

SPA >> OPC Variable Creator

Start Editor Wizard for OPC Variable Creator

The screenshot shows a software window titled "Form1" with a standard Windows-style title bar (minimize, maximize, close buttons). The window is divided into several sections. At the top, there is a "File path:" label followed by a text input field containing the path "C:\Users\TWJOHUA1\Joyce - Work\016 PSMC P3\PSMC P3 SYSCON_zenon_0627.xlsx". This input field is highlighted with a red rectangular border. To the right of the input field is a button labeled "Get Sheets". Above the input field, the text "Path for excel file" is written in red. Below the "File path:" section, there are three main columns. The first column is labeled "Sheet name:" and contains a large empty rectangular box. The second column is labeled "Header of selected sheet:" and also contains a large empty rectangular box. The third column is labeled "SPA Content Column" and contains a series of seven dropdown menus with labels: "Device name:", "Device description:", "Device station number:", "Variable name:", "Variable description:", "Variable datatype", and "Variable symbolic address:". Below these dropdowns is a "Variable data length:" label followed by another dropdown menu. At the bottom center of the window is a button labeled "Collect Points". On the right side of the window, there is a large empty rectangular box.

Form1

File path:

C:\Users\TWJOHUA1\Joyce - Work\016 PSMC P3\PSMC P3 SYSCON_zenon_0627.xlsx

Path for excel file

Get Sheets

Sheet name:

Header of selected sheet:

SPA Content Column

Device name:

Device description:

Device station number:

Variable name:

Variable description:

Variable datatype:

Variable symbolic address:

Variable data length:

Collect Points

Collect sheet names from excel

Show all name of sheets in
this excel file

Form1

File path:
C:\Users\TWJOHUA1\Joyce - Work\016 PSMC P3\PSMC P3 SYSCON_zenon_0627.xlsx

Get Sheets

Sheet name:

- FrontEnd
- FrontEnd (2)
- FE2 N21L2
- FE2 N21L3
- FE2 N21L4
- FE2 N21L5
- FE2 N21L6
- FE2 N21L7
- FE2 N22L1
- FE2 N22L2
- FE2 N22L3

Header of selected sheet:

SPA Content Column

Device name:

Device description:

Device station number:

Variable name:

Variable description:

Variable datatype:

Variable symbolic address:

Variable data length:

Collect Points

Start getting sheets...
----- End of Operation. -----

Shows header of sheet

After selecting sheet, the header of the sheet shows in the second list box

The screenshot shows a software window titled "Form1" with the following components:

- File path:** A text box containing "C:\Users\TWJOHUA1\Joyce - Work\016 PSMC P3\PSMC P3 SYSCON_zenon_0627.xlsx" and a "Get Sheets" button.
- Sheet name:** A list box containing the following items: FrontEnd, FrontEnd (2), FE2 N21L2, **FE2 N21L3** (highlighted in blue), FE2 N21L4, FE2 N21L5, FE2 N21L6, FE2 N21L7, FE2 N22L1, FE2 N22L2, and FE2 N22L3.
- Header of selected sheet:** A list box containing the following items: LN, UN, OA, OB, OI, OX, PO TYPE, LOGIC ADDR, SPA TYPE, CH1&2, Category, Data1, Data2, Symbolic Addr., zenon, Data Length, Station Address, and Station Name. This list box is highlighted with a red border.
- SPA Content Column:** A section with several dropdown menus: Device name, Device description, Device station number, Variable name, Variable description, Variable datatype, Variable symbolic address, and Variable data length.
- Collect Points:** A button at the bottom right of the SPA Content Column section.
- Status/Log:** A text area on the right side of the window containing the following text: "Start getting sheets...", "----- End of Operation. -----", "Collecting sheet header...", and "Please select column for SPA content."

Shows header of sheets

More than one sheet can be selected, if the sheets have the same headers, the variables in these sheets can be created at the same time

The screenshot shows a software interface titled 'Form1'. It has a 'File path' field with the value 'C:\Users\TWJOHUA1\Joyce - Work\016 PSMC P3\PSMC P3 SYSCON_zenon_0627.xlsx' and a 'Get Sheets' button. Below this is a 'Sheet name:' list containing 'FrontEnd', 'FrontEnd (2)', 'FE2 N21L2', 'FE2 N21L3', 'FE2 N21L4', 'FE2 N21L5', 'FE2 N21L6', 'FE2 N21L7', 'FE2 N22L1', 'FE2 N22L2', and 'FE2 N22L3'. A red box highlights the 'FE2 N21L3' and 'FE2 N21L4' entries, with a red arrow pointing to the 'FE2 N21L4' entry. To the right of the sheet names is a 'Header of selected sheet:' list containing 'LN', 'UN', 'OA', 'OB', 'OI', 'OX', 'PO TYPE', 'LOGIC ADDR', 'SPA TYPE', 'CH1&2', 'Category', 'Data1', 'Data2', 'Symbolic Addr.', 'zenon', 'Data Length', 'Station Address', and 'Station Name'. This list is also highlighted with a red box. To the right of the headers is a 'SPA Content Column' section with several dropdown menus: 'Device name:', 'Device description:', 'Device station number:', 'Variable name:', 'Variable description:', 'Variable datatype', 'Variable symbolic address:', and 'Variable data length:'. At the bottom right is a 'Collect Points' button. On the far right, there is a text area with the following text: 'Start getting sheets...', '----- End of Operation. -----', 'Collecting sheet header...', 'Please select column for SPA content.', 'Collecting sheet header...', and 'Please select column for SPA content.'

Shows header of sheets

More than one sheet can be selected, if the headers are not the same, error message shows in the second list box

The screenshot shows a software window titled "Form1" with the following components:

- File path:** A text box containing "C:\Users\TWJOHUA1\Joyce - Work\016 PSMC P3\PSMC P3 SYSCON_zenon_0627.xlsx" and a "Get Sheets" button.
- Sheet name:** A list box containing the following items: FrontEnd, FrontEnd (2), FE2 N21L2, FE2 N21L3, FE2 N21L4, FE2 N21L5, FE2 N21L6, FE2 N21L7, FE2 N22L1, FE2 N22L2, and FE2 N22L3. A red box highlights the last five items, and a red arrow points from this box to the "Header of selected sheet" box.
- Header of selected sheet:** A text box containing "Sheet header error." This box is highlighted with a red border.
- SPA Content Column:** A section with several dropdown menus: Device name, Device description, Device station number, Variable name, Variable description, Variable datatype, Variable symbolic address, and Variable data length.
- Collect Points:** A button at the bottom right of the SPA Content Column section.
- Log/Status:** A text area on the right side of the window containing the following text:
Start getting sheets...
----- End of Operation. -----
Collecting sheet header...
Please select column for SPA content.
Collecting sheet header...
Please select column for SPA content.
Collecting sheet header...
Sheet header error, please re-select new sheet name.

Selection for SPA content column

Form1

File path:
C:\Users\TWJOHUA1\Joyce - Work\016 PSMC P3\PSMC P3 SYSCON_zenon_0627.xlsx

Get Sheets

Sheet name:

FrontEnd
FrontEnd (2)
FE2 N21L2
FE2 N21L3
FE2 N21L4
FE2 N21L5
FE2 N21L6
FE2 N21L7
FE2 N22L1
FE2 N22L2
FE2 N22L3

Header of selected sheet:

LN
UN
OA
OB
OI
OX
PO TYPE
LOGIC ADDR
SPA TYPE
CH1&2
Cateory
Data1
Data2
Symbolic Addr.
zenon
Data Length
Station Address
Station Name

SPA Content Column

Device name: UN

Device description: OI

Device station number: Station Address

Variable name: zenon

Variable description: OX

Variable datatype: SPA TYPE

Variable symbolic address: Symbolic Addr.

Variable data length: Data Length

Collect Points

Start getting sheets...
----- End of Operation. -----

Collecting sheet header...
Please select column for SPA content.
Collecting sheet header...
Please select column for SPA content.
Collecting sheet header...
Sheet header error, please re-select new sheet name.
Collecting sheet header...
Please select column for SPA content.

After selecting the sheets,
choose header for each
SPA content column

Start collect points

Form1

File path:
C:\Users\TWJOHUA1\Joyce - Work\016 PSMC P3\PSMC P3 SYSCON_zenon_0627.xlsx

Get Sheets

Sheet name:

- FrontEnd
- FrontEnd (2)
- FE2 N21L2
- FE2 N21L3**
- FE2 N21L4**
- FE2 N21L5
- FE2 N21L6
- FE2 N21L7
- FE2 N22L1
- FE2 N22L2
- FE2 N22L3

Header of selected sheet:

- LN
- UN
- OA
- OB
- OI
- OX
- PO TYPE
- LOGIC ADDR
- SPA TYPE
- CH1&2
- Category
- Data1
- Data2
- Symbolic Addr.
- zenon
- Data Length
- Station Address
- Station Name

SPA Content Column

Device name: UN

Device description: OI

Device station number: Station Address

Variable name: zenon

Variable description: OX

Variable datatype: SPA TYPE

Variable symbolic address: Symbolic Addr.

Variable data length: Data Length

Collect Points

Start getting sheets...
----- End of Operation. -----

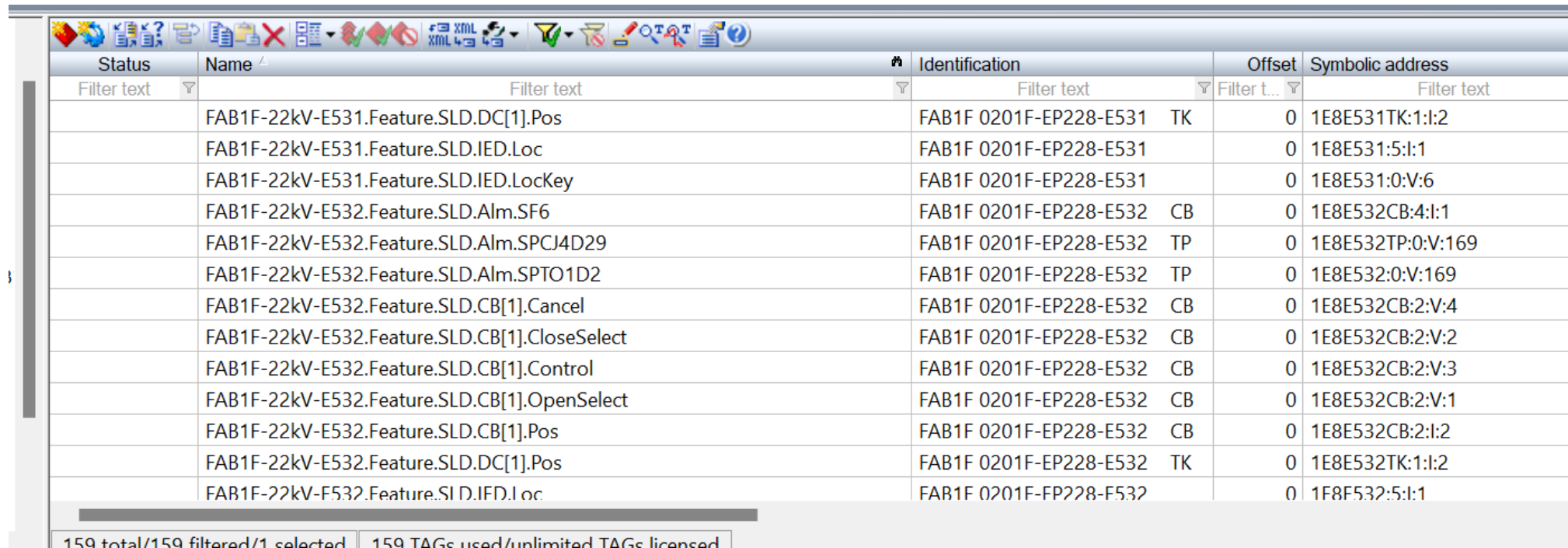
Collecting sheet header...
Please select column for SPA content.
Collecting sheet header...
Please select column for SPA content.
Collecting sheet header...
Sheet header error, please re-select new sheet name.
Collecting sheet header...
Please select column for SPA content.

After clicking “Collect Points”, the following items will be created:

1. Variables in Zenon editor with symbolic address
2. C:\\Temp\\StationContent.txt
3. C:\\Temp\\PointContent.txt

Variables created in editor

Note: The driver for ProScada SPACOMM must be created in advanced.



The screenshot shows the ProScada editor interface with a table of variables. The table has columns for Status, Name, Identification, Offset, and Symbolic address. The Name column contains hierarchical paths like FAB1F-22kV-E531.Feature.SLD.DC[1].Pos. The Identification column shows the device and feature, such as FAB1F 0201F-EP228-E531 TK. The Offset column shows the offset value, mostly 0. The Symbolic address column shows the final symbolic address, such as 1E8E531TK:1:I:2. The table is filtered to show 159 total items, with 159 filtered and 1 selected.

Status	Name	Identification	Offset	Symbolic address
Filter text	Filter text	Filter text	Filter t...	Filter text
	FAB1F-22kV-E531.Feature.SLD.DC[1].Pos	FAB1F 0201F-EP228-E531 TK	0	1E8E531TK:1:I:2
	FAB1F-22kV-E531.Feature.SLD.IED.Loc	FAB1F 0201F-EP228-E531	0	1E8E531:5:I:1
	FAB1F-22kV-E531.Feature.SLD.IED.LocKey	FAB1F 0201F-EP228-E531	0	1E8E531:0:V:6
	FAB1F-22kV-E532.Feature.SLD.Alm.SF6	FAB1F 0201F-EP228-E532 CB	0	1E8E532CB:4:I:1
	FAB1F-22kV-E532.Feature.SLD.Alm.SPCJ4D29	FAB1F 0201F-EP228-E532 TP	0	1E8E532TP:0:V:169
	FAB1F-22kV-E532.Feature.SLD.Alm.SPTO1D2	FAB1F 0201F-EP228-E532 TP	0	1E8E532:0:V:169
	FAB1F-22kV-E532.Feature.SLD.CB[1].Cancel	FAB1F 0201F-EP228-E532 CB	0	1E8E532CB:2:V:4
	FAB1F-22kV-E532.Feature.SLD.CB[1].CloseSelect	FAB1F 0201F-EP228-E532 CB	0	1E8E532CB:2:V:2
	FAB1F-22kV-E532.Feature.SLD.CB[1].Control	FAB1F 0201F-EP228-E532 CB	0	1E8E532CB:2:V:3
	FAB1F-22kV-E532.Feature.SLD.CB[1].OpenSelect	FAB1F 0201F-EP228-E532 CB	0	1E8E532CB:2:V:1
	FAB1F-22kV-E532.Feature.SLD.CB[1].Pos	FAB1F 0201F-EP228-E532 CB	0	1E8E532CB:2:I:2
	FAB1F-22kV-E532.Feature.SLD.DC[1].Pos	FAB1F 0201F-EP228-E532 TK	0	1E8E532TK:1:I:2
	FAB1F-22kV-E532.Feature.SLD.IED.Loc	FAB1F 0201F-EP228-E532	0	1E8E532:5:I:1

159 total/159 filtered/1 selected | 159 TAGs used/unlimited TAGs licensed

SPA content for ProScada SPACOMM

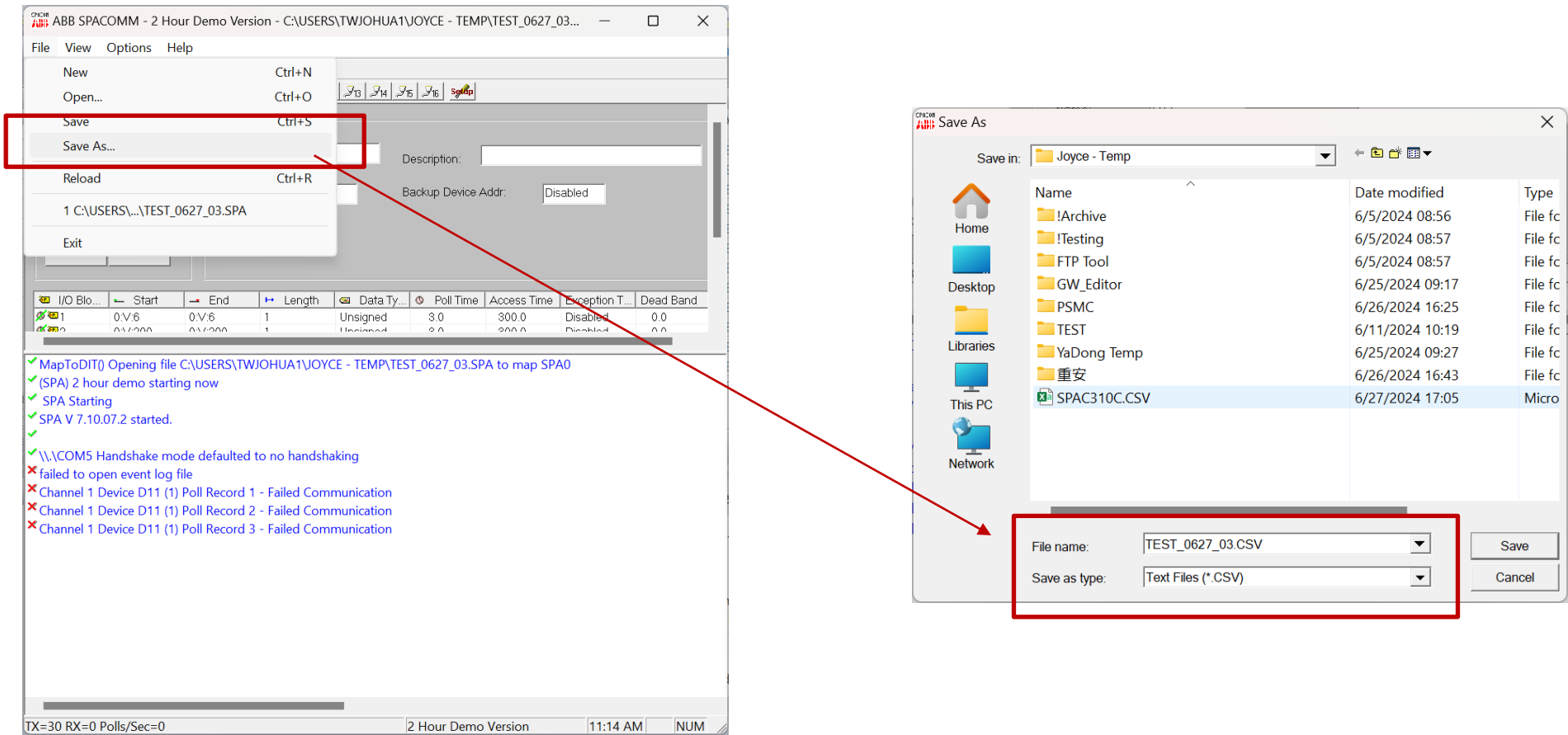
```
StationContent.txt
File Edit View

1E8E531,1,FAB1F 0201F-EP228-E531,BASIC,17,65535,,,,,,,,,
1E8E531CB,1,FAB1F 0201F-EP228-E531 CB,BASIC,17,65535,,,,,,,,,
1E8E531TK,1,FAB1F 0201F-EP228-E531 TK,BASIC,17,65535,,,,,,,,,
1E8E531TP,1,FAB1F 0201F-EP228-E531 TP,BASIC,18,65535,,,,,,,,,
1E8E532,1,FAB1F 0201F-EP228-E532,BASIC,19,65535,,,,,,,,,
1E8E532CB,1,FAB1F 0201F-EP228-E532 CB,BASIC,19,65535,,,,,,,,,
1E8E532TK,1,FAB1F 0201F-EP228-E532 TK,BASIC,19,65535,,,,,,,,,
1E8E532TP,1,FAB1F 0201F-EP228-E532 TP,BASIC,20,65535,,,,,,,,,
1E8E533,1,FAB1F 0201F-EP228-E533,BASIC,21,65535,,,,,,,,,
1E8E533CB,1,FAB1F 0201F-EP228-E533 CB,BASIC,21,65535,,,,,,,,,
1E8E533TK,1,FAB1F 0201F-EP228-E533 TK,BASIC,21,65535,,,,,,,,,
1E8E533TP,1,FAB1F 0201F-EP228-E533 TP,BASIC,22,65535,,,,,,,,,
1E8E633,1,FAB1F 0201F-EP228-E633,BASIC,23,65535,,,,,,,,,
1E8E633CB,1,FAB1F 0201F-EP228-E633 CB,BASIC,23,65535,,,,,,,,,
1E8E633TK,1,FAB1F 0201F-EP228-E633 TK,BASIC,23,65535,,,,,,,,,
1E8E633TP,1,FAB1F 0201F-EP228-E633 TP,BASIC,24,65535,,,,,,,,,
1E8E632,1,FAB1F 0201F-EP228-E632,BASIC,25,65535,,,,,,,,,
1E8E632CB,1,FAB1F 0201F-EP228-E632 CB,BASIC,25,65535,,,,,,,,,
1E8E632TK,1,FAB1F 0201F-EP228-E632 TK,BASIC,25,65535,,,,,,,,,
1E8E632TP,1,FAB1F 0201F-EP228-E632 TP,BASIC,26,65535,,,,,,,,,
1E8E631,1,FAB1F 0201F-EP228-E631,BASIC,27,65535,,,,,,,,,
1E8E631CB,1,FAB1F 0201F-EP228-E631 CB,BASIC,27,65535,,,,,,,,,
1E8E631TK,1,FAB1F 0201F-EP228-E631 TK,BASIC,27,65535,,,,,,,,,
1E8E631TP,1,FAB1F 0201F-EP228-E631 TP,BASIC,28,65535,,,,,,,,,
```

```
StationContent.txt PointContent.txt
File Edit View

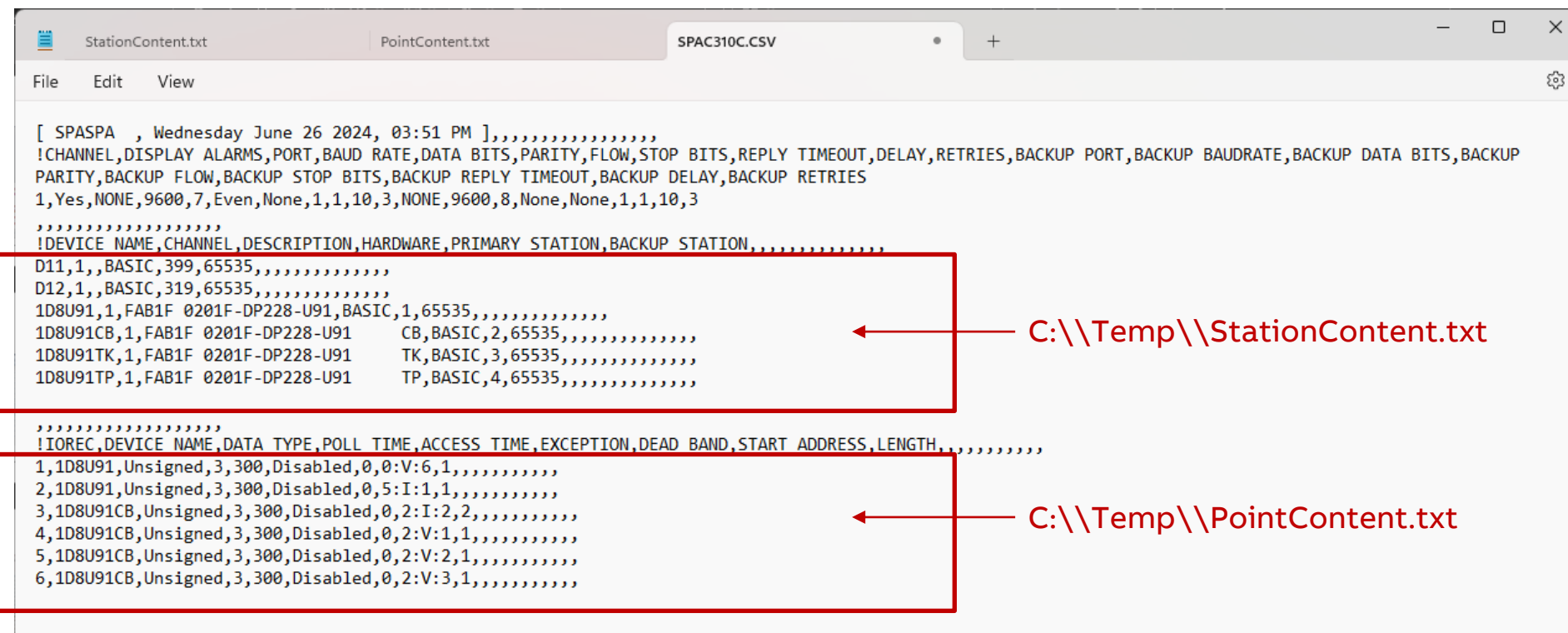
1,1E8E531,Unsigned,3,300,Disabled,0,0:V:6,1,,,,,,,,,
2,1E8E531,Unsigned,3,300,Disabled,0,5:I:1,1,,,,,,,,,
3,1E8E531CB,Unsigned,3,300,Disabled,0,2:I:2,2,,,,,,,,,
4,1E8E531CB,Unsigned,3,300,Disabled,0,2:V:1,1,,,,,,,,,
5,1E8E531CB,Unsigned,3,300,Disabled,0,2:V:2,1,,,,,,,,,
6,1E8E531CB,Unsigned,3,300,Disabled,0,2:V:3,1,,,,,,,,,
7,1E8E531CB,Unsigned,3,300,Disabled,0,2:V:4,1,,,,,,,,,
8,1E8E531CB,Unsigned,3,300,Disabled,0,4:I:1,1,,,,,,,,,
9,1E8E531TK,Unsigned,3,300,Disabled,0,1:I:2,2,,,,,,,,,
10,1E8E531,Unsigned,3,300,Disabled,0,0:V:169,1,,,,,,,,,
11,1E8E531TP,Unsigned,3,300,Disabled,0,0:V:169,1,,,,,,,,,
12,1E8E532,Unsigned,3,300,Disabled,0,0:V:6,1,,,,,,,,,
13,1E8E532,Unsigned,3,300,Disabled,0,5:I:1,1,,,,,,,,,
14,1E8E532CB,Unsigned,3,300,Disabled,0,2:I:2,2,,,,,,,,,
15,1E8E532CB,Unsigned,3,300,Disabled,0,2:V:1,1,,,,,,,,,
16,1E8E532CB,Unsigned,3,300,Disabled,0,2:V:2,1,,,,,,,,,
17,1E8E532CB,Unsigned,3,300,Disabled,0,2:V:3,1,,,,,,,,,
18,1E8E532CB,Unsigned,3,300,Disabled,0,2:V:4,1,,,,,,,,,
19,1E8E532CB,Unsigned,3,300,Disabled,0,4:I:1,1,,,,,,,,,
20,1E8E532TK,Unsigned,3,300,Disabled,0,1:I:2,2,,,,,,,,,
21,1E8E532,Unsigned,3,300,Disabled,0,0:V:169,1,,,,,,,,,
22,1E8E532TP,Unsigned,3,300,Disabled,0,0:V:169,1,,,,,,,,,
23,1E8E533,Unsigned,3,300,Disabled,0,0:V:6,1,,,,,,,,,
24,1E8E533,Unsigned,3,300,Disabled,0,5:I:1,1,,,,,,,,,
25,1E8E533CB,Unsigned,3,300,Disabled,0,2:I:2,2,,,,,,,,,
```

Create CSV file of ProScada SPACOMM



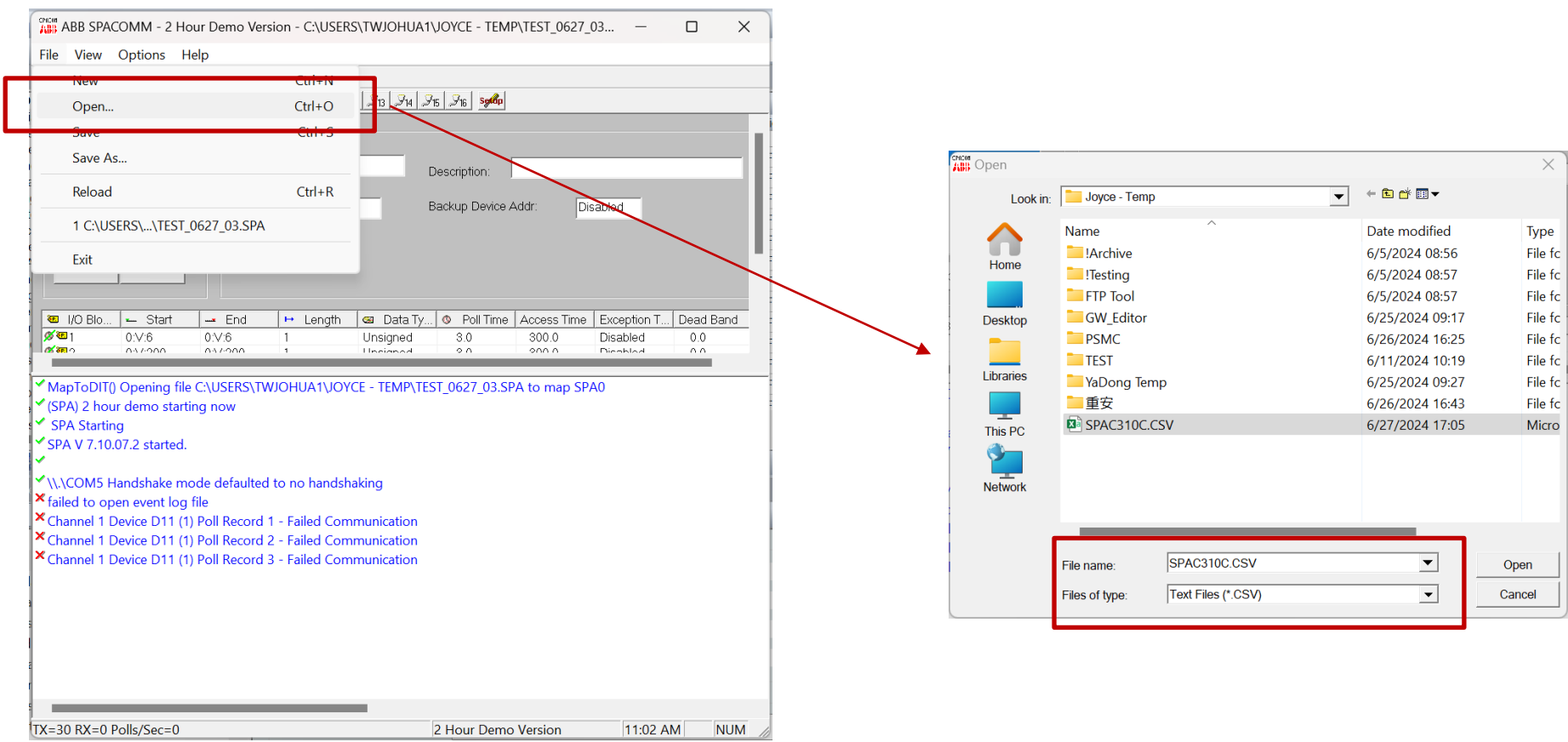
Input SPA content to CSV file

Open CSV file of ProScada SPACOMM, add station content and point content to the csv



```
[ SPASPA , Wednesday June 26 2024, 03:51 PM ],,,,,,,,,,
!CHANNEL,DISPLAY ALARMS,PORT,BAUD RATE,DATA BITS,PARITY,FLOW,STOP BITS,REPLY TIMEOUT,DELAY,RETRIES,BACKUP PORT,BACKUP BAUDRATE,BACKUP DATA BITS,BACKUP
PARITY,BACKUP FLOW,BACKUP STOP BITS,BACKUP REPLY TIMEOUT,BACKUP DELAY,BACKUP RETRIES
1,Yes,NONE,9600,7,Even,None,1,1,10,3,NONE,9600,8,None,None,1,1,10,3
,,,,,,,,,
!DEVICE NAME,CHANNEL,DESCRIPTION,HARDWARE,PRIMARY STATION,BACKUP STATION,,,,,,,,,
D11,1,,BASIC,399,65535,,,,,,,,,
D12,1,,BASIC,319,65535,,,,,,,,,
1D8U91,1,FAB1F 0201F-DP228-U91,BASIC,1,65535,,,,,,,,,
1D8U91CB,1,FAB1F 0201F-DP228-U91    CB,BASIC,2,65535,,,,,,,,,
1D8U91TK,1,FAB1F 0201F-DP228-U91    TK,BASIC,3,65535,,,,,,,,,
1D8U91TP,1,FAB1F 0201F-DP228-U91    TP,BASIC,4,65535,,,,,,,,,
,,,,,,,,,
!IOREC,DEVICE NAME,DATA TYPE,POLL TIME,ACCESS TIME,EXCEPTION,DEAD BAND,START ADDRESS,LENGTH,,,,,,,,,
1,1D8U91,Unsigned,3,300,Disabled,0,0:V:6,1,,,,,,,,,
2,1D8U91,Unsigned,3,300,Disabled,0,5:I:1,1,,,,,,,,,
3,1D8U91CB,Unsigned,3,300,Disabled,0,2:I:2,2,,,,,,,,,
4,1D8U91CB,Unsigned,3,300,Disabled,0,2:V:1,1,,,,,,,,,
5,1D8U91CB,Unsigned,3,300,Disabled,0,2:V:2,1,,,,,,,,,
6,1D8U91CB,Unsigned,3,300,Disabled,0,2:V:3,1,,,,,,,,,
```

Load modified CSV file into ProScada



ABB