

Glancy Nicholls Architects: Secure collaboration with BIM 360



“Making sure partners could access specific files was always a challenge. Managing the secure access to specific files for clients and consultants was not an easy task using our shared server.

BIM 360 has changed all that, while speeding up many of the processes we go through, particularly real time changes and clash detection. It really has jump-started our cloud journey”.

Neil Carter, BIM Lead, Glancy Nicholls Architects

Meet Glancy Nicholls Architects

Created by Lyndon Glancy RIBA and Patrick Nicholls RIBA in June 2004, Glancy Nicholls Architects (GNA) Ltd., is a Royal Institute of British Architects (RIBA) Chartered Practice. One of the Midlands’ leading architectural practices, GNA is continuously involved in high profile public and private sector developments, working with many repeat clients, including blue-chip organisations.

GNA has developed a strong reputation in various sectors, including Education, Build for Rent, Commercial, Industrial/ Logistics, Residential/Social Care, Master planning and Heritage. GNA and Excitech have a close working relationship of over ten years’ standing.

Innovations that Excitech has helped the practice benefit from include:

- Robust strategy and solution to drive [constant skills improvement](#) within the practice;

Services provided:

- BIM 360 software and licensing
- Consultancy
- Implementation support

- Implementing game-changing ways to [portray conceptual ideas visually](#), with SketchUp;
- Gap Analysis and preparation for successful [BIM Level 2 accreditation](#).

The Challenge: How to manage external parties’ secure access to the model?

GNA uses Revit to model and document its designs. Revit itself has brought many advances in how different companies can work together at the design stage. One file can be made available for access by lots of users. The advance here was to overcome the one-to-one collaboration of AutoCAD, where only one person at any one time could edit a file. This was like walking through a city and passing the file to one person, who would then set off on their own walk to take the file to the next person, and so on; a long, slow journey.

How much better to all jump on a train together and sort things out all at the same time, whilst getting to the ultimate destination faster and securely?

GNA uses Revit Server to support work-sharing – with external consultants and specialist project partners such as mechanical and structural engineers – across a wide area network (WAN).

Revit Server effectively fulfils the role of a virtual server. While it allows multiple access, some companies are wary of just how much access it does allow. GNA is one such company.

Neil Carter, GNA's BIM Lead, explains the concerns he had about ring-fencing the access: "To allow your project partners to get in and edit the model means releasing the IP of the Revit Server. Once you do that, they also have access to any other file that's on the server. Whatever way you look at it, this is a security problem but easily avoided once you appreciate that Revit Server is better suited to internal collaboration", rather than collaboration with external parties"

A place where collaboration thrives

With secure access firmly on its agenda, GNA was facing another big challenge. One of the biggest, most complex projects it had ever handled came on the books. The anticipated ecosystem of collaborators was huge and diverse. "To put it simply," says Neil, "We needed more collaboration, in a way that would not slow up project progress but would actually speed it up."

Slow or fast: What would you choose?

Neil has worked in the architectural and construction sectors for almost 40 years. He is very much an innovator and forward-thinker, constantly looking for the next step forward in technology.

A COMMON PROBLEM

A fast-paced, complex project, such as the one GNA was facing, demands fresh thinking about working with a common data environment (CDE). GNA is a Lloyd's Register Accredited for BIM Level 2 architects practice committed to the principles and practices of BIM on any project where it is either mandated or can be enhanced through BIM disciplines.

The CDE is a pivotal mechanism for ensuring a single source of information relative to the model and the data that accompanies it. Uploads to a CDE normally run to a 14-day cycle, allowing all project participants to make their edits, and pass the file along; the old walking through the city problem.

Some projects can accommodate that. GNA's new project couldn't.

The solution: Everyone can work on the model live, at the same time, in the cloud

Neil knew that the solution would be BIM 360 but wanted to put in place a cost-effective licensing arrangement. Excitech advised on the optimum licensing approach, involving increasing the number of seats to allow non-Revit users to gain access to the model (for presentation purposes, or simply checking project progress, rather than making any changes to the model).

To ensure the smoothest possible user adoption of BIM 360, Excitech provided technical support throughout the early stages. "Excitech are always on hand to help when problems arise. We

depend on their technical resource to get us started with all new software introductions. They also go beyond that by giving you food for thought in areas you may not have considered. I'd say their knowledge of how architects work is second to none," says Neil.

Results: Better collaboration, faster synchronisation, and compelling real-time presentation

Seeing the model evolve

BIM 360 provides live collaboration capabilities, so that all users see all changes from other users as the changes are made live and then instantly synchronised. This streamlines everybody's ability to react. You can validate changes in seconds, rather than hours. Clash detection for hard clashes is streamlined; BIM 360 groups hundreds of clashes that can be resolved in one click.

Each time the model is published, the software automatically versions it in such a way that comparisons can easily be made with previous versions; any user can see the additions, edits, and deletions. This applies both to model data and pdf data (uploaded in pdf format). Users can see the changes on their screens either through colour-coding, or by using the integral slider to see what has gone before. They can see how the model has evolved.

Revisions are so yesterday

"This, to me, is how models should be; easy to work with and understand", says Neil. "BIM 360 also serves as an ideal presentation tool. Our people can take their mobile devices to a meeting and instantly call up the full model and the sheets that go with it. They can even red-line the model and comment on the data via their devices. It's a powerful tool for keeping clients in the picture and keeping technical jargon out of the frame.

It's also great to consign revisions to the past. With BIM 360 you work with live data and don't have to keep checking the back story to validate that you're in the right place at the right time. With BIM 360, you always are."

BIM 360 is cloud-based collaboration. It has triggered GNA's journey to the cloud, one which Neil believes will have a broader impact across the practice. "Cloud is the way to go," says Neil.

"This is the future of design. BIM 360 has also proved to many that concerns about security are addressed while time to complete projects is reduced. In a very short period, we have used BIM 360 not only for the big project that was the original driver for this move but also across many other projects.

It has gone a very long way to removing complexity, improving outcomes, and making for a better, more satisfying design and presentation process for everybody."

Glancy Nicholls Architects is one of less than 15 Architects nationwide with full Lloyd's Register Accreditation for BIM Level 2.