

Software Platform Accelerates As-built BIM Workflow



ClearEdge3D has announced the release of its newest software platform, EdgeWise BIM Suite, which can make the process of creating Revit building models considerably faster than traditional workflows. The platform, which consists of the company's EdgeWise MEP and EdgeWise Building software, uses new technology developed through a National Science Foundation research grant to automatically extract piping, conduit, round ducting, walls and windows from laser scan point cloud data.

During the software's development phase, the ClearEdge3D team worked closely with the Revit product team to fully integrate the EdgeWise technology with Revit, creating a powerful as-built modelling toolset within the Autodesk Building Design Suite and the individual Revit products. With EdgeWise, walls can be exported to Revit plum and square

and best fit to the point cloud or converted to their exact as-built condition. Windows, pipes, round duct, and conduit are extracted and exported to Revit as properly specified family objects.

This deep integration with Revit combined with groundbreaking feature extraction and object recognition technology is delivering substantial workflow savings for users of the software. Digital Surveys, a UK-based engineering services company, tried the EdgeWise BIM Suite on a recent project to scan and model an aging hotel in central London. With the original site drawings either inaccurate or non-existent, the Digital Surveys crew scanned the facility, modelled it in EdgeWise, then exported the results directly to Revit, saving more than 70% in their workflow. Ben Bennett, managing director of the firm, said he doesn't think his company could have completed the project on time and on budget without EdgeWise.

Other users of the EdgeWise BIM Suite have reported similar results. Nederveld, based in Holland, Michigan, USA, used it on a recent hospital renovation and posted outstanding workflow savings. According to Clair Vander Zwaag, the firm's managing director, EdgeWise cut their modelling time by 70%. The client was extremely happy to receive their model in three days after scanning.

New features in the EdgeWise BIM Suite include:

- Automatic wall extraction from a point cloud and full integration with Revit to show the precise as-built wall condition
- Export EdgeWise BIM Suite models to Revit as properly assigned Revit family objects
- Extraction of windows, pipes, conduit and round ducting from a point cloud and export to Revit as family objects
- An exacting set of QA tools to ensure your model reflects the precise as-built condition
- Export the EdgeWise point cloud directly to the Revit Family Editor for much easier creation of custom families

The EdgeWise BIM Suite marks the debut of several new technologies the company has been working on as part of its National Science Foundation research grants, remarked Kevin Williams, ClearEdge3D's founder and Chief Scientist. Their goal was to create the most efficient as-built modelling software on the market with a seamless workflow into Revit.

To request a free 14-day trial of the EdgeWise BIM Suite software [click here](#) to sign up online