

Have Your Say on Revision to OGC 3D Streaming Community Standard



Open
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Consortium.

The Open Geospatial Consortium (OGC) seeks public comment on version 1.3 of the OGC Indexed 3D Scene Layer (I3S) and Scene Layer Package Format Community Standard. Version 1.3 adds support for building scene layers. Building scene layers are derived from building information modelling (BIM) and/or other 3D building data. Comments are due by 18 September 2022.

I3S is designed to enable the streaming and storage of arbitrarily large amounts of 3D geographic data. An I3S dataset, referred to as a 'scene layer', can consist of millions of discrete 3D objects with attributes, integrated surface meshes, symbolized points or point cloud data covering small to extensive geographic areas. Designed for performance and scalability, a scene layer enables the efficient encoding and transmission of 3D geospatial

content for an interactive visualization experience on web browsers, mobile and desktop apps for both offline and online access.

I3S is web and cloud friendly and is rooted in modern standards and technological advancements in the areas of 3D graphics, data structuring and mesh and texture compression.

3D Representation of a Building Model

Version 1.3 of the OGC I3S Community Standard adds support for building scene layers (BSLs), which are a 3D representation of a building model. A building model may be derived from 3D construction content, such as BIM data, or from a relational database model that contains 3D spatial information. The I3S BSL capability is designed to model the organization of construction data by grouping content into standard engineering disciplines. Content in a BSL may represent a partial building, an individual building, or multiple buildings on a campus.

An I3S Building Scene Layer also encapsulates the semantic structure of the information in the building model while capturing geometry and attributes that can be used in an application. A BSL captures standard architectural engineering and construction (AEC) disciplines such as mechanical, architectural, piping, electrical and structural. Within each discipline, a BSL groups category layers containing 3D objects representing assets of the building such as doors, windows, pipes and walls. The assets can contain attributes that directly reflect standard and user-defined metadata stored in the source BIM content or other 3D data sources.

The [candidate OGC Indexed 3d Scene Layer \(I3S\) and Scene Layer Package \(*.slpk\) Format v1.3 Community Standard](#), as well as relevant [release notes](#), are available for review and comment on the OGC Portal. **Comments are due by 18 September 2022**, and should be submitted via the method outlined on the [OGC Indexed 3d Scene Layer \(I3S\) Version 1.3 Community Standard public comment request page](#).