Solibri vs Navisworks
How to check your Building Information Model(s)

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BIM Consultant - Manager Building Solutions

AUTODESK. UNIVERSITY



Leeuwenkamp Architecten



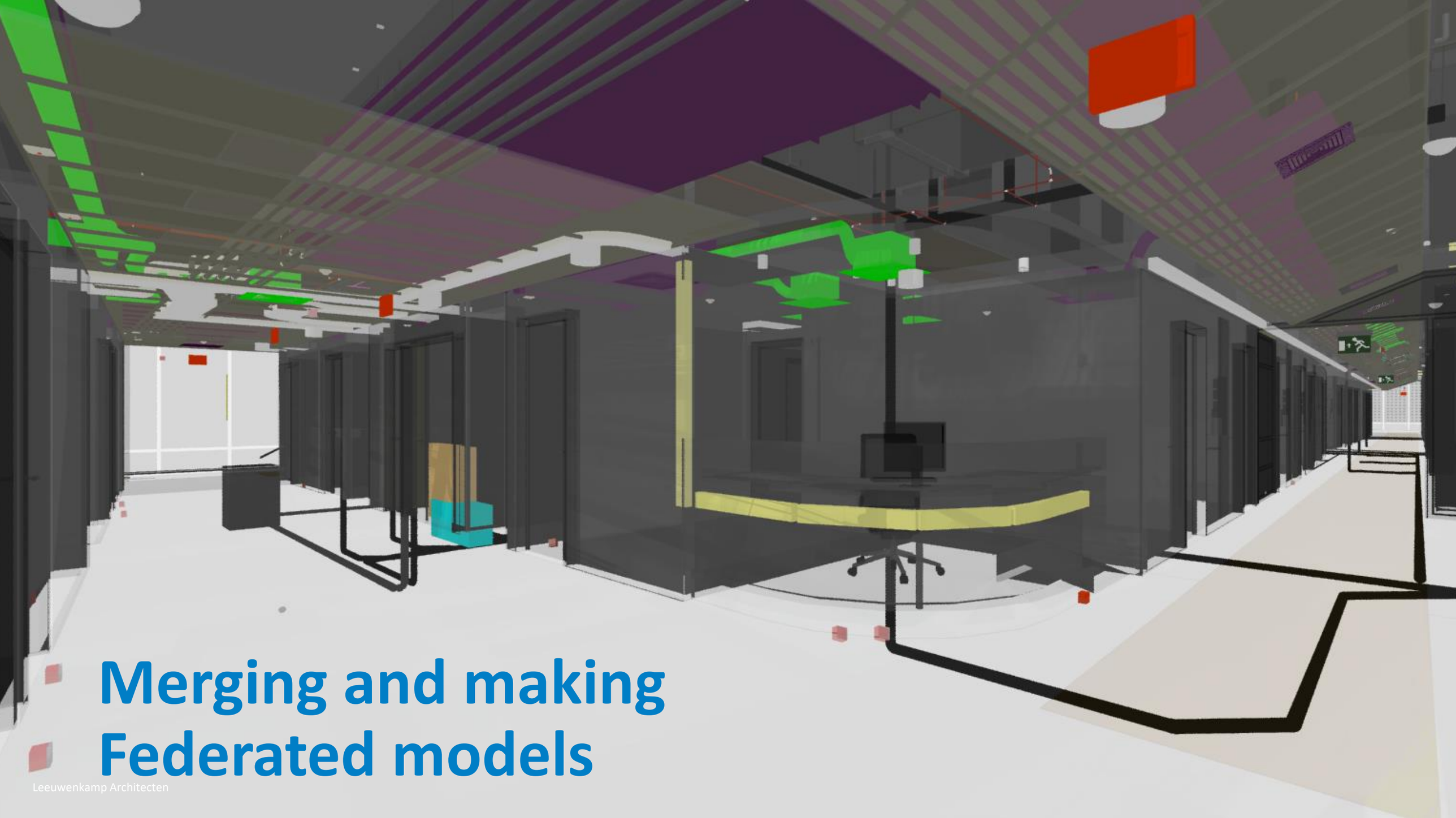
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It’s a mission!

What do we do as BIM manager?

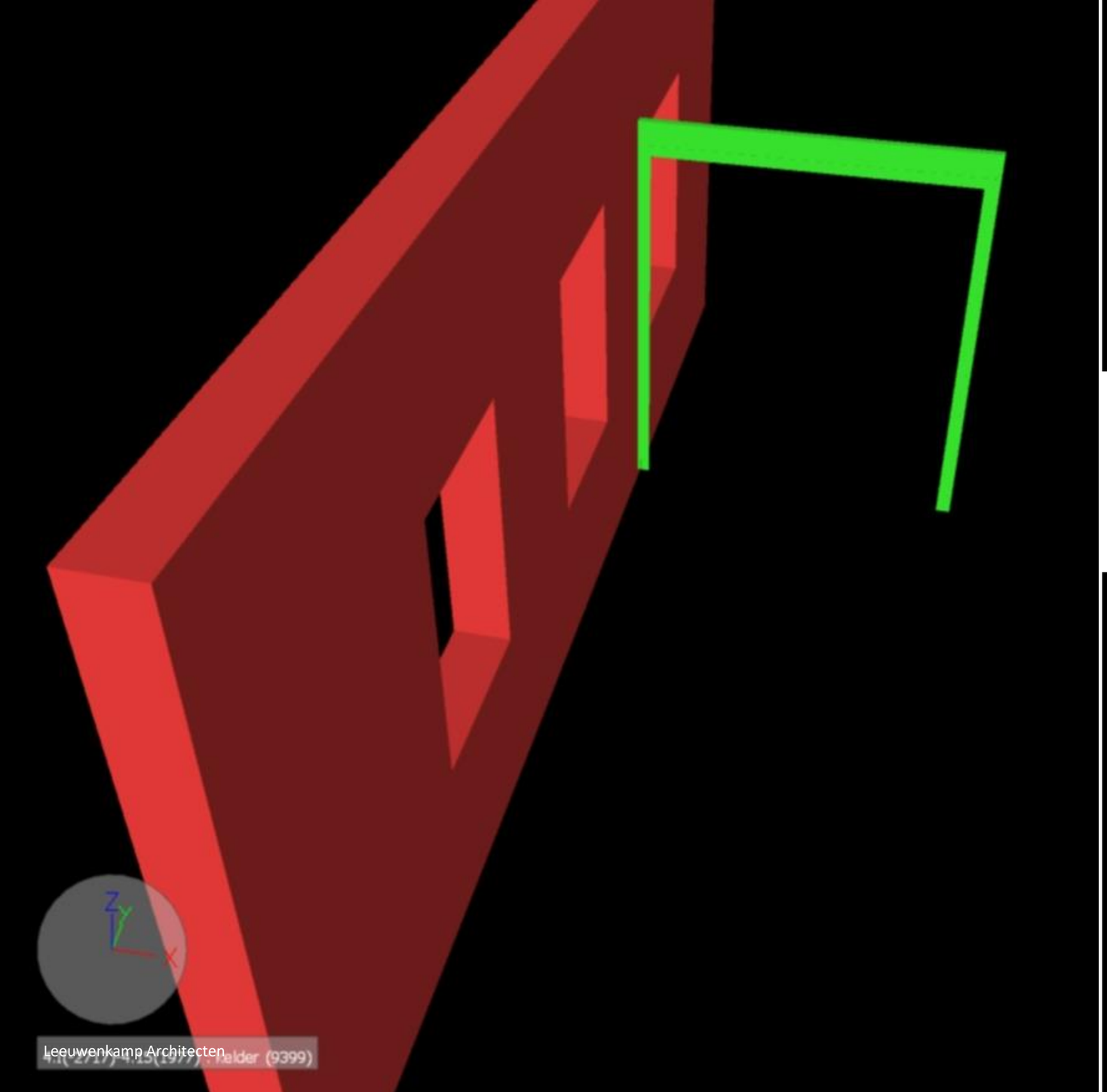


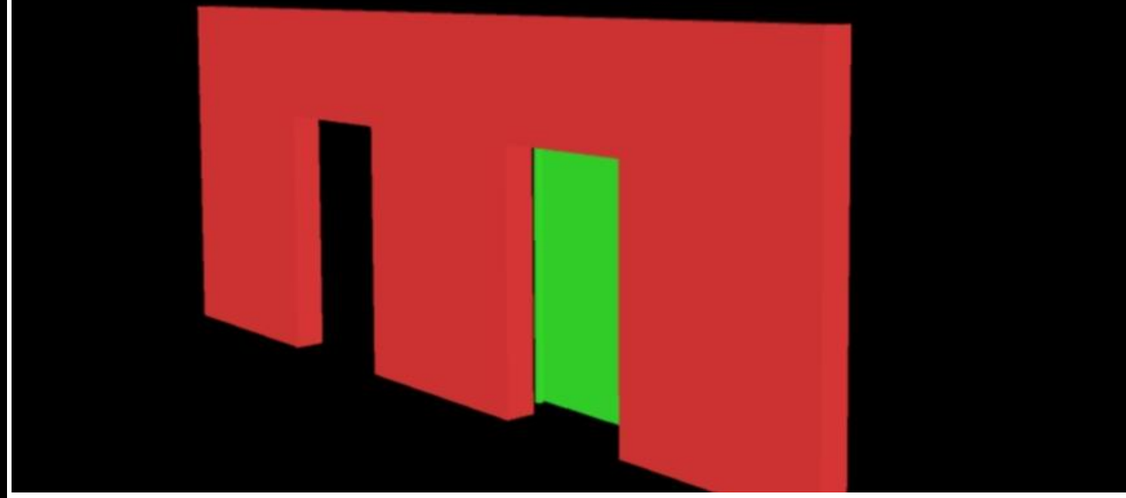
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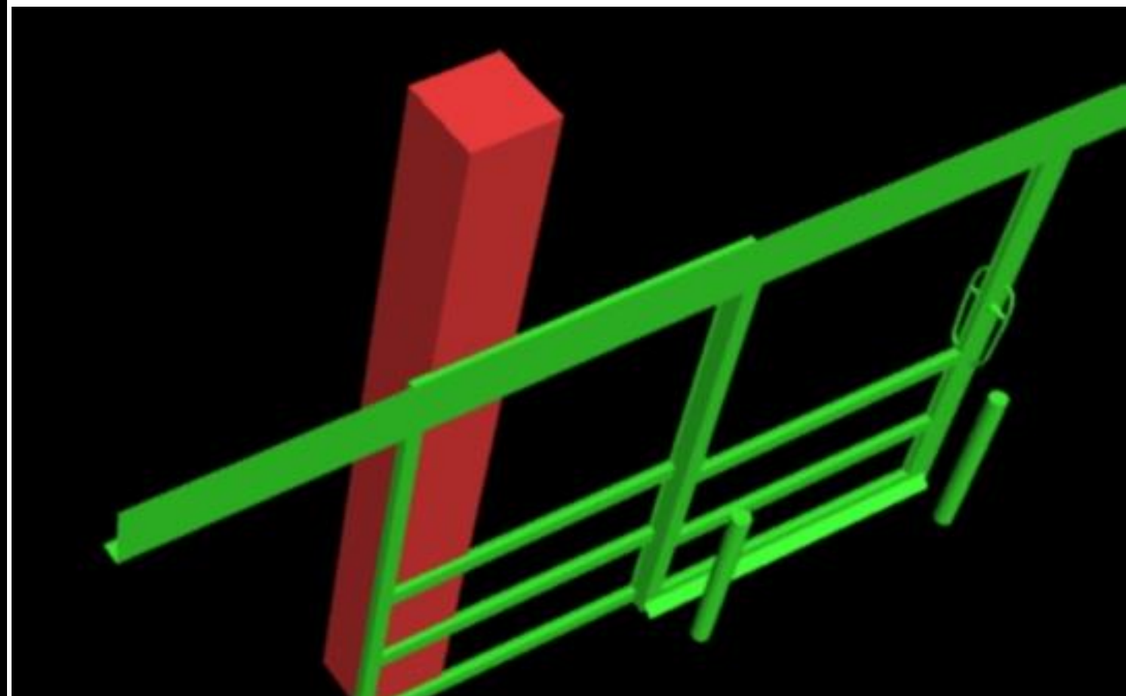
Merging and making Federated models

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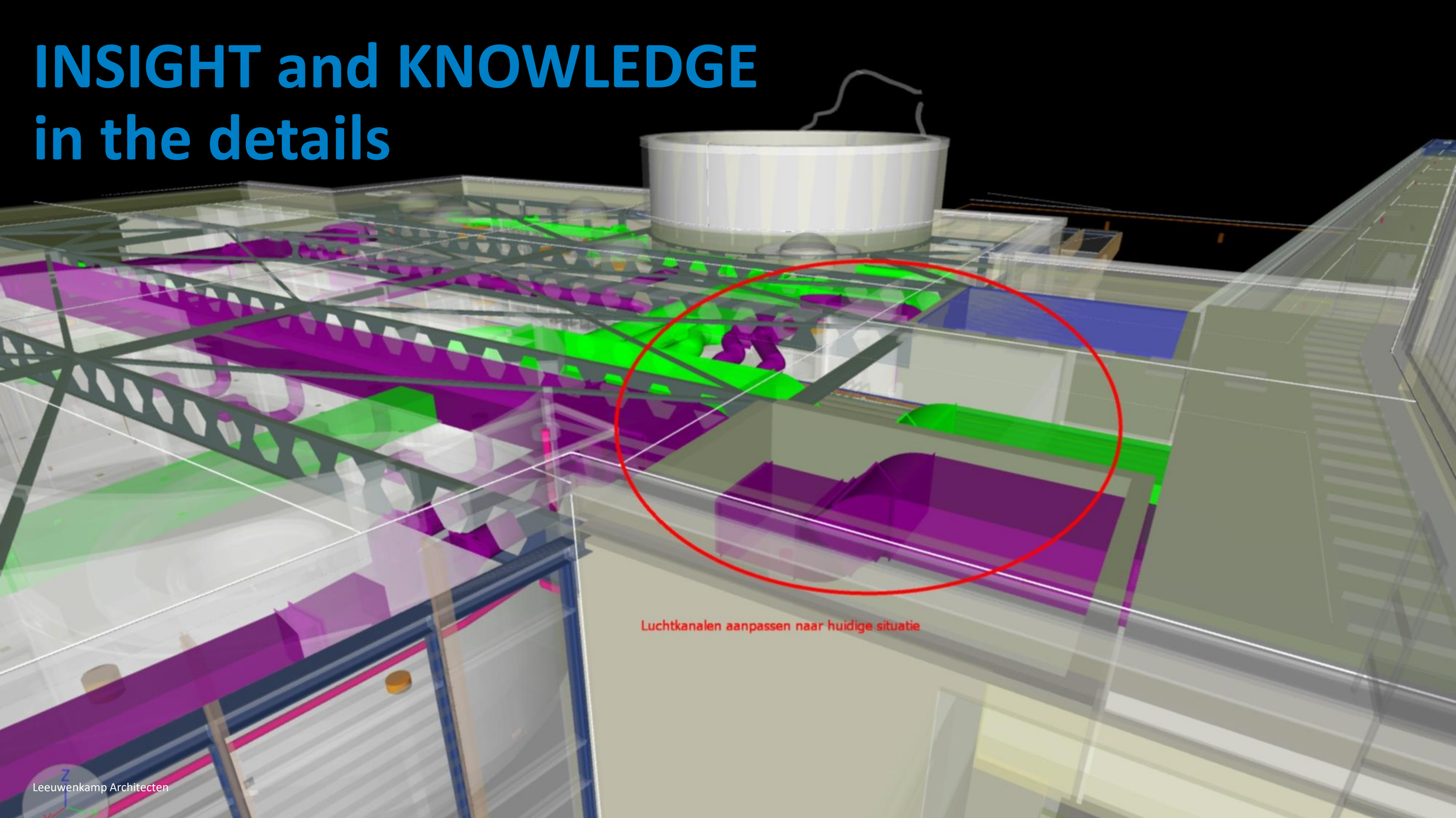




Finding and Resolving CLASHES



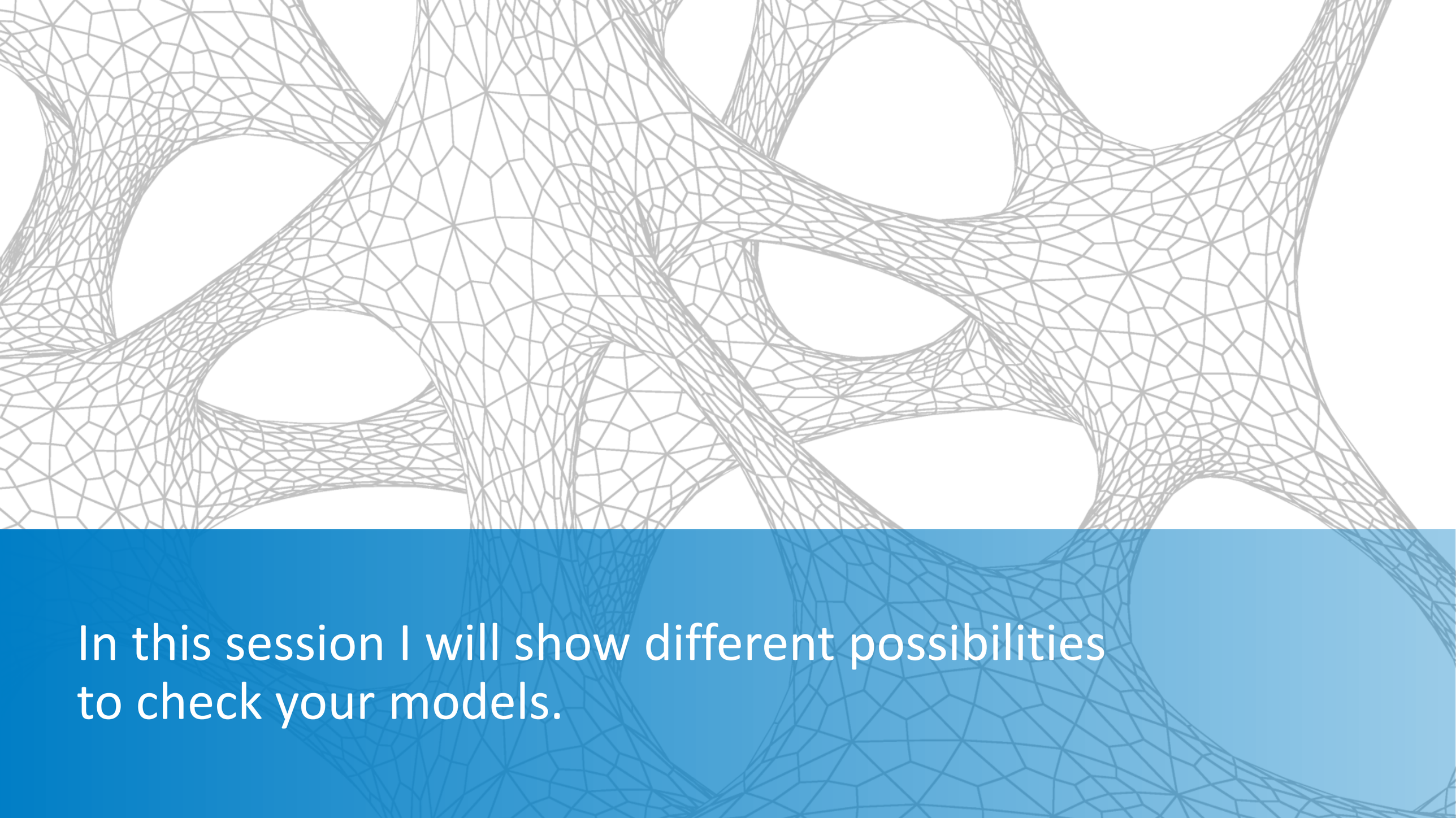
INSIGHT and KNOWLEDGE in the details





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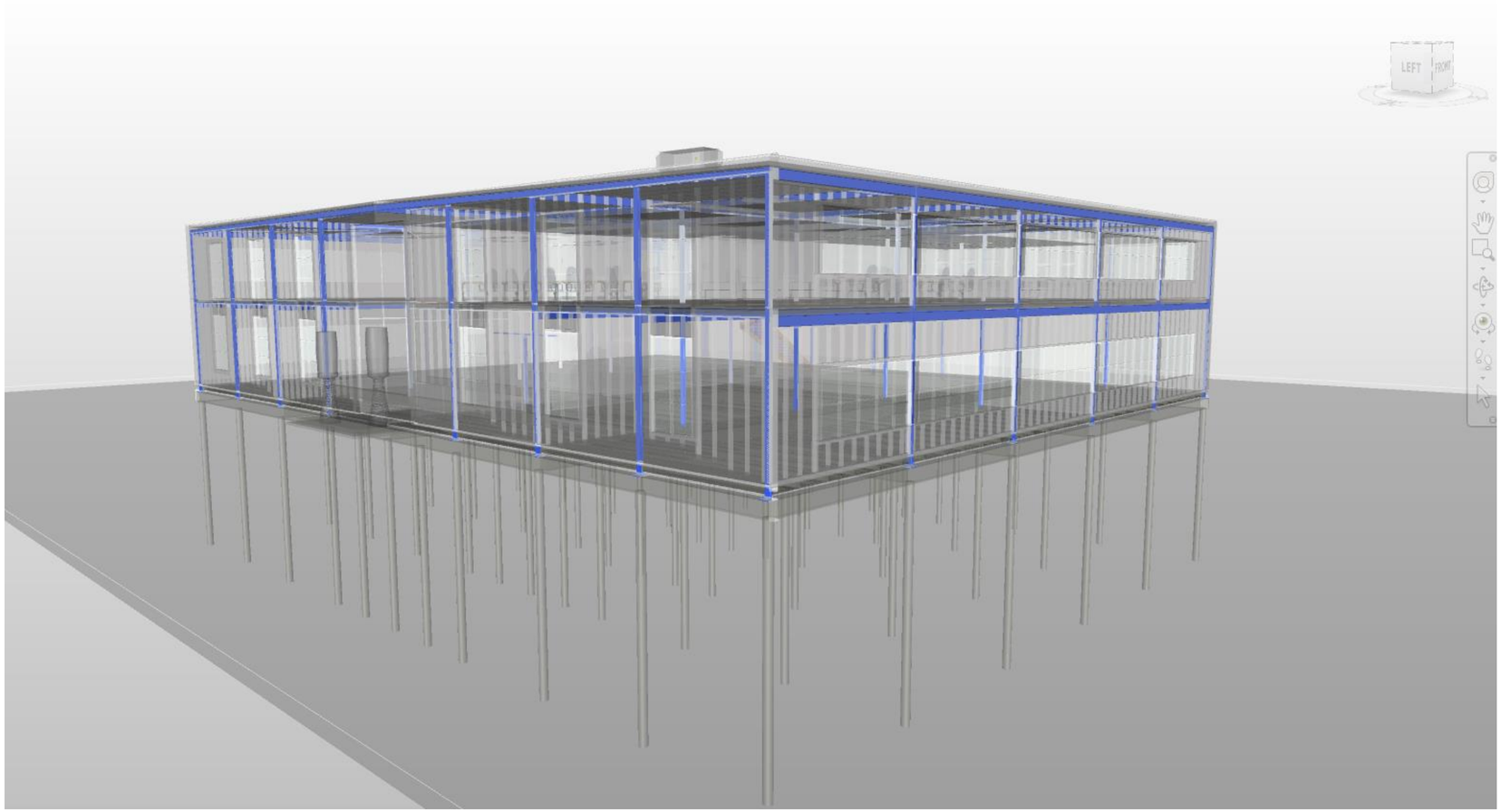

AI part off managing
the BIM Execution Plan!



In this session I will show different possibilities
to check your models.

Solibri vs Navisworks

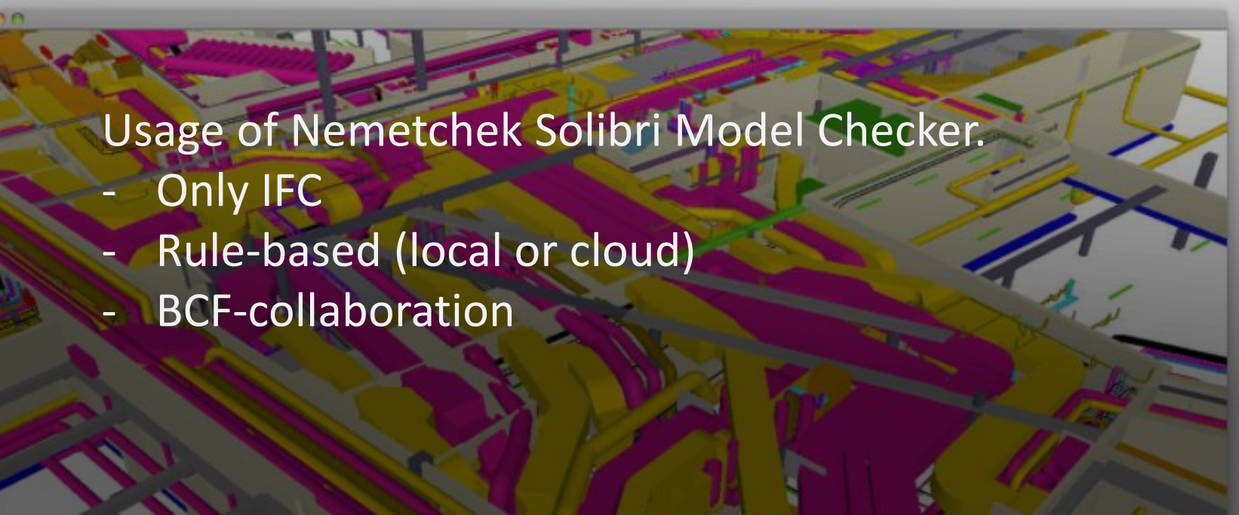
- Model checking
  - Geometry
  - Data
  - Duplicates
- Collaborate
- Adjust
- Keep on track?



FEATURES BENEFITS FUNCTIONALITIES SYSTEM RECOMMENDATIONS

SOLIBRI MODEL CHECKER

THE SOFTWARE THAT WILL REVOLUTIONIZE HOW WE DESIGN, CONSTRUCT AND MAINTAIN BUILDINGS



Usage of Nemetchek Solibri Model Checker.

- Only IFC
- Rule-based (local or cloud)
- BCF-collaboration

Features

Solibri Model Checker (SMC) is our flagship product. Here are few reasons that make it unique to the market

ADVANCED CLASH DETECTION & MANAGEMENT

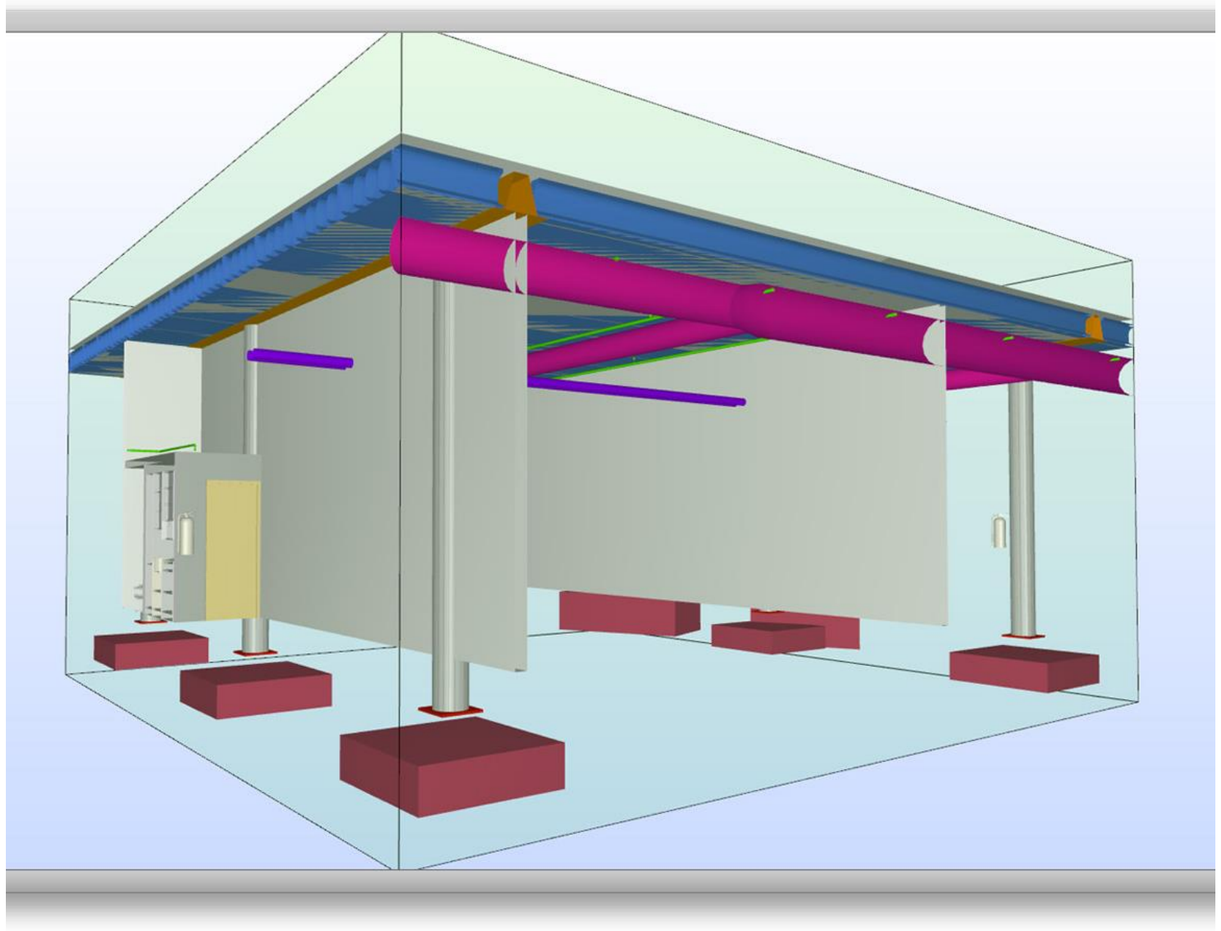
Automatically analyze and group clashes according to severity. Find relevant problems quickly and easily. Investigate the quality of your BIM files.

DEFICIENCY DETECTION

www.Solibri.com

Solibri Model Checker (SMC)

- Clash detection
- Rules to search for components and materials
- Information take off
- Material quantities and volumes
- Matching models
- Changes between versions



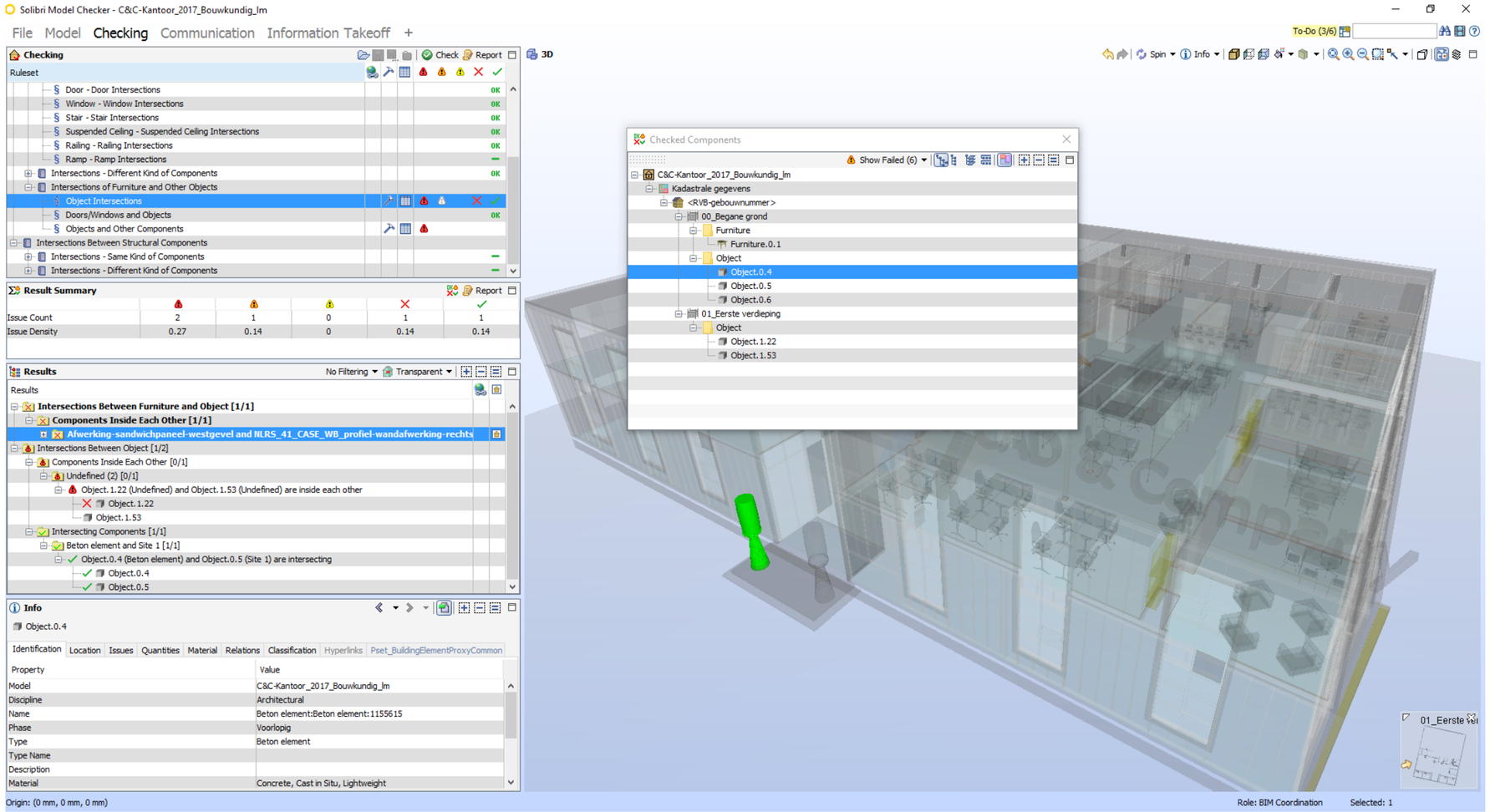
Solibri

SMC – General

SMC – Rule based checking

SMC – Rule-based checking

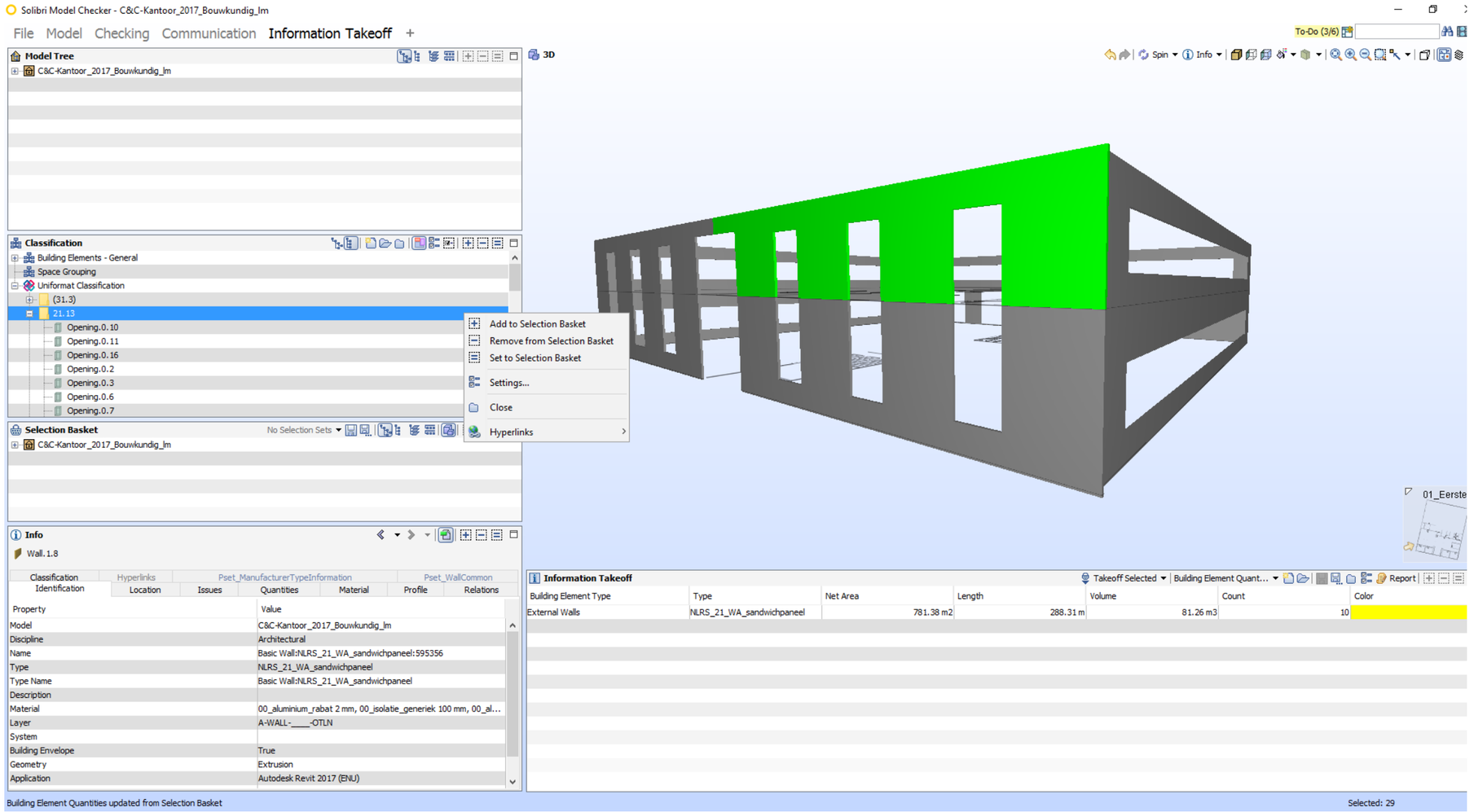
- Predefined rules
- Overview
- Extra detailed Information
- Accept / Reject
- Good views?
- Select objects?
- Collaboration?



SMC - Classification

SMC - Classification

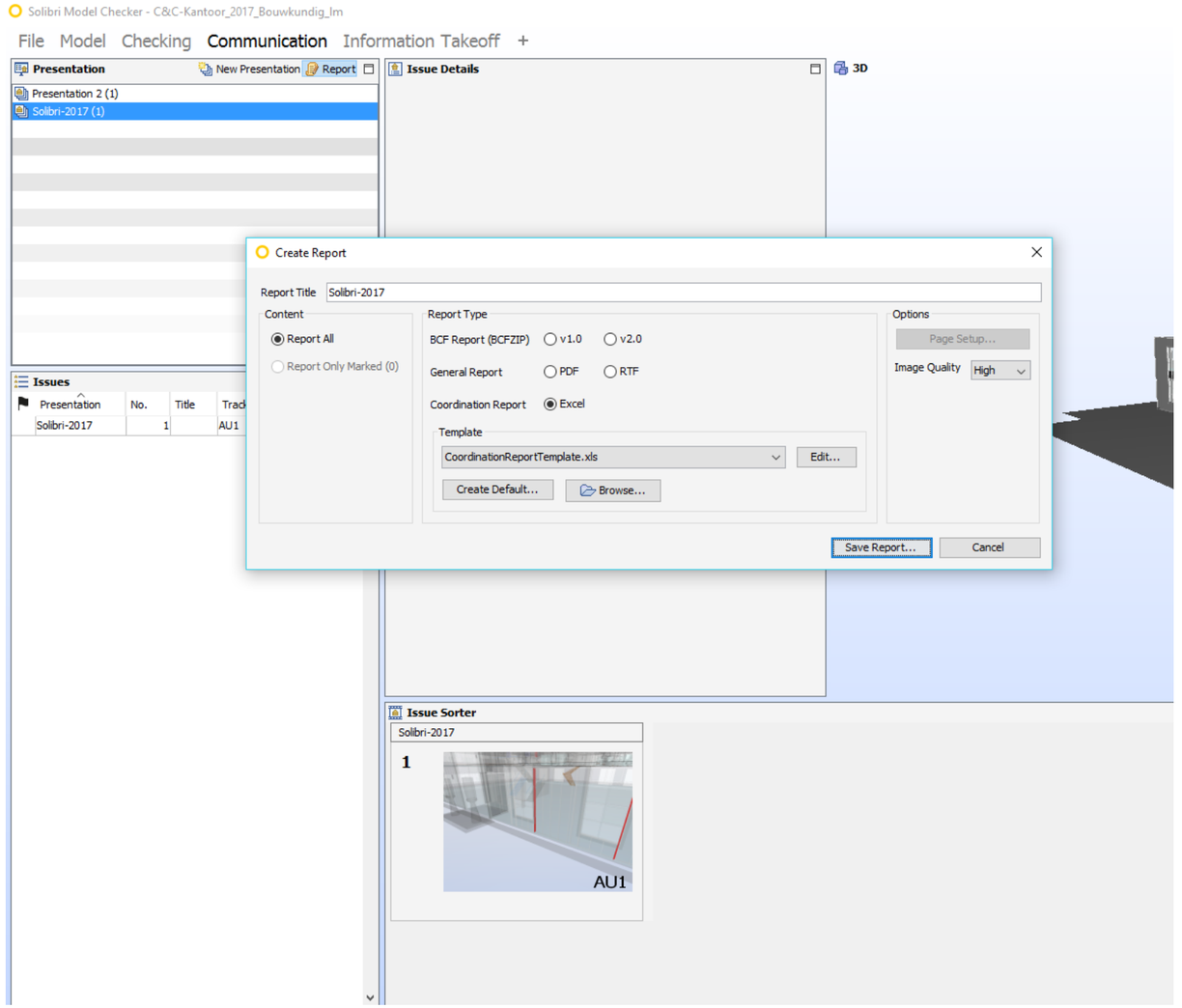
- Predefined classification
- Model structure
- Take Off possibility



SMC – Collaboration

SMC - Collaboration

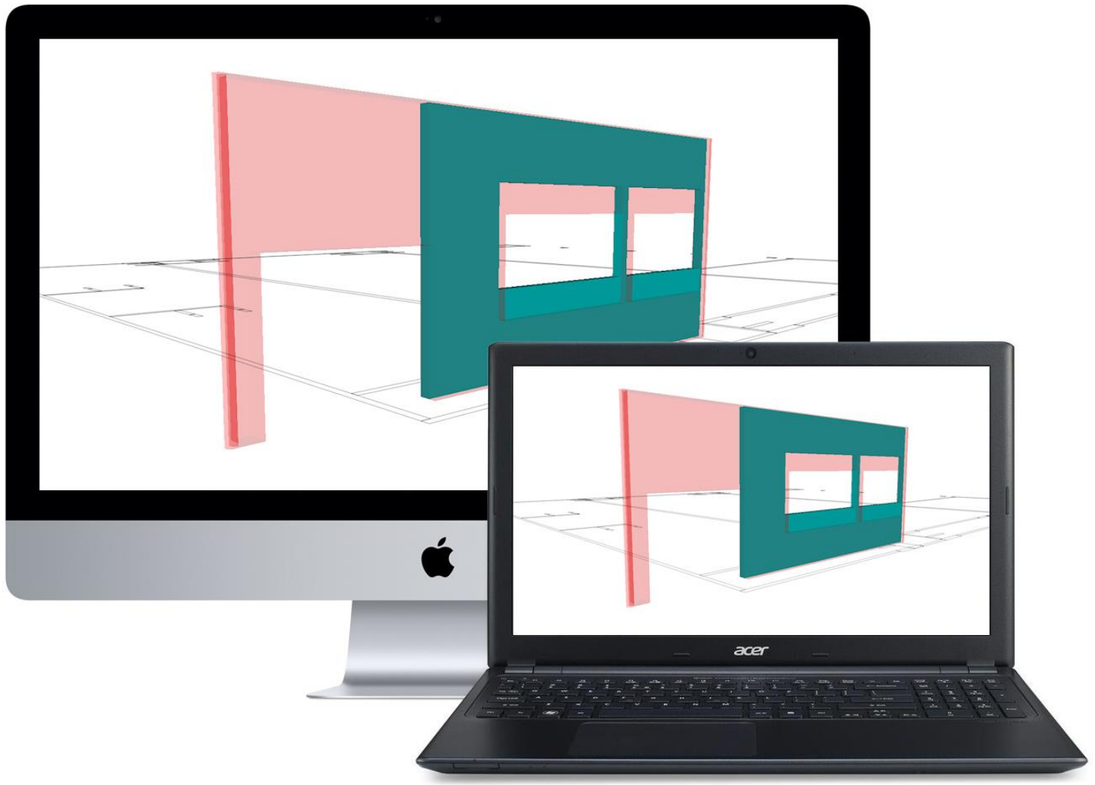
- Different file formats:
  - SMCT (open in free version)
  - BCF
  - PDF
- Information?
- Assigned to?



Solibri Model Checker overall

Solibri Model Checker (SMC)

- Rule-based checking for:
  - Intersection
  - Information
- Take off information and quantities
- Strong in showing geometry and dimensions
- IFC and BCF / PDF based
- Add extra software for collaboration



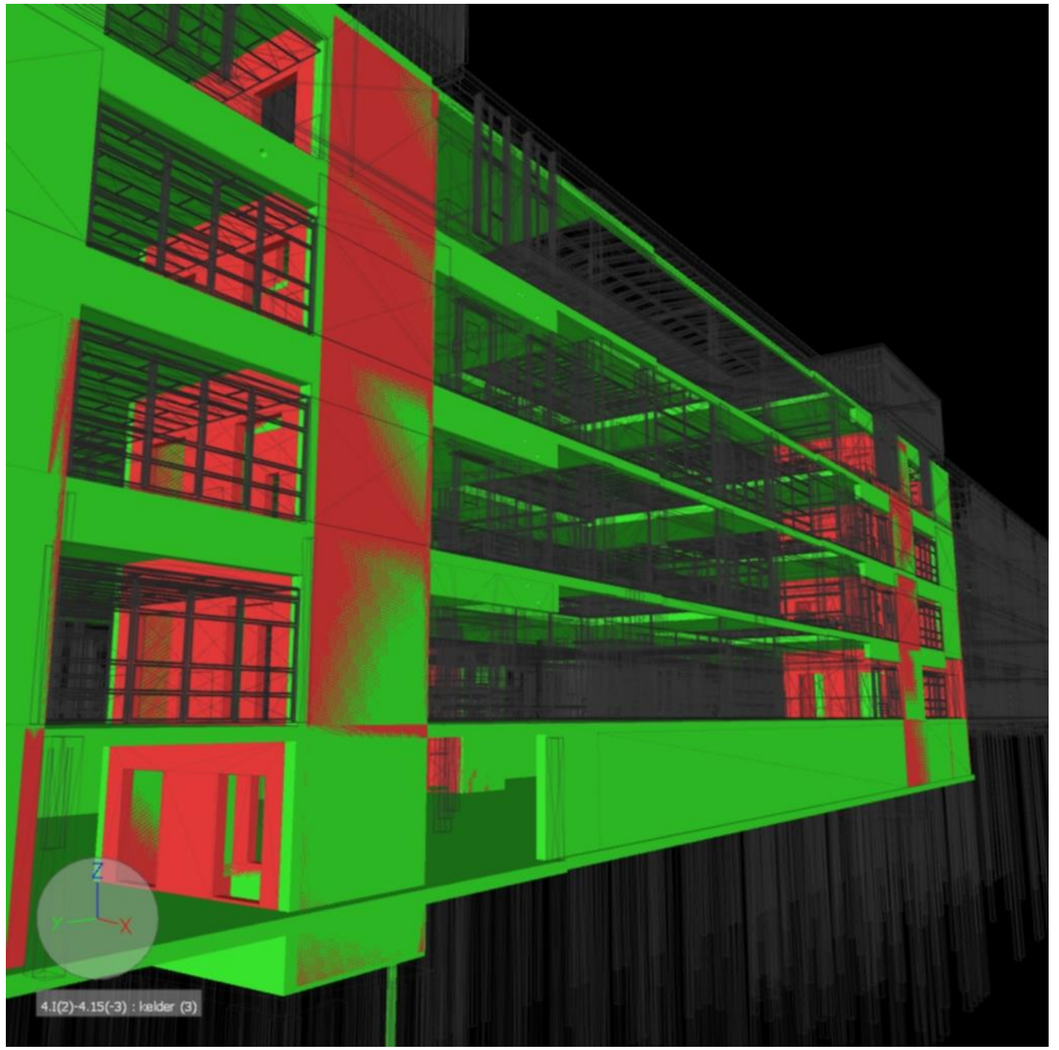


Usage of Autodesk Navisworks

- Different File types
- Wide range of possibilities
- In the Autodesk Collections
- Add- ins available

Navisworks

- Clash detection & Clash Management
- Find items in all data fields
- Create search sets (project)
- Material take off: quantities and volumes with QTO
- Model comparison
- Export functionalities



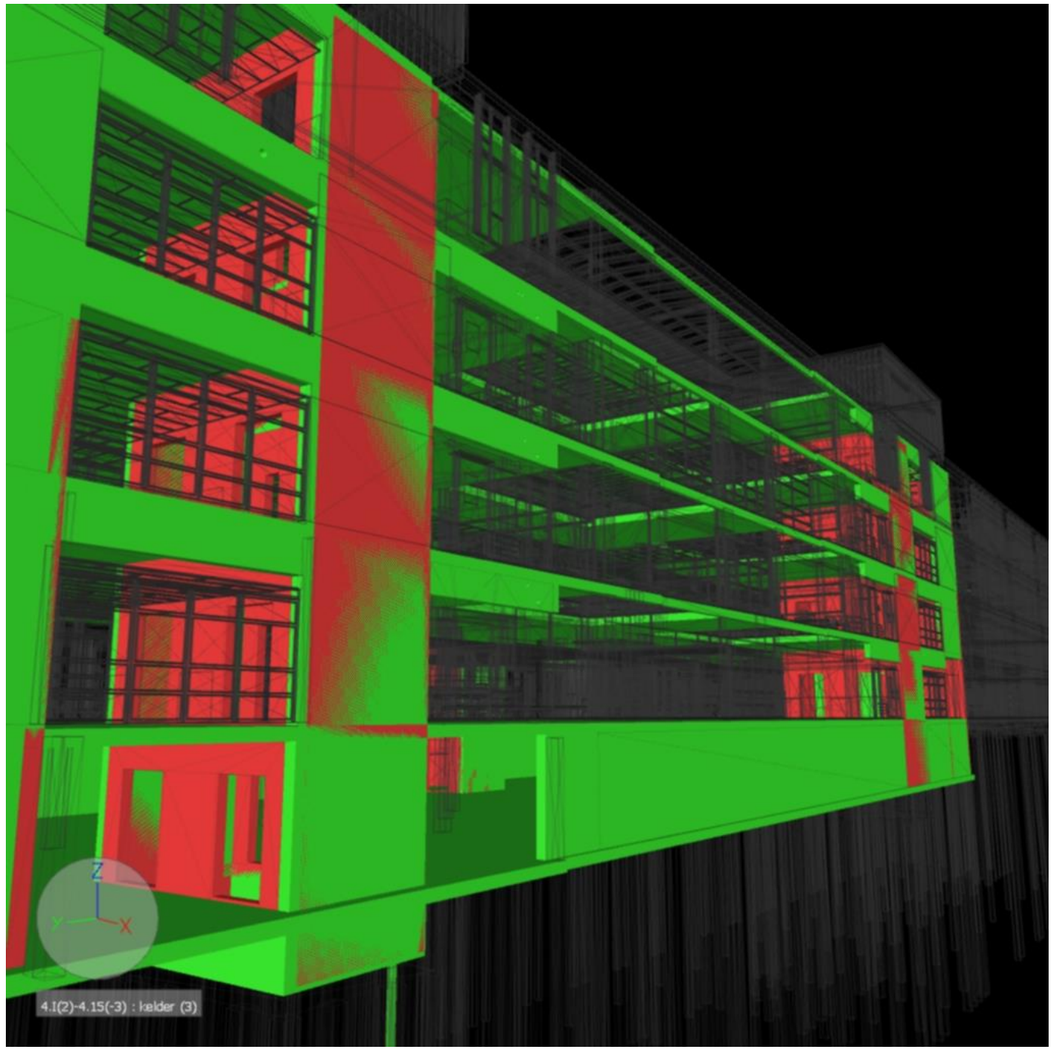
Navisworks

Navisworks - IFC

Navisworks - RVT

Navisworks

- Information
- Structured in categories
- Geometry information
- Material information
- Connected to the RVT file for change tracking



Navisworks

Navisworks QTO

Navisworks – Search sets

Navisworks

- File types (50+)
- Information (Use search sets)
- Clash detection
- Quantities and volumes
- Reporting

- Rule based checking
- Collaboration
- Secure knowledge



Navisworks

Navisworks with the power of Forge

- Add - Rule based checking
- Add - Information take off
- Add - Issue management
- Add - One Workflow collaboration
- Add - Secure your knowledge



Navisworks with the Forge and Collaborea

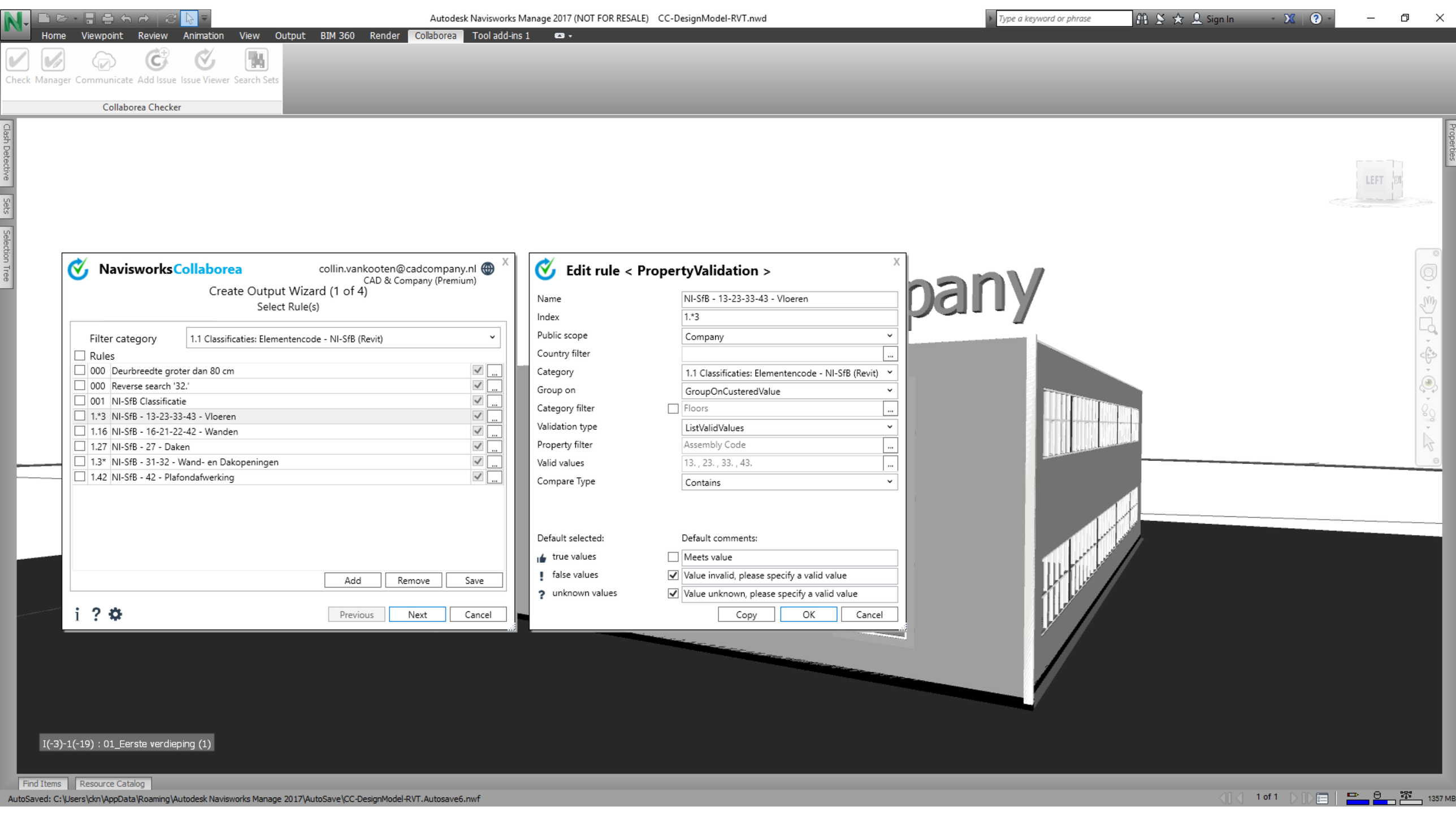
- An add-in for Navisworks to have a better workflow and standardized checks
- Connected to the Forge technology and a collaboration cloud platform
- No more rework to create search sets, clash detection or data checking.

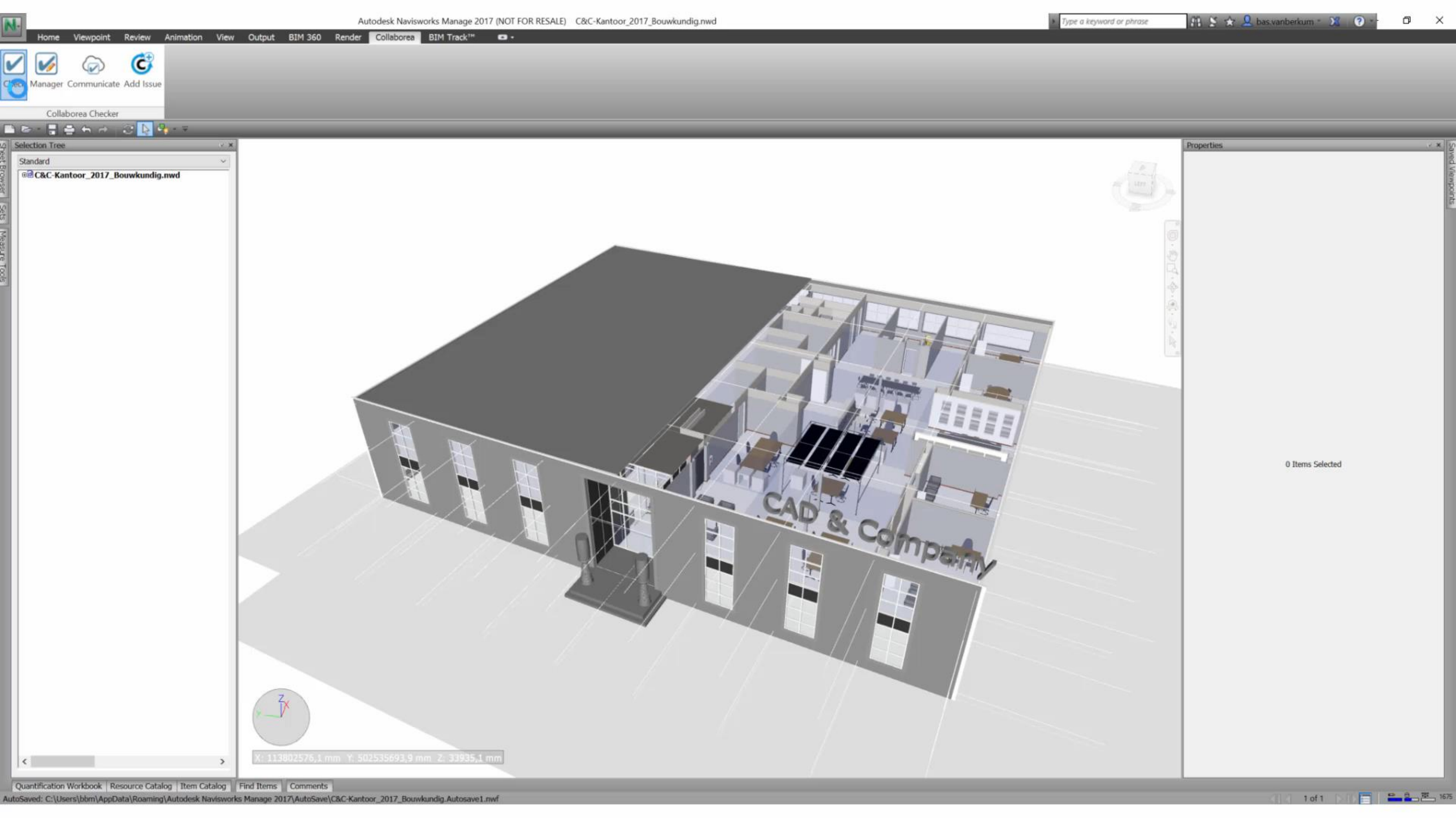


Collaborea

Navisworks & Collaborea

Navisworks & Collaborea - Checking


Autodesk Navisworks Manage 2017 (NOT FOR RESALE) CC-DesignModel-RVT.nwd
Home Viewpoint Review Animation View Output BIM 360 Render Collaborea Tool add-ins 1
Check Manager Communicate Add Issue Issue Viewer Search Sets
Collaborea Checker
NavisworksCollaborea
collin.vankooten@cadcompany.nl
CAD & Company (Premium)
Create Output Wizard (1 of 4)
Select Rule(s)
Filter category
1.1 Classificaties: Elementencode - NI-SfB (Revit)
Rules
000 Deurbreedte groter dan 80 cm
000 Reverse search '32.'
001 NI-SfB Classificatie
1.*3 NI-SfB - 13-23-33-43 - Vloeren
1.16 NI-SfB - 16-21-22-42 - Wanden
1.27 NI-SfB - 27 - Daken
1.3* NI-SfB - 31-32 - Wand- en Dakopeningen
1.42 NI-SfB - 42 - Plafondafwerking
Add
Remove
Save
Previous
Next
Cancel
Edit rule < PropertyValidation >
Name
NI-SfB - 13-23-33-43 - Vloeren
Index
1.*3
Public scope
Company
Country filter
Category
1.1 Classificaties: Elementencode - NI-SfB (Revit)
Group on
GroupOnCusteredValue
Category filter
Floors
Validation type
ListValidValues
Property filter
Assembly Code
Valid values
13. , 23. , 33. , 43.
Compare Type
Contains
Default selected:
true values
false values
unknown values
Default comments:
Meets value
Value invalid, please specify a valid value
Value unknown, please specify a valid value
Copy
OK
Cancel
I(-3)-1(-19) : 01_Eerste verdieping (1)
Find Items
Resource Catalog
AutoSaved: C:\Users\ckn\AppData\Roaming\Autodesk Navisworks Manage 2017\AutoSave\CC-DesignModel-RVT.Autosave6.nwf
1 of 1


Autodesk Navisworks Manage 2017 (NOT FOR RESALE) C&C-Kantoor_2017_Bouwkundig.nwd
Type a keyword or phrase
bas.vanberkum
Home
Viewpoint
Review
Animation
View
Output
BIM 360
Render
Collaborea
BIM Track™
Manager
Communicate
Add Issue
Collaborea Checker
Selection Tree
Standard
C&C-Kantoor_2017_Bouwkundig.nwd
Properties
0 Items Selected
CAD & Company
X: 113802576,1 mm Y: 502535693,9 mm Z: 33935,1 mm
Quantification Workbook
Resource Catalog
Item Catalog
Find Items
Comments
AutoSaved: C:\Users\bbm\AppData\Roaming\Autodesk Navisworks Manage 2017\AutoSave\C&C-Kantoor_2017_Bouwkundig.Autosave1.nwf
1 of 1

Navisworks and Collaborea - Checking

- Rule based checking capabilities
- Stored in the cloud for the whole project team
- Easy to use for everyone in the project team (subcontractors)
- Permission structure to add or change a rule
- Rules are private, teambased or public available



Navisworks

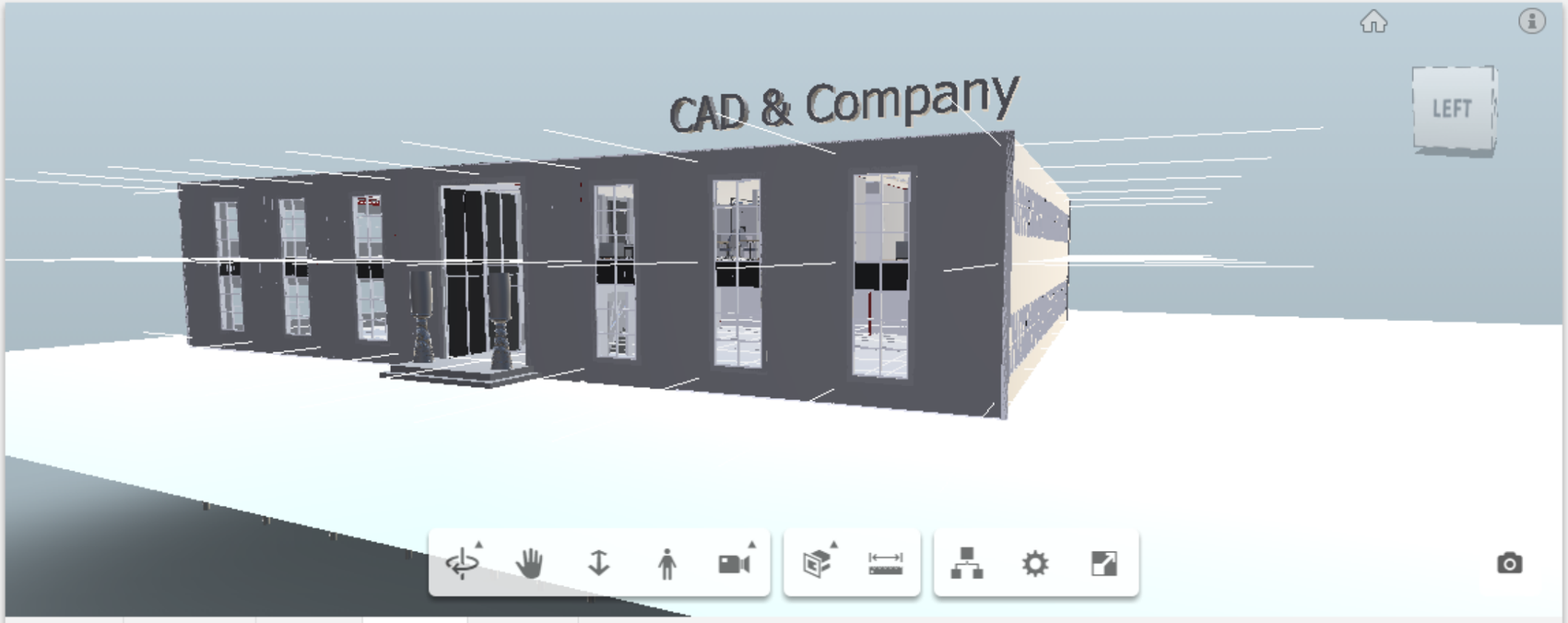
Navisworks & Collaborea – Collaboration

BLDNG360

NL | EN

Search

Start Buildings Companies Locations Services Apps Partners Contact CV



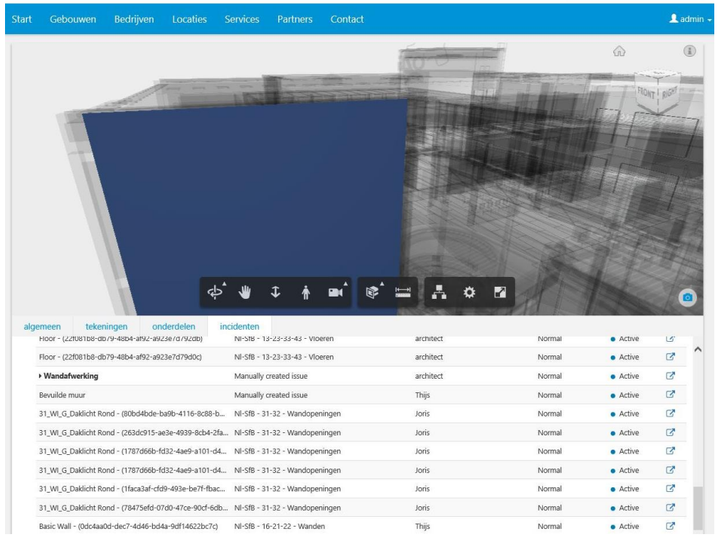
general drawings assets issues export

20 issues found.

view:

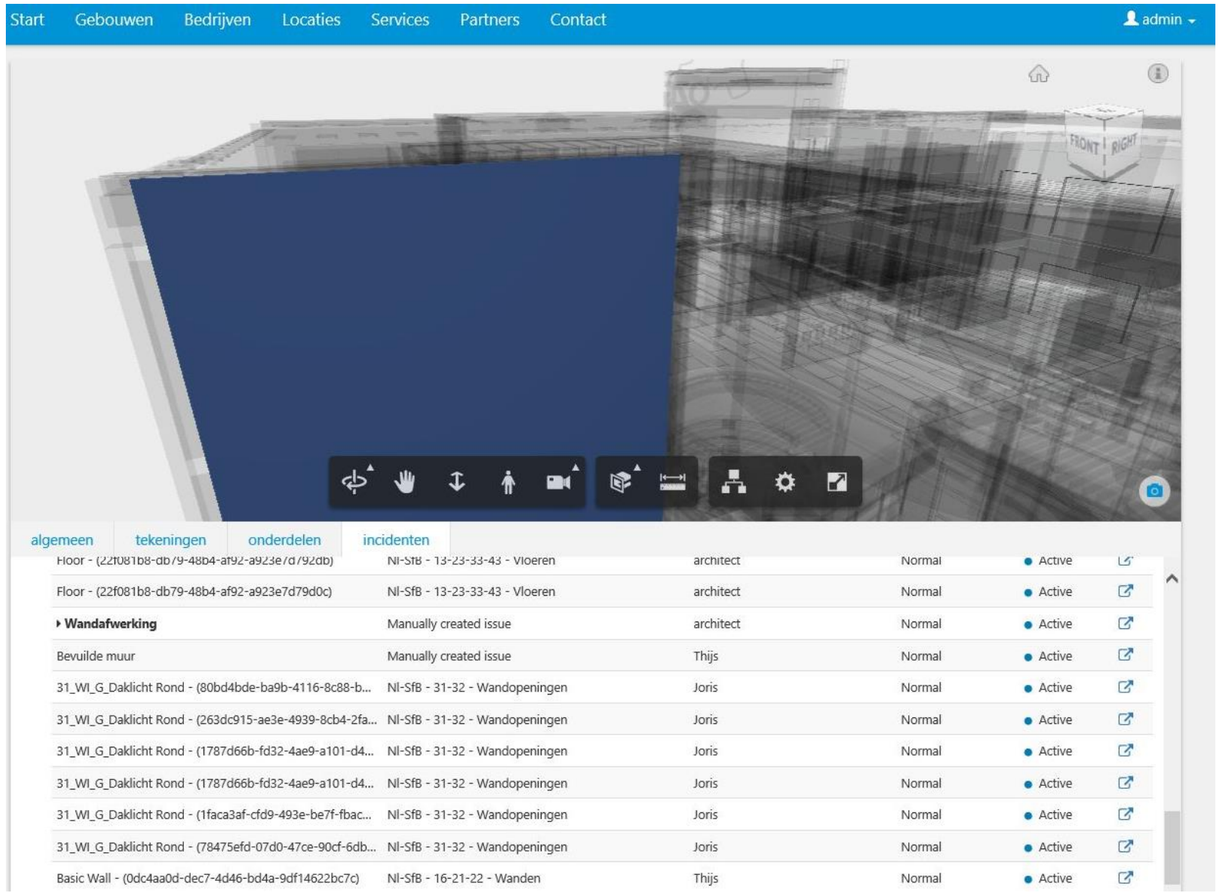
#	Title	Type	Rule	Assigned To	Priority	Status
90	Kast verplaasten	Remark	Manually created issue	Michèle Mollet	Normal	Active
77	C&C-Kantoor_2017_MEP_UO_Ventilatie	Issue	NLRS 3.4.0. Correct gebruik van entiteiten	Bas van Berkum	Normal	Active
71	C&C-Kantoor_2017_Constructief_UO_Staal_dak	Issue	NLRS 3.4.0. Correct gebruik van entiteiten	Bas van Berkum	Normal	Active
70	C&C-Kantoor_2017_Constructief_UO_Beton_b...	Issue	NLRS 3.4.0. Correct gebruik van entiteiten	Bas van Berkum	Normal	Active
69	C&C-Kantoor_2017_Buitenkozijnen	Issue	NLRS 3.4.0. Correct gebruik van entiteiten	Bas van Berkum	Normal	Active
68	C&C-Kantoor_2017_Aannemer	Issue	NLRS 3.4.0. Correct gebruik van entiteiten	Bas van Berkum	Normal	Active
66	OVerheaddeur type aanpassen	Request	Manually created issue	Bas van Berkum	! Critical	Resolved
64	Logo aanpassen	Clash	Manually created issue	Collin van Kooten	Normal	Resolved





Navisworks and Collaborea - Collaboration

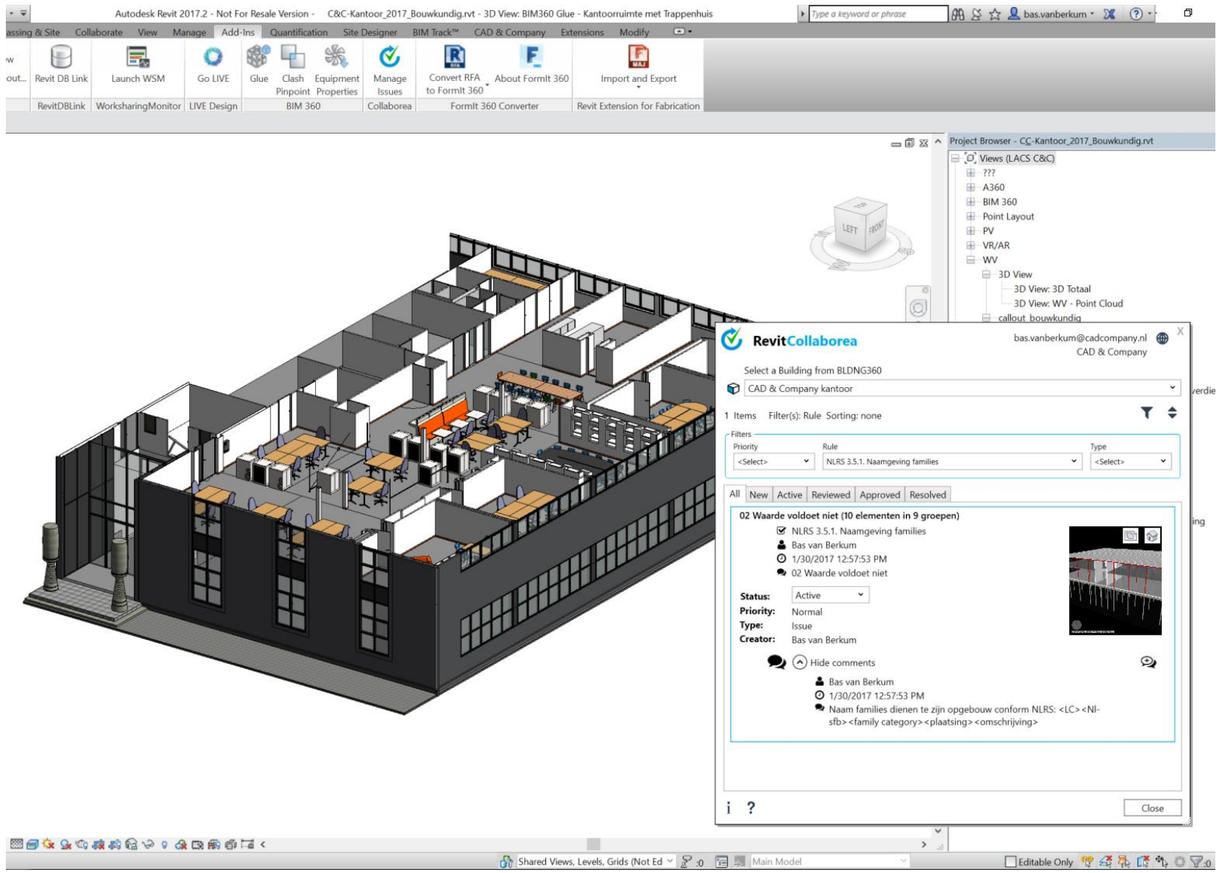
- Issue management:
  - Report?
  - Platform using Forge technology
- Overview of project and issues
- Dashboard
- Add issue on the fly
- Assigned to a project member

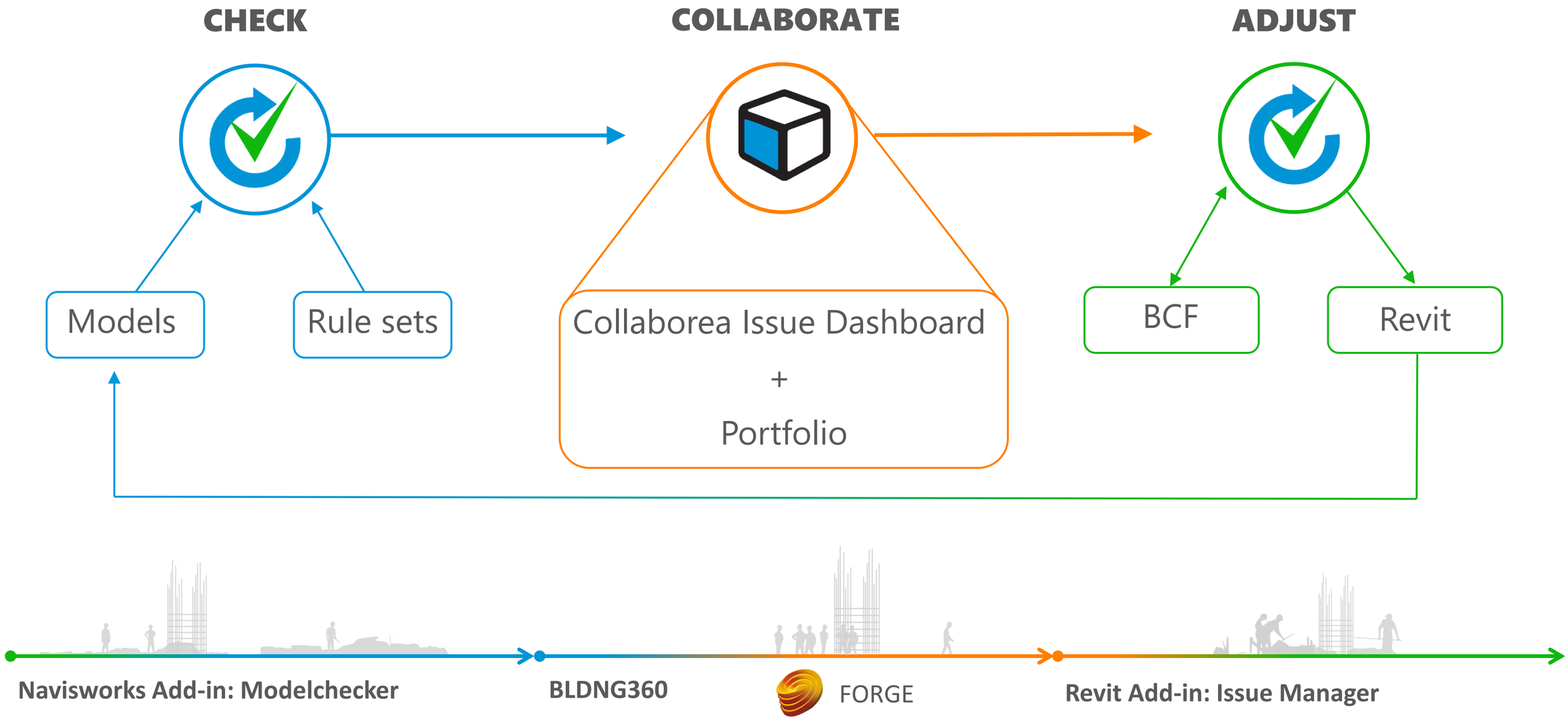


Collaborea – Adjust

Navisworks and Collaborea - Adjust

- Adjust the models in the right context, using:
  - BCF export and import
  - Revit – Add in




CHECK
COLLABORATE
ADJUST
Models
Rule sets
Collaborea Issue Dashboard
+
Portfolio
BCF
Revit
Navisworks Add-in: Modelchecker
BLDNG360
FORGE
Revit Add-in: Issue Manager

Collaborea – Information upstream

Navisworks & Collaborea

- Rule-based checking for all data, intersections and duplicates.
- Take off any information.
- Collaboration between al parties by Autodesk Add-in, Website and BCF export and Import.
- Export data capability.
- For all team members, not only BIM managers of engineers



Navisworks & Collaborea – simple Workflow

- Add a Rulebased Modelchecker to your workflow
- Standardize your checks
- Make full usage of the AEC collection with Navisworks Manage, Revit and Forge.
- Make better buildings, in an easy way.



Autodesk Forge and Collaborea

Meet us a the
Forge Booth: **D522**
Exhibition hall

D522 - Exhibition hall



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