

The AnyRail program, Copyright © 2023 DRail Software, can export a track plan to a JMRI PanelPro XML file with a Layout Editor formatted Panel.

Fair disclosure:

WHAT FOLLOWS is dependent upon the English (EN) language choice from within the AnyRail menu:

FILE >> Options >> Languages item.

NO OTHER LANGUAGE CHOICE HAS BEEN TESTED AS OF THIS TIME

Developed with PanelPro version 5.3.4+Raae2040ea3

under Java 11.0.13

on Windows 10 amd64 v10.0

Tested with AnyRail Version 6.51.0

If the track plan has defined "Sections," then there is a one-to-one translation to "Blocks" in the exported Panel file.

AnyRail allows duplicated Section names.

The first exported PanelPro Block systemName is always "IB1" and the rest of the systemName values are numbered sequentially.

An exported Block systemName might be "IB123" for some iteration, but have a different "IB" number the next time the plan is exported.

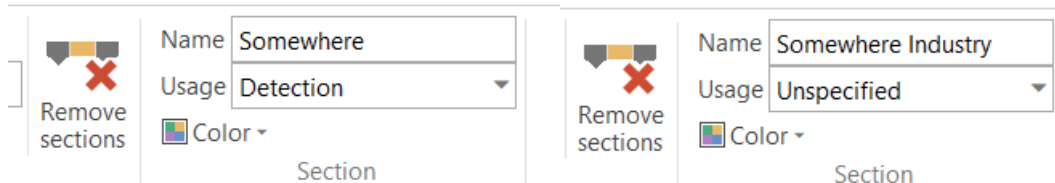
The exported PanelPro Blocks do not have any assigned occupancy Sensors.

The AnyRailBuildBlockSensorList script implements a simplistic rule to provide a unique occupancy Sensor for each AnyRail exported Block.

Each AnyRail exported PanelPro Block has a userName that is constructed by concatenating four strings that are separated with the Low Line character AKA the "_" character.

- 1) The character "B"

- 2) The numeric portion of the Block systemName,
- 3) The specific AnyRail Section name, if actually defined, with the possibility that the Section name includes one or more Low Line characters.
- 4) The pull-down choice for the "Usage" value.



If the AnyRail Section name were something like "Somewhere," and the selected Usage is "Detection," then the exported Block systemName might be "IB123" and if so, the exported Block userName would look like "B_123_Somewhere_Detection" and similarly, some other block might have a userName that could look like "B_21_Somewhere Industry_Unspecified"

To augment the exported PanelPro file, for each named Section and hence each exported Block with systemName "IBxxx", this script will create a new occupancy Sensor with a systemName "ISxxx" with matching digits "xxx."

Each discovered Block will be reported on the JMRI Script Output window followed by a report for the resulting occupancy Sensor data.

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Script Output
Block # = "0", systemName = "IB1", userName = "B_1_Unspecified", comment = "None"
New Sensor systemName = "IS1" userName = "" comment = "Unspecified"
Occupancy Sensor = "IS1" was exported from an unnamed Section

Block # = "1", systemName = "IB2", userName = "B_2_Somewhere_Detection", comment = "None"
New Sensor systemName = "IS2" userName = "Somewhere" comment = "Detection"

Block # = "2", systemName = "IB3", userName = "B_3_East Somewhere Ladder_Detection", comment = "None"
New Sensor systemName = "IS3" userName = "East Somewhere Ladder" comment = "Detection"

Block # = "3", systemName = "IB4", userName = "B_4_Somewhere Industry_Unspecified", comment = "None"
New Sensor systemName = "IS4" userName = "Somewhere Industry" comment = "Unspecified"

```

Usually, the Sensor assigned to the exported Block will be set to the AnyRail Section name, but some contingency is built in for AnyRail Sections with names that are either not unique or even left blank.

Any Block that is discovered to not have a userName fitting the recognized AnyRail exported Block format will be reported on the Script Output window, but no Sensor will be created.

The script allows the option of renaming the exported Block's userName to match the newly created occupancy Sensor's non-blank userName, but a simple edit of the value for

isRenameBlocks = False

If the option is set to rename the exported Block, then it's userName and it's comment field will match those of the created occupancy Sensor.

Block Table

File Paths Speeds Window Help

System...	User Name	Value	Comment		Edit	Direct...	Length	Curvature	State	Sensor	Rep
IB1	B_1_Unspecified			Delete	Edit	None	9.76	None	Inconsistent		
IB2	B_2_Somewhere_Detection			Delete	Edit	None	9.76	None	Inconsistent		
IB3	B_3_East Somewhere Ladd...			Delete	Edit	None	12.82	None	Inconsistent		
IB4	B_4_Somewhere Industry_...			Delete	Edit	None	9.76	None	Inconsistent		

Block Table

File Paths Speeds Window Help

System...	User Name	Value	Comment		Edit	Direct...	Length	Curvature	State	Sensor	R
IB2	Somewhere		Detection	Delete	Edit	None	9.76	None	Unknown	Somewhere	
IB3	East Somewhere Ladder		Detection	Delete	Edit	None	12.82	None	Unknown	East Some...	
IB1	B_1_Unspecified			Delete	Edit	None	9.76	None	Unknown	IS1	
IB4	Somewhere Industry		Unspecified	Delete	Edit	None	9.76	None	Unknown	Somewher...	

Sensor Table			
System Name	User Name	State	Comment
IS4	Somewhere Industry	Unknown	Unspecified
ISCLOCKRUNN...		Active	
IS1		Unknown	
IS3	East Somewhere Ladder	Unknown	Detection
IS2	Somewhere	Unknown	Detection

In this example, the exported Block IB1 comes from an unnamed AnyRail Section. The script creates a corresponding occupancy Sensor IS1 but does not provide the Sensor userName or change the Block userName.

Each time it becomes necessary to modify the AnyRail track plan and export a new version of the PanelPro file, the user is forced to rebuild the list of Sensors that define the related Occupancy status for each Block.

The AnyRailBuildBlockSensorList script automates what would be a tedious and error prone process when done manually. It does however, require careful attention to the AnyRail track plan details.

This script is intended be executed EXACTLY ONCE on each NEWLY EXPORTED PanelPro XML file. Since the script will not override any previously assigned occupancy Sensor for any Block, there is some protection if it were to be run a second time.