

BRATISLAVA - 19.10.2017

IFC/BCF based Collaboration

Project: CASA MAGAYON



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Introduction of the Project

Casa Magayon

Architect: **SARCO Architects**
Costa Rica

Project Name: **Casa Magayon**

Type: **Residential**

Location: **Guanacaste,
Costa Rica**

Built-in: **2015**

Size: **1290 m2**



<http://www.graphisoft.com/users/bim-case-studies/sarco-architects-magayon-house.html>

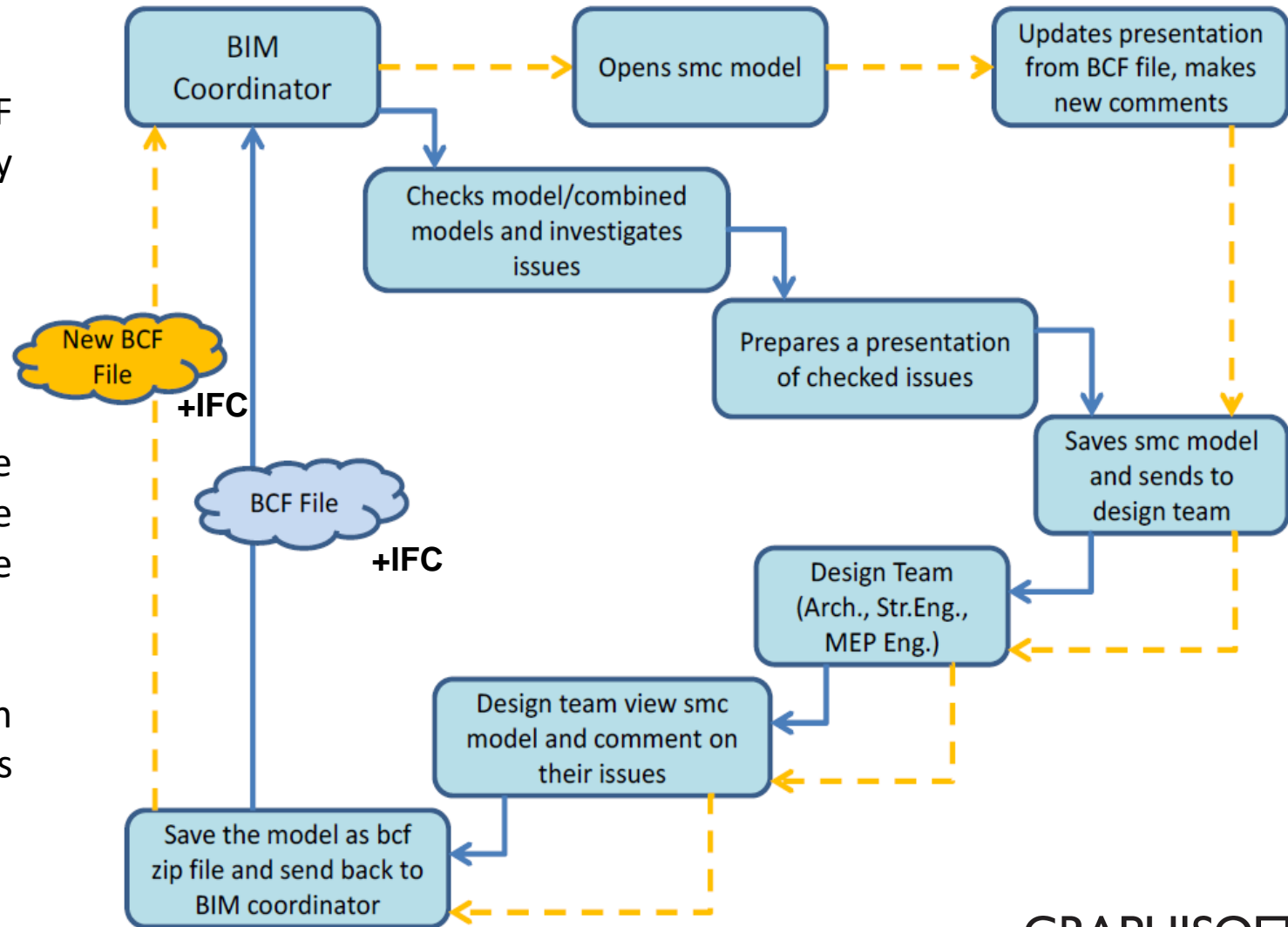
Introduction of the workflow

Sending and receiving design related issues

BCF stands for BIM Collaboration Format. BCF enables CAD authoring tool's users to send very small messages between native CAD applications.

BCF allows the user to send a viewpoint, a note (such as problem description) and respective GUIDs identifying components in the model in the question.

BCF is a way to communicate and resolve design issues between a BIM coordinator and members of design team.

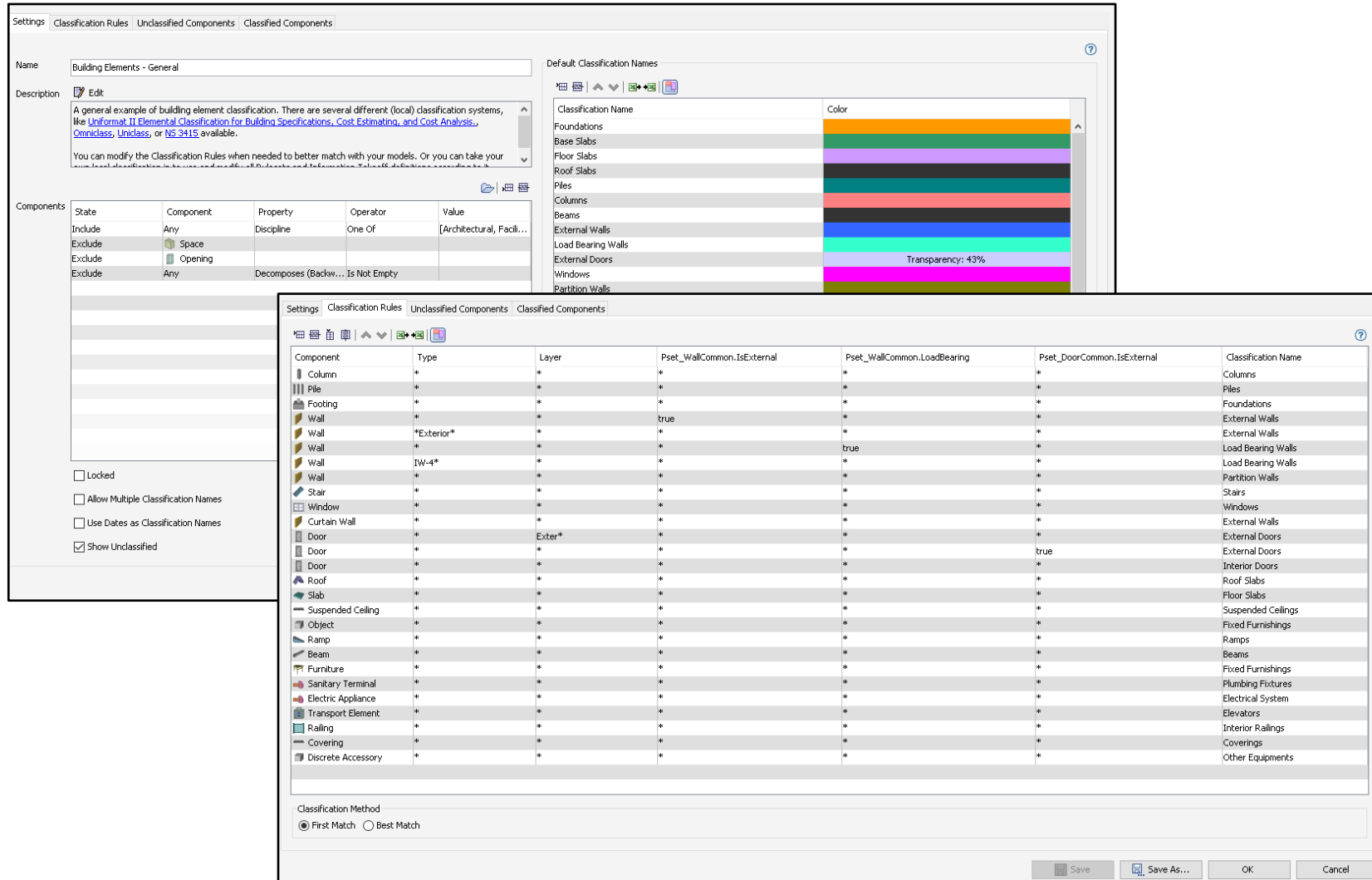


Framing the scope for IFC content

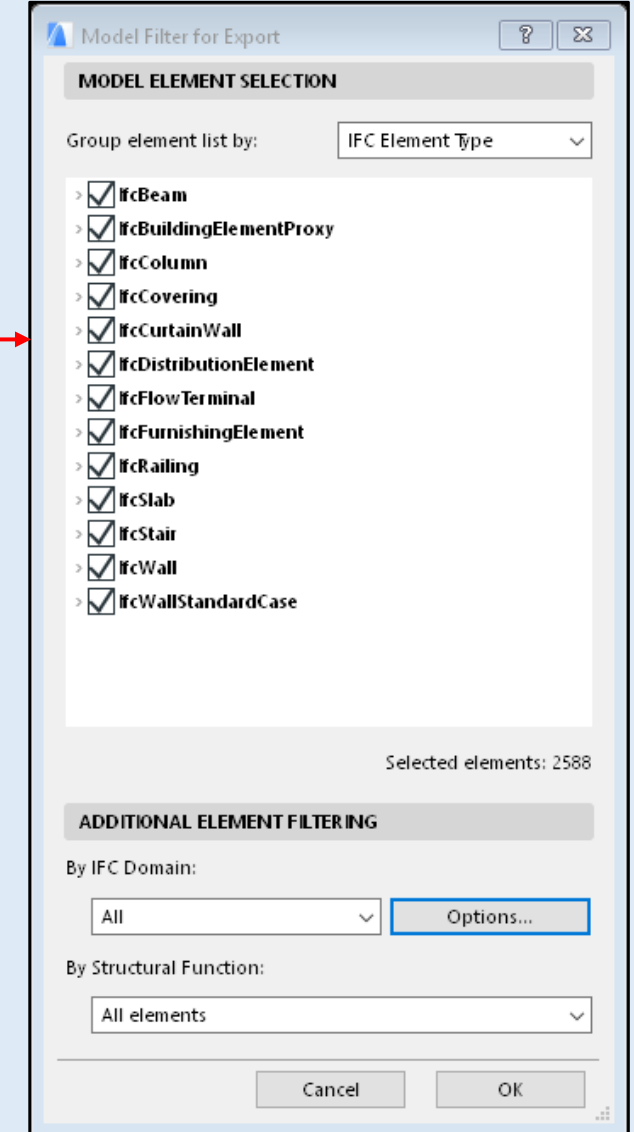
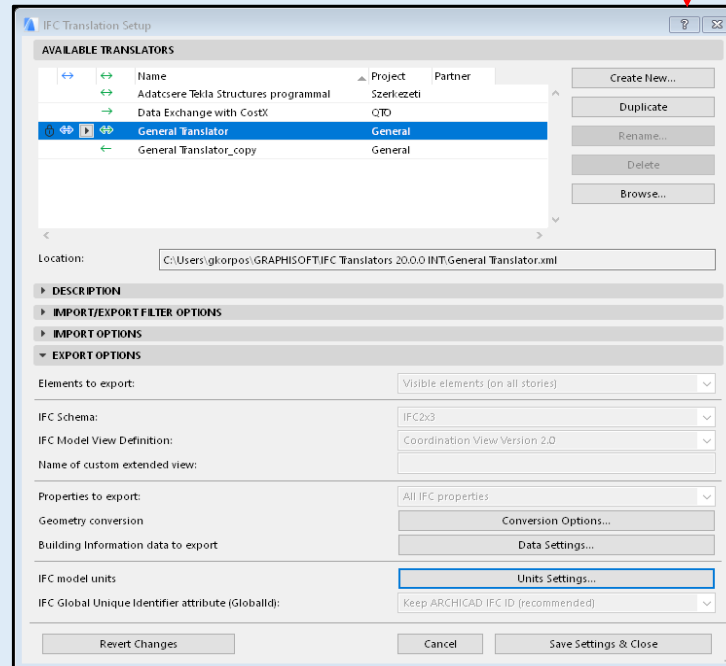
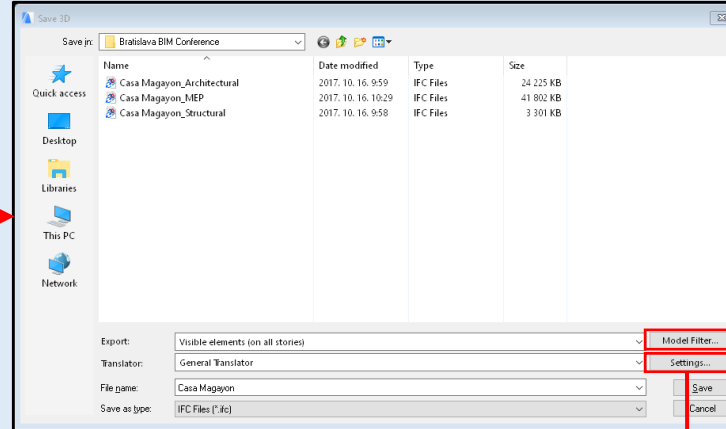
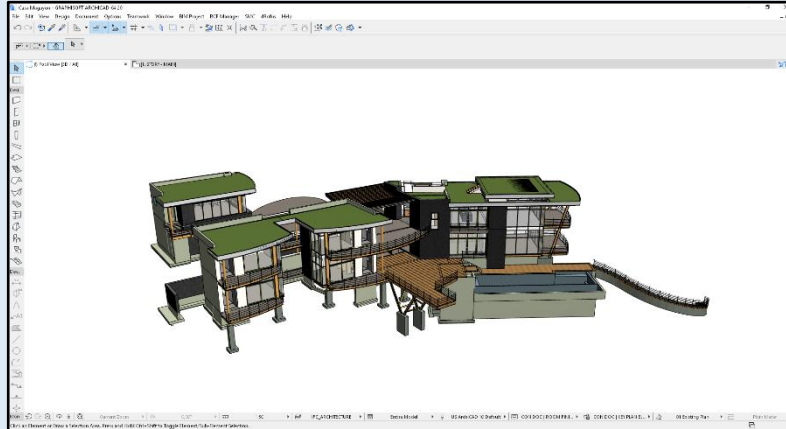
CLASSIFICATION SYSTEM

The identify the needed information for each and every element first we need to decide what sort of a Classification system are we going to use. There are several options with predefined solutions such as:

- **UniFormat**
- **Omniclass**
- **Uniclass**
- **or we can go with our definitions based on our needs.**

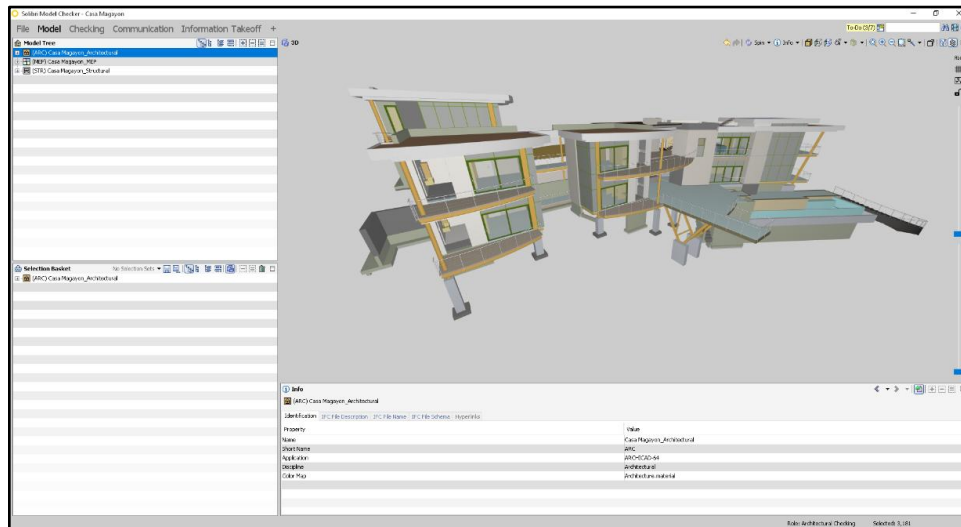
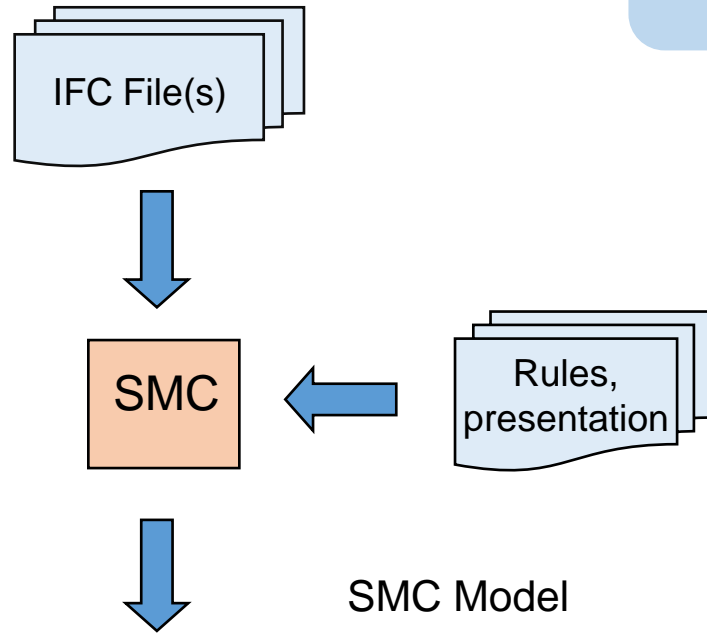


Export to IFC - Architectural

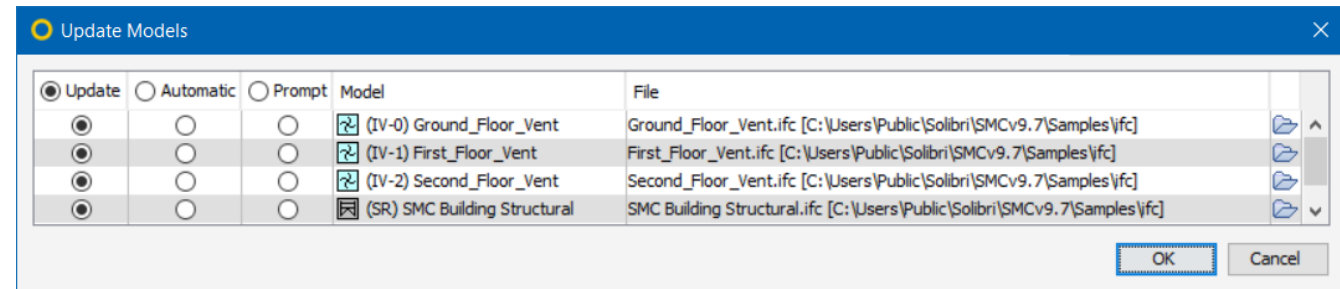


Importing and exporting model data using IFC is controlled by the settings of the translator you are using. ARCHICAD provides predefined, factory-default IFC Translators, but you can define your own. IFC Translation Setup command (File > Interoperability > IFC) allows you to view or modify translator settings, or to create new translators.

Import / update and setting up IFCs for Validation



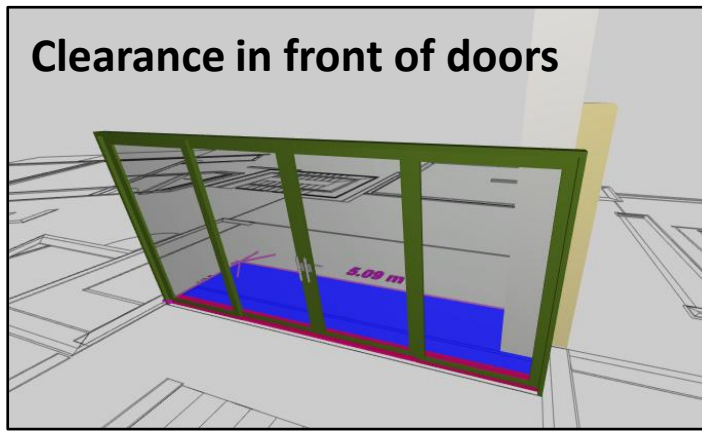
- You can update an imported ifc model with a new version
- You can update is from new location
- In a model that is checked, the checking results are also updated
(issues that haven't been affected by the change keep their decisions, comments and snapshots)
- Also the pictures in presentations are updated
- The update is
 - Manual
 - Automated (requires same file name)
 - The user is reminded to update (requires same file name)



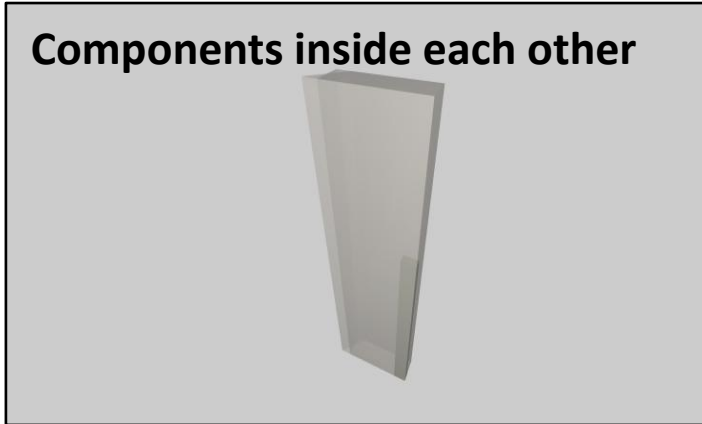
Validate IFC

- Selecting a Role and Rulesets
- Performing the To-Do List
- Model Checking
- Visualising and editing results – creating issues
- Issue Details view
- Reporting

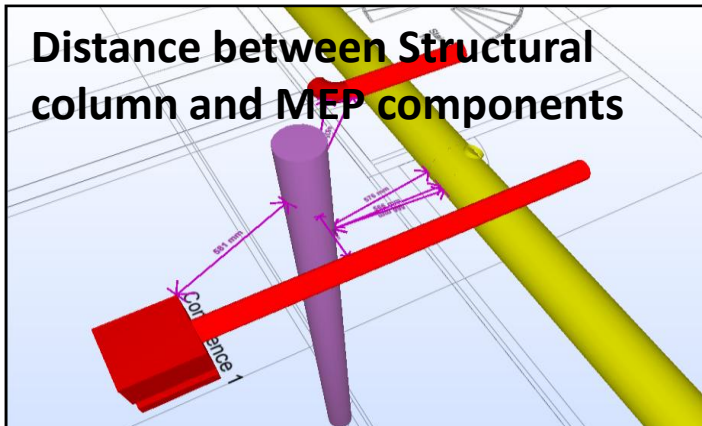
Clearance in front of doors



Components inside each other



Distance between Structural column and MEP components

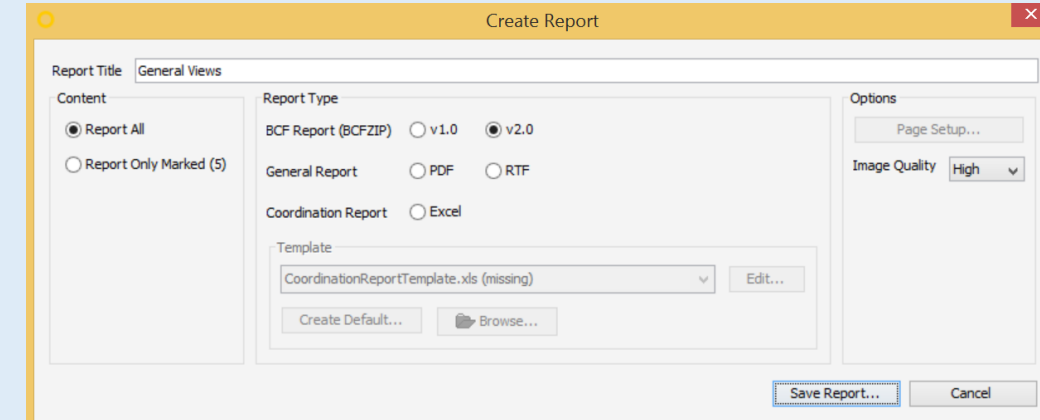
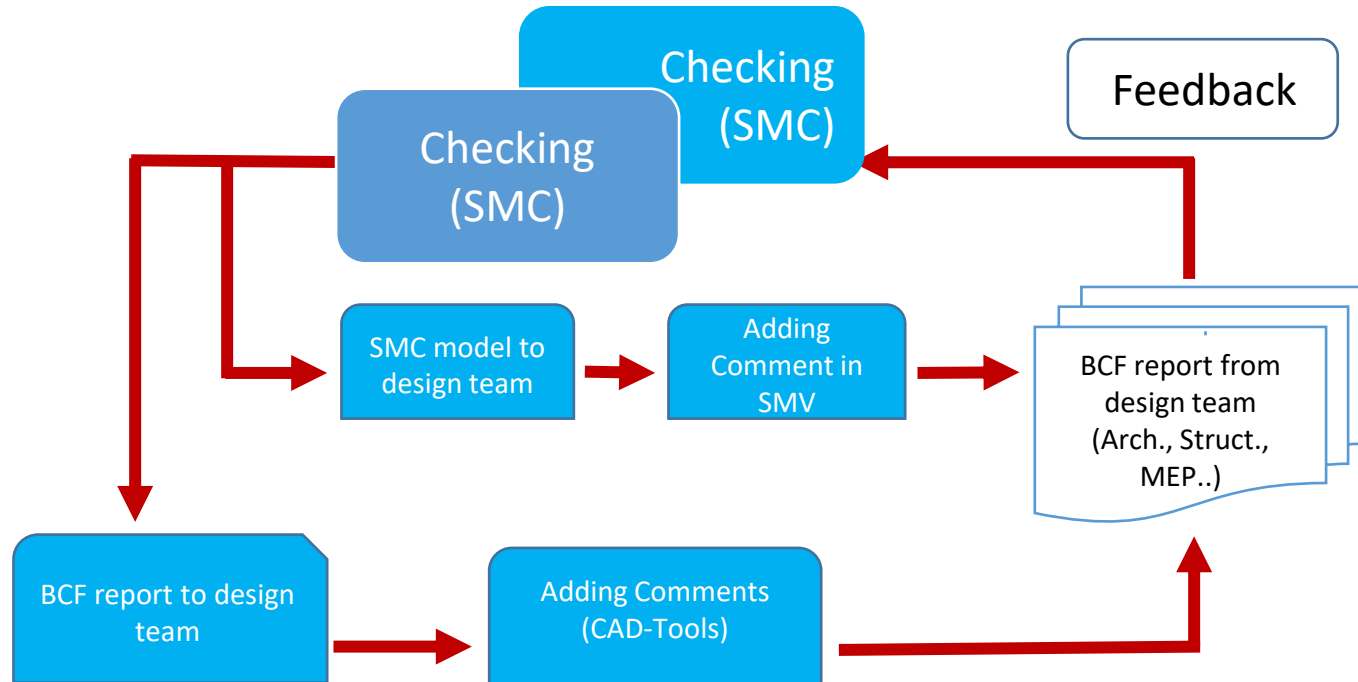


List of components attached to the issue
Components can be added and removed
The list can be used in reporting and communication

A screenshot of a software window titled "Issue Details". It contains the following fields and controls:

- Title:** Wall.3.14 (EW-1 240) and Wall.3.7 (EW-1 240) are inside each other
- Description:** Wall - Wall Intersections
- Coordination:** A section with a red "X" icon, a "Rejected" button, and a dropdown menu set to "Rejected".
- Status:** A dropdown menu set to "Assigned".
- BCF Status:** A dropdown menu set to "Error".
- Responsibilities:** A field containing "ARC" with a plus icon to add more.
- Communication:** A tab labeled "Components" with a small 3D preview of the wall intersection.
- Comments:** A section with a "PNI" icon and a text area for comments.
- Location:** A field containing "Roof Technical[401]" with a red "X" icon to the right.
- Created:** 2016-09-14 08:54:55
- Author:** PNI

Reporting / Communicate Issues



Define title for your report

Define type of report

- BIM Collaboration Report
- General Report
- Coordination Report

Select reported issues (all or marked only)

Coordination report is done based on selected report template

Image quality affects the size of the report file

Thank You!

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