COMPANY
LGA Architectural Partners
lga-ap.com

LOCATION
Toronto, Ontario

SOFTWARE
Rendering in Autodesk® 360
Autodesk® Building Design Suite

One in *Ten* Million

LGA Architectural Partners generates the ten millionth Autodesk 360 cloud rendering

Before we discovered Autodesk 360 rendering service, we spent long evenings using our office's desktop computers to produce the renderings for our presentations. Sometimes it would take all night for a rendering to complete.

—**Clara Shipman**
Project Architect and BIM Leader
LGA Architectural Partners

Image courtesy of LGA Architectural Partners

The firm

Founded in 1989, Toronto-based LGA Architectural Partners is a mid-sized architecture firm that services a broad base of educational, institutional, and residential clients. The firm began transitioning to BIM in 2010 and today uses the Autodesk® Revit® design platform on all new projects. For many years, LGA has used Revit to create photorealistic renderings of its architectural designs—visualizations that are used internally to inform their design efforts and externally to communicate ideas to their clients. In 2013, that workflow took an unexpected turn… to the cloud.

"We were designing the new School of Architecture for Laurentian University in Sudbury, Ontario," recalls Allison Janes, a project architect at LGA. "The building has two contrasting wings: a steel-framed structure with mezzanines and a two-story glulam and cross-laminated timber wood structure." The building is the second phase of the university's new School, known as Laurentian Architecture Laurentienne (LAL).

"There's a large atrium where the two wings merge and the structural systems come together," says Clara Shipman, a project architect and BIM leader at LGA. "It was difficult to visualize the space—even for the designers. While the Revit 3D modeling environment helped, the situation really called for renderings." The team started creating rendered views using Revit on their desktops, but it was tying up a lot of time.

"LGA had just hired a new architect who used Revit at his previous firm," says Janes. "He suggested we try Autodesk's new cloud rendering service and pointed to a new icon on the Revit toolbar labeled 'Render in Cloud'. We immediately tried it and have been using it ever since." Autodesk 360 enables firms like LGA to produce renderings in a fraction of the time it took before (going from hours to minutes for most renderings) and frees up their computers for project work.

"We are huge fans of Autodesk 360 and have used it to create over two thousand renderings," says Shipman. Therefore, it was fitting that LGA helped the cloud service reach an important milestone. On May 6, 2014, Shipman hit that 'Render in Cloud' icon while working on a new residential project and Autodesk 360 produced its ten millionth rendering!

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Helping clients see all the options

"We're currently working on a new residential project, a single-family home in downtown Toronto," says Shipman. "The lot is long and narrow, so our design uses two shifted volumes with a light well in-between them to bring light into the middle of the house." LGA is using Autodesk 360 to produce a variety of renderings quickly and cost-effectively in order to support daylighting studies and explore design ideas.

In addition, the firm is using Autodesk 360 to create visualizations for client meetings. "We feel it is essential to generate ideas and work through problems together in our studio and, most importantly, with our clients," says Janes. "Renderings are critical for communicating with clients who don't necessarily have a technical background. They are easier to understand than traditional 2D drawings, which can be difficult to conceptualize. Autodesk 360 allows us to quickly produce a large number of renderings, even on a smaller project like this."

"We've been able to show the client a variety of design alternatives," says Shipman. "This helps them really see the options— the spatial qualities in various rooms, the lighting strategy and window locations, the material selections—and helps them make informed decisions on a design that will ultimately be their home."

Rendering in the cloud

While working on the LAL project, the team regularly produced and distributed 50 or more rendered views for design meetings, which gave the whole team (including the project's structural and MEP engineers) a better understanding of the space to promote collaborative design development.

In addition, LGA had regular design review meetings with the university's steering committee. "Before we discovered Autodesk 360 rendering service, we spent long evenings using our office's desktop computers to produce the renderings for our presentations," says Shipman. "Sometimes it would take all night for a rendering to complete, only to discover in the morning that a minor mistake ruined the final image. It was a painstaking process."

With Autodesk 360, the rendering happened in the cloud while LGA continued to work on their own systems without interruption. "The ability to produce renderings at the click of a mouse meant we could try out even more design options, and easily generate high-quality project visualizations, including 360 panoramas, to more effectively communicate those options to the steering committee."

The results

"Autodesk 360 cloud rendering capabilities are fast and easy to use," says Shipman. "We've more than doubled the amount of renderings we produce on a project. It allows a mid-sized firm like ours to perform like a much larger practice." LGA is also experimenting with producing stereo panoramas and using virtual reality headsets for immersive client reviews or public outreach meetings.

"Autodesk 360 increases the quality of service that we provide to our clients, and improves our ability to engage and collaborate with them—allowing us to push our designs further and be better architects," concludes Janes.

To learn more about rendering in the cloud, visit, **http://www.autodesk.com/products/rendering**

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