



Going Beyond 3D Coordination

In this session we will learn techniques to leverage the data from BIM models to achieve superior project coordination, code and program compliance, and risk reduction enabled by i-models and Bentley Navigator.



Agenda

BIM Model Quality Assurance

Assisted Visual Review

- Code Validation
- Design Validation

Data-Driven Clash Detection

- Phantom Clashing

Data-Driven Hyper-model Links

Mobile apps



Learning Objectives

After this session you will be able:

Create, Save & Load EC Queries in Bentley Navigator

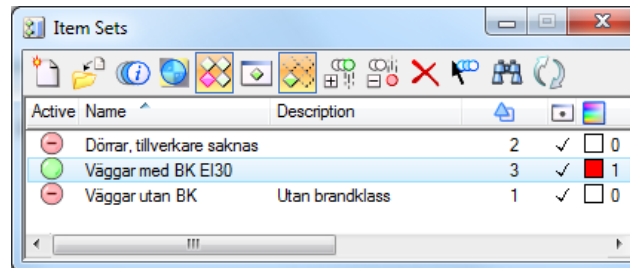
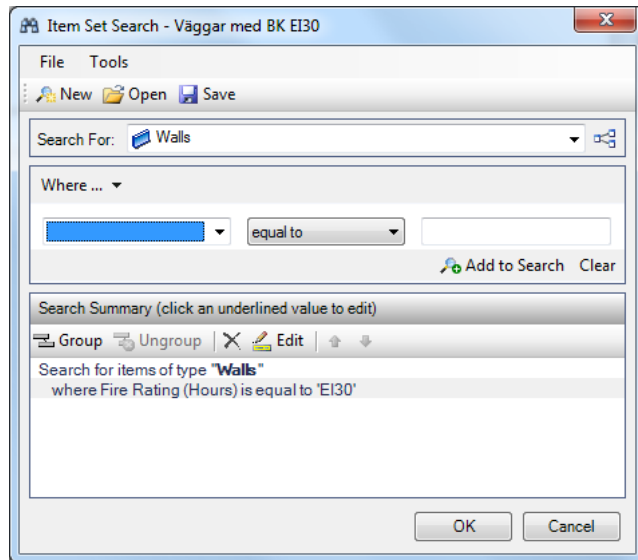
Understand how You can benefit from Item Sets in AECOsim Building Designer and Navigator

Use Bentley Navigator Item Sets as a Clash Criteria Set for advanced Clash Detection.

Dynamically add URL and/or File links to elements identified by an EC Query using Bentley Navigator's Item Sets.

Item Sets

Item Sets is a good way to verify that the model is correct with applied properties



Navigator and i-models

i-Models are read-only models for review

Markups, Clash Jobs, and Item Sets are saved in a .OVERLAY.DGN file that references the i-Model being reviewed.

MicroStation



Republish i-model

AECOsim
Building Designer



information model

*.overlay.dgn

Item Sets
Clash Detections

Refers

extract

Information

graphical

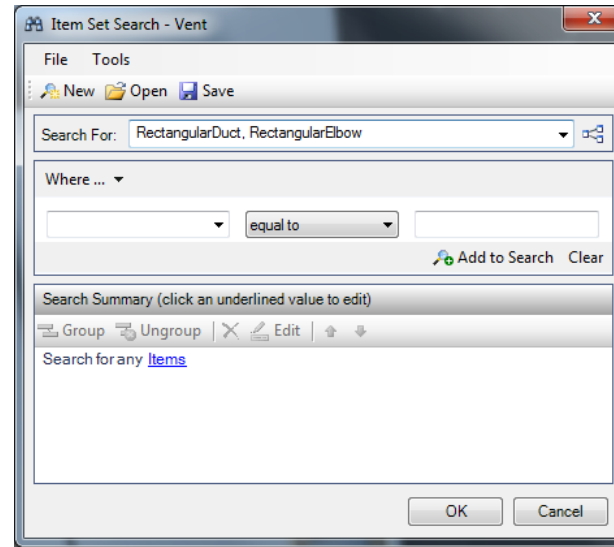
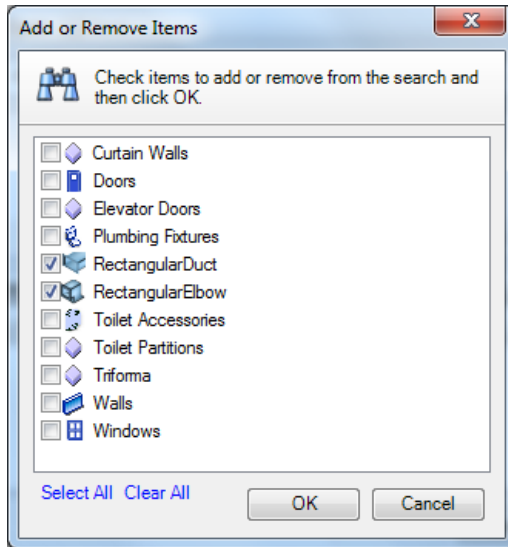
alphanumeric

various sub-sets of information
for different purposes

Going Beyond 3D Coordination

Create Dynamic Searches using Item Sets

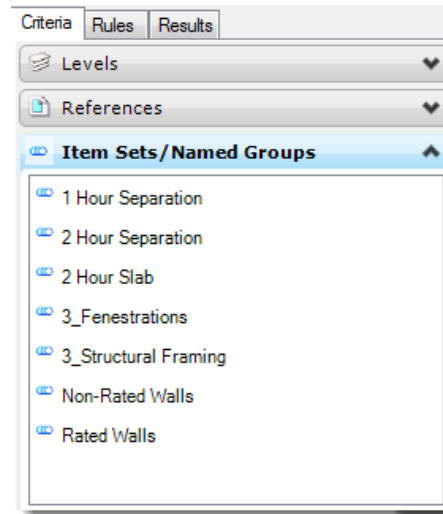
– From one or more Catalog Types



Data-Driven Clash Detection

Clash Detection Jobs Sets can be constructed by any of the following criteria methods:

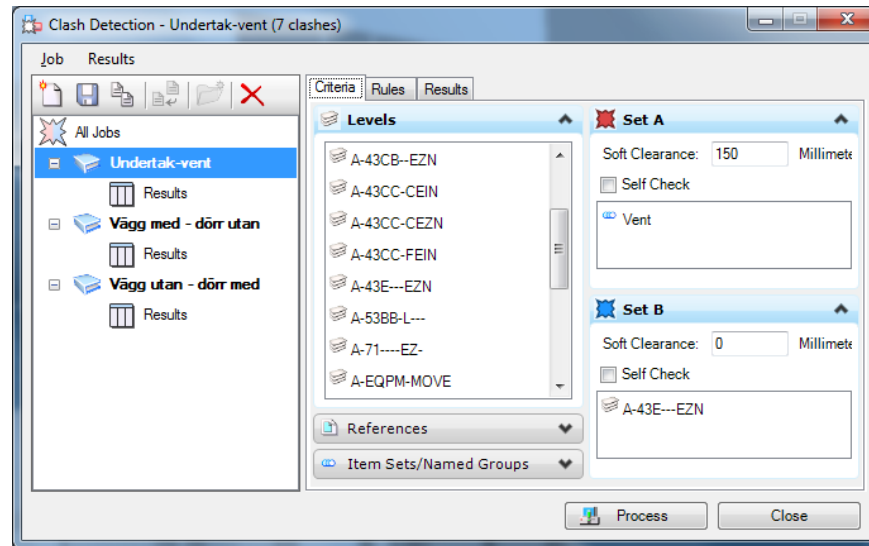
- LEVELS
- REFERENCES
- ITEM SETS / NAMED GROUPS



Phantom Clash Detection

Item Set can be created that returns the results of an EC Query for Ventilation

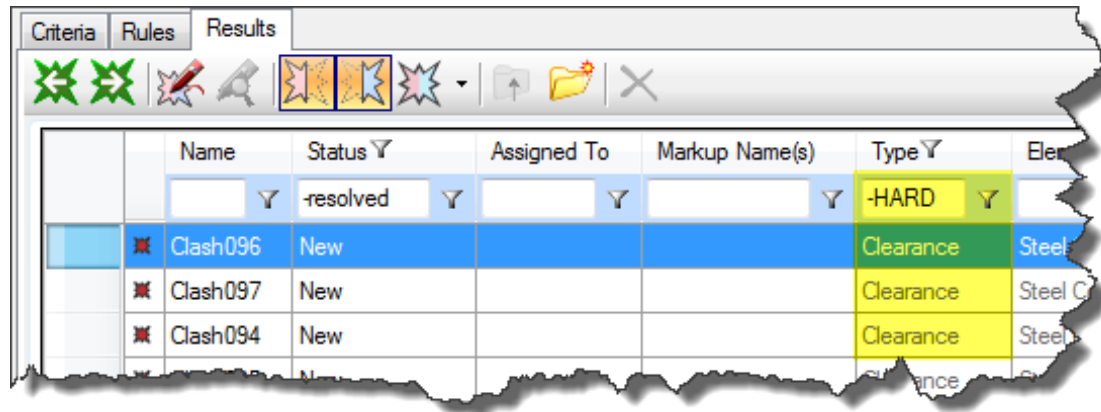
- Use Item Set "Vent" as Criteria for a Clash Set
- Set the Soft Clearance value as 150mm



Phantom Clash Detection

Process the Clash Job

- Filters can be applied to show just the 'soft clashes', where Clash Type = "Clearance"

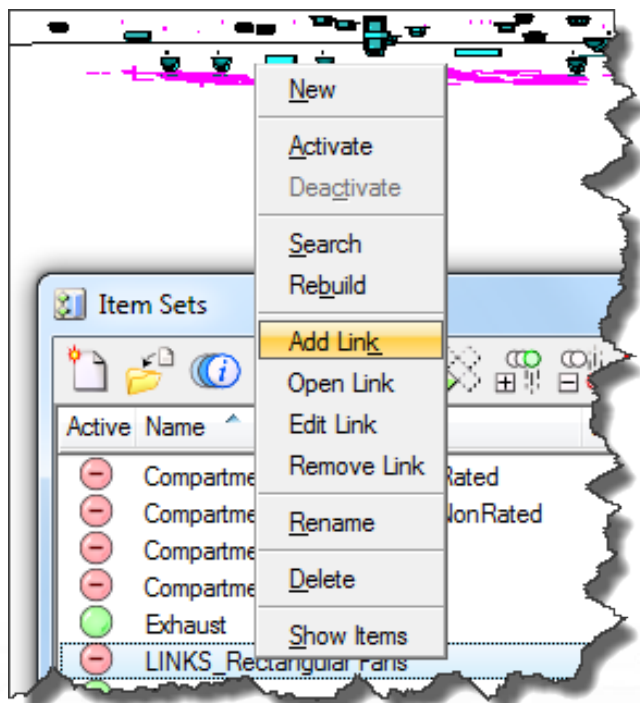


	Name	Status	Assigned To	Markup Name(s)	Type	Element
		resolved			HARD	
	Clash096	New			Clearance	Steel
	Clash097	New			Clearance	Steel C
	Clash094	New			Clearance	Steel
		New			Clearance	C

Data-Driven Hyper-model Links

Using a Query-based Item Set

- Right-click > Add Link > Select File
- <http://www.dorrkatalogen.daloc.se/tradorrar/TP/>
- <http://www.dorrkatalogen.daloc.se/tradorrar/T10/>
- *Make sure that Markers are ON in View Attributes*





Jonas Wahlberg, Application Engineer Building
jonas.wahlberg@bentley.com

Q&A



Jonas Wahlberg, Application Engineer Building
jonas.wahlberg@bentley.com

TACK!