

# Contents

1	Introd	luction	3			
2	Corrections					
	2.1	Version 2.1.110.2	3			
3	Important changes and new functions					
		New column in AlarmViewer (pWA only) Automatic deletion of historical data KNX driver	5			
4	What's next for ProMoS?					
5	MST Research					
6	Supp	ort	9			

# 1 Introduction

The following chapters describe corrections on the one hand and new features and improvements on the other hand.

This description refers to version 2.1.110.2.

These descriptions are translated automatically (by machine). Therefore we would like to apologize for the inconvenience.

# 2 Corrections

In diesem Kapitel werden einzelne Korrekturen und Verbesserungen aufgeführt.

### 2.1 Version 2.1.110.2

Version from 15 October 2021

#### AlmView

• If a user had no rights at all, he could acknowledge alarms. This can now lead to the fact that users who have no rights at all can no longer acknowledge alarms.

#### BACDriver

• Calendar: DMS datapoint date-list is represented in datapoint date-list-jext in JSON format. Used for web calendar.

#### DMS

- Extension of JSON interface with "query" functions (documentation to follow).
- Creation of new datapoints via JSON interface optimized (default values are only taken over if datapoint does not exist).

#### **ESPADriver**

• New default format "#c / #N / #VLastMsg / #Z(Comes:Goes:Quit) #u" for alarms.

#### HDAOptimizer

• Works now with new data format (introduced 2.1.110.1).

#### mDriver

• New default format "#c / #N / #VLastMsg / #Z(Come:Go:Quit) #u" for alarms.

#### OPCDriver

- Watchdog for remote installation of OPC driver improved
- New default format "#c / #N / #VLastMsg / #Z(Com:Go:Quit) #u" for alarms.

#### PDBS

• Reorganization of data only in version 2.1 (no reorganization in version 2.0 and 1.x).

#### PET

• Error in data type of DBGRP corrected.

#### ProjectCfg

• Various adjustments to the dialogs (no function changes).

4

- License display is updated.
- User management (pUser) can now be called directly.
- Start of MQTT and KNX driver can be configured.

#### Promos

• MQTT and KNX driver can be started directly.

#### Setup

• Silent setup with parameter /S at remote setup .

#### ModBusDriver

• New default format "#c / #N / #VLastMsg / #Z(Comes:Goes:Quit) #u" for alarms.

#### MailDriver

- Enhancements for ebIX format (multiple counters in one mail).
- Adjustments to the new backup directory structure.

#### MBusDriver

• New counters implemented: REL (Relay), SON (Sontex), EMH.

#### pWebAccess

Tooltip text in the display of historical data .

# 3 Important changes and new functions

The following chapters describe the most important changes and new functions.

### 3.1 New column in AlarmViewer (pWA only)

Any strain gauge data point in the equipment can be defined to be displayed in the alarm list:

	29 Alarme nicht quittie	en.		T Filter	C Alle exportieren	•	Anzeige: auto 🗸	₽
	Datum / Zeit 🔶	DMS Name	\$ Priorităt	\$ Alarmtext	<b>\$</b> S	tatus 💠	Anlage	
	07.10.2021 16:54:20	BN028B:H02:VE:001:ENERGY:GW_LE_Err	2	Energie Grenzwert unten erreicht kommt		kom	Erdsonde	
	06.10.2021 14:06:08	BN028B:H02:VE:001:ENERGY:GW_HE_Err	2	Energie Grenzwert oben erreicht quit mst_muec.web		attiert	Erdsonde	
]	06.10.2021 14:04:49	BN028B:H02:VE:001:RELPOS:GW_LE_Err	2	Relative Position Grenzwert unten erreicht kommt		kommt	Erdsonde	=
)	06.10.2021 14:03:01	BN028:MBus:013:Vis:P:VPower:GW_Lo_Err	3	Anlage / / / Electricity [SBC] / / kommt		kommt	-	=
I	06.10.2021 14:03:01	BN028:BEL:VS:001:Error:03_Error_Sensor	2	Regelventil Heizung Primär / Sensorfehler Durchfluss / kommt	-	kommt	Heizung primär	=
I	06.10.2021 14:03:01	BN028:BEL:VS:001:Error:13_Warn_MPcomm	3	Regelventil Heizung Primär / MP Kommunikationsfehler / kommt		kommt	Heizung primär	=
	20.08.2021 12:52:11	BN028B:H02:VE:001:RELPOS:GW_HE_Err	2	Relative Position Grenzwert oben erreicht quit mst_muec:DESKTOP-FSLL6GL		quittiert	Erdsonde	=

The freely definable variable can be specified in the settings and must be selected in the table columns:

Tabellenspalten				Hintergrundfarben				
7 ausgewählt	0	verfügbar	0	Alarm kommt				
Datum / Zeit	-	PC	+ ^					
DMS Name	-	BACnet Priorität	+	Alarm geht				
Priorităt	-	Anlagengruppe	Alarm guittiert					
Alarmtext	-	Alarmgruppe	+	Alarm quittiert				
Status	-	Alarmsammelgruppe	+					
Serviceanweisung	-	Quittieren	+					
Freidefinierte Variable	-	Kommentar	+ -					
Wartungen anzeigen				Deutsch 🗸				
Textanzeige auf Schaltflä	iche							
Akustische Signalisierung	g bei Änd	lerungen		Freidefinierte Variable				
Historische Alarme autor	matisch a	aktualisieren						
Unterdrückung Systemal	larme			Spaltentitel Anlage				
				DMS-Variable Anlage				

The data point must be defined identically in ALL devices (e.g. "Plant"). By means of pList the contents can be assigned quite easily.

### 3.2 Automatic deletion of historical data

Currently, the historical data is stored in the hdb(x) files until they are deleted manually.

Now, a deletion can be performed automatically. With the setting "Directory for data storage" a "Backup cleanup" can be activated.

Verzeichnis für Datenablage X										
Sicherungslaufwerk und Verzeichnis C:\PromosNT\HDA\HDA_Menzingen										
Datenbereinigung										
Überlebenszeit	Überlebenszeit 120 Monate									
Dateien archivie	Dateien archivieren									
ОК	Abbr	echen	Hilfe							

By "Activate" the number of months can be specified, which is intended for the representation of the historical data. Older data can either be deleted or, if "Archive files" is active, archived in compressed files.

© 2021 MST Systemtechnik AG

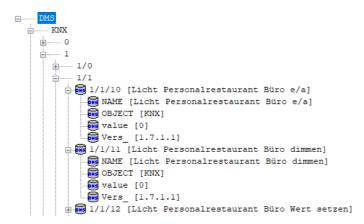
## 3.3 KNX driver

The new KNX driver is now available in the setup.

\$ KNXDriver													
tei ?													
Generel													
DMS Verbindung: 12	27.0.0.1:9010				✓ DMS Zeiche	,	0-8859-1						7
Log Dateigrösse:			1000 kB		Anzahl Log	Sicherungen:				10			-
Bus Konfiguration													
													Bus hinzufügen
# Aktiv	Kommentar	Verbindung	IP Adresse	Port Lok	ale Adresse Konfigur	ationsdatei	Wählen	Konfigur	ration L	öschen			
1 🕂 🗹		KNXnet/IP Tunneling	-	3671 ÷		knxproj	P	-		Î			
				(i)	1								
		2	Bus Konfiguration, Bus	1*								? ×	
			Tabellenansicht   🗆 Ei	xperten Modus	🐈 Slave hinzufügen	🕂 Alle Slaves hin	Tufficen	Eigenscl	haft W	ent			-
			Bus 001 (KNX)	Aper terr modula	- Save mizologen	- Ale slaves hit	zulugen 🔺	AKSPrefix	KND				
			0/0/1 [T-All-UG-K				E	DumpMeter		_			
			0/0/2 [T-All-UG-K				1	GroupFilter					
			0/0/4 [T-All-UG-K	-AKL Fluchttreppe	Zeit anpassen]		i	- ·					
			0/0/5 [T-AII-UG-K 0/0/6 [T-AII-UG-K		Zeitfunktion sperren] Szene 1		1		IAddress 12.1	3.14			
			0/0/7 [	]	-		1	PollInterval	1	_			
			0/0/10 [T-All-UG- 0/0/11 [T-All-UG-				1	Refresh					
			0/0/12 [T-All-UG-	K Fluchttreppe Ma	ster-Slave]		į	Suspend					
			0/0/13 [T-All-UG- 0/0/14 [T-All-UG-				1	TelegramRate	e 20				
			0/0/15 [T-All-UG-	K Fluchttreppe Zei	tfunktion sperren]		i						
			0/0/16 [T-All-UG-		ne]		1						
					rridor Minuterie ein/aus]		į						
					rridor Status] rridor Master-Slave]								
			0/0/23 [T-All-UG-	D Fluchttreppe/Ko	rridor Dauer-Ein]		i						
					rridor Zeit anpassen] rridor Zeitfunktion sperren]		1						
			0/0/25 [T-All-UG-				- i .						
			• 0/0/27 [	1			• •						
			1					,			ОК	Abbrechen	Anwende
											UK	Abbrechen	

The driver requires a KNX IP gateway to access the KNX bus.

The project engineering is done in the ETS system. The projecting file \*.knxproj or an XML export from the ETS system can be read directly in the driver. The data points in the DMS are automatically created in the form:



where the root (in the example: KNX) can be adapted. For visualization and operation the DMS addresses (Ex: "KNX:1:1/1:1/1/12:Switch" can be used.

6

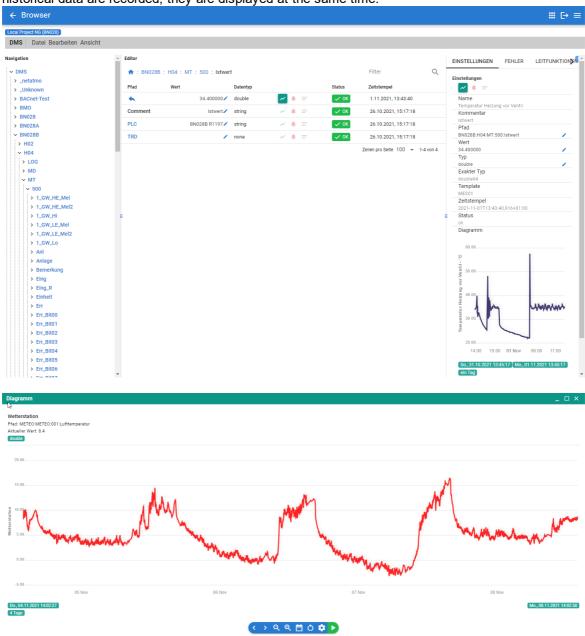
7

# 4 What's next for ProMoS?

ProMoS NG as (compatible) successor of ProMoS NT.

News are continuously published on the promosnt.ch(promosnt.com in English) page.

The DMS views are extended. Alarms and logs of a data point are displayed directly in the DMS. If historical data are recorded, they are displayed at the same time.



The complete DMS is readable and controllable via an API (JSON REST).

The following modules have already been implemented (but are still being continuously improved):

- DMS
- PDBS replacement
- AlmMng (directly integrated in the DMS)

- PrtMng (directly integrated in DMS)
- HdaMng (directly integrated in DMS)
- Frontend (exclusively web based)

Currently we are working on the ProcessManager (start/stop of single modules). The existing drivers can still be used (these will also be modified later to be operated using web technologies).

And ProMoS NG is still compatible with the existing ProMoS NT (where necessary, data is automatically adapted and/or extended). An extension is e.g. that in the DMS trees on each level the number of alarms is available, which is pending below the tree.

### 5 MST Research

Currently, two diploma theses are in progress with the following topics:

#### • Automated setting of PID parameters .

The tool should be used during commissioning and should be able to write the parameters immediately into the PLC (SAIA PCD) (via the control system ProMoS NT). We expect results in mid-2022 in cooperation with the Technical College in Grenchen/Switzerland.

#### • Automatic monitoring of plants

The work is intended to serve as a feasibility study for a possible product that enables automatic testing of building automation systems based on energy and process data. The target group of the product are building services planners and plant operators.

The work will be realized together with the Höhere Fachschule für Technik in Grenchen/Switzerland.

#### Automated calculation of target and limit values

Together with the Lucerne University of Applied Sciences and Arts (HSLU), we are trying to automatically calculate target and limit values using statistical methods and machine learning approaches. The system should automatically detect when, for example, a ventilation system is no longer operating optimally.

The project is supported by InnoSuisse with almost CHF 200'000. From our side, we have hired a new employee, Cyril Mouttet, who will work exclusively for this project.

Further information:

https://www.hslu.ch/de-ch/hochschule-luzern/forschung/projekte/detail/?pid=5854

8

# 6 Support

Support for ProMoS NT and Visi.Plus can be requested via the following channels:

Switzerland, Luxembourg, Belgium, France, Italy: Email: support@mst.ch Phone: +41 31 810 15 10

#### Germany, Netherlands, Austria, Scandinavia Email: support@mst-solutions.de

Phone: +49 40 999 99 4210

Support > 15 minutes will be charged (project specific clarifications, training by phone, etc.) if it is not about ProMoS bugs or improvement suggestions. Support packages can also be purchased.

Please ask for price list and news letter via info@mst.ch or info@mst-solutions.de.

Current information can be found at <u>www.promosnt.ch</u>.