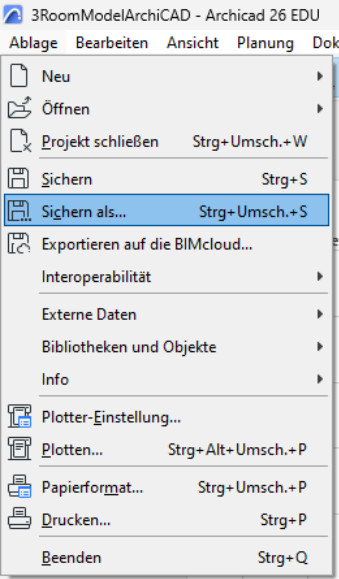
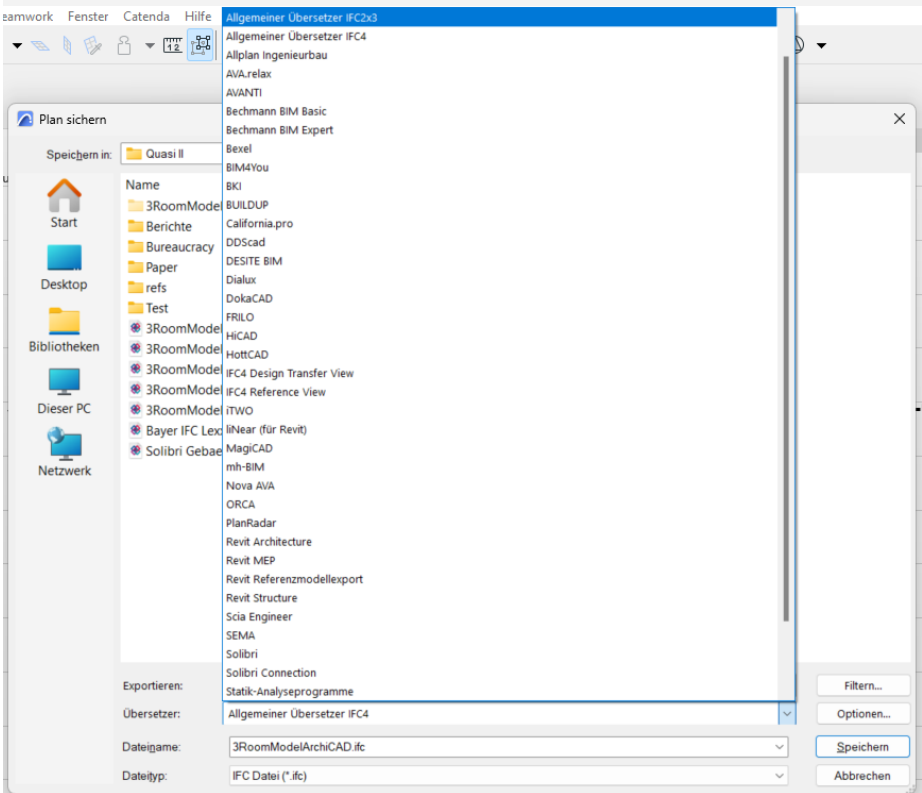
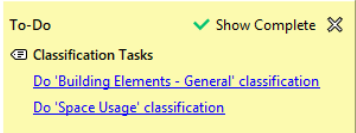
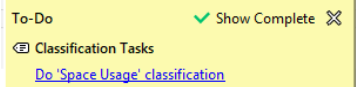

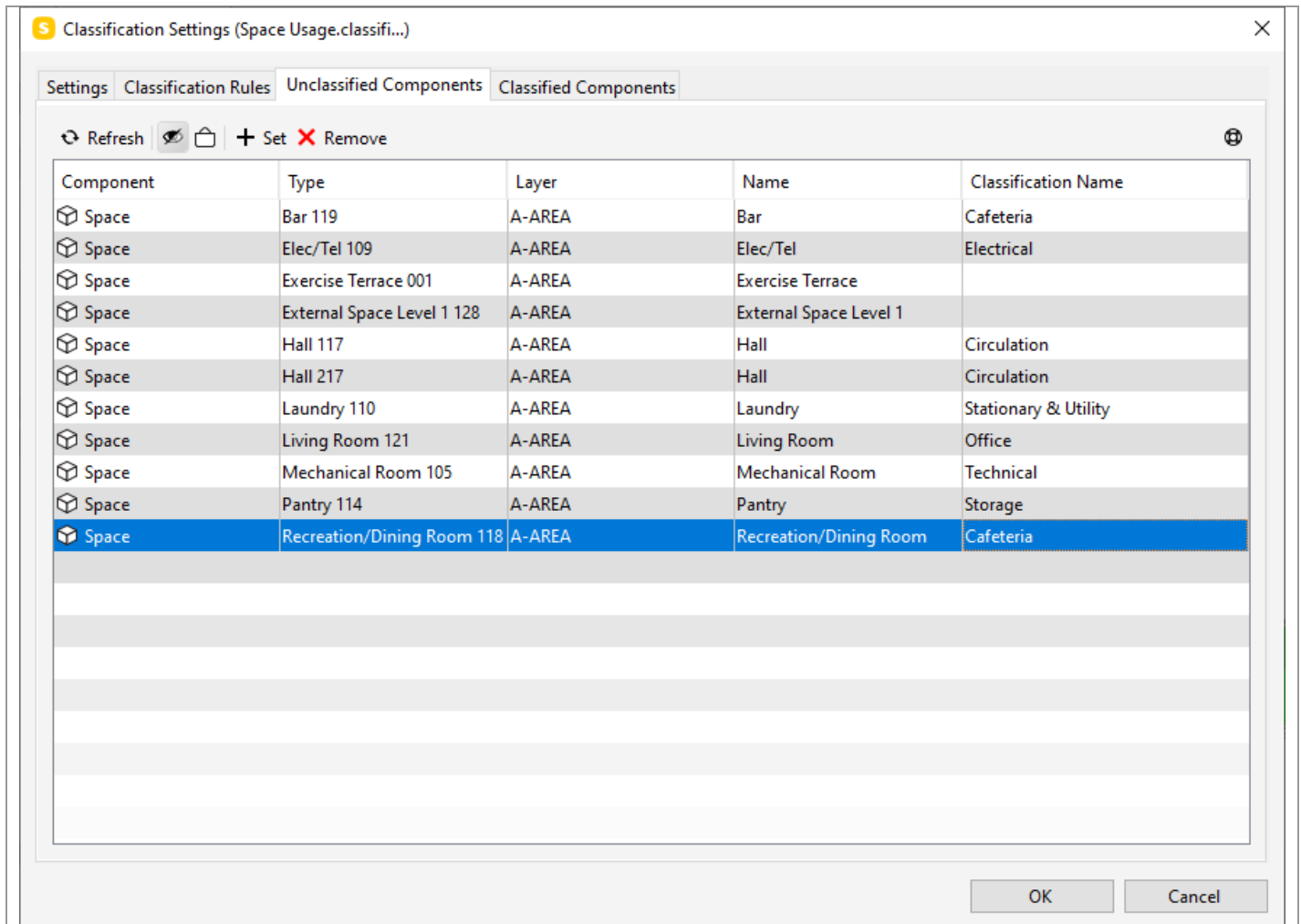


Model checking with Solibri

Author: Tobias Maile (tobias.maile@tha.de)

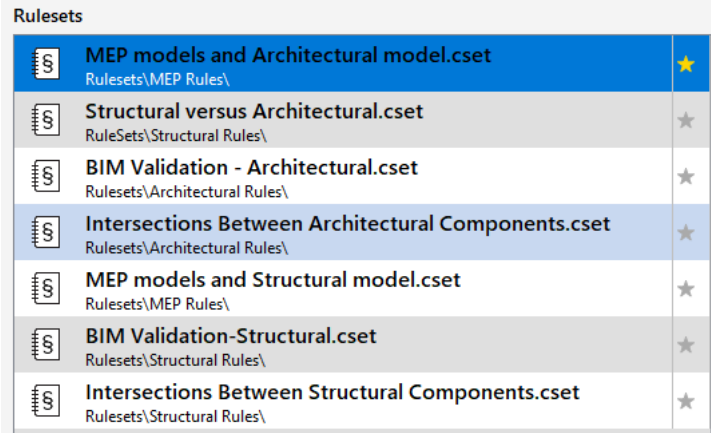
Export IFC file in ArchiCAD		
1	Start ArchiCAD	
2	Open Model	
3	Ablage – Sichern als...	
		
4	Suche den entsprechenden Übersetzer	Allgemeiner Übersetzer IFC2x3
		
5	Wähle Speichern	

Lesson 1: Architectural model checking		
6	Start Solibri	
7	Select SOLIBRI OFFICE on the welcome screen and press CONTINUE	
8	In the FILE Layout	
9	Click on Roles	
10	Click on the Open Button	
11	Select	<i>Architectural Checking</i>
12	Press the Open Button	
13	Click on Open Model	
14	Select the architectural IFC file named	<i>Dormitory-ARC.ifc</i>
15	Confirm the default discipline Architectural by pressing the OK button	
16	Go to the CHECKING Layout	
17	Click on Do 'Building Elements – General' classification	
18	Click on Open Classification Settings	
19	On the Unclassified Components tab	
20	Several unclassified components will appear	
21	Assign the Flow Terminals the following Classification Name	<i>"Plumbing Fixtures"</i>
22	Assign the Light Fixtures the following Classification Name	<i>"Lighting"</i>
23	Click on the Classified Components tab	
24	Review the other classifications	
25	Click on the Unclassified Components tab	
26	This list should now be all empty, all components are classified.	
27	Confirm by clicking OK	
28	Click on Do 'Space Usage' classification	
29	Click on Open Classification Settings	
30	Quite a number of spaces are not classified into Space Usage types yet, including several bathrooms	
31	Click on the Classification Rules tab	
32	Click on add a new row	
33	A new row will be added at the bottom of the table, so scroll down and make the following adjustments	
34	Set the Type cell value to	*
35	Set the Name cell value to	<i>Bath</i>
36	Set the Classification Name cell value to	<i>Bathroom</i>
37	Click on the Unclassified Components tab	
38	All the bathrooms will disappear from the unclassified list	
39	Now we manually assign the other unclassified spaces as follows:	



40	Click on the Classified Components tab	
41	Review the other classifications	
42	Confirm by clicking OK (we leave the two external spaces unclassified)	
43	Select the Check Model button	
44	Click on check anyway.	
<div> <div>Ruleset - Checked Model</div> <div> </div> </div> <div> <div>▶ BIM Validation - Architectural</div> <div>▶ General Space Check</div> <div>▶ Intersections Between Architectural Components</div> </div> <div> <div> </div> <div> </div> <div> </div> </div>		
45	The checking results are shown and indicate with red, orange, yellow, green if rules have been passed.	
46	Double click the BIM Validation – Architectural ruleset	
47	Double click the Component check	
48	Go to Component Dimensions – Wall Dimensions Should Be Sensible – Wall Height	
49	Click on Wall Height and the issues are shown in the RESULTS section	
50	In the result tree, go to Wall.2.1 and click on it, it will get highlighted in the 3D model view	
51	By clicking on a number of these walls, we can see that these walls look like base walls and their height looks acceptable.	

52	Right click on the top node in the RESULT section and Mark as Accepted	
53	Click on the Wall Length rule	
54	Click on Wall.0.49 and Wall.0.50	
55	In both cases the wall length is very small, and it looks like a modelling error	
56	Right click the Wrong value of Property – Length: 125 mm node in the tree and select Add slide	
57	A popup window shows up and summarized the issue	
58	Make changes as you see fit and close the window	
59	Click on the COMMUNICATION Layout	
60	Click on New Presentation	
61	Select From Checking Results checkbox and press OK	
62	The issue we just created was automatically added to this presentation	
63	Go to the CHECKING Layout	
64	There is another wall length issue	
65	This one appears to be a false negative and we make it as resolved	
66	Go through more of the results and add two issues of the three rule sets to your presentation (6 in total) - <i>BIM Validation – Architectural</i> - <i>General Space Check</i> - <i>Intersections between Architectural Components</i>	
67	Go to the FILE Layout	
68	When you are done go to the file Layout and save the file as smc file. This file will include your issue presentation.	
69	Close the model	

Lesson 2: Coordination check		
70	Start Solibri	
71	Select SOLIBRI OFFICE on the welcome screen and press CONTINUE	
72	In the FILE Layout	
73	Click on Roles	
74	Click on the Open Button	
75	Select	<i>BIM Coordination</i>
76	Press the Open Button	
77	In the Rulesets list unselect all but MEP models and Architectural model	
		
78	Click on Open Model	
79	Select the architectural IFC file named	<i>Dormitory-ARC.ifc</i>
80	Confirm the default discipline Architectural by pressing the OK button	
81	Click on the FILE Layout	
82	Click on ADD Model	
83	Select the mechanical IFC file named	<i>Dormitory-HVAC.ifc</i>
84	Change the default discipline to HVAC and pressing the OK button	
85	Click on the CHECKING Layout	
86	Click on Check Model and Check Anyway	
87	Great, 0 (zero) errors, but wait a sec ...	
88	Click on the MODEL Layout	
89	Select the HVAC model in the tree	
90	Right click and select Move or Rotate Model	
91	Set delta Z to	<i>-100 m</i>
92	Click on OK	
93	Click on the CHECKING Layout	
94	Click on Check Model and Check Anyway	
95	Now review those errors and generate a presentation with 3 issues that you found	
96	Close the model	