

Converting Static Scans into Immersive 360-degree Imagery



NavVis, a leading provider of indoor spatial intelligence technology, can now automatically convert E57 point cloud files into interactive, realistic 360-degree walkthroughs, following the latest software upgrade to IndoorViewer. NavVis IndoorViewer is a web-based application that displays realistic digital twins using 360-degree panoramic images, point clouds and maps generated by [3D scanning devices](#). Users can move around digital twins of scanned spaces as if they are on site and use the interactive functionality to add, search for and route to geotagged information and take accurate measurements.

The intuitive user interface and functionality has made [NavVis IndoorViewer](#) a valuable deliverable for laser scanning professionals who want to extend the use of point clouds beyond BIM models and building plans to a wider range of building stakeholders who would also benefit from 3D scan data. This is particularly relevant for stakeholders working on complex projects or properties, such as manufacturing facilities and construction sites, where IndoorViewer enables remote access to the site and is used as a platform for collaboration and exchanging information.

Making scan data available

IndoorViewer was originally developed to display the data captured by NavVis' [indoor mobile mapping system](#) in a way that is accessible to every user. In recent years, the company has seen that making scan data available to every building stakeholder is fulfilling an unmet need. Many of the partners using a NavVis indoor mobile mapping system for conventional scanning projects are offering [IndoorViewer](#) as an additional deliverable to increase the number of stakeholders who can make use of this data, said Felix Reinshagen, NavVis CEO.

To meet the growing demand for extending the use of valuable 3D scan data, the company developed a feature that automatically renders 360° immersive images from structured E57 point cloud files. The latest software release brings the full functionality of IndoorViewer to [E57 point cloud files](#) and therefore marks an important step towards NavVis' goal of making scan data meaningful for every building stakeholder, Reinshagen continued.

NavVis IndoorViewer currently supports third party point cloud files in most standard formats. However, a key component of the immersive experience that NavVis IndoorViewer provides is the 360° panoramic images. The new IndoorViewer feature bridges this gap for structured E57 files by automatically rendering 360° immersive imagery from E57 point cloud files. This means data collected by [terrestrial laser scanners](#) can now also be used to create realistic, immersive 360° walkthroughs that can be published and shared online without the need to download or install software.