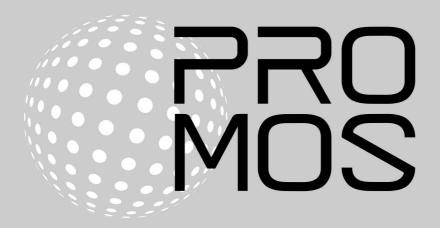
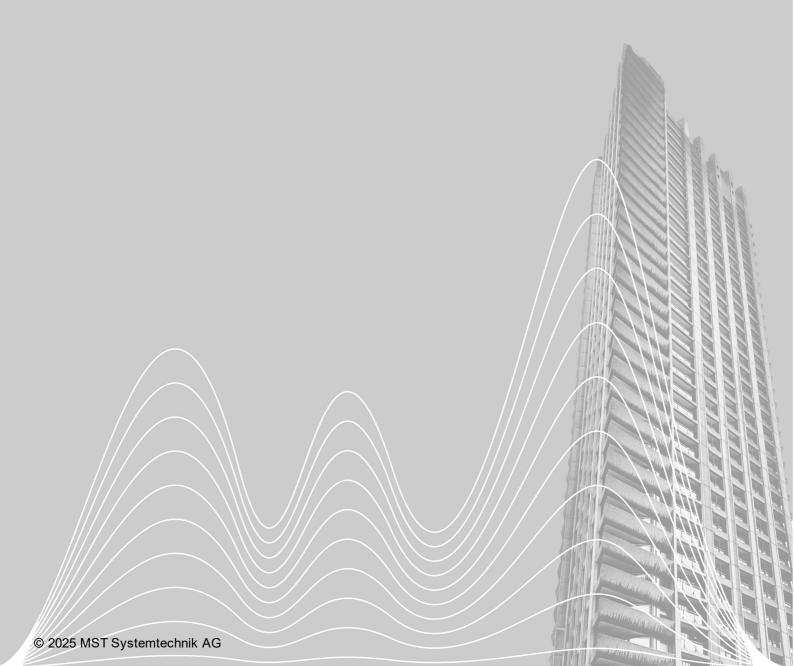
# Update description





## Contents

| 1 | ProM                    | oS NG   | 3   |
|---|-------------------------|---|-----|
|   | 1.1                     | What is ProMoS NG?  | . 3 |
|   | 1.2                     | The strengths of ProMoS NG  | . 3 |
|   | 1.3                     | Why ProMoS NG?  | . 3 |
|   | 1.4                     | Platforms   | . 4 |
|   | 1.5                     | Modules   | . 4 |
|   | 1.5.1<br>1.5.2<br>1.5.3 | Communication modules Visualization and HMI modules Process data management | . 5 |
|   | 1.5.4                   | Control and automation logic  |     |
|   | 1.5.5                   | Security modules  |     |
|   | 1.5.6<br><b>1.6</b>     | Diagrams - successor to pChart  General information                         |     |
|   | 1.7                     | Training courses  |     |
| 2 | ProMoS NT               |   |     |
|   | 2.1                     | Introduction  | 11  |
|   | 2.2                     | Corrections/improvements/new features                                       | 11  |
|   | 2.2.1                   | Version 2.24.110.29   |     |
|   | 2.2.2                   | Version 2.24.110.30   |     |
|   | 2.2.3                   | Version 2.24.110.31   |     |
|   | 2.2.4<br>2.2.5          | Version 2.24.110.32<br>Version 2.25.110.33                                  |     |
|   | 2.2.5                   | Version 2.25.110.33 Windows Server 2025                                     |     |
| 3 | Supp                    | ort 1   | 15  |

#### 1 ProMoS NG

Welcome to the future of automation! With **ProMoS NG** (Next Generation), we are redefining the boundaries of efficiency, flexibility and connectivity in process and building automation. Our platform has been developed from scratch to master the challenges of modern automation projects - while meeting tomorrow's requirements today.

With ProMoS NG, you are not just at the cutting edge - you are actively shaping the future of automation. Join us and experience what's possible!  $\mathscr{Q}$ 

#### ProMoS NG is available to selected integrators for productive systems.

There are currently over 60 systems - one of them with more than 60 PLC systems - some of which have been successfully in operation for several years. The system is stable.

We thought long and hard about the right time for the market launch of ProMoS NG. New tools and ideas were constantly being added that needed to be integrated into NG. In the end, we realized that full completion was hardly realistic in the foreseeable future - possibly not even in ten years. We therefore decided to release the stable runtime version.

#### 1.1 What is ProMoS NG?

ProMoS NG is the direct successor to ProMoS NT and is largely compatible.

The state-of-the-art, modular and scalable software platform was specially developed to meet the requirements of integrators, plant operators and engineers. Its goal: to make complex automation projects more efficient, faster and more robust.

With a unique combination of powerful functions, open standards and high user-friendliness, ProMoS NG optimizes processes in infrastructure, the process industry and manufacturing. The platform enables seamless communication and maximum efficiency.

## 1.2 The strengths of ProMoS NG

- Modular and flexible: Adapts perfectly to your requirements from small systems to very large, complex installations.
- Future-proof: Supports open standards and enables simple integration into existing systems.
- Performance-optimized: Fast processing of data and reliable communication in real time.
- User-centered: Clear and intuitive operation ensures fast commissioning and a short training period.

## 1.3 Why ProMoS NG?

The automation landscape is changing faster than ever. Companies need to react more flexibly to market requirements, use technologies efficiently and at the same time guarantee maximum reliability. This is exactly where ProMoS NG comes in:

- It combines proven technologies with innovative approaches.
- It reduces complexity without sacrificing functionality.
- It offers a clear and future-proof migration concept for existing systems (ProMoS NT PromoS NG).

#### 1.4 Platforms

ProMoS NG can be installed on the following platforms:

#### Windows (64 bit)

- Windows Server (2019, 2022, 2025)
- Windows 11

#### Linux (32/64 bit)

Ubuntu (current LTS versions) Debian Raspberry Pi OS OpenWRT (32 bit only)

#### **Container platforms**

Docker (for container-based installations) Kubernetes (for orchestrated deployments)

#### Hardware platforms

x86/64-based systems

- · Standard industrial PCs
- Server hardware for virtualization and high availability

#### **ARM-based platforms**

- Raspberry Pi and derivatives (e.g. for smaller, cost-effective applications)
- Industrial ARM controllers (e.g. for edge computing or PLC control, e.g. Weidmüller M3000/M4000)

#### 1.5 Modules

The modular components of ProMoS NG enable a customized solution for every automation requirement. The platform can be flexibly expanded so that it grows with your projects and requirements.

#### 1.5.1 Communication modules

The basis of every automation platform is the ability to communicate with a wide variety of devices and systems. ProMoS NG offers a wide range of options here:

#### **OPC UA Client\***

Supports platform-independent, standardized communication with controllers, field devices and other systems. OPC UA is the future of interoperability and ensures seamless data exchange in heterogeneous environments.

#### Modbus TCP/RTU

Ideal for integrating older but proven industry standards and modern devices.



#### **PLCHandler\***

Enables direct communication with controllers from leading PLC manufacturers such as Wago, Weidmüller, without the need for additional middleware.

#### **MQTT**

Perfect for IoT applications. This lightweight communication standard allows data to be exchanged between devices in real time.

#### **BACnet (in planning)**

Specially designed for building automation to integrate HVAC systems and more.

and approx. 20 other communication drivers.

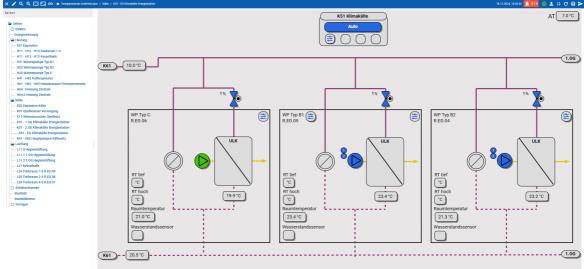
\*Released in January 2025, the other drivers will follow in the course of the year.

#### 1.5.2 Visualization and HMI modules

These modules offer comprehensive options for monitoring and controlling processes:

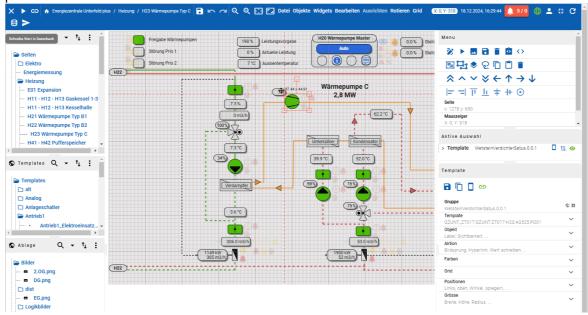
#### Web HMI

Thanks to HTML5 technology, processes can be visualized platform-independently on any device with a browser - whether PC, tablet or smartphone.

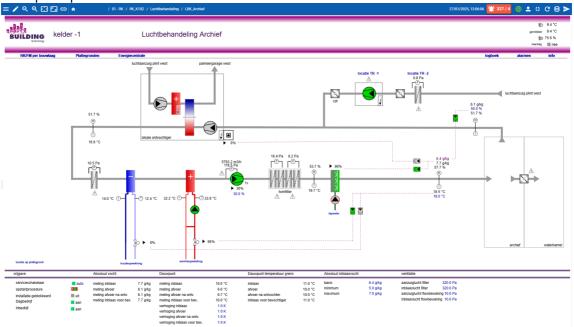


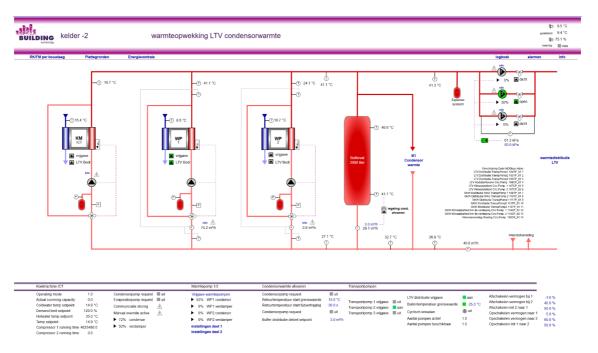
#### Designer

An intuitive tool for creating individual process screens and dashboards for monitoring KPIs, process parameters or alarm statuses.



Example of process screens:





#### Alarm and event management

This module enables the structured display and management of alarm lists, event histories and notifications. Critical conditions can thus be identified and rectified at an early stage.

The alarm viewer enables direct jumps to the corresponding process screens and access to intervention texts.

#### 1.5.3 Process data management

Data is the backbone of every automation platform. ProMoS NG offers powerful modules for recording, processing and analyzing process data:

#### **DMS - Data Management System**

Collects and stores process data in real time for later analysis. The data can be exported in common formats such as CSV.

#### Alarm management

The alarm management in ProMoS NG enables the efficient monitoring, management and logging of alarm signals in order to be able to react quickly to malfunctions and safety-relevant events (incl. collective alarms, alarm suppression and intervention texts).

#### Logs

In ProMoS NG, all relevant system events and processes are logged in detail to ensure a complete history for analysis, troubleshooting and compliance purposes.

#### Historical data acquisition

A specialized module for long-term storage and fast retrieval of historical data. This is crucial for the traceability and optimization of processes.

#### Data analysis

Modern analysis tools can be used to identify and visualize trends, patterns and correlations in the data. This facilitates well-founded decisions. Machine learning is also used for this purpose.

#### 1.5.4 Control and automation logic

ProMoS NG is not just a data collector, but also offers extensive options for controlling and automating processes:

#### Script engine

Developers can create customized control logic. The common scripting language JavaScript is supported in order to implement specific requirements quickly and flexibly.

Example: Calculation of abs. humidity using temperature and relative humidity:

Validieren

#### Scheduler

Planning and execution of time-controlled tasks such as switching operations, reports or data exports.

#### 1.5.5 Security modules

Safety has the highest priority in automation. ProMoS NG integrates extensive security functions:

#### User and rights management

Fine-grained access control based on roles and authorizations to control access to sensitive data and functions

#### TLS encryption

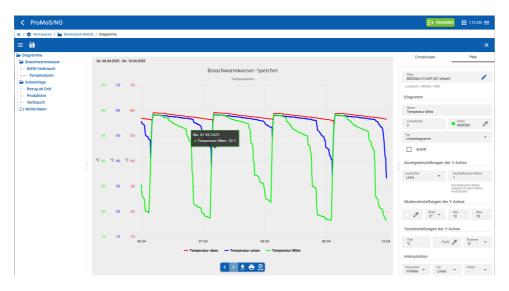
All communication channels are protected by modern encryption techniques to protect data from unauthorized access.

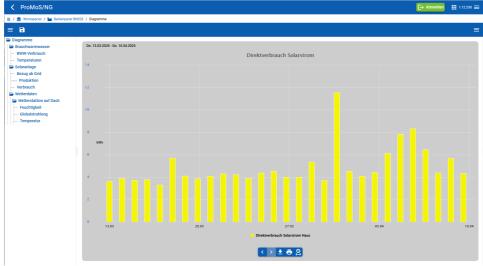
#### 1.5.6 Diagrams - successor to pChart

The successor to pChart (NT) in ProMoS NG enables an even more versatile and powerful visualization of historical data. With this new program, users can visualize any data from multiple DMSs (Data Management System) as line or column charts. This feature provides a user-friendly way to visualize trends, correlations and changes over defined time periods.

The charts can be configured as required to display various metrics or measured values clearly and precisely. The presentation is flexible and enables a quick analysis of process data in order to make well-founded decisions and carry out optimizations. In addition, the diagrams can be easily

integrated into reports to share the results with other users (download as jpg, png, svg, pdf, xls and csv).





## 1.6 General information

Further information at promosng.ch.

Download current versions: **Download**.

## 1.7 Training courses

| Training dates   | Location     | Status                 |
|------------------|--------------|------------------------|
| May 22/23, 2025  | CH-Belp      | Places still available |
| June 04/05, 2025 | CH-Belp      | places still available |
| July 03/04, 2025 | DE - Hamburg | seats still available  |

| Training dates     | Location | Status                 |
|--------------------|----------|------------------------|
| August 13/14, 2025 | CH-Belp  | places still available |

Duration 2 days, from 09:00 to 17:00. Lunch break from 12:45 - 14:00 Costs: Fr. / € 960.- per person for 2 days incl. meals.

#### For your information:

The annual MST Technology Days will take place on September 11/12. Reserve the date now.

#### 2 ProMoS NT

#### 2.1 Introduction

With the latest releases of versions 2.23.110.29 to 2.25.110.33, we want to ensure the reliability and user-friendliness of our software. These updates focus on stability and fine-tuning and are provided as part of a service pack. The releases focus primarily on corrections to existing functionalities as well as minor but significant improvements developed on the basis of customer feedback and internal analysis processes.

The long-term plan is to provide ProMoS NT with continuous support and maintenance updates until 2032. While the system will be carefully supported throughout this period, the focus is primarily on ensuring security and functional stability; however, significant system enhancements or new drivers will not be included in the update process.

In order to keep the overview up-to-date and to guarantee our users a seamless transition in the future, we ensure that projects that are currently based on ProMoS NT can be migrated or upgraded to the more advanced ProMoS NG platform at a later date with little effort. This approach offers users flexibility and solid future security.

With this in mind, users are advised to consider ProMoS NG for future new projects from next year at the latest. ProMoS NG represents the latest innovation within our product line and is designed to meet the requirements of modern automation and control environments and to go significantly beyond known standards in the sector.

### 2.2 Corrections/improvements/new features

The following chapters are dedicated to a detailed list of the corrections and optimizations made. Since the release of the last software versions, we have introduced the first modules of ProMoS NG. Important updates that specifically address these new ProMoS NG communication modules are also included here.

For users who would like an up-to-date overview of all known issues and the associated corrections, there is the option of visiting the official website https://www.promosnt.ch/de/downloads/known-issues. This online resource provides the latest information and is updated more regularly than the update information provided in PDF format. There are also ongoing additions and notes, even between regular software updates, providing a timely and comprehensive source of information for users.

#### 2.2.1 Version 2.24.110.29

Version from 15.08.2024

#### **AlmMng**

• Message field for automatically closing error messages has been added

#### **AlmView**

The column "Acknowledge" confirms the alarm correctly.

#### **BACDriver**

• Export BMO/VLO based objects even if structured view object scanning is enabled.

- If PushUpBMOName could not evaluate the VLO name correctly, BacDriver issues a corresponding warning.
- If DS-RPM is not supported by the device, DS-RP is used to read the properties.
- Support of a special manual switching functionality if BacDriver is running in a redundant system environment.
- BACnet statistics alarm group in BMO.dms has been changed back.
- No error log when using the BACnet standard port, as the BacDriver functionality is given anyway.
- If a device is accessible via non-boradcast mode, the device status is also displayed.
- The data list of a calendar object is now written to the device in the correct decimal order.

#### **DMS**

• The BMO path search has been improved

#### **GE**

- Tooltip in runtime mode has been corrected.
- Levels are set correctly for reinitialized objects.

#### **GE2XML**

- Correct analysis of the ITA element.
- The decimal point is replaced by the correct decimal point.
- Correction for multiple switching values.
- The global map is used to analyze access rights.

#### **KNXDriver**

- Further KNX types are supported.
- The path to the remote project has been corrected.

#### MalmCfg/MalmMng

• LF in text and subject of the e-mail can be replaced by CR+LF.

#### **MBusDriver**

Additional configurations for AMT, ECS and SON

#### oList, parList, pList

- A TCP socket connection to the DMS can now also be used.
- The appearance and handling of the DMS/PDBS dialog have been changed.

#### **PrtMng**

Correction of the PRT list from DMS via JSON.

#### pUser

• The functionality for retrieving/saving the "user.pms" file of the project has been revised.

#### pWA

- Correct analysis of the project name with spaces.
- Correction of layers for superimposed images

• Tooltip of the lib object is not displayed on a plot object

#### 2.2.2 Version 2.24.110.30

Version from 31.10.2024

#### **AlmMng**

- · Protocols for adding new alarms are adapted.
- New parameter "CurrentTimestampForAlarms" for setting Alarm1: Activates a correct timestamp.

#### **BACDriver**

Program status error fixed.

#### GE

- Reinitialization of library objects has been implemented.
- Symbols that are <= 1px without initialization are no longer saved.
- Multiple initialized symbols are checked to see if all options are initialized and are only skipped when saving if all their names are empty.
- Correction of the %s format for the strings.

#### MalmMng

- The alert format for HTTP requests can be retrieved from the MALM\_XXX group (the #MALM GRP FORMAT# flag must be used in the HTTP request string).
- The URL encoding for HTTP requests has been corrected.

#### pCalc

• The update interval for HDA is now freely definable.

#### pChart

The export in headless mode has been improved.

#### **PDBS**

- Error with invalid timestamps has been fixed.
- Various functions of the application have been revised.

#### **MQTTDriver**

- Implementation of "subscribe wildcard" and publication of nested DMS data as JSON.
- Fixed an error when replacing the search term in the template.

#### **KNXDriver**

- · Some missing data points are skipped during logging.
- · Logs improved.

#### **MailDriver**

- New format for LOYTEC csv.
- Additional format for recognition and timestamp for CSV2.

#### **MBusDriver**

- New configuration for SON.
- New configurations for IMT.
- New definitions for SEC.
- New definitions for SON.

#### **PCDDiver**

• Incorrect user IP setting corrected.

#### pWA

- The size of the pop-up window is fixed.
- The title text of the y-axis labels is placed correctly.
- The size of the Highcharts component is set.
- The visibility of objects is set.

#### 2.2.3 Version 2.24.110.31

Version from 25.11.2024

#### **BACDriver**

• Object name corrected for Bacpushupbmo=3.

#### GE

- Layer setting for line object is fixed.
- Fixed crash after several image changes.

#### MalmMng

The registration of malm points has been revised (accelerated).

#### pUser

• The customization of the remote user.pms file has been revised.

#### **GE2XML**

• The parsing of the ITXN type has been corrected.

#### **MBusDriver**

• New definitions for AMT, NZR and SON.

#### **MQTTDriver**

• Publishing of JSON payload fixed tree struct data from dms to valid json corrected.

#### 2.2.4 Version 2.24.110.32

Version from 02.01.2025

#### **BACDriver**

- Date/time display from controller in pWA improved.
- Scheduler data types improved.

#### **OPCDriver**

• Crash when generating an opc.ini file fixed. Occurred with OPC servers with over 20,000 tags.

#### **MBusDriver**

- Better detection of the V2 communication protocol.
- New counters added: ACW and HAG

#### 2.2.5 Version 2.25.110.33

Version from 03.02.2025

#### **DMS**

• "Critical section" is removed from a license server check. Could lead to blocking.

#### GE

• Levels are set correctly for nested, reinitialized objects.

#### **pChart**

• The unit of the DP can be exported as a header to a csv file.

#### **MailDriver**

• New parser for Onnosolv CSV.

#### **GE2XML**

• Unnecessary protocols are removed.

#### **MBusDriver**

• New configurations for SON / SON\_v2.

#### 2.3 Windows Server 2025

We have tested version 2.24.110.30 extensively on Windows Server version 2025. As of this version, ProMoS NT can be used without hesitation.

## 3 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 suggestions for improvement.

Support packages can also be purchased (from 25 hours).

Current prices can be found at https://license.promosnt.com/.

Current information and registration for the newsletter can be found at <a href="https://www.promosnt.ch">www.promosnt.ch</a> or <a href="https://www.promosnt.ch">promosnt.com</a>.