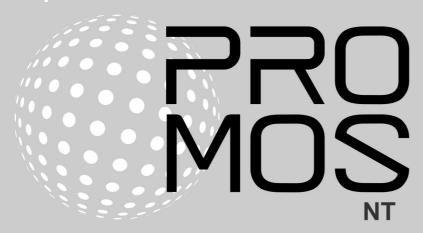
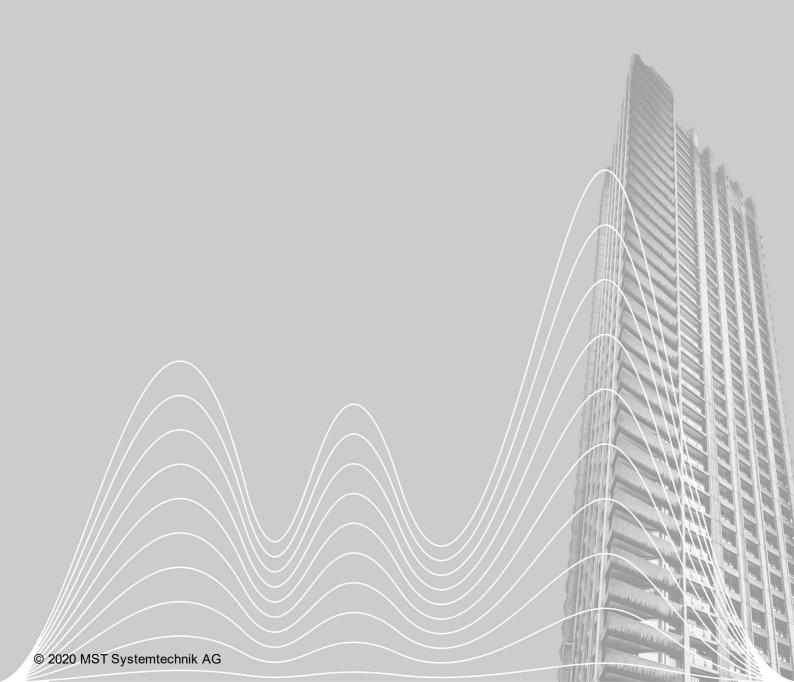
Update





Contents

1	Introduction 3				
2	Corrections				
	2.1 2.2	Version 2.0.107.4			
	2.3	Version 2.0.107.2	6		
	2.4	Version 2.0.107.1	6		
	2.5	Version 2.0.107.0	8		
3	Important new functions				
	3.1	Version 2.0.107.4	9		
	3.1.1	HDAOptimizer			
	3.1.2	pList: Now also with data import			
	3.1.3 3.2	pUser: Popup menu for editing, deleting and copying users Version 2.0.107.3			
	3.2.1	GE: Performance			
	3.2.2	GE: Dynamic call of HTML pages			
	3.2.3	MailDriver: Browse mails and files			
	3.2.4 3.3	MBusDriver: New counters Version 2.0.107.2			
	3.3.1	pWA: HTML and video streams			
	3.4	Version 2.0.107.1			
	3.4.1	New modul: BACConfig			
	3.4.2 3.4.3	GE: Properties window over multiple objects SNMPDriver			
4					
4	vvnat	t happens next with ProMoS NT?	17		
5	Interf	Interface to NodeRed 18			
6	Updates				
	6.1	Obtaining updates	19		
	6.2	Versions			
7	Support 2				
_	CALA Viei Dive				
8	SAIA	SAIA Visi.Plus			

1 Introduction

The following chapters describe corrections and new features and improvements.

This description refers to versions 2.0.107.0 to 2.0.107.4.

Such descriptions will appear regularly again in the future. The descriptions are automatically translated (by machine). Therefore we would like to apologize for the inconvenience.

2 Corrections

This chapter lists individual corrections and improvements.

2.1 Version 2.0.107.4

Version of 6 May 2020

AlmMng

• Connections to EDL-Portal are closed properly after an alarm transmission

AlmView

· Alarm priorities can only be influenced with admin rights

BACDriver

- Enlarging the APDU_MAX_SEGMENTS to a maximum of 255 (originally 32)
- Status display extended from ONLINE/OFFLINE to UNREACHABLE/OFFLINE/ONLINE

DMS

- Correction PLC-Errors-Dialog
- Adaptation of the license for the pAlmText module (alarm text management)

GE

- Optimization of dynamic parameters when opening a web browser
- Correction for multi-DMS environments when saving images if the data points do not exist in the DMS
- Rotation of transparent icons corrected

PDBS

· Backup functionality revised

ProjectMng

• When setting up remote projects, the admin password no longer needs to be set

Remote Setup

• Fixed several bugs - remote setup no longer worked with new development environment

pChart

· corrected data export via summer/winter time and vice versa

2.2 Version 2.0.107.3

Version of April 7, 2020

AlmMng

- · User activity has an influence on the overall auto logoff
- After restart, pending alarms are processed (also compared with alarm history)

AlmView

- The status also changes if PDBS is not polled
- Default Poll Interval PDBS set to 5 seconds
- · User activity has an influence on the overall auto logoff

BACDriver

· User activity has an influence on the overall auto logoff

DMS

- Logoff settings are now managed in the DMS (but still configured in the GE)
- User activity has an influence on the overall auto logoff
- · Compiling the control functions after data import via JSON/REST
- Correction display tree when displayed via right mouse button
- The data type "NONE" is now also stored in promos.dms file
- Optional parameter via JSON/REST to rename or type change data points
- · Reading of registrations and further data point information via JSON/REST
- The correct time stamp is taken over when changing values manually
- · Performance optimizations

DSMData

The parsing of alarm groups has been improved for the transfer to the EDL portal

GE

- Rebuild user activity/total auto logoff now handled via DMS.
- System-User-Flags at logout adjusted (in connection with Auto-Logout)
- Transparent icons have been improved in performance
- Adapted processing of program parameters so that web pages from the GE can be called dynamically

HDAMng

User activity has an influence on the overall auto logoff

Logger

· User activity has an influence on the overall auto logoff

MailDriver

- New format for Wattenfall meter data transmission
- Error logs extended
- CSV and EML import
- Search function in EMail and files
- Support for packed files zip and gz

MalmMng

· User activity has an influence on the overall auto logoff

MBusDriver

- New meter support for AMT, EHM, EMU, SON and SEN
- · New configuration for PadPulse Hot Water

mDriver

- · User activity has an influence on the overall auto logoff
- · TraceView improved (display of digital values)

oList

User activity has an influence on the overall auto logoff

OPCDriver

User activity has an influence on the overall auto logoff

pCalc

User activity has an influence on the overall auto logoff

pChart

- User activity has an influence on the overall auto logoff
- 4 and 12-hour export now also works with S/Wi time switching

PDBS

- User activity has an influence on the overall auto logoff
- Filter on SGroup corrected (pWA)
- · Timing optimized at PDBS startup
- Display of the last x alarms corrected
- Update of the alarm list in AlmView improved
- The status of the last x alarms is now also tracked

PET

- · User activity has an influence on the overall auto logoff
- JSON communication extended to all data types (gave problems with mDriver)
- Function generator now shows the unchecked cells as disabled

pList

· User activity has an influence on the overall auto logoff

promos

· Can only be terminated in logged in mode

PrtMng

· User activity has an influence on the overall auto logoff

PrtView

· User activity has an influence on the overall auto logoff

pUser

· User activity has an influence on the overall auto logoff

pWA

- · adapted sorting of tables in Firefox
- CSS-Sheet adapted for Firefox
- Files with Unicode strings are now handled correctly
- · Dynamic Web links configured accordingly in the GE

The program TAPIDriver was removed from the setup, because this was only supported up to Windows 7.

2.3 Version 2.0.107.2

Version of 10 February 2020

DMS

Default size change for an automatic DMS-Backup new set to 10'000 Bytes

MBusDriver

· New meter support for SEC

2.4 Version 2.0.107.1

Version of 6 February 2020

AlmView

- · User activity has an influence on the overall auto logoff
- The program argument /SGRP is processed correctly

BACConfig

- A new feature is that a spash screen is displayed at startup
- If no DMS is available at startup, a warning is displayed
- The program BACConfig is integrated into the standard setup

BACDriver

- Default values were adjusted (polling deactivated)
- The BACDriver reports in the BACnet as an own device and can be recognized by other participants
- Reading non-standard time stamps
- NC correction (suppression of false alarms)
- Optimization COV buffer handling (memory leak)
- Trendlog with data type Real optimized in the message handler
- Customizations for Visual Studio 2019 (initialization of variables improved)
- Correction when displaying the number of COV value changes
- If the standard BACnet port 47808 is already in use by other programs when starting, a corresponding error message appears

DMS

- Long texts are now represented by "...", so that it is clear that the text displayed goes even further
- User activity is now managed in the DMS
- Starting the SNMP driver could be prevented under certain circumstances
- When renaming data points, presettings are automatically applied (automatic adjustments)
- Data points with a Unix timestamp are now displayed in readable form (date/time)

- Automatic backups of promos.dms are limited to the number of 5 and kept for a maximum of 2 weeks
- · Hardly reproducible DMS crash when deleting subtrees fixed
- · Renamed data points are displayed correctly again in the DMS tree
- Empty parent trees are cleaned up after renaming data points
- The pop-up menu (right mouse button on tree) is also displayed on the root
- License location is displayed correctly
- The list of AddOns (insert addition) has been implemented dynamically (no limitation to 8 positions anymore)

GE

- AutoLogoff converted
- Error message for missing SVG files is now only displayed once
- Problems with re-initialization of System: Driver data points solved
- Properties window now works across multiple drawing objects (will display common subset)
- Display of HTML files

MDriver

- · Correction of the display Telegram counter
- · Correction of license problems

pBackup

· Fixed crash on program exit

pChart

- When exporting data to multiple CSV files, raw data or interpolated data can be exported
- Data point selection optimized (access via EDL portal)
- data export via S/Wi time switching corrected

PET

- BACnet file generator only with selected PCDDriver (SAIA)
- If data points are imported and the PLC does not yet exist, the error message is only output once
- Code generator: With brackets "(" and ")" the generated code can be replaced with characters other than () (BracketOpen and BracketClose in the PET file)
- Code generator: Correction at visiplus.rxp, if BNT file should be generated in parallel
- · Optimization Image assignment alarms
- · Switching of profiles (PET files) optimized
- DMS blockade fixed (VisualStudio 2019 only)
- JSON/REST communication with improved filter function (Regex)
- Code generator: Generates PCD labels instead of fixed register/flag addresses
- PLC data can be edited again
- When creating a new PLC, the system checks whether it already exists
- Function generator: It can be defined whether a value should be taken over 1:1
- Code generator: commas in data are eliminated (PG5 cannot do anything with them)
- Function generator extended by macro function
- License information is now displayed correctly

SNMP driver

Completely new SNMP driver (see details under SNMPDriver)

Customized pet files have been added to the setup. Configuration files for generating BNT files have also been added.

Old modules have been removed from the shortcut menu (pWeb, BMP2JPG, GE2XML).

2.5 Version 2.0.107.0

Version of 8 November 2020

DMS

• Value updates in the tree, if the value is visible

GF

- Size of the re-initialization window adjusted
- Switching Edit-Runtime-Mode optimized (e.g. EditBox, Checkbox etc.)

Logger

- Parameter LogDelay reintroduced (was eliminated in the course of the logger conversion)
- Correction for data export in CSV

pChart

• Display of the strain gauge name is now activated by default

3 Important new functions

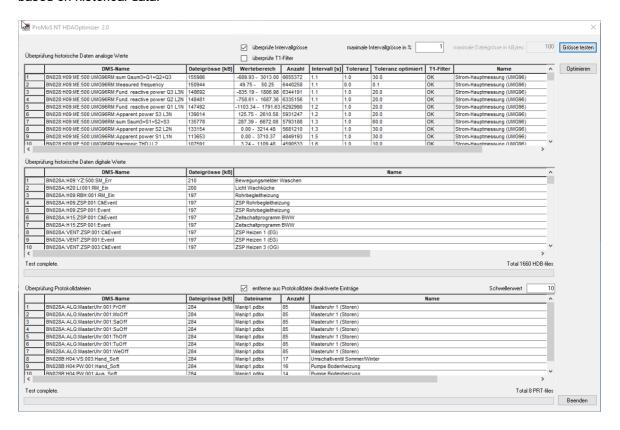
Setup 2.0.107 was implemented with the latest Microsoft development environment Visual Studio 2019 (2.0.106 was still VS 2010).

Also all used software libraries have been updated to the latest version, so that they run without problems on Windows 10 as well as on Windows Server 2019.

3.1 Version 2.0.107.4

3.1.1 HDAOptimizer

The HDAOptimizer has been added. The program allows an easy adjustment of the trend parameters based on historical data.



For historical data, the last 30 days are analyzed and displayed according to the file size. Both the current and the optimized tolerance are displayed. Using the "Optimize" button the optimized values can be automatically adopted.

Both analog and digital values are displayed. The digital values show the number of changes in the last 30 days. Possible adjustments must be made manually for digital trend values (remove data point from logging).

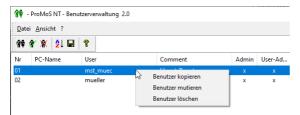
The number of log entries is also shown in the bottom section. Changes may have to be made manually (Remove data point from logging).

3.1.2 pList: Now also with data import

In pList, data can be exported in pfi format (CSV format for recipes). Now these data can also be imported again.

This makes it possible, for example, to export setpoints (with the same DMS addendum) and later reset the setpoints to this status.

3.1.3 pUser: Popup menu for editing, deleting and copying users



With the right mouse button a popup menu can be opened, which allows to copy the selected user (without user name and password), to mutate the user (analogous double click) or to delete the user.

3.2 Version 2.0.107.3

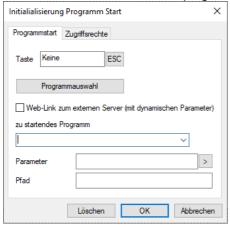
3.2.1 GE: Performance

With the GE, we have seen some massive performance problems, especially when there are a lot of initializations on a screen. These problems could be massively improved by rebuilding the internal processing of the DMS data and refreshing the individual screen positions.

3.2.2 GE: Dynamic call of HTML pages

This function is part of preparations for a new display type in the GE. It will be possible to call up web pages directly, e.g. with JavaScript (analogous to an operating screen in the GE). It is thus possible to create a web-based attribute viewer (e.g. BACnet-Sheduler). The developments in this respect are running at full speed.

A link is defined via action INIT program start, where the following fields must be entered additionally:



Program to be started

Name of the Internet Explorer (preferably with full path) for example: "C:\Programs\Internet Explorer\IEXPLORE.EXE"

Checkbox Web link to external server

If the checkbox is activated, the parameter can be assembled dynamically using a referenced configuration file. In this way, external API interfaces, for example, can be specified in a separate file. Furthermore, the URL in a re-initialized image can display the current AKS in the URL. In this way, the AKS can be further processed on the Web.

If checkbox is deactivated:

Parameter

Name of the link, web address, etc. If the link is only in the form "www.name.ext", 'http://' is prepended by default.

If the link also contains the protocol information (recommended!), such as "http://", "https://" or "ftp://", then the entire term must be written in quotation marks ("...").

This distinguishes between type DMS-names and link and prevents that in the link name the DMS ":" delimiters are exchanged for "_" characters.

Path

Remains empty

If checkbox activated:

Structure of the configuration file

The file is referenced in the Configuration field and must be stored in JSON format. If the project path is not selected as storage location, care must be taken that the file is not included in a backup.

With the placeholder %PROJECT%, you can reference the current project.

Parameters

Name of the link, web address, etc. The link must be written in the form of "https://www.name.ext" and you can use '{}' to reference the content of the configuration file.

Examples:

Parameters:

"https://{server.host}:{server.port}{path.contact}"

Result:

https://localhost:3000/contact

parameters:

"https://{server.host}:{server.port}{path.bmo mes01}?{query.nodename}=BMO:MES01"

Result if the link was opened in a re-initialized context:

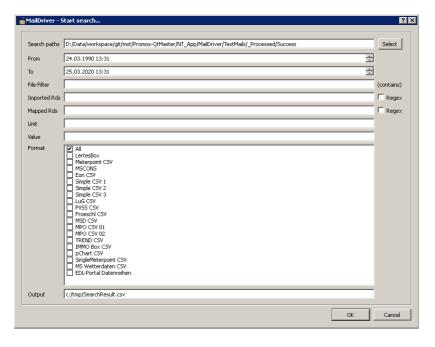
https://localhost:3000//bmo/mes01?node=BN028:H01:MT:500

Configuration

See "Configuration File Structure". File format must be JSON and only key-value pairs are supported, no arrays.

3.2.3 MailDriver: Browse mails and files

In MailDriver, all mails or files can be searched for an OBIS code, for example, to find out whether data has arrived at all or which data has been transmitted.



The output shows when which data was transmitted:

The output shows when which data was transmitted.			
C:/tmp/EMails/20200201/MSCONS_TL_9911831000005_9890000010005_20200201_RCH00007612160.txt - (edifact-strom@realestate.vattenfall.de) - 2020-02-01 0858.eml MSCONS 50727581031_1.1.1.29.0	2020-01- 06T05:45:00	4.817	kWh
$ C:/tmp/EMails/20200207/MSCONS_TL_9911831000005_9890000010005_20200207_RCH00007676447.txt-(edifact-strom@realestate.vattenfall.de)-2020-02-07-0832.eml MSCONS-50727581031_1.1.1.29.0 \\$	2020-01- 06T05:45:00	4.809	kWh
$ C:/tmp/EMails/20200213/MSCONS_TL_9911831000005_9890000010005_20200213_RCH00007747273.txt-(edifact-strom@realestate.vattenfall.de)-2020-02-13 0833.eml MSCONS 50727581031_1.1.1.29.0 \\$	2020-01- 06T05:45:00	7.254	kWh
$C:/tmp/EMails/20200214/MSCONS_TL_9911831000005_9890000010005_20200214_RCH00007762817.txt-(edifact-strom@realestate.vattenfall.de)-2020-02-14-0832.eml MSCONS-50727581031_1.1.1.29.0$	2020-01- 06T05:45:00	4.809	kWh
$C:/tmp/EMails/20200304/MSCONS_TL_9911831000005_9890000010005_20200304_RCH00008025963.txt-(edifact-strom@realestate.vattenfall.de)-2020-03-04-0831.eml MSCONS 50727581031_1.1.1.29.0$	2020-01- 06T05:45:00	2.68	kWh

Furthermore, MailDriver now also supports ZIP and GZ formats with energy data.

3.2.4 MBusDriver: New counters

The following new counters have been implemented in the setup:

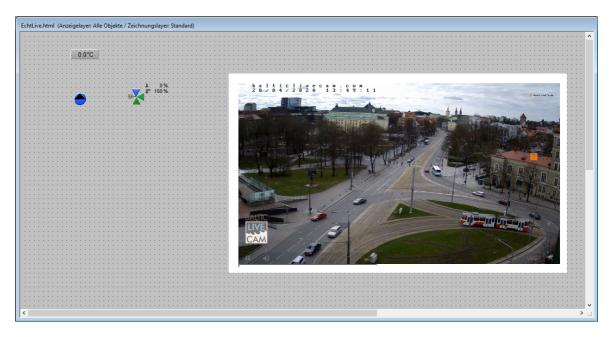
- AMT (Aquametro)
- EMH (EMH Elektrizitätszähler GmbH & CO KG)
- SON (Sontex SA)
- EMU (EMU Electronics AG)
- SEN (Sensus GmbH)
- PadPulse Hot Water

The MBusDriver recognizes the new counters automatically at a new scan of the bus.

3.3 Version 2.0.107.2

3.3.1 pWA: HTML and video streams

Now it is possible to play video streams directly in GE and pWA.



Unfortunately, the function currently had to be set up so that the videos have to be started manually (web browsers do not (no longer) allow video streams to be played immediately (because of the many advertisements and the data consumption for unwanted videos).

The video must be defined as a graphic. As file you have to select an HTML file with the embedded video.

Example of an HTML file with embedded video stream:

The HTML files are preferably stored in the BMP directory (images).

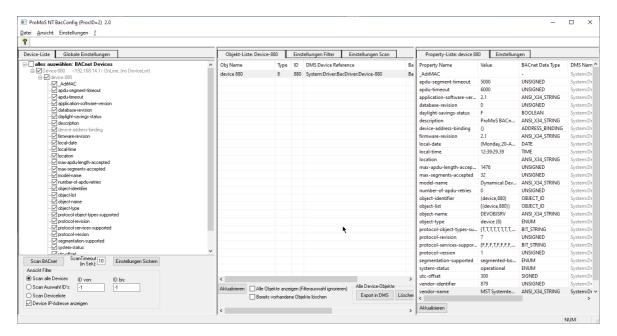
Remark:

This function is currently still experimental. It will certainly be optimized in the future.

3.4 Version 2.0.107.1

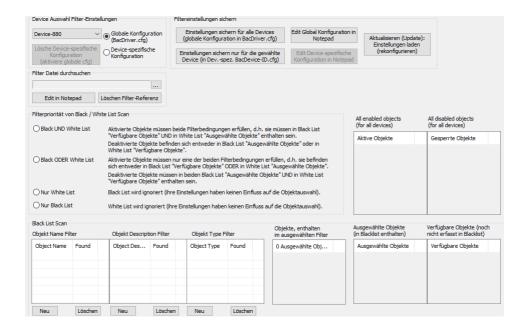
3.4.1 New modul: BACConfig

The BAnet driver configuration is now additionally supported via a Windows tool, so that the configuration does not have to be realized exclusively via the configuration file.



With the configurator the BACnet can be scanned and all attributes can be viewed.

Settings can be made directly in the configurator:



3.4.2 GE: Properties window over multiple objects

The attribute window no longer shows the last selected object, but all common attributes of all selected objects.



This makes it possible to configure attributes over several drawing objects simultaneously. Initializations are excluded from this.

3.4.3 SNMPDriver

The SNMP driver has been completely rewritten and has many more features.

Protocols

- SNMP Manager
- SNMP Trap Manager
- SNMP agent

The SNMP driver has the following main features:

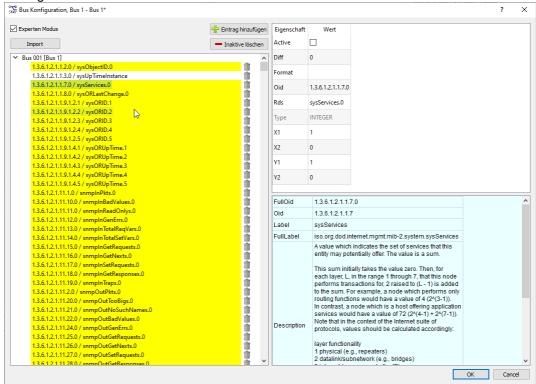
- Any protocol with UDP or TCP connection possible
- Each protocol supports SNMP versions 1, 2c and 3

- Automatic detection of agents in a network (Manager)
- Automatic scanning of OID's (Manager)
- Support of MIB files as detailed information on individual OID's and for automatic creation of configurations
- · Unlimited number of bus configurations
- Integrated user tables for SNMP V3
- Simple commissioning (through IP scan / OID scan)
- CSV import of configurations
- Scaling of values
- Monitoring of the drivers (status in the DMS)
- Fast data retrieval, minimum poll time Manager: 10ms
- · Conversion of the configuration of the "old" SNMP driver

Configuration options:

- Via the tray icon menu "Configuration
- Using a text editor (.ini files)
- Using CSV Import





All SNMP attributes of a device can be scanned and displayed in a list. The data points important for communication can be easily selected (double-click with the mouse).

4 What happens next with ProMoS NT?

We are asked again and again how to proceed with ProMoS NT. For MST it is clear that we want to continue developing this software. If only because we run more than 600 control systems in virtual environments for our customers and also have to update them regularly. We will continue to maintain the current version 2.x **until at least 2032**. Customers will therefore continue to receive updates with error corrections, improvements and new functions.

We are currently working on a completely new version (working title ProMoS NG - name will probably still change). Even if the version is completely rewritten, this does not mean that existing ProMoS installations can no longer be updated. For example, the new DMS can import all data points from all installations from the last 20 years. The same will be true for process images and driver configurations.

Here are a few keywords about the new version (will be available in 2022 at the earliest)

- Almost 100% compatible with the current version (through automatic format conversions). Applies
 to databases (including historical data), as well as engineering data (images, driver configurations,
 etc.)
- Latest technologies (communication within the modules via JSON/REST interfaces
- Runs on Windows 10, Windows Server and Linux
- Under Windows, databases and drivers run as a Windows service
- Configurations (e.g. drivers, AlarmManager etc.) are realized exclusively via a web interface, since services do not have a user interface.
- Internet Security
- Integration into the EDL portal (will also remain possible as a stand-alone installation)

DMS (already implemented)

- Supports as communication JSON-API as well as the existing socket communication
- Control functions no longer need to be compiled
- Control functions can have any number of parameters (also constants)
- Runs as a Windows service and under Linux (Ubuntu)
- Several instances of the DMS can run on the same PC/VM
- · Completely new log functions
- Web interface for operating the individual data points (insert, mutate, delete, attributes). The structure is multi-DMS-compatible.

still open:

- User administration (will be completely rebuilt with groups etc.)
- Multilingualism (German, English, French and Dutch)

PDBS

Here, tests with various database systems are underway (among others, InfluxDB has already been implemented).

Driver

All drivers that have been developed over the last years are already executable under Linux. Adjustments are only to be implemented in the frontend.

The following new drivers are planned:

- OPC UA
- KNX (depends on interest currently there are very few customers who have expressed interest)
- BACnet IP (will be implemented completely new is also already in development)

Alarm Manager

Becomes a new service with all alarm functionalities (also with API to allow access to external systems). Currently the functions are distributed between PDBS and ALMMng. This will be completely separated in the future.

Protocol and HDA Manager

Won't be of this kind anymore. Historical data is managed directly via the DMS.

GE

Drawing the images will be possible directly in the browser. Alternatively, the GE can continue to be used

Web server (incl. alarm viewer, protocol viewer etc.)

The pWeb as well as the pWA were completely written by MST. The new web server will be a standard web server and will also support encrypted communication.

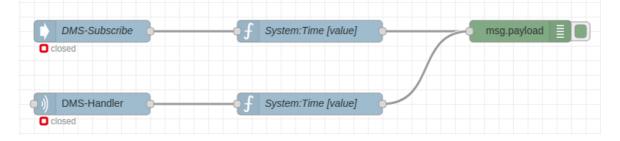
Engineering

It is planned to abandon the many operating screens (will still be possible, but hardly makes sense anymore). Attribute windows will now be available, which will also have adapted input options according to the data type (e.g. calendar, timers, etc.). These will have a fixed appearance, but will be configurable (e.g. according to user rights). Dynamic displays (BACnet) are also supported. Tools such as pList, oList will be available as browser applications.

Code generator

We will extend the code generator in the direction of IEC 61131-3, so that the new SAIA PLC generation can also be supported (and also other PLC systems).

5 Interface to NodeRed



There is a NodeRed connector to process data from the DMS directly in NodeRed (read, subscribe and write).

Further information is available at: https://github.com/MST-Systemtechnik/node-red-contrib-promosnt-connector

In Github there are several examples besides the source code.

6 Updates

Versions from version 1.5 onwards can be updated (usually up to 10 years after discontinuation of sales).

Older versions (up to 1.4) must be purchased new. An update at reduced costs is no longer possible.

The project data can be transferred (with very few exceptions in the GE) from up to version 1.2 (compatible since 2001).

6.1 Obtaining updates

Updates ProMoS NT

Updates can be ordered at any time from

MST Systemtechnik AG Airport Business Center 60 CH-3123 Belp

Tel.: +41 31 810 15 00 Fax: +41 31 810 15 05

info@mst.ch

or

MST System Solutions GmbH Alsterufer 20 D-20354 Hamburg

Tel.: +49 40 99999 4200 Fax: +49 40 99999 4299 info@mst-solutions.de

Updates Visi.Plus

Updates can be obtained from SAIA until the end of 2020. From the beginning of 2021 Visi.Plus updates can also be obtained from MST (as ProMoS NT).

6.2 Versions

The first installations with ProMoS NT were put into operation in spring 1998 (Version 1.0).

Year	Version	ultimate version
2001 - 2004	version 1.2	
2004 - 2008	version 1.3	
2008 - 2010	version 1.4	1.4.1.106 (August 2010)
2011 - 2013	version 1.5	1.5.1.47 (June 2013)
2013 - 2014	version 1.6	1.6.1.27 (April 2014)
2014 - 2019 *1	version 1.7	until the end of 2022
2017 - 2019 *2	version 2.0	until 2032 Compatibility with newer versions

^{*1} Will not be further developed - only error corrections

Main difference between version 1.7 and 2.0:

- Longer DMS names (extended from 80 to 160 characters)
- New data formats PDBS (Float->Double, Timestamps work also after 19. January 2038 (overflow seconds since 01.01.1970) still further)

Comment

If a new version is released that is compatible with the previous version, we reserve the right to shorten the support period for the respective versions.

On average a version is supported for about 10 years (with updates for error corrections).

7 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 does not concern ProMoS errors or improvement suggestions.

Support packages can also be purchased.

Please request a price list and news letter from info@mst.ch or info@mst-solutions.de.

Current information can be found at www.promosnt.ch.

8 SAIA Visi.Plus

Unfortunately SAIA will officially support the Visi.Plus product only until the end of 2020. SAIA recommends the use of the Supervisor.

We offer all SAIA Visi. Plus customers from now on

- email support
- phone support
- On-site support
- Trainings

^{*2} Current version - under further development