# Sharing and consuming point clouds via webservices

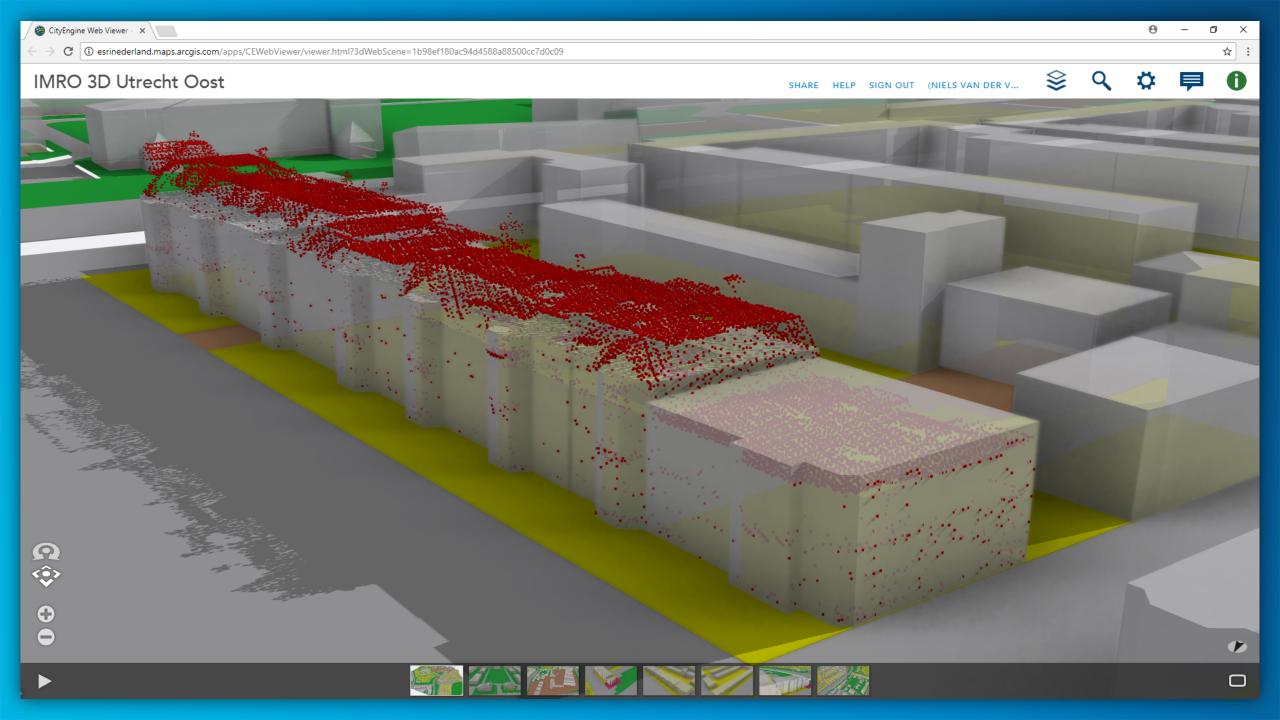
Niels van der Vaart

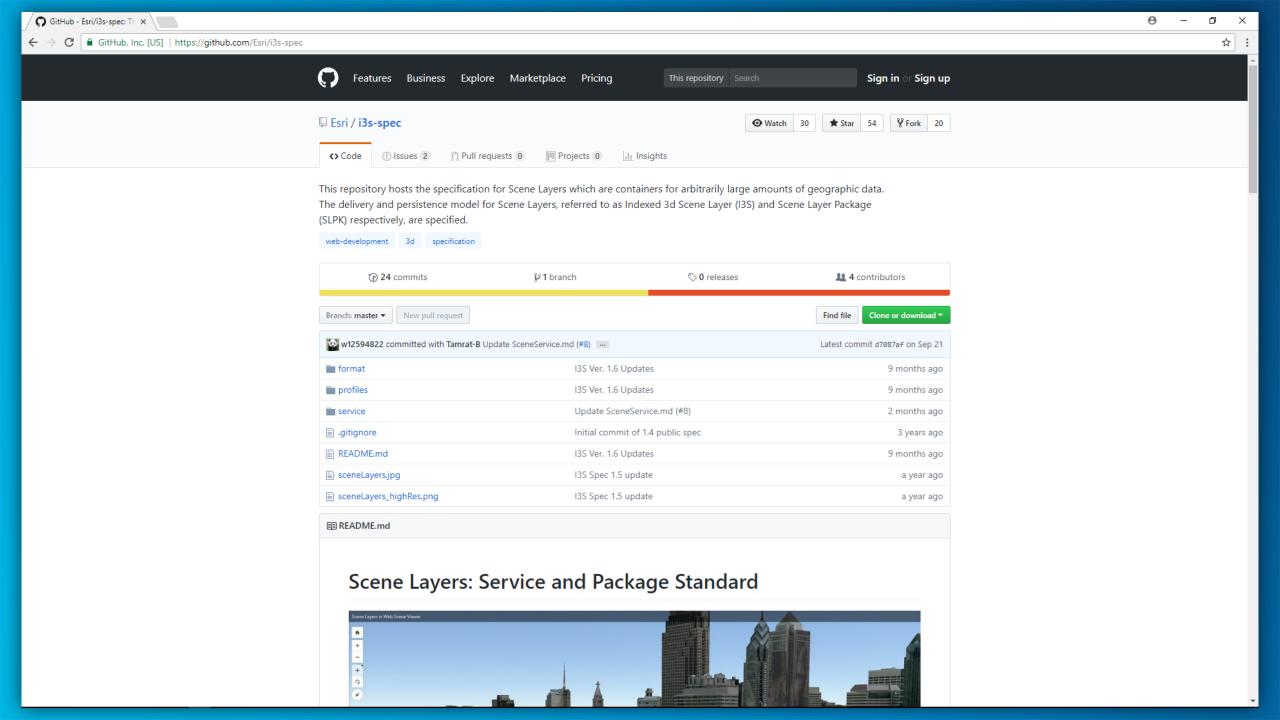




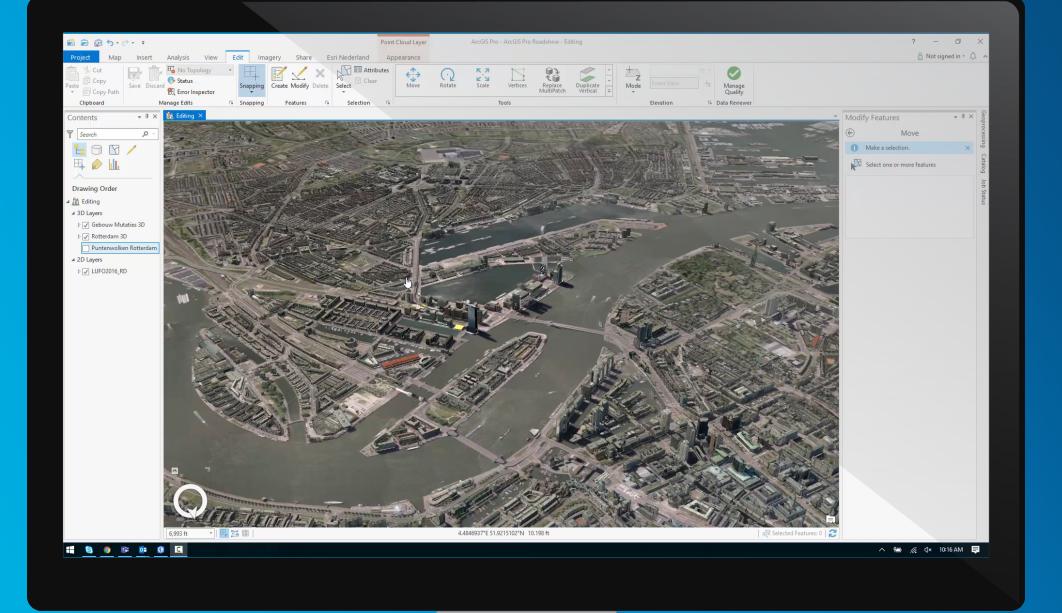


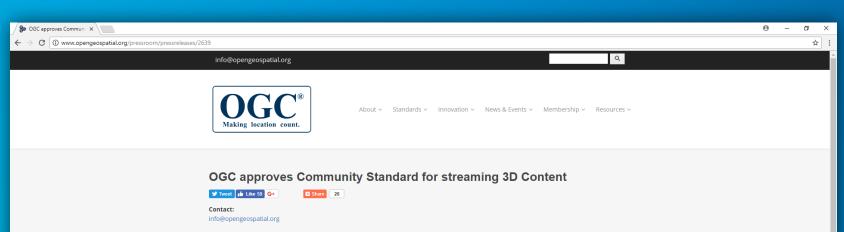












### Release Date:

Wednesday, 6 September 2017 UTC

The Open Geospatial Consortium (OGC®) membership has approved a new 3D standard for content strategy. This standard is focused on high performance visualization and spatial analysis in a services or disconnected environment. The standard is referred to as the OGC Indexed 3D Scene Layer (I3S) and the Scene Layer Package Format (SLPK) Specification. These standards are released as an OGC Community Standard. Esri, along with numerous endorsing organizations, submitted the I3S and SLPK specification into the OGC Community Standards process for use by the entire 3D visualization community. The document was submitted under the Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0)

A single I3S data set, referred to as a Scene Layer, is a container for large amounts of heterogeneously distributed 3D geographic data. Scene Layers are designed to be used in mobile, desktop, and server-based workflows and can be accessed over the web or as local files.

The I3S format is declarative and extensible and can be used to represent different types of 3D data. The following layer types have been specified and the standard validated via implementation and production deployments:

- . 3D Objects e.g. building exteriors from geospatial data, 3D models
- . Integrated Meshes e.g. a mesh surface with high resolution imagery textures representing the skin of the Earth, typically created from satellite, aerial, or drone imagery
- · Point Features e.g. geolocated hospitals or schools, trees, street furniture, or signs

The Indexed 3D Scene Layer (I3S) and Scene Layer Package (\*.slpk) are open formats and not dependent on any vendor-specific solution, technology, or products.

"The OGC I3S and SLPK Community Standard is an important contribution to the rapidly evolving 3D visualization and analytics community and extends OGC's offerings for delivery of 3D content. The OGC Community Standards review and approval process resulted in significant improvements to the documentation of this standard," said Scott Simmons, Executive Director of the OGC Standards Program.

As with any OGC standard, the open I3S and SLPK Community Standard is free to implement. Interested parties can view and download the standard

# **Open Geospatial Consortium**

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# OGC Indexed 3d Scene Layer (I3S) and Scene Layer Package Format Specification

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