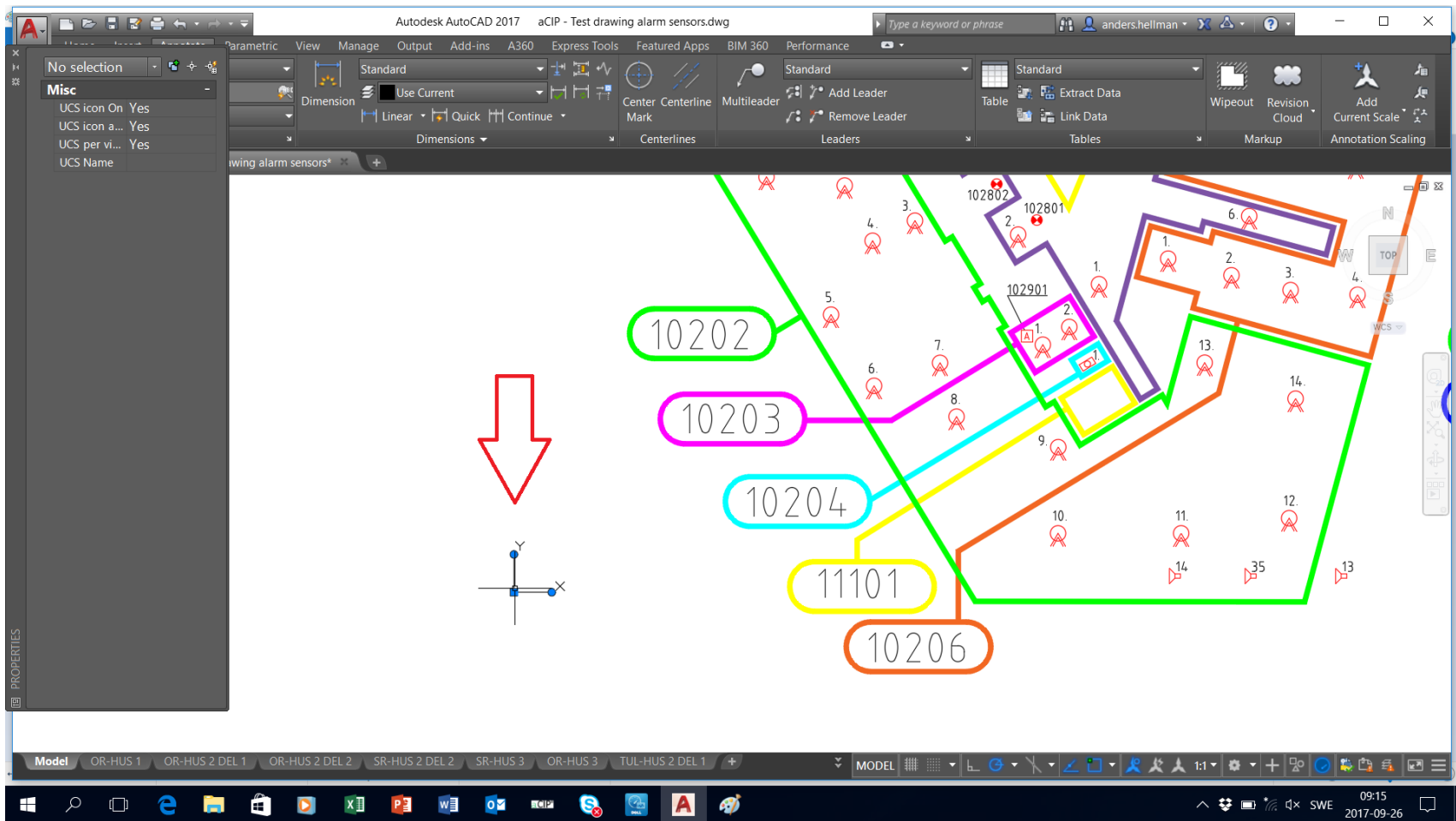


aCIP® - Smart information management

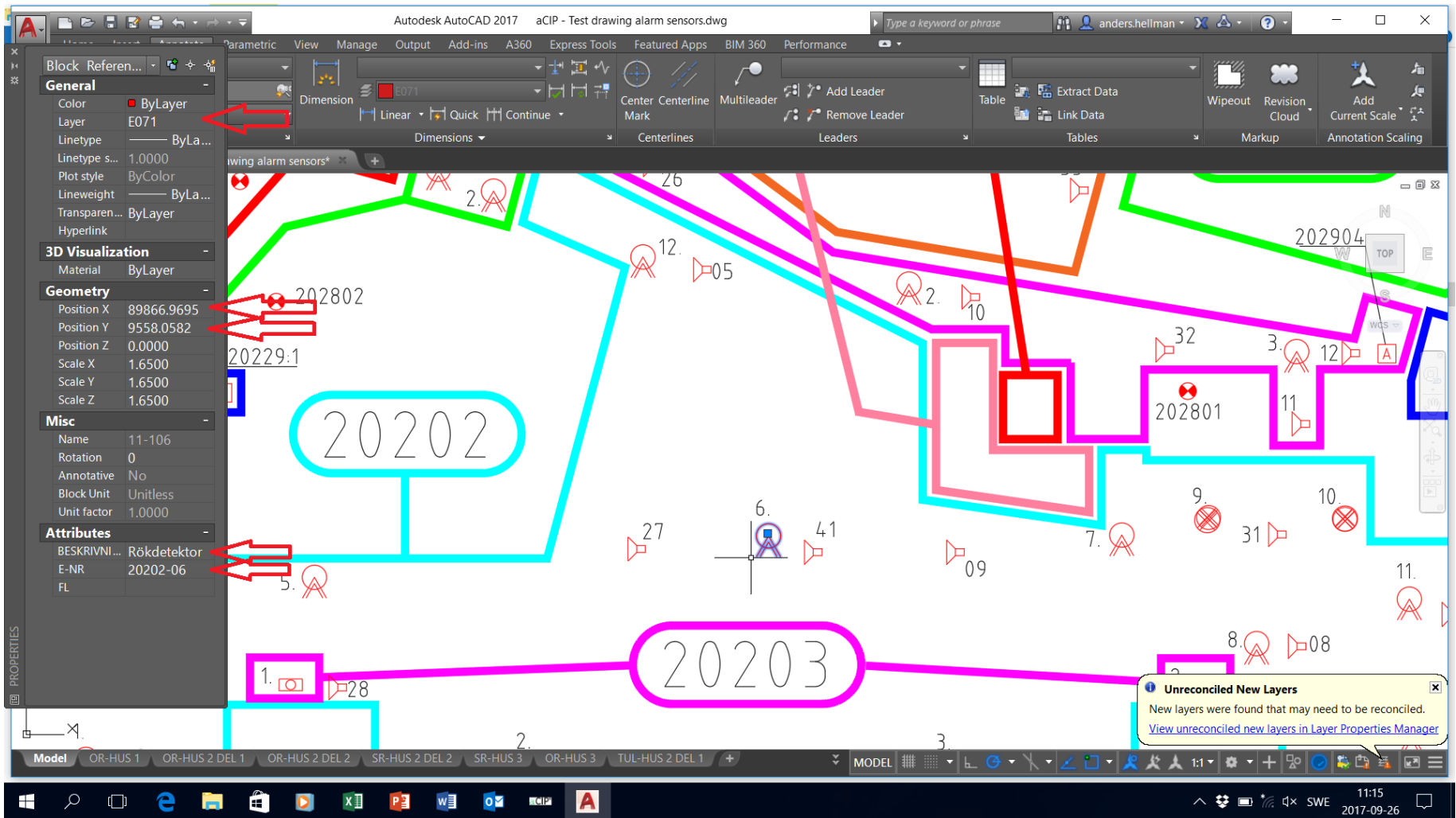
Fetch sensors from AutoCad



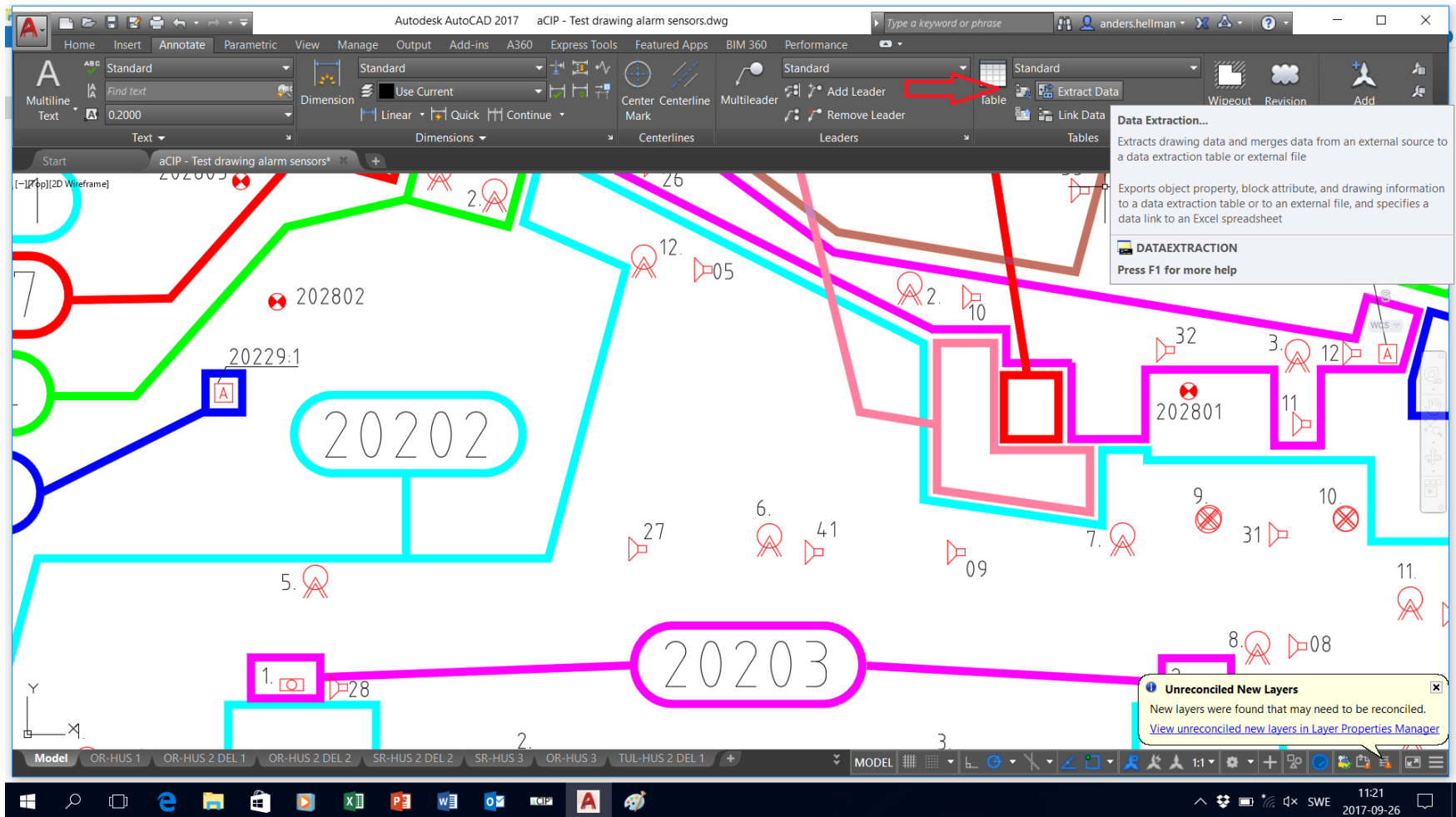
- Find origo
 - Get the longitude and latitude for origo from Google Earth or similar



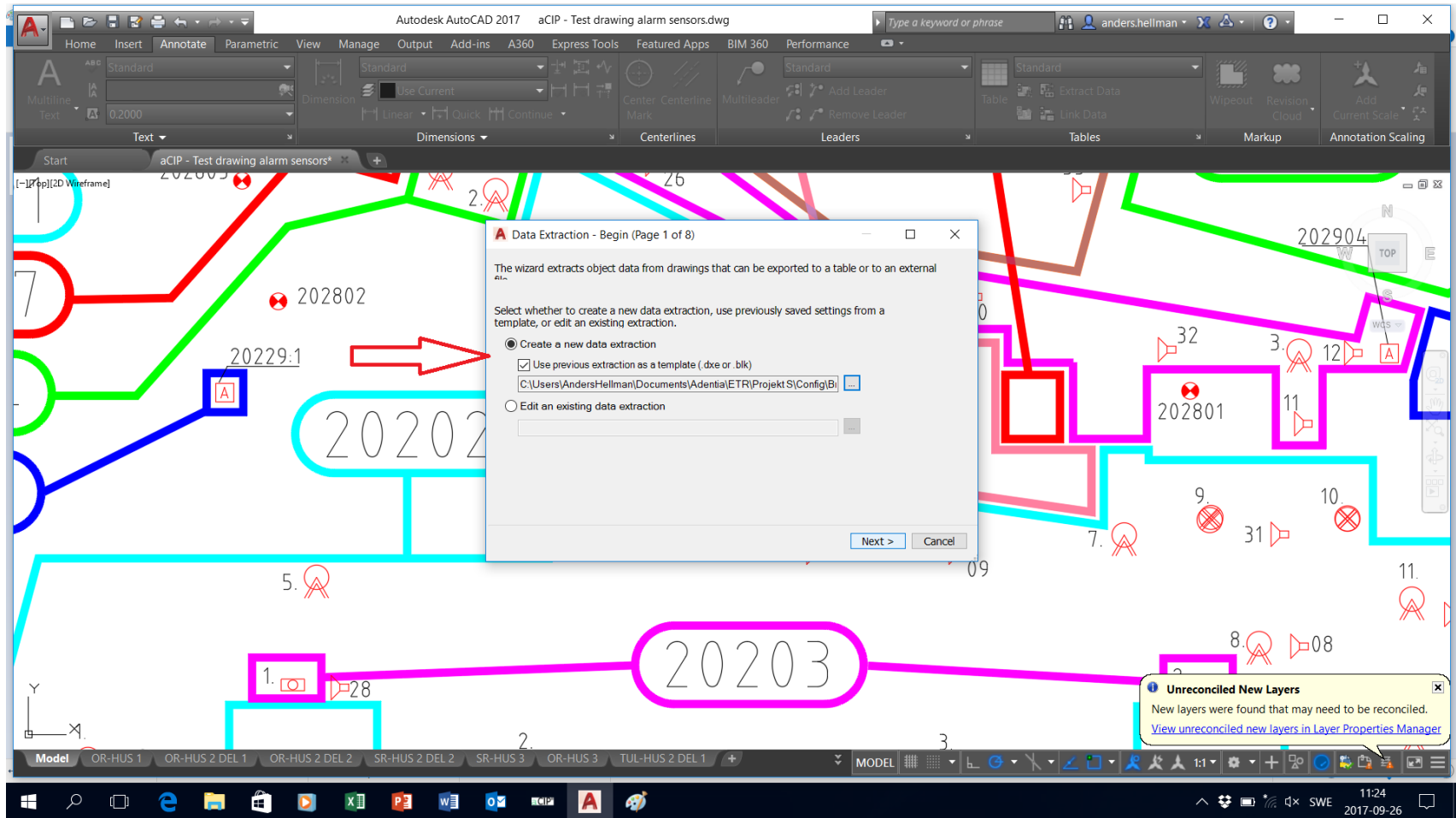
- Find layer and attributes of interest for the objects of interest



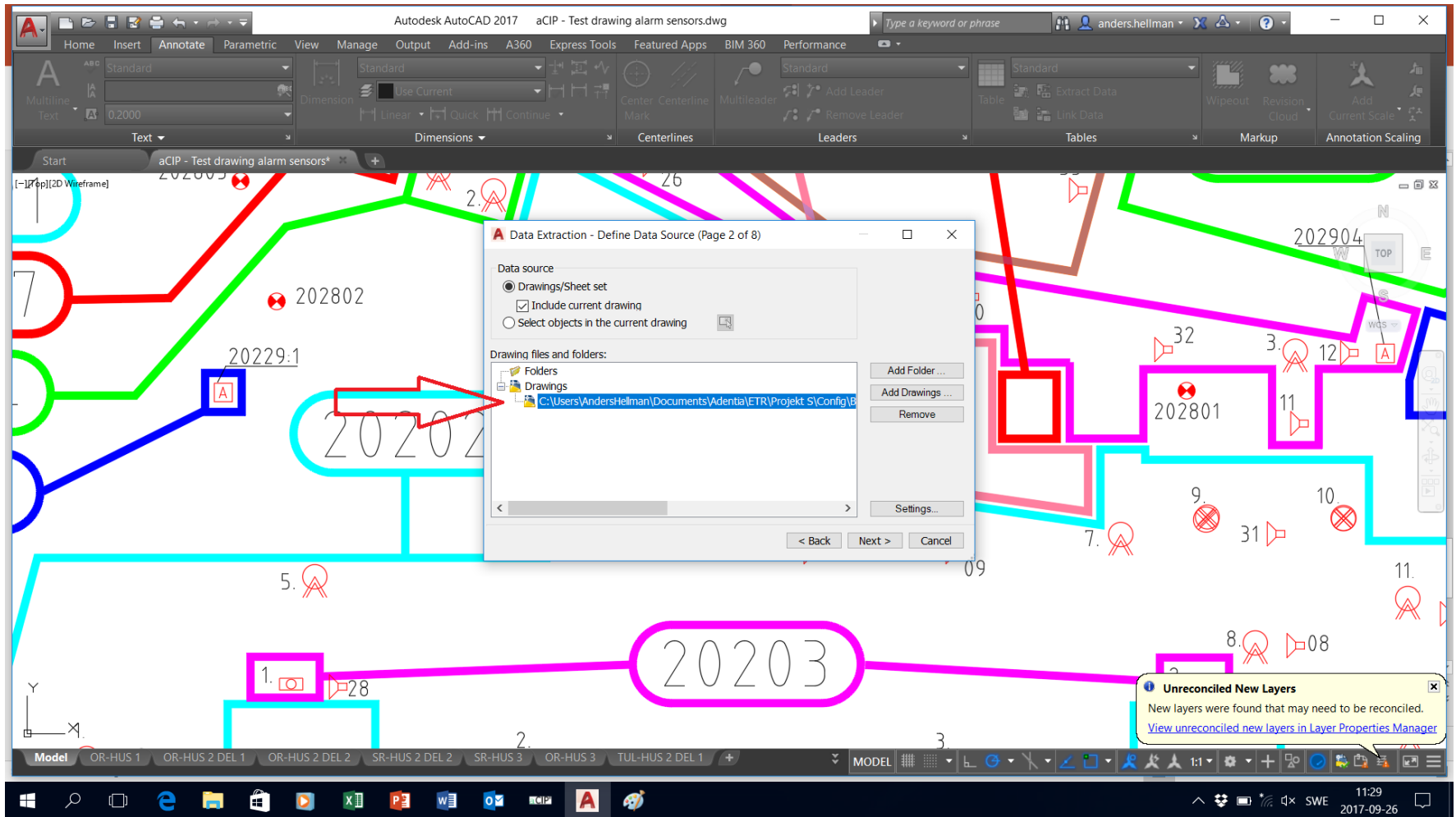
- Select “Extract data”



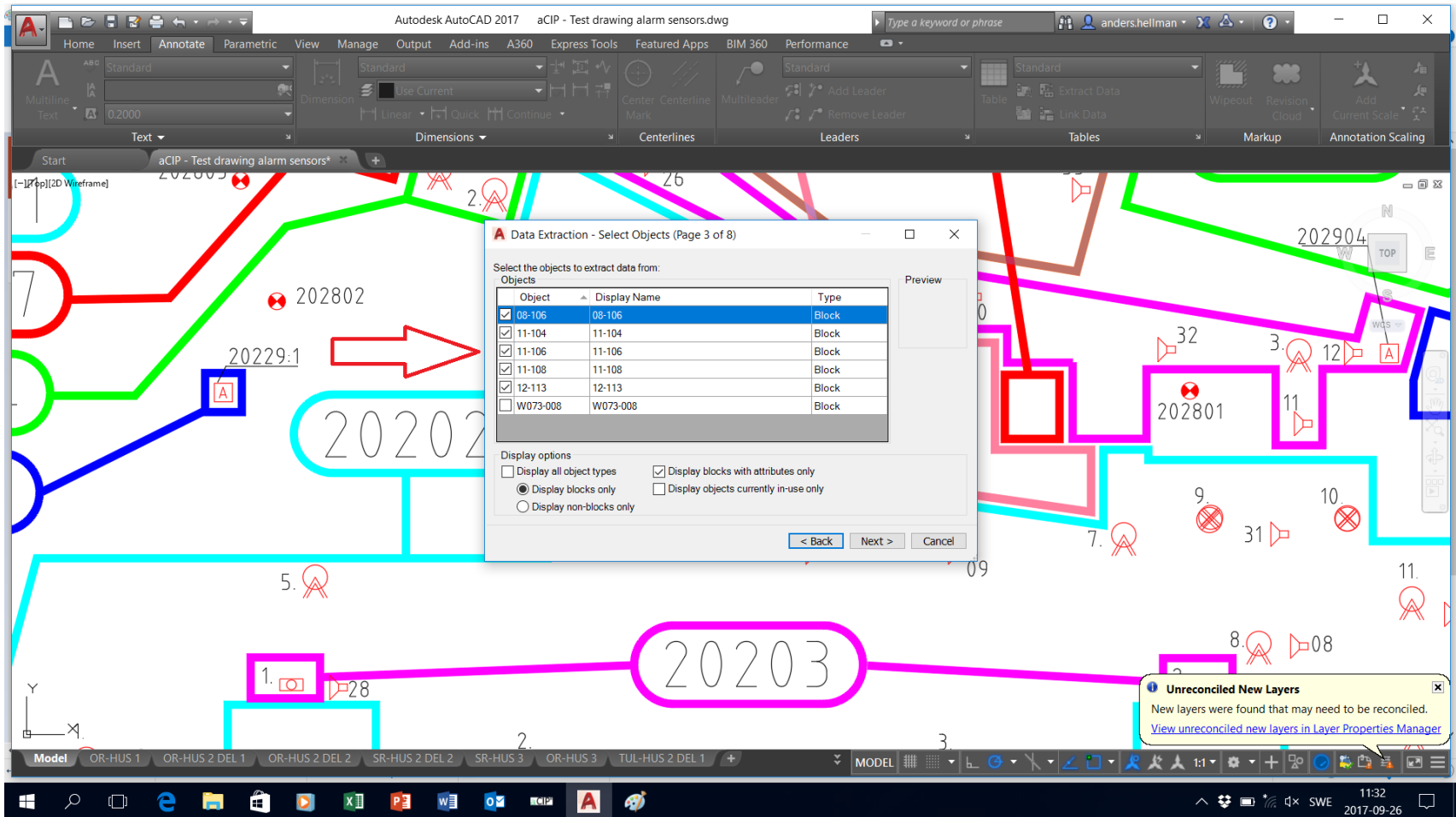
- Create a new data extraction template
 - Can use another extraction as template
 - Or create a brand new one where you have to set which layers, object types and attributes to export



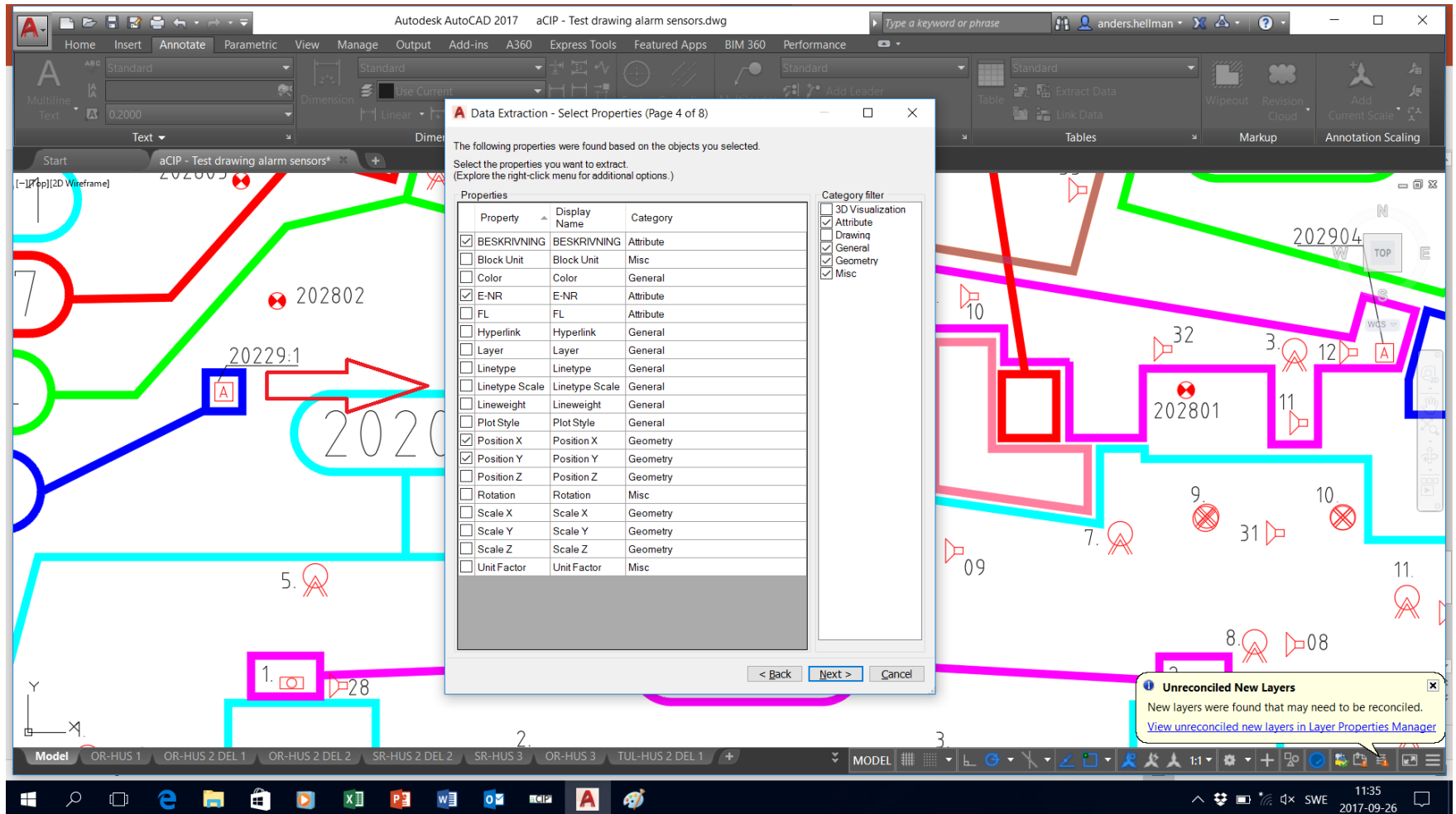
- Make sure to select only the drawing of interest
 - That drawing must be open in AutoCad



- Select object types of interest
 - Normally a bit trial and error is required. But these setting are almost always the same for all drawing from a specific site and even from a specific integrator.



- Select attributes of interest.



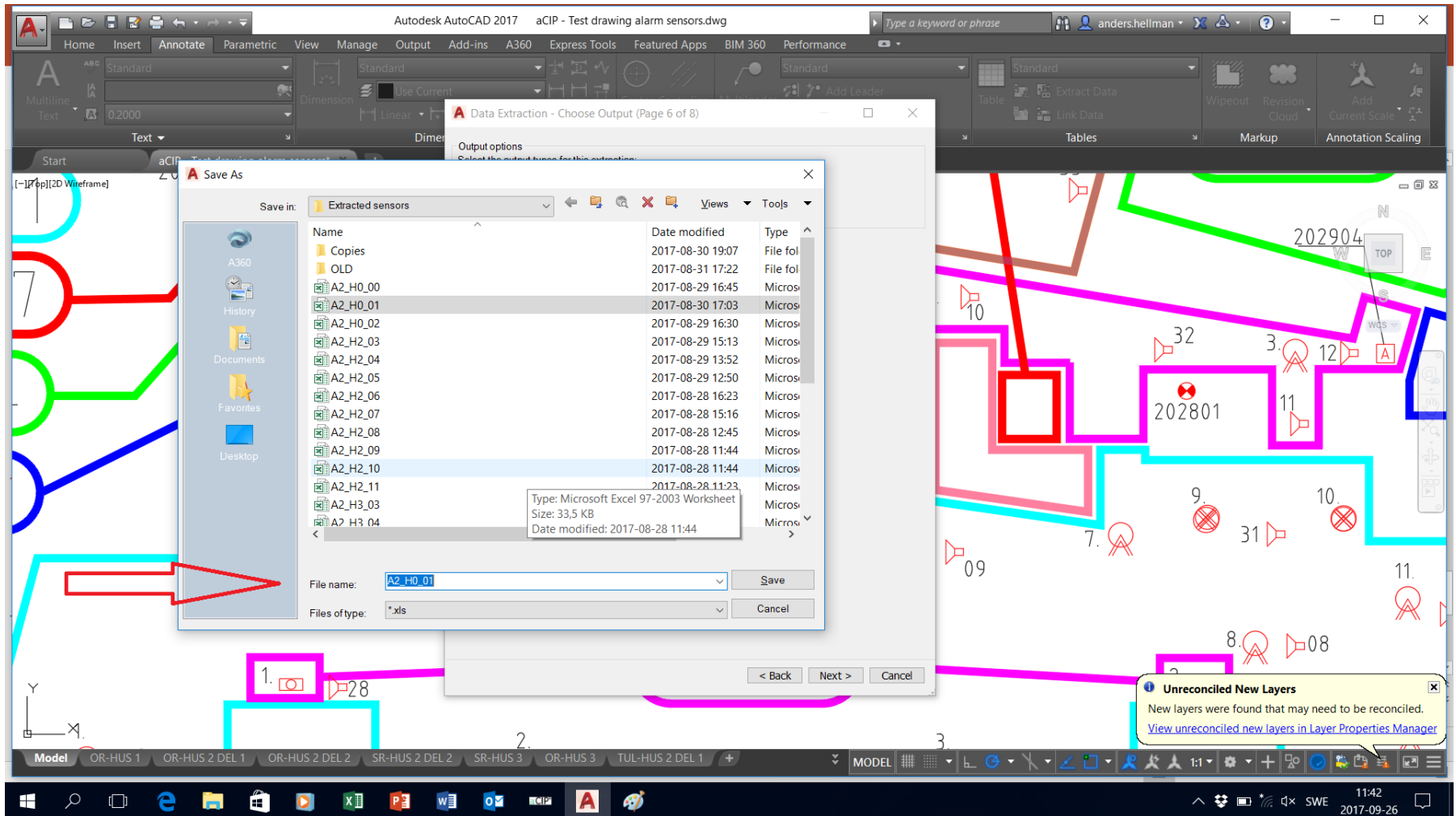
- Enjoy a preview of elements to export
 - If you like you can refine your filtering and sorting here. But it's easier to do it afterwards on Excel.

The screenshot shows the Autodesk AutoCAD 2017 interface with a drawing titled "aCIP - Test drawing alarm sensors.dwg". A "Data Extraction - Refine Data (Page 5 of 8)" dialog box is open, displaying a table of sensor data. The table has the following columns: Position X, Position Y, BESKRIVNING, and E-NR. The data rows are as follows:

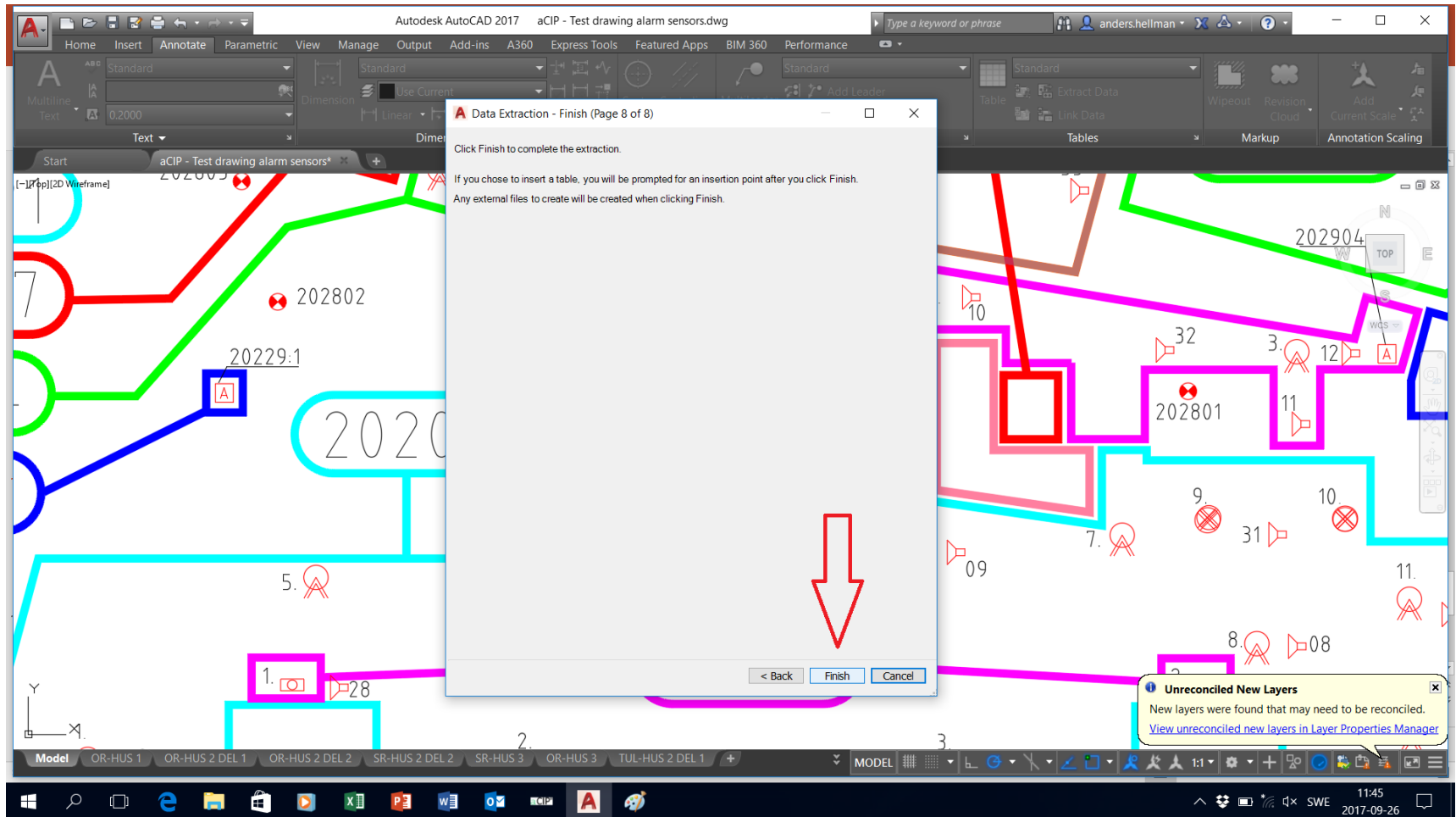
Position X	Position Y	BESKRIVNING	E-NR
19329.8657	23869.7423	Rökdetektor	10202-02
23443.8500	21814.1924	Rökdetektor	10202-03
20967.0626	20639.5923	Rökdetektor	10202-04
18532.2543	16318.7422	Rökdetektor	10202-05
21051.1743	12158.2888	Rökdetektor	10202-06
24913.2845	13500.6887	Rökdetektor	10202-07
25878.8120	10354.4387	Rökdetektor	10202-08
31832.2099	8571.9925	Rökdetektor	10202-09
31819.9584	3533.2267	Rökdetektor	10202-10
39025.1824	3533.2267	Rökdetektor	10202-11
45345.5504	4417.4584	Rökdetektor	10202-12
40402.4425	13509.0994	Rökdetektor	10202-13
45724.7744	11407.0947	Rökdetektor	10202-14
30928.9204	14563.4424	Rökdetektor	10203-01
32478.5082	15599.8338	Rökdetektor	10203-02
33583.6856	13347.0111	Manöverdo...	10204-01
25416.3430	49257.6592	Manöverdo...	10204-02
30291.9519	49658.9565	Manöverdo...	10204-03
34218.4488	18102.0054	Rökdetektor	10205-01
29483.6398	21002.7078	Rökdetektor	10205-02
26178.4328	26354.4989	Rökdetektor	10205-03
16662.0276	26220.7766	Rökdetektor	10205-04

The dialog box also includes options for "Combine identical rows", "Show count column", and "Show name column". It has buttons for "Link External Data...", "Sort Columns Options...", and "Full Preview...". The background drawing shows a floor plan with various colored lines (red, green, blue, cyan, magenta) and sensor symbols (red circles with 'X' or 'A' and speaker icons). A "Unreconciled New Layers" warning box is visible in the bottom right corner of the drawing area.

- Decide name and location for export file



- Run the extraction
 - Can be repeated easily based on the new template you just created to update from changes done in the drawing



- This is how an export file can look like

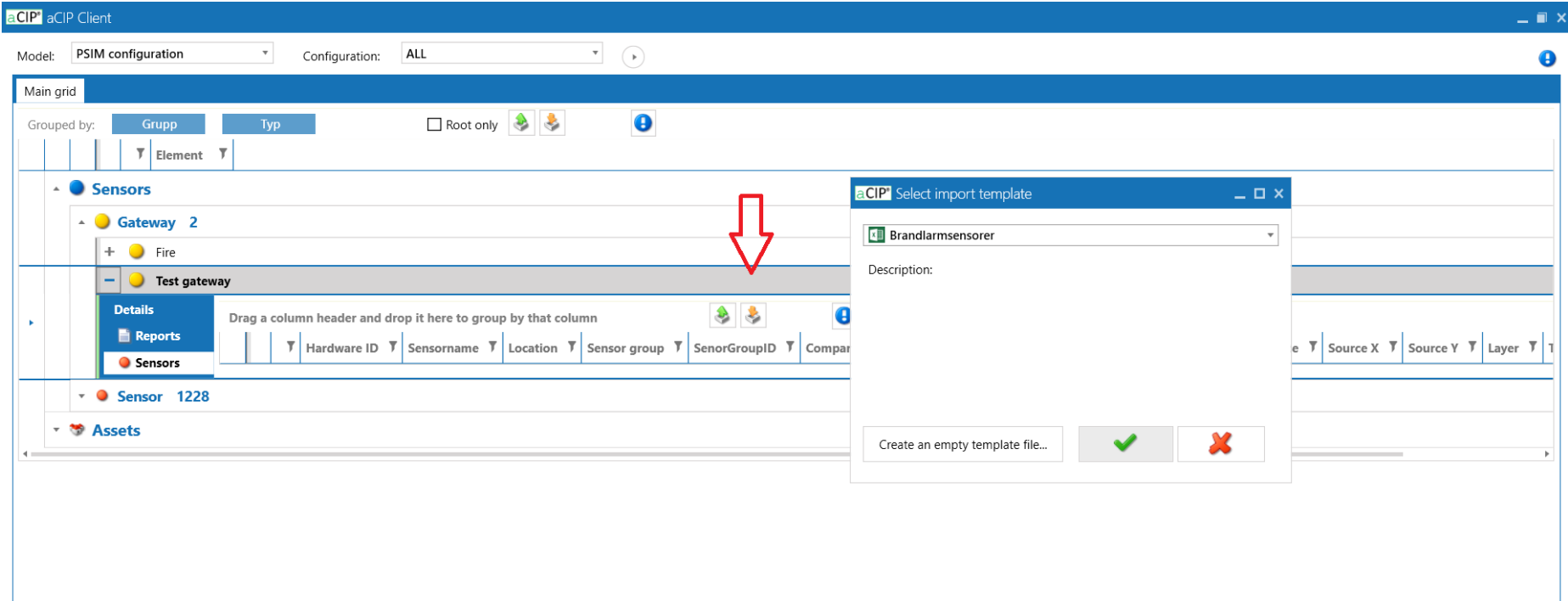
The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Position X	Position Y	BESKRIVNING	E-NR										
2	14754.1046	24373.1419	Rökdetektor	10202-01										
3	19329.8657	23869.7423	Rökdetektor	10202-02										
4	23443.8500	21814.1924	Rökdetektor	10202-03										
5	20967.0626	20639.5923	Rökdetektor	10202-04										
6	18532.2543	16318.7422	Rökdetektor	10202-05										
7	21051.1743	12158.2888	Rökdetektor	10202-06										
8	24913.2845	13500.6887	Rökdetektor	10202-07										
9	25878.8120	10354.4387	Rökdetektor	10202-08										
10	31832.2099	8571.9925	Rökdetektor	10202-09										
11	31819.9584	3533.2267	Rökdetektor	10202-10										
12	39025.1824	3533.2267	Rökdetektor	10202-11										
13	45345.5504	4417.4584	Rökdetektor	10202-12										
14	40402.4425	13509.0994	Rökdetektor	10202-13										
15	45724.7744	11407.0947	Rökdetektor	10202-14										
16	30928.9204	14563.4424	Rökdetektor	10203-01										
17	32478.5082	15599.8338	Rökdetektor	10203-02										
18	33583.6856	13347.0111	Manöverdon Utanpål.	10204-01										
19	25416.3430	49257.6592	Manöverdon Utanpål.	10204-02										
20	30291.9519	49658.9565	Manöverdon Utanpål.	10204-03										
21	34218.4488	18102.0054	Rökdetektor	10205-01										
22	29483.6398	21002.7078	Rökdetektor	10205-02										

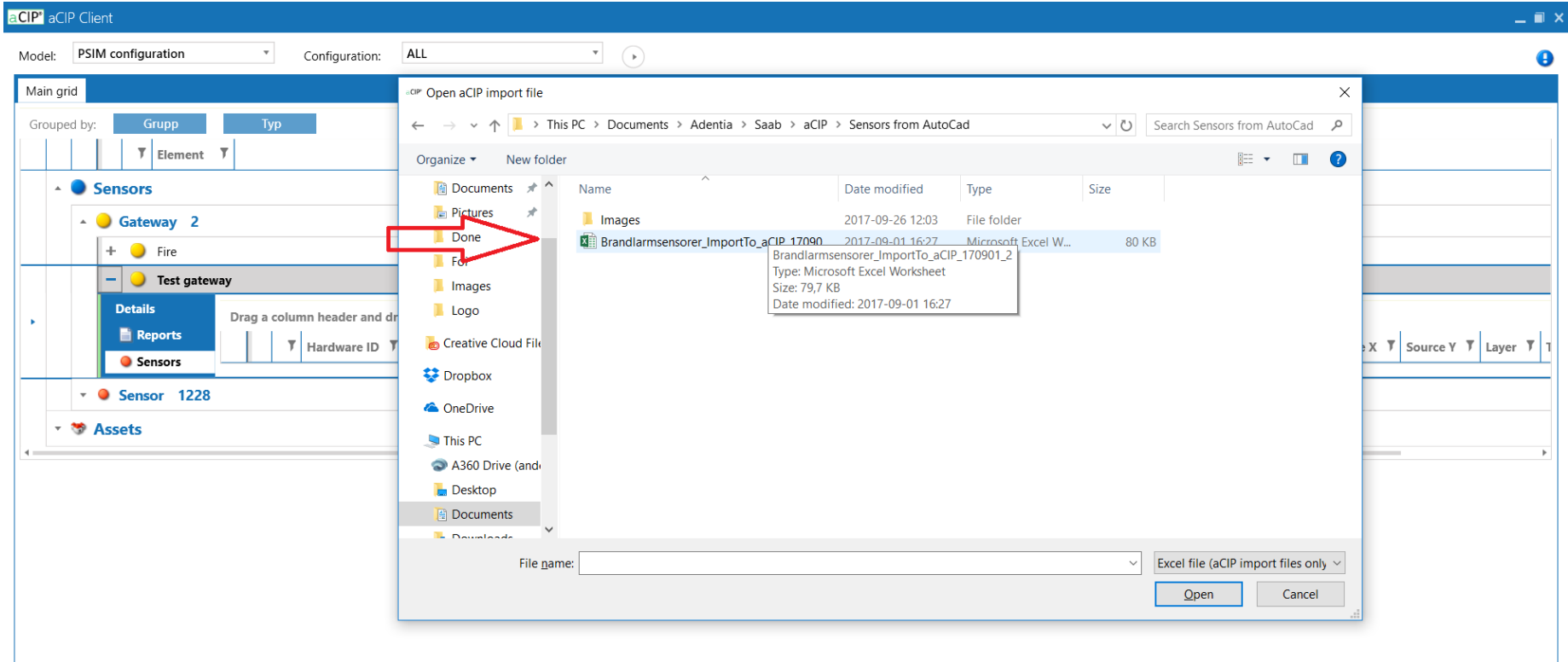
- Based on an aCIP import template designed for the target system in question, edit the data in Excel so it fits the template.
 - Coordinate columns shall be named Source X and Source Y.
 - Normally data are added to relate sensors from certain floors to certain target system map layers and sensor groups. Depending on target system any other relevant attributes can also be added.
 - Merge all sensors from all floor plans to a common file (make it quicker to import but it can be done floorplan by floorplan instead if you like)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Source X	Source Y	Description	Sensorname	HwID	SenorGroupID	Layer	Sensor type	Location												
2	30035.2912	9017.7534	Fire alarm button	10001-01	10001-01	328	886	203	A0.00.												
3	34762.7337	53210.2157	Fire alarm button	10002-01	10002-01	328	886	203	A0.00.												
4	60502.5871	55412.2467	Fire alarm button	10002-02	10002-02	328	886	203	A0.00.												
5	71355.0521	1785.8719	Fire alarm button	20001-01	20001-01	328	886	203	A0.00.												
6	106227.8249	4780.0430	Fire alarm button	20001-02	20001-02	328	886	203	A0.00.												
7	141581.6377	15813.1056	Fire alarm button	20002-01	20002-01	328	886	203	A0.00.												
8	132433.8197	42402.6392	Fire alarm button	20002-02	20002-02	328	886	203	A0.00.												
9	131544.8685	59477.8542	Fire alarm button	20002-03	20002-03	328	886	203	A0.00.												
10	210959.4792	13132.5106	Fire alarm button	30001-01	30001-01	328	886	203	A0.00.												
11	28768.8939	6350.8074	Smoke detector	10102-01	10102-01	327	747	201	A0.01.												
12	30649.8127	15146.4790	Smoke detector	10102-01	10102-01	327	747	201	A0.01.												
13	19027.5987	17179.4454	Smoke detector	10102-02	10102-02	327	747	201	A0.01.												
14	32732.5598	15538.1915	Smoke detector	10102-02	10102-02	327	747	201	A0.01.												
15	13669.1347	29479.5777	Smoke detector	10102-03	10102-03	327	747	201	A0.01.												
16	13790.2404	41405.7774	Smoke detector	10102-04	10102-04	327	747	201	A0.01.												
17	24785.9908	23797.1892	Smoke detector	10102-05	10102-05	327	747	201	A0.01.												
18	36818.7297	18709.6080	Smoke detector	10102-06	10102-06	327	747	201	A0.01.												
19	43533.8114	18397.9387	Smoke detector	10102-07	10102-07	327	747	201	A0.01.												
20	38067.5006	14766.9395	Smoke detector	10103-01	10103-01	327	747	201	A0.01.												
21	46559.5815	12660.8931	Smoke detector	10103-02	10103-02	327	747	201	A0.01.												
22	22541.2251	35439.6930	Smoke detector	10104-01	10104-01	327	747	201	A0.01.												
23	29311.4125	32700.6573	Smoke detector	10105-01	10105-01	327	747	201	A0.01.												
24	18305.5792	41451.7847	Smoke detector	10106-01	10106-01	327	747	201	A0.01.												
25	15550.1417	52514.7541	Smoke detector	10107-01	10107-01	327	747	201	A0.01.												
26	16138.6501	48488.2481	Fire alarm button	10108-01	10108-01	327	747	203	A0.01.												
27	30771.9770	52127.0548	Smoke detector	10109-01	10109-01	327	747	201	A0.01.												
28	44298.8813	46149.8293	Smoke detector	10109-02	10109-02	327	747	201	A0.01.												
29	43953.9462	48168.7786	Smoke detector	10109-03	10109-03	327	747	201	A0.01.												

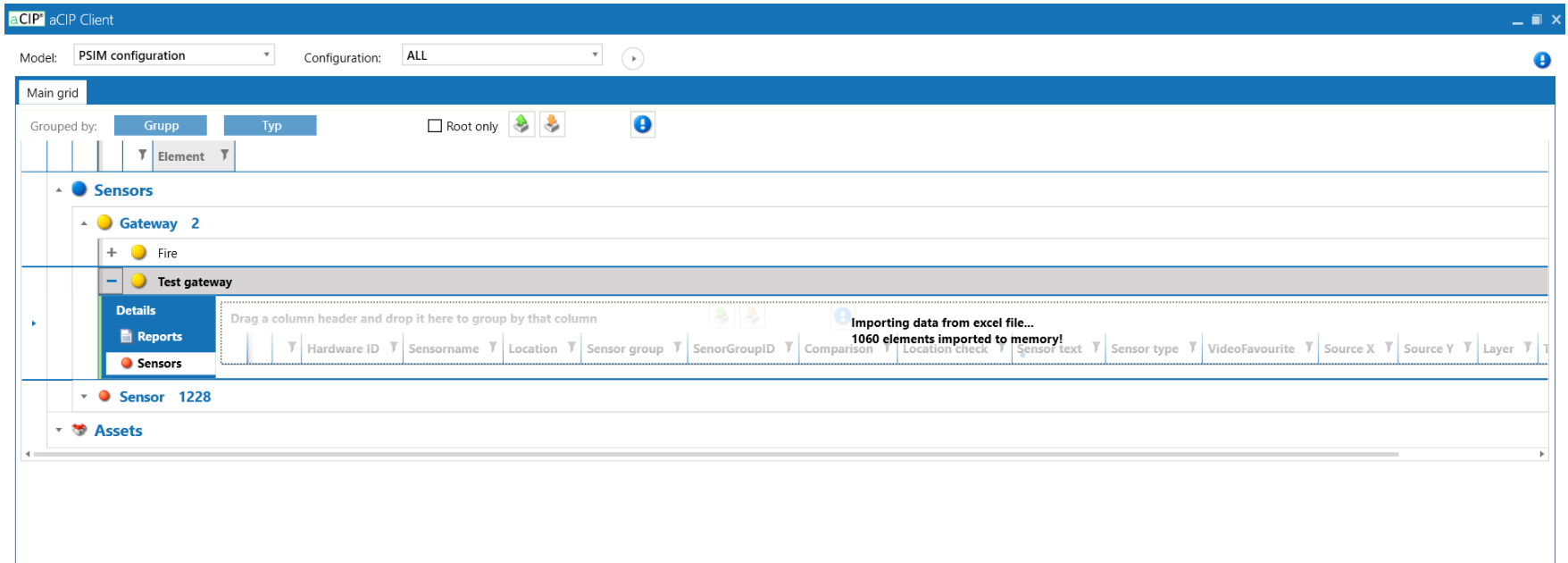
- In aCIP:
 - Select a sensor gateway to use or create a new one
 - Select correct import template



- In aCIP:
 - Select file to import from (the one you just created)



- In aCIP:
 - Importing sensors



- In aCIP:
 - Preview sensors to import and, refine filtering even more if you like

The screenshot shows the aCIP Client interface. At the top, the window title is 'aCIP Client'. Below the title bar, there are dropdown menus for 'Model: PSIM configuration' and 'Configuration: ALL'. The main area is titled 'Main grid' and contains a tree view on the left with 'Sensors' expanded to 'Gateway 2' and 'Test gateway'. A table of sensors is displayed with columns: Hardware ID, Sensorname, Location, SensorGroupID, Source X, Source Y, Sensor type, Description, Location check, Senso, Sensor text, and VideoFa. A filter dialog is open over the table, showing a list of sensor types with checkboxes: 'Select All', 'Fire:_Button', 'Fire:_Heat', and 'Fire:_Smoke'. The dialog also includes a 'Show rows with value that' dropdown set to 'Is equal to', an 'And' dropdown, and 'Filter' and 'Clear Filter' buttons.

Hardware ID	Sensorname	Location	SensorGroupID	Source X	Source Y	Sensor type	Description
10001-01	10001-01	A0.00.	328	30035.2912	9017.7534	Fire:_Button	
10002-01	10002-01	A0.00.	328	34762.7337	53210.2157	Fire:_Button	
10002-02	10002-02	A0.00.	328	60502.5871	55412.2467	Fire:_Button	
20001-01	20001-01	A0.00.	328	71355.0521	1785.8719	Fire:_Button	
20001-02	20001-02	A0.00.	328	106227.8249	4780.0430	Fire:_Button	
20002-01	20002-01	A0.00.	328	141581.6377	15813.1056	Fire:_Button	
20002-02	20002-02	A0.00.	328	132433.8197	42402.6392	Fire:_Button	
20002-03	20002-03	A0.00.	328	131544.8685	59477.8542	Fire:_Button	
30001-01	30001-01	A0.00.	328	210959.4792	13132.5106	Fire:_Button	
10102-01	10102-01	A0.01.	327	28768.8939	6350.8074	Fire:_Smoke	
10102-01	10102-01	A0.01.	327	30649.8127	15146.4790	Fire:_Smoke	
10102-02	10102-02	A0.01.	327	19027.5987	17179.4454	Fire:_Smoke	Smoke detector
10102-02	10102-02	A0.01.	327	32732.5598	15538.1915	Fire:_Smoke	Smoke detector
10102-03	10102-03	A0.01.	327	13669.1347	29479.5777	Fire:_Smoke	Smoke detector
10102-04	10102-04	A0.01.	327	13790.2404	41405.7774	Fire:_Smoke	Smoke detector
10102-05	10102-05	A0.01.	327	24785.9908	23797.1892	Fire:_Smoke	Smoke detector

- In aCIP:
 - When happy, press import button

The screenshot shows the aCIP Client interface with a confirmation dialog box open. The dialog asks: "You have selected 1228 elements for import. Do you want to import them?" and features a green checkmark button and a red X button. A red arrow points to the 'Import' button (represented by a person icon) in the dialog's header. The background shows a tree view of sensors under a gateway, and a table of sensor data.

ID	Source X	Source Y	Sensor type	Description	Location check	Senso	Sensor text	VideoFa
30035.2912	9017.7534		Fire_Button	Fire alarm button				
34762.7337	53210.2157		Fire_Button	Fire alarm button				
60502.5871	55412.2467		Fire_Button	Fire alarm button				
71355.0521	1785.8719		Fire_Button	Fire alarm button				
106227.8249	4780.0430		Fire_Button	Fire alarm button				
141581.6377	15813.1056		Fire_Button	Fire alarm button				
132433.8197	42402.6392		Fire_Button	Fire alarm button				
131544.8685	59477.8542		Fire_Button	Fire alarm button				
210959.4792	13132.5106		Fire_Button	Fire alarm button				
28768.8939	6350.8074		Fire_Smoke	Smoke detector				
30649.8127	15146.4790		Fire_Smoke	Smoke detector				
19027.5987	17179.4454		Fire_Smoke	Smoke detector				
32732.5598	15538.1915		Fire_Smoke	Smoke detector				
13669.1347	29479.5777		Fire_Smoke	Smoke detector				
13790.2404	41405.7774		Fire_Smoke	Smoke detector				
24785.9908	23797.1892		Fire_Smoke	Smoke detector				

- In aCIP:
 - aCIP is now checking for other similar sensors in the database to eliminate duplicates. Good time to grab some coffee, this will take a while.

The screenshot shows the aCIP Client interface. At the top, the 'Model' is set to 'PSIM configuration' and 'Configuration' is set to 'ALL'. The main grid is titled 'Main grid' and is grouped by 'Grupp' and 'Typ'. The 'Sensors' section is expanded, showing a 'Test gateway' under the 'Fire' group. A table of sensor data is displayed, with columns for Hardware ID, Sensorname, Location, SensorGroupID, Source X, Source Y, Sensor type, Description, Location check, Senso, Sensor text, and VideoFa.

Drag a column header and drop it here to group by that column

Hardware ID	Sensorname	Location	SensorGroupID	Source X	Source Y	Sensor type	Description	Location check	Senso	Sensor text	VideoFa
10001-01	10001-01	A0.00.	328	30035.2912	9017.7534	Fire_Button	Fire alarm button				
10002-01	10002-01	A0.00.	328	34762.7337	53210.2157	Fire_Button	Fire alarm button				
10002-02	10002-02	A0.00.	328	60502.5871	55412.2467	Fire_Button	Fire alarm button				
20001-01	20001-01	A0.00.	328	71355.0521	1785.8719	Fire_Button	Fire alarm button				
20001-02	20001-02	A0.00.	328	106227.8249	4780.0430	Fire_Button	Fire alarm button				
20002-01	20002-01	A0.00.	328	141581.6377	15813.1056	Fire_Button	Fire alarm button				
20002-02	20002-02	A0.00.	328	132433.8197	42402.6392	Fire_Button	Fire alarm button				
20002-03	20002-03	A0.00.	328	131544.8685	59477.8542	Fire_Button	Fire alarm button				
30001-01	30001-01	A0.00.	328			Fire_Button	Fire alarm button				
10102-01	10102-01	A0.01.	327			Fire_Smoke	Smoke detector				
10102-01	10102-01	A0.01.	327	30649.8127	15146.4790	Fire_Smoke	Smoke detector				
10102-02	10102-02	A0.01.	327	19027.5987	17179.4454	Fire_Smoke	Smoke detector				
10102-02	10102-02	A0.01.	327	32732.5598	15538.1915	Fire_Smoke	Smoke detector				
10102-03	10102-03	A0.01.	327	13669.1347	29479.5777	Fire_Smoke	Smoke detector				
10102-04	10102-04	A0.01.	327	13790.2404	41405.7774	Fire_Smoke	Smoke detector				
10102-05	10102-05	A0.01.	327	24785.9908	23797.1892	Fire_Smoke	Smoke detector				

Created filtered list for import!
 Comparing import list with existing DB. Looking for existing similar elements... (Can take a while!)
 10 (1228) import elements compared with DB!

- In aCIP:
 - If similarities are found, decide how to handle them

The screenshot shows the aCIP Client interface. At the top, the 'Model' is set to 'PSIM configuration' and 'Configuration' is set to 'ALL'. The main grid displays a list of sensors with columns for Hardware ID, Sensorname, Location, SensorGroupID, Source X, Source Y, Sensor type, Description, Location check, Senso, Sensor text, and VideoFe. A dialog box titled 'aCIP Import similarities' is open, showing a 'Selected action...' dropdown with options: 'Abort', 'All import elements will be imported as new elements', 'Import elements will replace similar elements in DB', and 'Import elements where similarities are found will not be imported'. The dialog also shows a list of similar elements with columns for Hardware ID, Sensorname, and Description. A status bar at the bottom indicates 'Sensor 1228'.

Hardware ID	Sensorname	Location	SensorGroupID	Source X	Source Y	Sensor type	Description
10001-01	10001-01	A0.00.	328	30035.2912	9017.7534	Fire_Button	Fire alarm button
10002-01	10002-01	A0.00.	328	34762.7337	53210.2157	Fire_Button	Fire alarm button
10002-02	10002-02	A0.00.	328	60502.5871	55412.2467	Fire_Button	Fire alarm button
20001-01	20001-01	A0.00.	328	71355.0521	1785.8719	Fire_Button	Fire alarm button
106227.8249	4780.0430					Fire_Button	Fire alarm button
141581.6377	15813.1056					Fire_Button	Fire alarm button
132433.8197	42402.6392					Fire_Button	Fire alarm button
131544.8685	59477.8542					Fire_Button	Fire alarm button
30203-09	30304-04	Description = Smoke detector				Fire_Smoke	Smoke detector
30203-10	30304-04	Description = Smoke detector				Fire_Smoke	Smoke detector
30203-11	30304-04	Description = Smoke detector				Fire_Smoke	Smoke detector
30203-12	30304-04	Description = Smoke detector				Fire_Smoke	Smoke detector
30203-13	30304-04	Description = Smoke detector				Fire_Smoke	Smoke detector
10102-05	10102-05	A0.01.	327	24785.9908	23797.1892	Fire_Smoke	Smoke detector
10102-06	10102-06	A0.01.	327	36818.7297	18709.6080	Fire_Smoke	Smoke detector
10102-07	10102-07	A0.01.	327	43533.8114	18397.9387	Fire_Smoke	Smoke detector
10103-01	10103-01	A0.01.	327	38067.5006	14766.9395	Fire_Smoke	Smoke detector
10103-02	10103-02	A0.01.	327	46559.5815	12660.8931	Fire_Smoke	Smoke detector
10104-01	10104-01	A0.01.	327	22541.2251	35439.6930	Fire_Smoke	Smoke detector

Created filtered list for import!
 Comparing import list with existing DB. Looking for existing similar elements... (Can take a while!)
 1220 (1228) import elements compared with DB!

- In aCIP:
 - Now, after a couple of confirm questions, the selected sensors are really imported to the aCIP database

The screenshot shows the aCIP Client interface. At the top, there are dropdown menus for 'Model: PSIM configuration' and 'Configuration: ALL'. Below this is a 'Main grid' section with a tree view on the left and a table on the right. The tree view shows a hierarchy: 'Sensors' > 'Gateway 2' > 'Test gateway'. The table on the right has columns for Hardware ID, Sensorname, Location, SenorGroupID, Source X, Source Y, Sensor type, Description, Location check, Senso, Sensor text, and VideoFs. A notification box in the bottom right of the table area says 'Import of elements started... 60 elements imported!'.

	Hardware ID	Sensorname	Location	SenorGroupID	Source X	Source Y	Sensor type	Description	Location check	Senso	Sensor text	VideoFs
	20107-01	20107-01	A0.01.	327	79188.7893	29929.1354	Fire_Heat	Heat detector				
	20107-02	20107-02	A0.01.	327	83339.5427	34986.8945	Fire_Smoke	Smoke detector				
	20107-03	20107-03	A0.01.	327	90145.1292	33552.4901	Fire_Smoke	Smoke detector				
	20107-04	20107-04	A0.01.	327	100812.7900	38153.0050	Fire_Smoke	Smoke detector				
	20107-05	20107-05	A0.01.	327	92806.3939	43241.9659	Fire_Smoke	Smoke detector				
	20107-06	20107-06	A0.01.	327	86698.9455	48056.5551	Fire_Smoke	Smoke detector				
	20107-07	20107-07	A0.01.	327	91229.7175	47520.1369	Fire_Heat	Heat detector				
	20108-01	20108-01	A0.01.	327	73265.8227	45367.9603	Fire_Smoke	Smoke detector				
	20109-01	20109-01	A0.01.	327	85169.1461	57902.8453	Fire_Smoke	Smoke detector				
	20110-01	20110-01	A0.01.	327	85405.5913	59417.3696	Fire_Smoke	Smoke detector				
	20111-01	20111-01	A0.01.	327	97899.2500	24156.2942	Fire_Smoke	Smoke detector				
	20111-02	20111-02	A0.01.	327	103477.2500	18868.2942	Fire_Smoke	Smoke detector				
	20111-03	20111-03	A0.01.	327	114458.7500	11918.7942	Fire_Smoke	Smoke detector				
	20111-04	20111-04	A0.01.	327	112834.4297	4057.8989	Fire_Smoke	Smoke detector				
	20111-05	20111-05	A0.01.	327	124952.7588	12344.0898	Fire_Smoke	Smoke detector				
	20112-01	20112-01	A0.01.	327	109921.6932	3424.4488	Fire_Button	Fire alarm button				

- In aCIP:
 - Now, sensors are imported to aCIP. As you can see target coordinates are empty. Time to create them.

Model: PSIM configuration Configuration: ALL

Main grid

Grouped by: Grupp Typ Root only

Sensors

Gateway 2

Fire

Test gateway

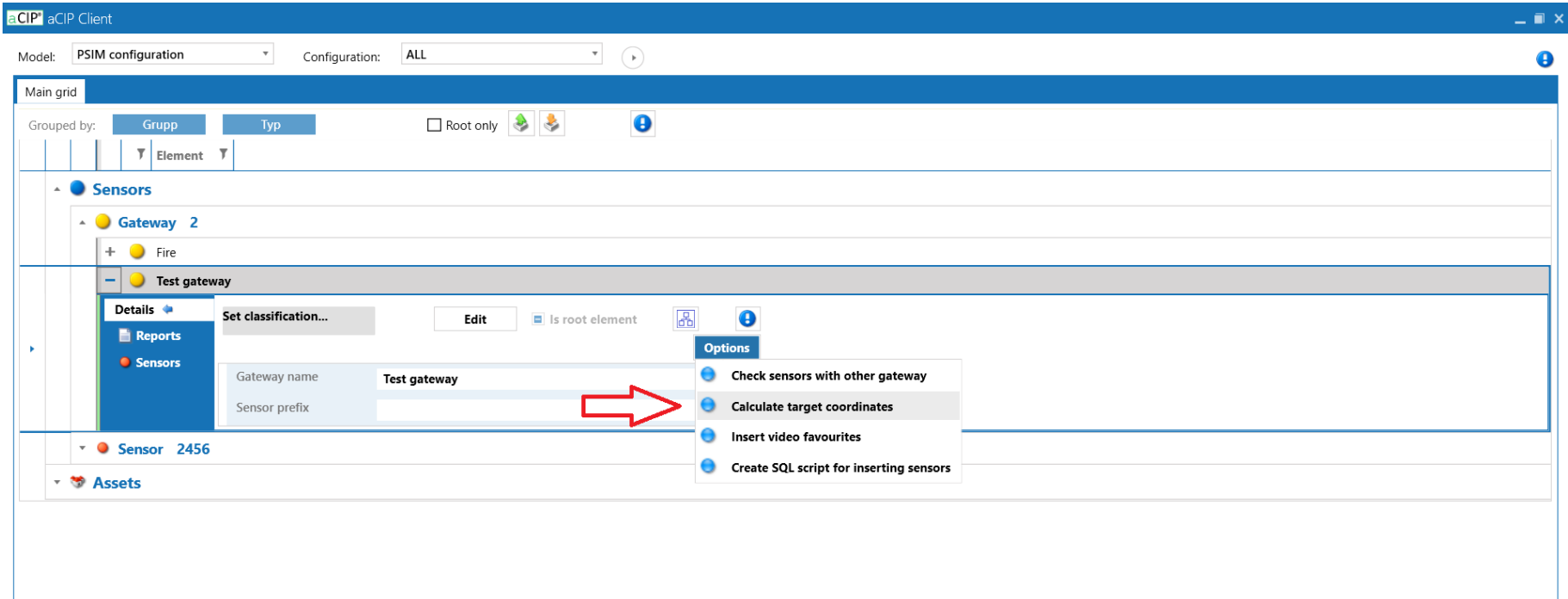
Details

Drag a column header and drop it here to group by that column

	Hardware ID	Sensorname	Location	SensorGroupID	Sensor type	Source X	Source Y	Layer	Target X	Target Y	Sensor group	Comparison	Location check	Sensor t
+	10001-01	10001-01	A0.00.	328	Fire_Button	30035.2912	9017.7534	886						
+	10002-01	10002-01	A0.00.	328	Fire_Button	34762.7337	53210.2157	886						
+	10002-02	10002-02	A0.00.	328	Fire_Button	60502.5871	55412.2467	886						
+	10102-01	10102-01	A0.01.	327	Fire_Smoke	28768.8939	6350.8074	747						
+	10102-01	10102-01	A0.01.	327	Fire_Smoke	30649.8127	15146.4790	747						
+	10102-02	10102-02	A0.01.	327	Fire_Smoke	19027.5987	17179.4454	747						
+	10102-02	10102-02	A0.01.	327	Fire_Smoke	32732.5598	15538.1915	747						
+	10102-03	10102-03	A0.01.	327	Fire_Smoke	13669.1347	29479.5777	747						
+	10102-04	10102-04	A0.01.	327	Fire_Smoke	13790.2404	41405.7774	747						
+	10102-05	10102-05	A0.01.	327	Fire_Smoke	24785.9908	23797.1892	747						
+	10102-06	10102-06	A0.01.	327	Fire_Smoke	36818.7297	18709.6080	747						
+	10102-07	10102-07	A0.01.	327	Fire_Smoke	43533.8114	18397.9387	747						
+	10103-01	10103-01	A0.01.	327	Fire_Smoke	38067.5006	14766.9395	747						
+	10103-02	10103-02	A0.01.	327	Fire_Smoke	46559.5815	12660.8931	747						
+	10104-01	10104-01	A0.01.	327	Fire_Smoke	22541.2251	35439.6930	747						
+	10105-01	10105-01	A0.01.	327	Fire_Smoke	29311.4125	32700.6573	747						

- In aCIP:
 - First, some coordinate conversion parameters need to be defined (make sure to use enough precision = number of decimals)
 - Example:
 - The coordinates of origo in AutoCad
 - origoX = 18.0037020800492F
 - origoY = 59.3688017642466F
 - Tilt angle (degrees the AutoCad drawing up differs from straight north)
 - tiltAngle = 32
 - Millimeters per degree X and Y (example good for central Stockholm)
 - mmPerDegreeLongX = 57242640
 - mmPerDegreeLatY = 107005200;

- In aCIP:
 - Select feature “Calculate target coordinates”



- In aCIP:
 - aCIP has now calculated the target coordinates for you

aCIP Client

Model: PSIM configuration Configuration: ALL

Main grid

Grouped by: Grupp Typ Root only

Sensors

Gateway 2

Fire

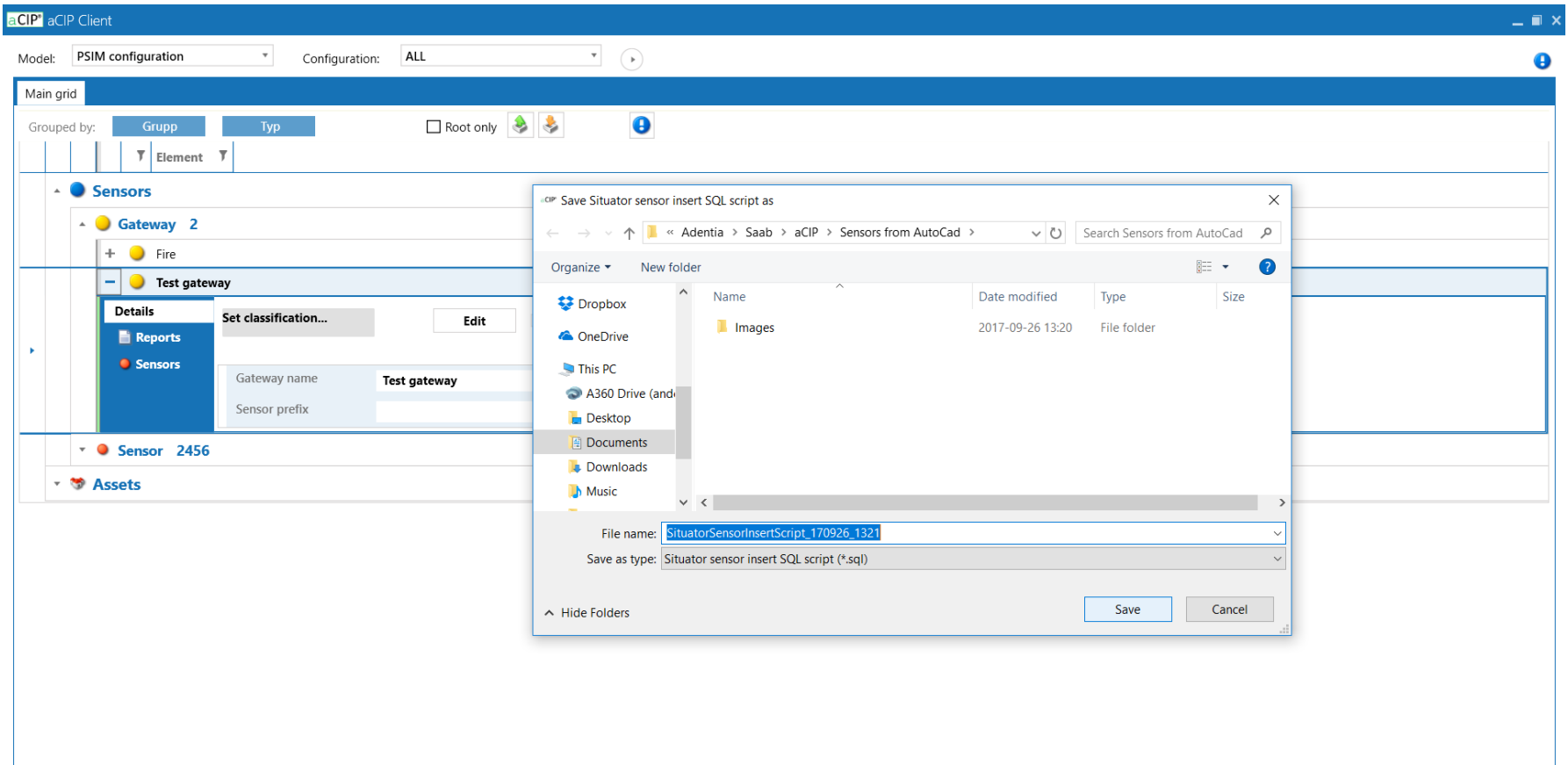
Test gateway

Details Reports Sensors

Drag a column header and drop it here to group by that column

	Hardware ID	Sensorname	Location	SensorGroupID	Sensor type	Source X	Source Y	Layer	Target X	Target Y	Sensor group	Comparison	Location check
+	10001-01	10001-01	A0.00.	328	Fire_Button	30035.2912	9017.7534	886	18.0042306168348	59.36872384228			
+	10002-01	10002-01	A0.00.	328	Fire_Button	34762.7337	53210.2157	886	18.0047097620266	59.3690506691133			
+	10002-02	10002-02	A0.00.	328	Fire_Button	60502.5871	55412.2467	886	18.0051114823581	59.3689406500116			
+	10102-01	10102-01	A0.01.	327	Fire_Smoke	28768.8939	6350.8074	747	18.0041871661505	59.3687089774869			
+	10102-01	10102-01	A0.01.	327	Fire_Smoke	30649.8127	15146.4790	747	18.0042964571516	59.3687693709767			
+	10102-02	10102-02	A0.01.	327	Fire_Smoke	19027.5987	17179.4454	747	18.0041430944067	59.3688430392505			
+	10102-02	10102-02	A0.01.	327	Fire_Smoke	32732.5598	15538.1915	747	18.0043309392389	59.3687621610769			
+	10102-03	10102-03	A0.01.	327	Fire_Smoke	13669.1347	29479.5777	747	18.0041775764268	59.368967058056			
+	10102-04	10102-04	A0.01.	327	Fire_Smoke	13790.2404	41405.7774	747	18.0042897764656	59.3690609769936			
+	10102-05	10102-05	A0.01.	327	Fire_Smoke	24785.9908	23797.1892	747	18.0042896680689	59.3688669696962			
+	10102-06	10102-06	A0.01.	327	Fire_Smoke	36818.7297	18709.6080	747	18.004420834871	59.3687670596573			
+	10102-07	10102-07	A0.01.	327	Fire_Smoke	43533.8114	18397.9387	747	18.0045174333627	59.3687313346485			
+	10103-01	10103-01	A0.01.	327	Fire_Smoke	38067.5006	14766.9395	747	18.0044028364312	59.3687296285766			
+	10103-02	10103-02	A0.01.	327	Fire_Smoke	46559.5815	12660.8931	747	18.0045091498102	59.3686708824045			
+	10104-01	10104-01	A0.01.	327	Fire_Smoke	22541.2251	35439.6930	747	18.0043641914971	59.368970356707			
+	10105-01	10105-01	A0.01.	327	Fire_Smoke	29311.4125	32700.6573	747	18.0044391352235	59.3689151211976			

- In aCIP:
 - Time to create the import file for the target system. Depending on target system type it can be an SQL-script (as this example), an xml file, a csv file or something else.



• And this is how it can look like:

```
1. INSERT INTO dbo.Sensors(SensorName,SensorDescription,SensorHardwareID,SensorGatewayID,SensorTypeID,SensorLocation,X,Y,Z,GroupID,SensorAdditionalInfo,SensorMode,SensorState)
VALUES('10001-01','Fire alarm button','10001-01',7,203,'A0.00.',18.0042306168348,59.37872384228,0,328,['Site=Head office'],3,1);
2. GO
3. INSERT INTO dbo.GISEntitiesToLayers(EntityID, EntityType, LayerID) VALUES((SELECT SensorID FROM dbo.Sensors WHERE SensorHardwareID = '10001-01'),3,886);
4. GO
5. INSERT INTO dbo.Sensors(SensorName,SensorDescription,SensorHardwareID,SensorGatewayID,SensorTypeID,SensorLocation,X,Y,Z,GroupID,SensorAdditionalInfo,SensorMode,SensorState)
VALUES('10002-01','Fire alarm button','10002-01',7,203,'A0.00.',18.0047097620266,59.3790506691133,0,328,['Site= Head office'],3,1);
6. GO
7. INSERT INTO dbo.GISEntitiesToLayers(EntityID, EntityType, LayerID) VALUES((SELECT SensorID FROM dbo.Sensors WHERE SensorHardwareID = '10002-01'),3,886);
8. GO
9. INSERT INTO dbo.Sensors(SensorName,SensorDescription,SensorHardwareID,SensorGatewayID,SensorTypeID,SensorLocation,X,Y,Z,GroupID,SensorAdditionalInfo,SensorMode,SensorState)
VALUES('10002-02','Fire alarm button','10002-02',7,203,'A0.00.',18.0051114823581,59.3789406500116,0,328,['Site= Head office'],3,1);
10. GO
11. INSERT INTO dbo.GISEntitiesToLayers(EntityID, EntityType, LayerID) VALUES((SELECT SensorID FROM dbo.Sensors WHERE SensorHardwareID = '10002-02'),3,886);
12. GO
13. INSERT INTO dbo.Sensors(SensorName,SensorDescription,SensorHardwareID,SensorGatewayID,SensorTypeID,SensorLocation,X,Y,Z,GroupID,SensorAdditionalInfo,SensorMode,SensorState)
VALUES('20001-01','Fire alarm button','20001-01',7,203,'A0.00.',18.0047758193489,59.3784619006114,0,328,['Site= Head office'],3,1);
14. GO
15. INSERT INTO dbo.GISEntitiesToLayers(EntityID, EntityType, LayerID) VALUES((SELECT SensorID FROM dbo.Sensors WHERE SensorHardwareID = '20001-01'),3,886);
16. GO
17. INSERT INTO dbo.Sensors(SensorName,SensorDescription,SensorHardwareID,SensorGatewayID,SensorTypeID,SensorLocation,X,Y,Z,GroupID,SensorAdditionalInfo,SensorMode,SensorState)
VALUES('20001-02','Fire alarm button','20001-02',7,203,'A0.00.',18.0053201767987,59.3783129307202,0,328,['Site= Head office'],3,1);
18. GO
19. INSERT INTO dbo.GISEntitiesToLayers(EntityID, EntityType, LayerID) VALUES((SELECT SensorID FROM dbo.Sensors WHERE SensorHardwareID = '20001-02'),3,886);
20. GO
21. INSERT INTO dbo.Sensors(SensorName,SensorDescription,SensorHardwareID,SensorGatewayID,SensorTypeID,SensorLocation,X,Y,Z,GroupID,SensorAdditionalInfo,SensorMode,SensorState)
VALUES('20002-01','Fire alarm button','20002-01',7,203,'A0.00.',18.005946080252,59.3782252891969,0,328,['Site= Head office'],3,1);
22. GO
23. INSERT INTO dbo.GISEntitiesToLayers(EntityID, EntityType, LayerID) VALUES((SELECT SensorID FROM dbo.Sensors WHERE SensorHardwareID = '20002-01'),3,886);
24. GO
25. INSERT INTO dbo.Sensors(SensorName,SensorDescription,SensorHardwareID,SensorGatewayID,SensorTypeID,SensorLocation,X,Y,Z,GroupID,SensorAdditionalInfo,SensorMode,SensorState)
VALUES('20002-02','Fire alarm button','20002-02',7,203,'A0.00.',18.0060567061148,59.3784813216918,0,328,['Site= Head office'],3,1);
26. GO
27. INSERT INTO dbo.GISEntitiesToLayers(EntityID, EntityType, LayerID) VALUES((SELECT SensorID FROM dbo.Sensors WHERE SensorHardwareID = '20002-02'),3,886);
28. GO
29. INSERT INTO dbo.Sensors(SensorName,SensorDescription,SensorHardwareID,SensorGatewayID,SensorTypeID,SensorLocation,X,Y,Z,GroupID,SensorAdditionalInfo,SensorMode,SensorState)
VALUES('20002-03','Fire alarm button','20002-03',7,203,'A0.00.',18.0062016087957,59.3786210501904,0,328,['Site= Head office'],3,1);
30. GO
```

So, + 1000 sensors now imported and positioned correctly on the correct layers in the target system.

Our experience is that importing and positioning 1000 sensors takes around two weeks with traditional methods.

Doing as described here with the help of aCIP the same work is done 1-2 days, depending on the quality of the AutoCad drawings.

aCIP® - Smart informationshantering

The art of creating order



Thanks for attending!