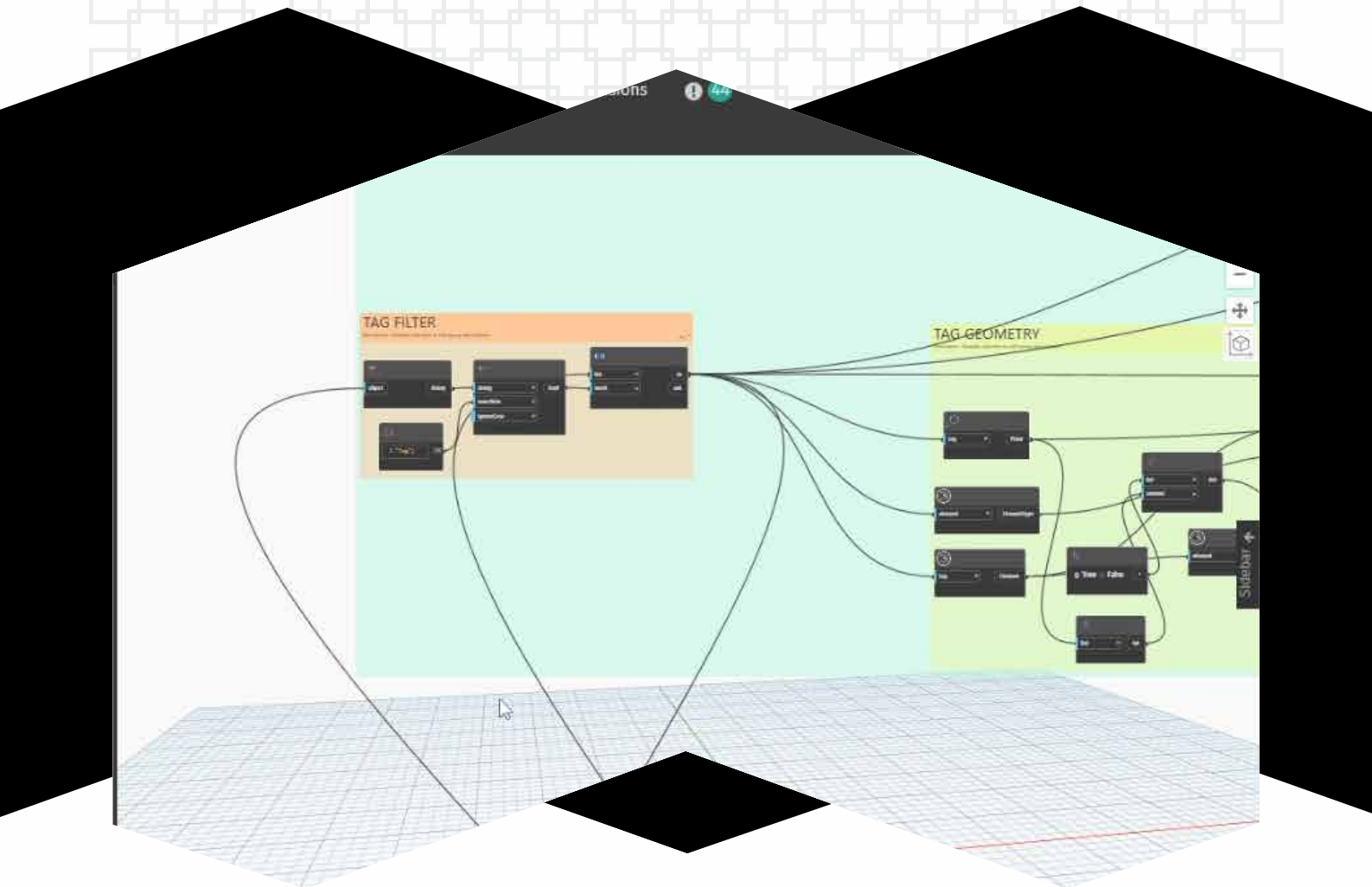




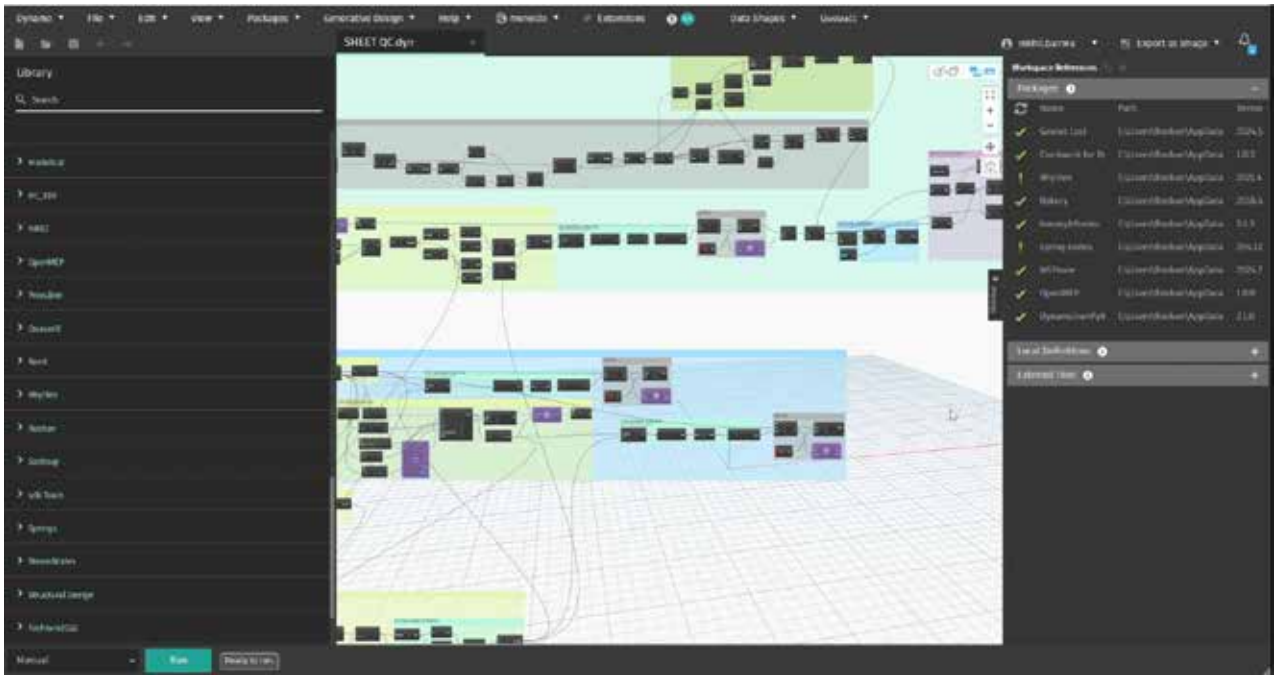
Dynamo Scripting for Façade Panel Systems

(Dynamo Scripting, BIM & VDC Coordination Services)

CASE STUDY



TECHTURE



Client : General Contractor

Team Size : 1 No. (Automation Specialist)

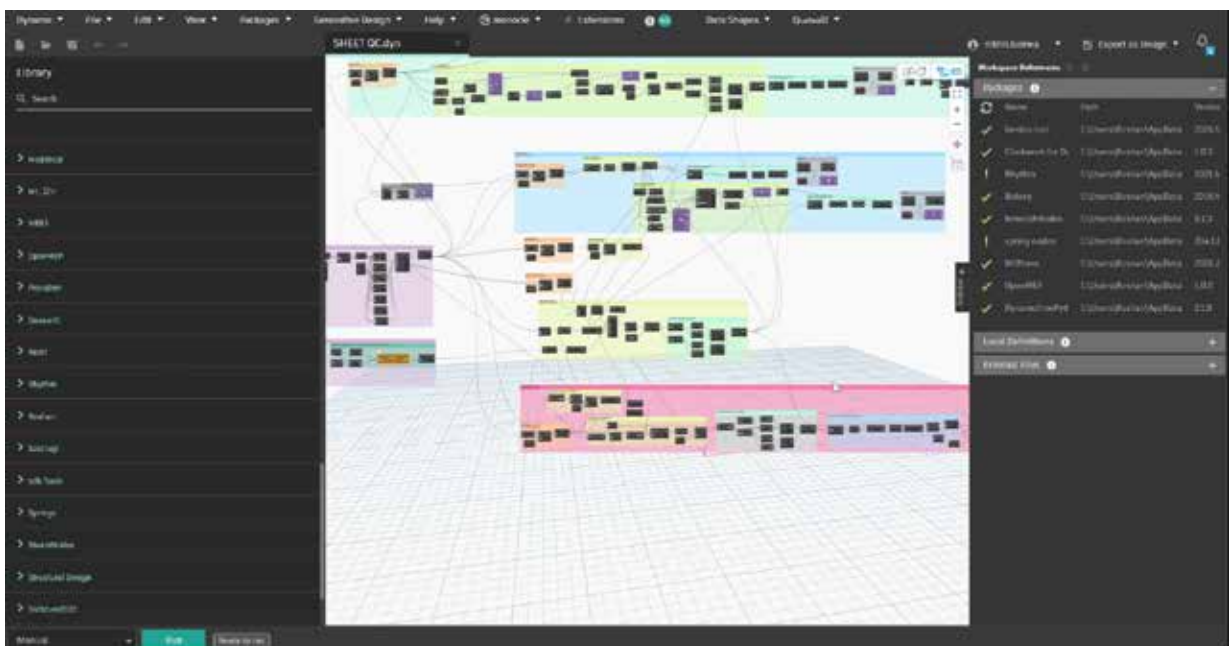
Disciplines : Automation

Duration : 2 Days

Type : Residential

Software : Dynamo & Autodesk Revit

Location : Ontario, Canada



Project Overview

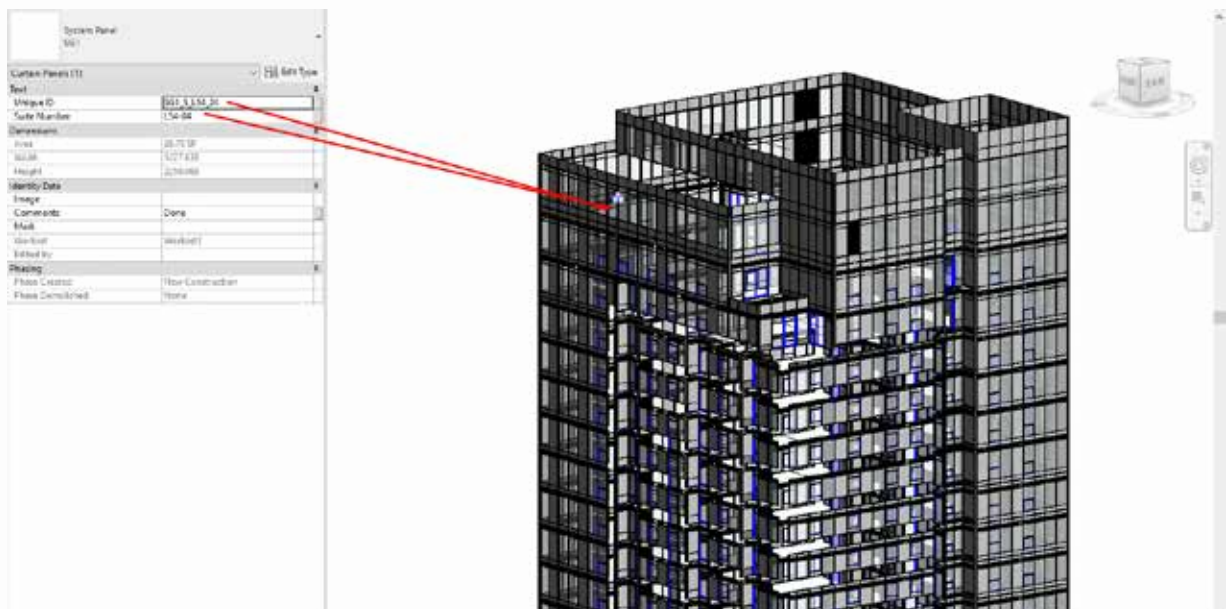
The project involved a 55-storey residential high-rise featuring a full glass façade system comprising multiple panel types, including clear glass, aluminum louvres, and spandrel glass. A key requirement was to assign a unique ID (as a text parameter) to every façade panel for precise identification and coordination. To achieve this, a custom Dynamo script was developed, automating the ID generation process. This significantly optimized efficiency, reducing what would have been a month-long manual task to just two days

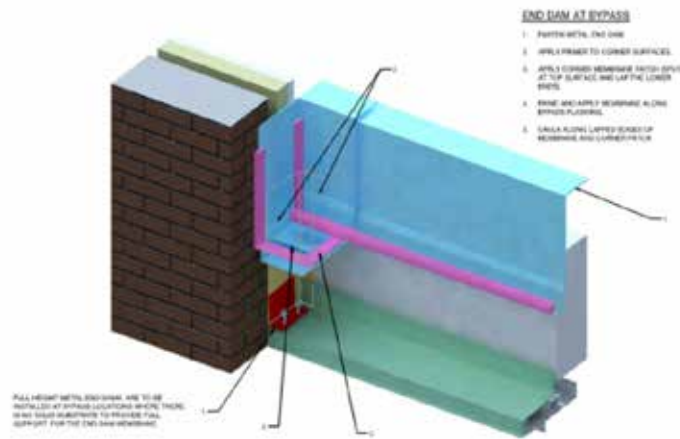
Scope & Deliverables

- Automate the process of assigning unique text-based IDs to every façade panel across 55 storeys.
- Handle multiple panel types (clear glass, spandrel glass, aluminum louvres) within the same façade system.
- Ensure the IDs are consistent, non-repetitive, and Revit-compatible for seamless model management and coordination.

Challenges

- Scale of data: Thousands of façade elements across 55 levels, making manual assignment impractical.
- Diversity of panel types: Requirement to distinguish between glass, spandrel, and louvre elements while maintaining a unified numbering logic.
- Time & accuracy: Manual workflows risked duplication, errors, and would have taken over a month to complete.





Techture Approach

- Developed a custom Dynamo script to automatically generate and assign unique IDs to every panel.
- Incorporated logic filters to differentiate element categories (glass, louvre, spandrel) within the same automation process.
- Built the script to be scalable and reusable, ensuring adaptability for future façade projects.

Benefits

- Drastic time reduction: Task completed in 2 days vs. 1 month with manual effort.
- Error-free automation: Eliminated duplication and ensured consistency across all façade elements.
- Improved project efficiency: Enabled faster downstream coordination with consultants, fabricators, and contractors.

