Instruction Sheet – Kepware Configuration for 3rd Party Communications Firmware

This document describes how to configure Kepware KepserverEx (version 5.5 and higher) to begin collecting tag data from the SmartPAC PRO equipped with Enhanced 3rd Party Communication Firmware.

Install Kepware

Complete the following steps to download and install Kepware KepserverEx:

- 1. Visit MyKepware.com and create an account.
- 2. Download the current version of KepServerEX. Unlicensed copies will stop collecting tag data after two hours of runtime and must be manually restarted. The unlicensed version is adequate for testing and experimentation, but you should obtain a licensed copy before using it in a production environment.
- 3. Once downloaded, double-click the .EXE file to begin the installation.
- 4. During installation, you must specify the proper drivers to communicate with the SmartPAC PRO (see figures 1 and 2 below). When the "Select Features" screen appears, click on the + next to "Communication Drivers" to display a list of available drivers (see Figure 1).



Figure 1- Select Features Screen

5. Scroll down the list, click on the down arrow next to Modicon Modbus Suite, and select "Entire feature will be installed on local hard drive" (see Figure 2). Click Next.

Select which featu	res are to be installed.			
	Keyence KV Ethemet KraussMaffei MC4 Ethemet Lufkin Modbus Mettler Toledo Senal Micro-DC1 Mitsubishi Suite Modicon Modbus Suite	^	Feature Description Modicon Modbus Suite: Please view sub-compon of included communication	ent for a list n drivers.
e	Will be installed on local ha	ard	drîve	
 ;	Entire feature will be install	ed	on local hard drive	n your
± ×	Entire feature will be unava	ilab	ble V.	features require
	Omron Suite	~	//28KB on your hard driv	e.

Figure 2- Installing the Modicon Modbus Suite

6. Continue selecting the default options until the installation is complete.

NOTE

If you are updating an existing KepServerEX installation, follow the manufacturer's instructions for installing the Modicon Modbus drivers.

Configure Kepware to Communicate with SmartPAC PRO

1. Assign a static IP address to the SmartPAC PRO by following the instructions in the "SmartPAC PRO Enhanced Third-Party Communications Firmware" Instruction Sheet:

https://www.wintriss.com/docs/1138700D Instr Sht SPAC Third Party Comms FW.p df

- 2. Download the ".OPF File for 3rd Party Comms" from the Wintriss Download center at <u>https://www.wintriss.com/wcg/general/sppro-download.html</u>.
- 3. Start Kepware KepServerEX, select File, Open..., and browse to the .OPF file, and click "Open" (see Figure 3).

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Organize 👻 New folder				8= • 🔳 🌘
Attachments Documents Music Pictures OncDrive - Wintri- Attachments From Dropbox Microsoft Teams Microsoft Teams	Name legacy update SmartPAC-Third-Party-Comms-Tags Type: OPF File Size: 43 KB Date modified: 12/14	Date modified 10/31/2022 2:06 PM 7/7/2020 4:51 PM 12/14/2021 11:05 AM 4/2021 11:05 AM	Type File folder File folder OPF File	Size 45 KB
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Figure 3 - Open the OPF File in KepServerEX

4. The .OPF file imports all tag data for all SmartPAC versions into KepServerEX. Upon opening the .OPF file, the resulting Kepware project is shown in Figure 4.

[Connected to Runtime] - KEP: File Edit View Teels Puetier	GerverEX 6 Configuration		- 0	×
Project Connectivity Connectivity SmartPAC Pro 2000 SmartPAC Pro Classi SmartPAC1 SmartPAC2 Aliares Advanced Tags Advanced Tags Advanced Tags Advanced Tags Add Area Data Logger Add Log Group FFM Exporter SmartPAC1 Add Poll Group DiF for Splunk S Add Splunk Connect Add Agent Local Historian Add Datastore	Series c		∑ s	
Date \(\car{\car{\car{\car{\car{\car{\car{	Source KEPServerEX\Runtime	Event Runtime project replaced.		^
<				>
Ready		Default User Clients: 0	Active tags: 0 of 0	

Figure 4 - Kepware Project Created by the OPF File

5. Note that in addition to the two SmartPAC PRO profiles, there are also profiles for SmartPAC 2 and SmartPAC 1. If you are connecting a SmartPAC PRO for the first time, you will use the profile labeled "SmartPAC Pro 2000 Series". If the SmartPAC PRO is replacing a SmartPAC 2 that had already been connected to KepServerEX, use the "SmartPAC Pro Classic" profile. To begin collecting tag data from your SmartPAC RRO, click on the + sign next to "SmartPAC Pro 2000 Series", right-click on "SPPRO" below it, and select "Properties" (see Figure 5).

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Project	T.,/ Address	Data Type	Scan Rate	Scaling	Description
- 【】 Connectivity	🚾 C. 402080	DWord	1000	None	Counters Batch1 Count
SmartPAC Pro 2000 Series	C. 402082	DWord	1000	None	Counters Batch1 Preset
New Tag Group		DWord	1000	None	Counters Batch2 Count
Smart Contraction New Tag Group		DWord	1000	None	Counters Batch2 Preset
Smart Mag		DWord	1000	None	Counters Batch3 Count
S. Alianza Import CSV		DWord	1000	None	Counters Batch3 Preset
Advances Export CSV		DWord	1000	None	Counters GoodParts Count
Advanced 1	1000 control 100	DWord	1000	None	Counters GoodParts Preset
Cut	Ctrl+X	DWord	1000	None	Counters Non Resetable G
Data Logo Copy	Ctrl+C	DWord	1000	None	Counters Non Resetable Sc
Add L X Delete	Del	DWord	1000	None	Counters Non Resetable Str
- O EFM Expc		DWord	1000	None	Counters Strokes Count
Add P Diagnostics		DWord	1000	None	Counters Strokes Preset
DF for Sp	t Here	DWord	1000	None	Counters TotalHits Count
Add S 🚰 Properties		DWord	1000	None	Counters TotalHits Preset
🕂 🕂 IoT Gateway	🖸 D. 402017	Word	1000	None	DiProPAC StatusBits Input
🔄 🏡 Add Agent	🔁 P., W402401.10	String	1000	None	PLC Status Message
Local Historian	P. 402104	Word	1000	None	Press CurrentCommandSp
Add Datastore	🖸 P 402015	Word	1000	None	Press ShaftAngle
Profile Library	🚾 P 402016	Word	1000	None	Press ShaftRPMProduction
Add Profile	🖸 P., 402106	Word	1000	None	Press Speed Max
Scheduler	🔙 P 402105	Word	1000	None	Press Speed Min
SNIMD Agent	🔁 P 402035	Word	1000	None	Press StartTime Actual
Add Agent	🖸 P 402036	Word	1000	None	Press StartTime Limit
Add Agentan	🖸 P., 402033	Word	1000	None	Press StopTime Actual
	P., 402034	Word	1000	None	Press StopTime Limit

Figure 5- SmartPAC Pro 2000 Series Properties in KepServerEX

 When the Property Editor screen appears, replace the IP address in the ID field with the IP address assigned to the SmartPAC PRO in Step 1 above, then click "Apply" and "OK" (See Figure 6 below).



Figure 6- Setting the IP Address in the KepServerEX Property Editor

8. KepServerEX should now collect tag data from the SmartPAC PRO. To verify, click on the Quick Client icon on KepServerEX's toolbar (see Figure 7).



Figure 7- Quick Client Icon

- 9. When Quick Client opens, click on the folder labeled "SmartPAC Pro 2000 Series SPRO". The tag list on the right will show the current values of all the data tags collected (see Figure 8).
- 10. KepServerEX is ready to provide SmartPAC PRO data to your 3rd Party SCADA system.

Adding Additional SmartPAC PRO Instances

You can add additional SmartPAC PRO systems to KepServerEX using the Copy and Paste functions:

- 1. In KepServerEX, right-click on the SmartPAC PRO 2000 Series profile you configured and select Copy (see Figure 9).
- 2. Right-click on "Connectivity" and select Paste. KepServerEX will create another instance of a SmartPAC PRO profile. (see Figures 10 and 11). Follow the instructions beginning in Step 6 above to specify the IP address for the new SmartPAC PRO.
- 3. Repeat these steps as necessary until all your SmartPAC PROs are connected to KepServerEX.



Figure 8 - SmartPAC PRO Tag Data in Kepware Quick Client

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project	T/ Address	Data Type	Scan Rate	Scaling	Description
回 (説) Connectivity	C. 402080	DWord	1000	None	Counters Batch1 Count
SmartPAC Pro 2000 Series	C. 402082	DWord	1000	None	Counters Batch1 Preset
New Tag Group		DWord	1000	None	Counters Batch2 Count
Smail Call New Ten		DWord	1000	None	Counters Batch2 Preset
H Small Small		DWord	1000	None	Counters Batch3 Count
She Alizzor		DWord	1000	None	Counters Batch3 Preset
Advance Export CSV		DWord	1000	None	Counters GoodParts Count
Alarms ()		DWord	1000	None	Counters GoodParts Preset
Add Cut	Ctrl+X	DWord	1000	None	Counters Non Resetable G
Data Loc Copy	Ctrl+C	DWord	1000	None	Counters Non Resetable Sc
Add X Delete	Delete Del		1000	None	Counters Non Resetable Str
EFM Exp Diagnostics			1000	None	Counters Strokes Count
Add Ball Long Long Long	2012	DWord	1000	None	Counters Strokes Preset
DF for S	ere	DWord	1000	None	Counters TotalHits Count
Add Properties		DWord	1000	None	Counters TotalHits Preset
글 붉 loT Gateway	🖸 D. 402017	Word	1000	None	DiProPAC StatusBits Input
Add Agent	🥝 P W402401.10	String	1000	None	PLC Status Message
E Local Historian	🖸 P., 402104	Word	1000	None	Press CurrentCommandSp
Add Datastore	💶 P 402015	Word	1000	None	Press ShaftAngle
- Profile Library	P. 402016	Word	1000	None	Press ShaftRPMProduction
Add Profile	🖸 P., 402106	Word	1000	None	Press Speed Max
Scheduler	🔁 P 402105	Word	1000	None	Press Speed Min
SNMP Agent	💶 P., 402035	Word	1000	None	Press StartTime Actual
Add Agent	💶 P 402036	Word	1000	None	Press StartTime Limit
	🖸 P 402033	Word	1000	None	Press StopTime Actual
	🖸 P., 402034	Word	1000	None	Press StopTime Limit

Figure 9- Copying an existing SmartPAC PRO Profile

SmartPA SmartPAC1	Modbus TC Modbus AS Modbus TC	Ethernet Ethernet En Ethernet	N/A No N/A	None None None		
	SmartPAC	III SmartPAC1 Modbus AS IIII SmartPAC2 Modbus TC	■ SmartPAC2 Modbus TC Ethernet En SmartPAC2 Modbus TC Ethernet En	ImattPA Modus Ic Ethernet En No ImattPAC2 Modbus TC Ethernet N/A SmartPAC2 Modbus TC Ethernet N/A	SmartPAC2 Modbus TC Ethernet IVA None SmartPAC2 Modbus TC Ethernet N/A None	SmartPAC2 Modbus TC Ethernet N/A None SmartPAC2 Modbus TC Ethernet N/A None

Figure 10-Paste the Profile Copy under "Connectivity"



Figure 11- KepServerEX with two SmartPAC PRO profiles