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1 Introduction

With the latest releases of versions 2.23.110.23 to 2.24.110.28, 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 aim is to improve the user experience through continuous optimization of performance and user interface and to further establish ProMoS NT as a reliable tool in your daily work.

The long-term plan is to provide ProMoS NT with continuous support and maintenance updates until 2032. While the system will be accompanied with care 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 new projects from next year onwards. 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 MST Technology Days



The upcoming event day on Thursday, August 29, 2024, will cover a wide range of groundbreaking topics. The focus of this meeting will be on presenting and explaining the latest technologies and advanced methods in the field of engineering. Participants can look forward to in-depth insights into the workflow from the planning phase through to operation and maintenance.

A particular highlight will be the demonstration of mobile system operation using a smartphone and QR code - an innovation that promises seamless interaction with machines and system elements. Furthermore, the security of ProMoS NG with topics relating to encryption and certificates will be high on the agenda.

In addition, the ambitious topic of a CO₂-neutral city district will be presented, which will be of great

interest to both urban planners and environmentally conscious stakeholders. This presentation topic will be expanded in perspective by discussing application examples in the field of machine learning, which offer insights into the future of data-driven analysis and process optimization.

Another core topic of the day will be engineering within ProMoS NG, whose further development and new functions will be examined in detail. Participants can also look forward to an outlook on the further development of ProMoS NG, which will underline the future-oriented focus and adaptability of the software platform.

Meanwhile, the agenda for Friday, August 30, 2024, remains true to the EDL portal, with a wealth of topics that will once again discuss various interesting aspects relating to this central tool for energy data management.

ProgramProgram and registrationLink (German).

3 Corrections/improvements/new features

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

For users who would like an up-to-date overview of all known issues and the associated corrections, there is the option to visit 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.

3.1 Version 2.23.110.23

Version from 17.08.2023

AlmMng

• Date/time format changed to UTC.

ASCII export

• Filter option added, sorting of data points adjusted.

BACConfig / BACDriver

• Data for statistical evaluations added to recognize communication problems.

ChangePwd

• Minimum requirement for password guidelines implemented.

DMS

- Correction to format string #T.
- Additional format for time information (according to ISO8601). #G (%Y-%m-%dT%H:%M:%S.%i%z) and #g (%H:%M:%S.%i%z)

GE

- · Size management of screens in Runtime optimized.
- lcons with an extension of 0 pixels are no longer saved.
- Output of an AKS name corrected if it starts with a number.

GE2XML

- Correction for non-existent DMS data points in images.
- Default value is reset if the DMS name no longer exists.
- Path information for images corrected.

KNXDriver

- DPTAngle: Data type adapted (WOU)
- No double import of data points if they already exist.
- Correction when saving configuration changes.
- DataView error corrected.
- If no ETS configuration file is specified, an error message no longer appears.

Logger

• Addition and update of headers in the configuration corrected.

MalmCfg

- New encryption for mailbox login data
- Correction for SMS dispatch (AT+CMGS="Number").

MailDriver

- Correction for incorrect EML mail formats
- New options for ISN with IAKS

MBusDriver

- Extended counter definition for SON counters (version 72).
- Extended meter definition for ECS and SEN meters.
- New meter definition for KAM meters.

ModbusDriver

- DEBUG mode: New mode for setting up a Modbus connection without the values already being written to the DMS.
 - ATTENTION: This is the default setting.
- Hack for FRONIUS inverters that repeatedly send 0xFFFF by mistake.
- Correction for negative Register64dec and Register64dec32
- "First DMS Data to PLC" was hidden.
- · Fixed problems when saving the parity settings
- "System:Driver:ModBusDriver:..." extended with a "tag" to better distinguish which station is causing problems with multiple stations.

pChart

· New encryption for mailbox login data

PET

"Detail" tab display optimized.

ProjekctCfg

- Minimum requirement for password guidelines implemented.
- Filter for FBox symbols corrected.

pWA

- Minimum requirement for password guidelines implemented.
- INIT position of text objects corrected.
- Corrected duplicate display of values in tooltips for trend graphics.

pUser

• Minimum requirement for password guidelines implemented.

Setup

- Setup can only be executed if a valid license is available (so that it is not determined after an update that a valid license is no longer available).
- Setup is canceled if the warranty period has expired (1 year).

3.2 Version 2.23.110.24

Version from 17.08.2023

DMS

- License logs extended
- · License is checked again online before the demo license expires

GE

- · Empty icon names are no longer checked in autosave mode
- · Incorrectly initialized icons are no longer deleted on request
- Error during printing corrected
- The size of pop-up windows can be redefined
- · Dialog for checking icon initializations extended

GE2XML

- Correction when generating xges images (error came with version 2.23.110.23) ATTENTION: Images must be saved again in the GE
- · Correction when reading image sizes

KNXDriver

- Auto reconnect even after hours of failure
- · Communication errors are written to the DMS

PET

• Global settings are no longer stored in the registry

pmosfunc.dll

- Correction for Internet availability check (for license query)
- · Correction for project path import

3.3 Version 2.23.110.25

Version from 27.10.2023

BACDriver

- Statistics functions expanded (for monitoring communication)
- Support CEV from program-state

- COV resubscription, even if the devise is not available when the driver is started
- New BMO file for BACnet included in the setup

GE

• Revised dialog for starting external programs

GE2XML

- Default value for "localhost"
- IDIV, ISA, ISB handling adapted
- Improvement for multi-DMS variables (not available locally)
- URL0s / paths and "Datapoint not found" corrected
- Display user name corrected

IECDriver

• New: (dummy) time synchronization

KNXDriver

- · Accelerated startup of the driver
- Traylcon display optimized

MailDriver

- Special characters "<" and ">" for data storage (filename) eliminated
- Order %ISN and %IAKS changedAdditional definitions for AMT, EMU, KAM and ZRM

ModbusDriver

• Data type changes in DMS adapted

MQTTDriver

• Status API implemented (NG)

PET

- PCD folder is created automatically if not available
- ProjectCfg Dongle ID is read from JSON file

pWA

• Possible crash fixed

• nmap requests are interpreted correctly. Heap buffer overflow intercepted

3.4 Version 2.24.110.26

Version from 31.01.2024

ChangePwd

- Crash when replacing a user fixed
- · Remote user file view improved

DMS

- Crash with pipe connection fixed
- ActCode uses licinfo.cfg
- Unnecessary log file entries eliminated (also dingle entries)
- · License is interpreted correctly if there is initially no Internet connection

• Error message after 10 days without license server connection

DeviceDriver (General)

• The IDs are reassigned each time a new license is imported. This could lead to an overflow

GE

- Correction layer for multi-DMS applications
- · Correction of catalog display (saving on/off)
- lcons smaller/equal to 1 pixel are automatically deleted
- SetValue function corrected, coordinates adjusted
- Initialization background color corrected
- SetValue of type String corrected
- Various display problems from tests fixed

GE2XML

• URLs are checked again

IECDriver

· Possibility to suppress values for general queries. COT can be included

PET

• Crash with JSON connection fixed

ProjectCfg

- · Length of passwords limited to 32 characters
- Project name must not be empty
- Name NG removed (for Modbus)
- Start options MALM optimized
- Dot allowed in passwords (.)

pUser

· Correction when replacing user names

Setup

• mDriver removed from menu (new: ModbusDriver)

3.5 Version 2.24.110.27

Version from 14.02.2024

BACDriver

• More information added to error log file

GE2XML

· Image size is taken into account

IECDriver

Status server for NG implemented (NG)

KNXDriver

- Reading of text variables
- String type 16.xxx corrected
- Telegram counter implemented

MBusDriver

- Added more definitions for KAM counters
- Added more information for LUG counters

ModbusDriver

- Default IP address specified for slave station
- · Corrected connection types in server mode

pWA

• The height of the pop-up windows has been adjusted (browser-dependent)

3.6 Version 2.24.110.28

Version from 16.05.2024

BACDriver

- The driver no longer activates the active flag (NC)
- Consistent description of the [Alarming] section in the BacDriver configuration files

DMS

- Error in "childs" query is fixed
- System:NT:Disk:Drive X:Free:ALM data points can be saved
- WebSocket reception delay fixed
- · Parsing of the .pet file has been optimized

GE

- Incorrect DMS name check corrected
- Parsing of the .pet file has been optimized
- Error with automatic deletion of link objects has been fixed

GE2XML

• yTitle corrected if nothing should be displayed

KNXDriver

- Updated handling of changing the configuration file path
- Correct status update in the device column
- The comment column of the configuration dialog has been revised
- Fixed error with group states
- Remaining DB path can be handled correctly (NG)
- · Improved text for group error status

Logger

 A new flag has been implemented that makes it possible to write data to a new file for each logger tick

MailDriver

New format SILOVEDA format

MBusDriver

- New definitions for LUG counters
- New definitions for SIE (v2) counters

• New definitions for SIE and IME

MDriver (obsolete)

• The correct number of the license data points used is written to the DMS (BMO Modbus configuration is no longer counted)

PET

- Crash during "Update from registry" has been fixed
- An error when parsing the .pet file has been fixed

pmosfunc

- Replaces protected space with a normal space by parsing the INI data
- An error when parsing the .pet file has been fixed
- The DMS_GetFindMessageList function returns the entire list of messages found

PrtMng

• The complete list of PRT data points can now be retrieved from DMS via JSON

pWA

- Fix in display of trend curves
- Fix for IBW function
- Error with single quotation marks in AKS name fixed

4 ProMoS NG

ProMoS NG is on a promising path and is already demonstrating its potential in active MST customer projects. ProMoS NG is proving its flexibility and customizability with the successful commissioning under various operating systems, including Windows, Linux and OpenWRT.

Current work includes the creation of graphical templates for structured text objects, which complement the existing templates for NT. The PLC-independence of the templates is particularly noteworthy: they are compatible with various controllers, including Codesys, Beckhoff, Wago, Weidmüller, Qronox and Logicals.

This level of compatibility simplifies and standardizes the engineering approach and workflow by providing users with a consistent platform, regardless of the manufacturer of the programmable logic controller (PLC). In addition, ProMoS NG is already undergoing tests with regard to the generation of PLC logic in cooperation with Codesys, a strategy that is geared towards the requirements of practical applications.

For the use of the code generator, ProMoS NG was designed in such a way that the top-down approach delivers optimum results. At the same time, its interaction with the web version of Codesys planned from 2024 will be continuously adapted and improved in order to create the best possible conditions for users.

Despite these advanced development options, conventional working methods in a hybrid mode, as known from D SAIA, will continue to be fully supported. ProMoS NG thus guarantees users both conventionality and innovative further development, with the focus on further improving the workflow.

4.1 Template objects

The variety of templates available in the code generator enables a wide range of applications to control and monitor various industrial and technical processes. Users can choose from an extensive collection of templates that can be configured to suit their needs. These templates serve both simple data visualization tasks and the execution of complex regulation and control functions.

With the templates for analog measurements, such as MES01, users can visualize and monitor measured temperature or pressure values, for example. Templates such as AVG01 can be used to determine the average value of certain measurements over a defined period of time, which is essential for long-term monitoring and control tasks.

Example:



For the motor control area, there are templates such as MOT01 and MOT02, which enable the switching on and off of single or two-stage motors. The MOT10 template offers the possibility of controlling motors precisely by means of a frequency converter, which is particularly advantageous for drive technologies that require speed control.

Example:



With valve control templates such as VEN01, VEN02 and VEN03, users can regulate rotary actuators of continuous valves, butterfly valves and control valves much more precisely as required. These templates are of great benefit in the automation of HVAC systems and in process plants, where precise flow control is crucial.

Example:



More complex controls, such as the PID control enabled by PID31 and PID32, offer advanced features to maintain stable process control. Users can adjust the control to different setpoints, ensuring operational efficiency and product quality.

In addition, templates such as SEQ04 can be used to create customized sequences with multiple outputs for use in complex control tasks such as the operation of ventilation systems.

An intelligent authorization system within a control system is essential to ensure functionality and safety. Integrators, who are often specialists in commissioning and configuring systems, require extensive access rights so that they can set all the necessary parameters. These rights typically include the configuration of measuring points, the storage of threshold values and the configuration of control logic.

In contrast, the operator only has access to the data relevant to them. This not only ensures clarity and user-friendliness, but also system safety, for example by protecting against unintentional operating errors. The operator can read the necessary information, monitor process statuses and carry out basic operating interventions without having to access deeper configuration levels.

The flexibility of the operating panels to adapt dynamically to the relevant information is a significant advantage in this context. Operators are not overwhelmed by irrelevant data, but can perceive context-related information and control elements, which simplifies the handling of the system and increases the efficiency of the process sequences.

This leads to a clearly defined distribution of roles within the operating concept, whereby each user group - from the integrator to the operator - is optimally supported in their respective function and the system can be managed sustainably and safely.

Overall, the code generator with its diverse collection of templates provides a powerful basis for a wide range of use cases in building automation and technical process control.

4.2 Codegenerator

ProMoS NG code generator: A tool for the standardization of PLC programming processes

Introduction

The programmable logic controller (PLC) plays a central role in building automation. However, the complexity of PLC programming, the variety of systems used and the different programming languages pose a considerable challenge. This is where the ProMoS NG code generator comes in: an innovative tool that enables a uniform and standardized approach to PLC programming.

Versatility of the ProMoS NG code generator

The ProMoS NG code generator can be used for a wide range of PLC systems, including

- Wago
- Beckhoff
- Weidüller
- SAIA Qronox
- Other Codesys-based systems (e.g. based on Raspberry Pi, but also virtual PLC systems)

Example of a generated code:



The system identification system (AKS) is also used in the structured text source code. A function block is called for each piece of equipment and its comment is also generated. The library is linked automatically.

Advantages of the ProMoS NG code generator

The use of the ProMoS NG code generator offers numerous advantages:

1. uniform, standardized procedure:

The code generator ensures a consistent programming methodology across different PLC systems. This reduces complexity and minimizes sources of error that can arise due to different programming languages and system architectures.

2. time savings and increased efficiency:

Automated code generation significantly reduces programming effort. Developers can concentrate on the essential aspects of application development, while the code generator takes over the standardized routines.

3. quality and maintainability:

The generated code meets defined quality standards and is therefore easier to maintain. Standardized code structures facilitate troubleshooting and error correction.

4. scalability and flexibility:

The ProMoS NG code generator is capable of handling projects of any size. From small applications to complex control systems, the code generator can be used flexibly.

5. interoperability and compatibility:

Thanks to the support of numerous PLC systems and Codesys-based platforms, users can easily integrate and expand their existing automation solutions. This ensures a high level of investment security and future viability.

6 Simplified training and knowledge management:

The standardized approach facilitates the training of new employees and the transfer of knowledge within the company. New developers can be trained more quickly as they do not have to deal with different programming languages and systems.

Conclusion

The ProMoS NG code generator represents a significant innovation in PLC programming. The unification and standardization of the programming process increases efficiency, reduces the susceptibility to errors and increases the quality of the software. For companies that rely on different PLC systems, the ProMoS NG code generator offers a future-proof solution that significantly reduces both development time and maintenance costs. In a rapidly changing building technology environment, the ProMoS NG code generator is an indispensable tool for modern automation technology.

4.3 Designer

The philosophy of the ProMoS system has evolved significantly and now includes a range of state-ofthe-art functions and improvements. The adoption of the basic ProMoS NT functions has led to a significant evolution by adopting the template object philosophy and introducing device-independent generation of operating screens for PC, tablet and cell phone. This provides greater flexibility and an improved user experience.

The ability to initialize attributes has been greatly expanded with NG, resulting in an even more precise and individual configuration. The edit and runtime mode allows users to not only view data, but also update it in real time, even in edit mode, which makes for a much more user-friendly experience.

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Noteworthy is the compatibility with ProMoS NT utilities such as PET, including PCD code generator, pList, oList and others. These utilities retain their functionality and are now part of the extended ProMoS NG system. However, the functionality will be integrated directly into ProMoS NG.

The improved designer in ProMoS NG makes it possible to realize process screens and dashboards in a much more flexible and versatile way than in the previous NT system. New additional functions such as auto-scaling, in which the image dynamically adapts to the size of the output device, offer great potential for automation-based visualization.

The system now also supports the multi-user function. This means that several users can work on the same project at the same time from different PCs, whereby working on exactly the same image at the current time is still excluded. These functions facilitate collaboration and significantly increase the efficiency of project work.

As digitalization progresses, the ProMoS NG system is being specifically adapted to modern requirements. One of the key innovations is that all operations are now carried out exclusively via the web browser. This not only increases accessibility, as special software installations are no longer required on the end devices, but also platform independence, as users can now access the functions of ProMoS NG from any device with Internet access and a compatible browser.

This type of implementation promotes flexibility and user-friendliness. It makes the system as a whole lower-maintenance and technologically future-proof, as adjustments and updates can be carried out centrally and take effect immediately for all users.

This innovation makes the system predestined for use in cloud-based environments, which offers the advantages of scalability and data centralization. Furthermore, the use of common web technologies ensures responsiveness and accessibility of the user interfaces, so that the user interfaces are always displayed optimally regardless of the end device used (desktop PC, tablet or smartphone).

The exclusive use of web browsers therefore represents a decisive step towards a future-oriented, interoperable and user-oriented control and monitoring solution.

4.4 Alarms and logs

The alarm management functions are an essential part of any modern control system, and it is clear to see that both interactivity and configuration options have been significantly improved in ProMoS NG.

First of all, the revised alarm list offers users significantly more setting options. They can individually configure which information should be displayed and how it should be sorted in the list to ensure the fastest possible response and the most efficient overview in the event of an alarm.

In addition, the integration of intervention texts for alarms, which can provide immediate instructions for action or important additional information for responding personnel, is another important development. Such texts are often crucial in order to act promptly and correctly in critical situations. The intervention texts, which act as instructions for the users of ProMoS NG when alarms occur, gain in depth thanks to their own dedicated editor. This tool within the system makes it easy to create and edit intervention texts.

With a user interface that is customized for this purpose, users can create texts in various formats, depending on what information or instructions are most suitable. These texts can also be flexibly assigned to individual alarms or alarm groups, ensuring a quick and targeted response to specific events or system conditions. The integration of the editor for intervention texts directly in ProMoS NG not only simplifies the workflow, but also contributes to a higher effectiveness of the overall alarm management.

The two collective alarm groups in ProMoS NG offer improved organization and handling of alarms by creating the possibility to bundle certain alarms and selectively suppress them if required. This can be particularly helpful if several alarms can be traced back to a common cause and information overload is to be avoided as a result. The advantage of this grouping function is a clearer and more focused alarm display for the operating personnel.

It is also important that any alarm suppression is clearly indicated in the alarm list. This transparency ensures that users are aware of the status and possible suppressions in the system at all times. This increases both security and the traceability of measures initiated in the alarm management process.

4.5 Upgrade ProMoS NG

The transition from the previous NT to the new system is seamless with the introduction of ProMoS NG, as existing customers have the option of transferring their existing ProMoS NT installations to the new platform. The use of special converters ensures that both historical data and process images can be transferred to the new format (almost) without data loss or loss of functionality.

The converters have the task of ensuring compatibility between the two system versions. They convert the data and images so that they look and can be operated in the new ProMoS NG system in exactly the same way as in the previous ProMoS NT. This is a significant advantage for users who are already familiar with the layout and functionality of the existing user interfaces, as the changeover will hardly be noticeable for them.

Example:

Display in ProMoS NT GE:





Users can therefore continue to use their familiar process screens without having to get used to new displays or operating concepts. This makes a decisive contribution to increasing acceptance of the new system among existing users and minimizing training costs.

The switch to the web-based ProMoS NG offers numerous advantages, but also some limitations that need to be taken into account, especially when it comes to specific functionalities that were previously available directly in the Windows-based system.

One of these limitations is the launching of Windows programs directly from the system. While this can be implemented directly in a Windows environment, the web browser does not provide a direct interface to local applications for security reasons.

There are also changes to the operation of trend screens, i.e. the display of historical data. The new features are aimed at adapting the display and management of historical data to the standards of today's web applications. This may require minor adjustments to existing screens in order to ensure optimal display and functionality within the new system. However, the effort involved is expected to be manageable, as adjustments are usually based on minor changes to the design or data connection.

Customers should have no concerns, as such adjustments can usually be made quickly and do not affect the core system. These minor modifications are disproportionate to the long-term benefits that a state-of-the-art, fully browser-based system brings, such as increased flexibility, improved user experience and seamless integration of new features and updates.

This means that with the implementation of ProMoS NG, not only are advanced features and a modernized user interface deployed, but also that investments and know-how built up over the years in ProMoS NT can be seamlessly and effectively transferred to the new system generation.

4.6 Machine Learning

ProMoS NG is setting new standards in the field of system control and monitoring with the introduction of the Building Intelligence (BI) module. This module represents real progress in intelligent data processing within the building services environment.

The BI module uses advanced machine learning algorithms to extract useful insights from large amounts of historical data. A notable feature of the module is its ability to perform automated calculations of threshold values. This means that the system is able to independently define and adjust the normal operating range by performing data analysis and "learning" from historical data.

ProMoS NG

Example of BWW load monitoring:



This innovation enables users of the ProMoS NG system to increase their process efficiency as critical safety and performance standards are dynamically managed and optimized. In addition, BI also makes it easier to generate forecast data that allows the future condition and behavior of plant systems to be predicted. This aspect of predictive management is crucial for maintenance, operational planning and energy efficiency.

ProMoS NG's ability to not only generate this data, but also to feed it directly into the control and monitoring process, takes plant automation to a new level. Users benefit from an advanced, datadriven approach that aims to increase operational safety, minimize energy consumption and reduce maintenance costs through preventive measures.

The newly integrated Building Intelligence (BI) module in ProMoS NG represents a significant enhancement for data analysis and process optimization, but requires appropriate computing power to perform its extensive functions. This is due to the complexity of the machine learning algorithms and the enormous amount of data that needs to be processed.

A powerful processor (CPU) and sufficient working memory (RAM) are fundamental requirements for the execution of machine learning models and the associated calculations. On devices with limited resources, such as a simple router operating system, such computationally intensive applications would lead to performance bottlenecks.

The BI module is therefore specifically designed for server or cloud infrastructures that have sufficient CPU power and memory to provide complex data analyses and real-time forecasts.

4.7 Timeline

Intensive work is currently underway to integrate various engineering tools into a standardized user interface for the ProMoS NG platform. The integration of tools such as PET (Process Engineering Tool), pList and oList aims to increase user-friendliness and efficiency through centralized control. Test procedures for the redesigned operating panels and icons of the template objects are running in parallel.

In order to give interested parties and developers a taste of the possibilities and design of ProMoS NG, BETA versions have already been made available for various operating systems. These early versions are primarily for testing and evaluation purposes and are intended to provide an initial insight into the future functions of ProMoS NG. However, users should be aware that these BETA setups are not yet suitable for use in real system environments. Basic functions are still subject to changes and enhancements, which may be made without prior notice.

Furthermore, the accompanying documentation is still under development and is not yet ready for final release. Users and developers working with the BETA versions of ProMoS NG should be aware that official support services and complete documentation are still pending.

For those interested in the development process and would like to get a comprehensive overview of the features of the new ProMoS NG, there will be an opportunity at the MST Technology Day at the end of August 2024. This event will provide a framework for demonstrating progress, clarifying questions and obtaining direct feedback from users and developers.

Looking to the future of ProMoS NG, the goal is still to schedule the official release for use in projects for the end of 2024. This will ensure that there is sufficient time to complete the development work, comprehensive test phases and final fine-tuning of the system before implementation in productive environments.

There are also plans to offer training courses to support users of ProMoS NG, which are scheduled to begin at the start of 2025. These training and further education measures are scheduled post-release to ensure that they are aligned with the final version and all features of ProMoS NG. The training courses are also intended to ensure that users are familiarized with the latest functions and changes to the system and are able to exploit the full potential of ProMoS NG for their specific requirements.

The preparation of the training materials and course plans is expected to run in parallel with the development of the final versions of ProMoS NG, so that the materials will be ready for use as soon as the system is rolled out. This planning will ensure that users and project teams have all the necessary information and skills to ensure a smooth transition and successful operation when they start using ProMoS NG.

5 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 befound at https://license.promosnt.com/.

Current information and registration for the newsletter can be found at<u>www.promosnt.ch</u> or <u>promosnt.com</u>.