Case Study: University Science Building As-Built Revit Model

EdgeWise Building Delivers a 55% Workflow Improvement for Scan-to-Revit Modeling

3D Imaging Services (3DIS) was hired to create a complete and accurate as-built Revit model of the newly-constructed Kettering University Science Incubator building. The model was to include all interior and exterior doors, walls, windows and trims, as well as ceilings, floors, and the roof. 45 scans were required to capture both the interior and exterior of the building.

Streamline the Process
3DIS wanted to streamline the process of converting laser-scanned data into a usable format for 3D modeling, with the goal of reducing overall project time and costs. Automating this process was extremely important for both meeting the project’s tight deadlines, and helping the company handle more jobs simultaneously. “On this project, we would have spent one day laser scanning, a half-day registering the scans together, five days modeling in AutoCAD® and two days tracing in Revit®, for a total of 8.5 days,” said Nick Bobbitt, 3DIS BIM Project Coordinator.

Eliminate Manual Modeling Steps
With EdgeWise Building, 3DIS was able to eliminate the modeling step in AutoCAD and reduce the time from scanning-to-Revit-model by 55%. “EdgeWise saves us substantial time on all of our projects,” said Bobbitt. We can save anywhere from hours on smaller projects, to weeks for large-scale projects. What used to take days to process can now be completed in hours. EdgeWise is now a firm part of our 3D as-built models. It has become a standard part of the process we use in our digital documentation.”

“What used to take days to process can now be completed in hours.”
- Nick Bobbitt, 3DIS BIM Project Coordinator

3DIS would import the point cloud data into AutoCAD to use as a background for the drawing. They would then manually take measurements from the point cloud to ensure accurate locations in the model. Once the model was completed in .DWG format, it would be imported into Revit, where a draftsperson would essentially trace or re-draw the .DWG into a Revit model.

To learn more or request a software demonstration, visit clearedge3d.com or contact us at sales@clearedge3d.com or +1 866.944.8210.

3D Imaging Services specializes in as-built documentation for the AEC and Plant industries. The company uses both traditional survey equipment and 3D laser scanning to capture spatial information from sites and converts them into dynamic 2D drawings, 3D models or Building Information Models for a diverse market of clients.

EdgeWise is a trademark of ClearEdge3D, Inc. in the USA and/or other countries. All other brand names, product names or trademarks belong to their respective holders. © 2013 ClearEdge3D. All rights reserved.