Subject: Release of ProLink® III v4.1 Software

Overview

This documents the release of new software for the ProLink® III application. The version of this software is 4.1. The build number of this software release is Build #354 Revision 4. Download links for the upgrade-only release can be found on the ProLink III Updates web page referenced below.

Products Affected

ProLink III software application.

NAMUR NE 53 Rating

This release is rated at NAMUR NE 53 Level 2.

Symptoms

The following symptoms may appear with previous versions of ProLink III software:

- 1. For the 2700 Profibus PA rev 2.0 transmitter, the Profibus configuration tab is not available. Instead, it shows up for device firmware v2.2 and higher.
- 2. As of the ProLink III 4.0 release, it is not possible for users to modify the appearance and behavior of trend graphs. With prior ProLink III releases, a user interface dialog was provided for graph modifications.
- 3. For Coriolis batching devices, some configuration data cannot be changed while a batch is in progress, and attempts to change that data generates a Modbus exception. In such cases, a generic message indicating "transmitter rejected value" is shown. Instead, a message more specific to the batch configuration error should be shown.
- 4. For the Series 3000 NOC transmitter, the NOC well test and continuous test modes were not being supported properly for simulated and offline device connections. In particular, the well name string was not always being shown for these connection types.
- 5. For transmitters connected to a host system, such as the 2400S Profibus DP, 2400S DeviceNet and 5700 Ethernet transmitters, it's possible totals and inventories are reset by the controlling DCS while the customer is also using ProLink III to look at this data. To help avoid confusion, add a note on appropriate screens saying that totals and inventories are sometimes reset by an external PLC device.
- The fuel consumption variables Differential Mass Total (165), Differential Mass Inventory (166), and Differential Mass Flow (219) are not supported for basic and enhanced events. These variables should be removed from basic and enhanced events combo box lists.



- 7. For the 2700 transmitter connected to an 800 Enhanced Core Processor, the Transmitter Options tab would sometimes allow the Volume Flow option to be configured. It should always unavailable for this core processor type.
- 8. On the Device Information and Core Processor Diagnostics tabs, the Core Processor Unique ID of a connected core processor was either not being shown or was shown with an incorrect value.
- 9. The Core Processor Unique ID of a connected core processor is not shown as reference information in ProLink III configuration files.
- 10. When the 5700 transmitter is connected to a 700 core processor, the Meter Verification menu commands are available. Those menu commands should be available only when the 5700 transmitter is connected to the 800 enhanced core processor.
- 11. For all of the Density Calibration screens (K1, K2 and FD calibration), if the connected device is in critical fault then device firmware returns from the calibration run immediately without doing the calibration and without showing an error. ProLink III does not detect this situation and inform the user the calibration was not done.
- 12. In the custody transfer approved variables list, Average Density at Reference Temperature is mapped to PV code 19, but it should be PV code 223. Correct the mapping, and then add PV code 19 back in the list as Batch-Weighted Average Density. In addition, add Average Density at Reference Temperature, PV code 223, to the "Decimal Places for Petroleum Variables" list.
- 13. For the 1700 Analog device on the Discrete Output configuration screen, the Discrete Output Polarity and Fault Action data fields are missing.
- 14. For the 5700 Ethernet transmitter with v1.4 firmware, add support on the user interface to allow inventories to be started, stopped or reset from the device display.
- 15. For the 5700 Ethernet transmitter with v1.4 firmware, add support on the user interface to allow the device web server to be enabled and disabled.
- 16. For the 5700 Ethernet transmitter with v1.4 firmware, add support on the user interface for a new alert that notifies the user to change default logon credentials from the device defaults.
- 17. For the 5700 Ethernet transmitter with v1.4 firmware, add support on the user interface to show the device bootloader revision number.
- 18. It is not possible to connect with the Series 3000 ALTUS NOC device type 60 transmitter. The connection should succeed and show only the Modbus screen for device firmware v5.1 and higher.
- 19. For the 8712E magnetic flow meter device, scaling factor on the line size configuration parameter is not handled correctly. The line size is shown with a multiplier of 100 on ProLink III screens.
- 20. The 2000 Series PVR, TMR, TBR, and Fuel Consumption features are listed under advanced settings for 2700 simulated connections, but the features are not enabled so no feature specific process variables or menus are available.



- 21. For computers with two monitors, ProLink III messages to the user might show up on a monitor different from the one showing the main ProLink III application. This can be confusing to users.
- 22. For the 5700 Ethernet transmitter with v1.4 firmware, users are not aware of web server password complexity requirements. Add information to the Web Server Security screen explaining password requirements.
- 23. In the SMV Field Baseline wizard, Advanced Settings Meter Verification Parameters, the BL Temp Quad Coeff (register 3094) parameter is missing from the list.
- 24. In the SMV Field Baseline wizard, when working with the newest 5700 device family firmware and an attached 800 Enhanced Core Processor, sensor calibration data that is not recognized by the meter hardware results in all SMV parameters in the device being set to zero by device firmware. ProLink III does not detect this error nor communicate it to the user. Add an appropriate message on the affected screen so users will know what happened and how to fix it.
- 25. When using the SMV Run Test wizard with a device that has custody transfer enabled, ProLink III allows the user to pick an output behavior of Last Measured Value (LMV). However, LMV is not applicable when custody transfer is enabled in the device, so the LMV option should not be available.
- 26. For all 5700 family devices, when API is enabled in the device, assignment of Special Units to volume flow should not be allowed. Device firmware is also being updated to enforce this.
- 27. ProLink III log files for some locales are missing either 24-hour time format, or properly applied AM and PM indicators appended to the time value.
- 28. The Accumulated TBR Time variable is missing in device PVR feature support under some conditions. The logic for enabling this variable needs to be corrected.
- 29. For the 2700 IS device with v6.1 firmware and SMV enabled, alerts A034 Meter Verification Failed and A035 Meter Verification Aborted, are not present on the Alert Severity screen for alert programming.
- 30. For the 8732EM magnetic flow meter, the Pulse Width parameter used for frequency output configuration programming can be off by a multiple of 10. For example, an entered value of 2.5 shows up as 25.
- 31. Add the ability to configure the Core Processor Unique ID value when connected to a transmitter with attached core processor. Currently, a direct connection to the core processor itself is required to configure this parameter.
- 32. When Weights and Measures (W&M) NTEP is enabled and the security breach alert is active, several transmitters show a red status light while ProLink III continues showing green (no critical alert) status. ProLink III should show at least yellow (warning) status if NTEP is enabled and the security breach alert is active.
- 33. For the 2400S Analog device with v5.53 and higher firmware, if SMV mode 8 is commanded to run and the process aborts in the device, the abort message written by ProLink III to the .csv file should be "Fault Condition" instead of "Wrong Verification Enabled."



34. The IP address user interface (UI) control used in ProLink III sometimes disappears or becomes corrupted at some computer monitor resolutions. A different UI control should be chosen that is not sensitive to monitor resolution settings.

Resolution

All items listed above have been resolved with this new revision of software.

Details for specific issues:

- Symptom #2: ProLink III v4.0 used a different user interface control for trend graphs. The v4.1 release has reverted to using the previous graph control, which also provides the user interface needed to modify trend graph properties at program run time.
- Symptom #11: If the device is in critical fault, ProLink III now disables the Start Calibration button so the user cannot begin a calibration that will not complete properly.
- Symptom #20: The PVR, TMR, TBR, and Fuel Consumption features require HART 7 to be selected before the respective user interface menu commands and screens will be shown. HART 7 is now selected by default as appropriate for newer Series 2000 firmware versions.

Additional Features

This version of software includes the following changes to device support over previous versions.

- Added support for Micro Motion 5700 Ethernet v1.4 device firmware.
- Added support for Micro Motion 5700 Configurable I/O v2.1 device firmware.
- Added support for Micro Motion 5700 Foundation Fieldbus v1.2 device firmware.
- Added support for the new Micro Motion SMV report format, available for all Coriolis flow meter devices.
- Updated Advanced Phase Measurement (APM) support for Micro Motion 5700 Configurable I/O v2.01 ETO 31746 device firmware. Minor changes were also made to APM screens supporting standard device firmware.
- Added support for Piecewise Gas Linearization for 5700 family devices, including firmware ETO 25733.
- Added support for Micro Motion 2400S Analog v5.6 device firmware.
- Added support for Micro Motion 2400S DeviceNet v2.9 device firmware.
- Added support for Micro Motion 2400S Profibus-DP v2.1 device firmware.



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ProLink III Updates

- To update an existing version of ProLink III, Basic or Professional, go to the 'Software Downloads & Drivers' section of the ProLink III webpage (<u>www.emerson.com/catalog/enus/micro-motion-prolink-flow</u>).
- To download a new installation of ProLink III Basic, go to the Emerson Online Store (<u>www.micromotion.com/onlinestore</u>)
- There is no change to the purchasing or licensing procedures for ProLink III Professional.



Micro Motion[®] Service Bulletin

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Contact Information

Product information is available on the internet at: www.emerson.com.

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