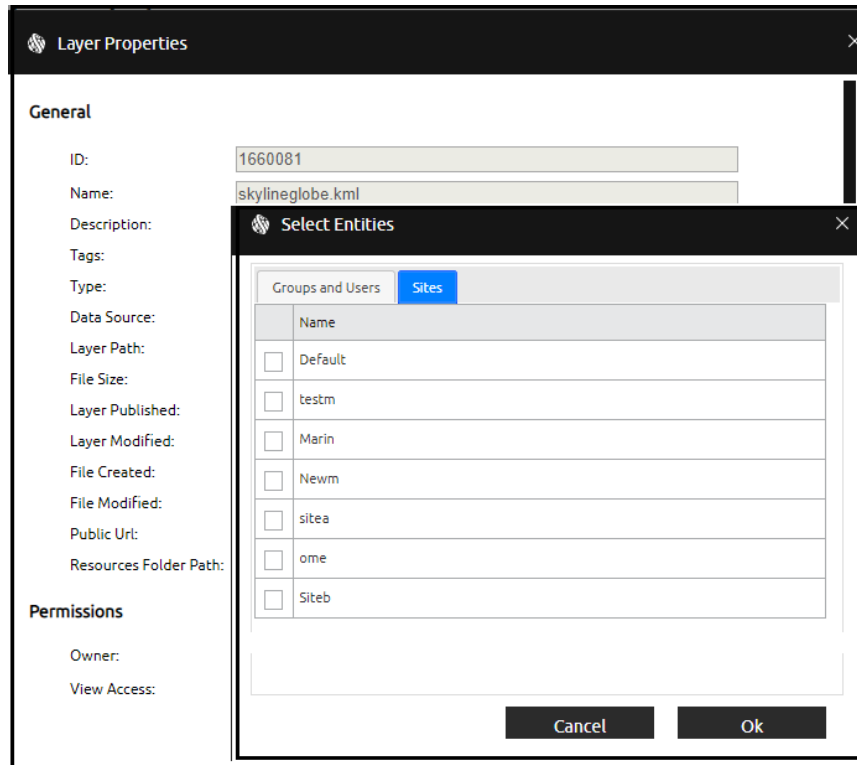
Layer Permissions for Sites

New view/edit access option enables you to easily grant other sites access to a layer or data source. All user, group, and site access permissions can be managed in the same "Selected List" dialog.

Support Cesium Terrain Layer

SGS 7.2 includes a JavaScript file that Cesium developers can add to their application to enable the loading of SGS elevation layers as Cesium terrain layers in their application.

Improvements to Custom Authentication Mechanism

The custom authentication mechanism has been expanded to include support for sites and user/group/site limitations.

Improved Performance

SGS 7.2 features improved performance in handling of multiple concurrent users.

ESRI I3S/SPK Service for 3D Mesh Layers

SkylineGlobe Server 7.2 supports streaming services for ESRI clients who want to view 3D mesh layers from SkylineGlobe Server. The ESRI web service supports authentication requests and data streaming in ESRI I3S format

About SkylineGlobe Server

SkylineGlobe Server is a private cloud solution that provides a comprehensive set of web services for publishing, storing, managing and streaming 3D spatial data. SkylineGlobe Server provides streaming services for all your spatial data types including terrain (MPT/TBP), map (raster-WMS/WMTS), feature (WFS/WFS-T), 3D Mesh (3DML, 3D Cesium tiles), and point cloud (CPT, 3D Cesium tiles). All data on your server is cataloged and referenced so clients can easily find the specific published layer required. Your data is kept safe by multiple security layers, including restriction of each user group to predefined data folders and a robust user authentication mechanism.

SkylineGlobe Server repackages the retired TerraGate and SFS products into a unified server technology and management interface from which to control and manage the complete 3D geospatial data lifecycle.

SkylineGlobe Server can be configured as a single server or as part of a new or existing server cluster. A server cluster is a collection of servers that communicate with each other in order to serve data to clients with higher availability.

Individual geospatial layers and complete projects can be directly uploaded and published to the cloud server from TerraExplorer or other Skyline client applications, thus streamlining your workflow and eliminating the need for any server side login after initial installation. Through a single publishing operation, data is made ready for consumption by all TerraExplorer clients: Desktop, Mobile, and TE for Web, as well as standard geospatial applications. Server-side geospatial layers that are stored in files and databases on the server can also be published by scanning their data stores and publishing selected layers.

The server's built-in complete user access control system allows easy management of users, groups, and administrative roles controlling the server-side storage and client-side view/edit permissions.

About TerraExplorer for Web

TerraExplorer for Web (TE4W) is a lightweight 3D GIS viewer that enables you to view and analyze high-resolution, stunningly realistic SkylineGlobe 3D content in a web browser, without any plug-ins. This latest addition to Skyline's TerraExplorer product line complements Skyline's powerful 3D GIS desktop and mobile applications, offering a simple, no-download, no-installation solution for online viewing and analysis of 3D environments.

Building on standard Cesium support for imagery, elevation and KML layers, TerraExplorer for Web can also display most of your spatial databases including 3D city layers and feature layers. TerraExplorer for Web integrates smoothly with the entire Skyline product line for easy access to all your data – from photo-realistic, geographically accurate terrain databases created in TerrainBuilder to PhotoMesh's high-resolution, textured, 3D mesh models.

Moreover, TerraExplorer for Web seamlessly accesses online data from Skyline's SkylineGlobe server and other OGC-compliant servers, and quickly loads online TerraExplorer projects. Based on HTML5/WebGL standards, TerraExplorer for Web provides support for multiple platforms and browsers (Windows, Mac, Linux, and selected mobile devices, Chrome, Firefox, Edge, Internet Explorer and more).

SOFTWARE AND HARDWARE REQUIREMENTS

Requirement	Description
Operating System	Windows® Server 2008 R2 / 2012 R2 / 2016 – 64-bit.
System Memory	4 GB of RAM (8 GB or more recommended).
Processor	Dual-Core (4 or 8 cores recommended).
Browser	Microsoft Internet Explorer 8 or higher, Edge, Mozilla Firefox, and Google Chrome.
User Privileges	Administrator privileges required for installation and configuration.
Additional Software	Microsoft Internet Information Services IIS7.5, IIS8.5, IIS10 with .Net 4.0.