



SOFTWARE RELEASE NOTES

FieldConnex Diagnostic Manager



Software Details

Software Name: FieldConnex Diagnostic Manager

Release Version: 2.2.4.3610

Release Date: 2022-04-28

Release Notes for Software Version 2.2.4.3610

Description

The software package comprises the FieldConnex Diagnostic Manager, Accessory Tools and Complementary Software.

The Diagnostic Manager is used to configure and parameterize products listed in this document below. It makes use of the FDT/DTM technology and needs a compatible FDT framework installed as listed in the section 'Compatibility Notes' for operation.

After installation the Diagnostic Manager is a basic version with limited features. Under different license terms activation keys are purchasable at one of the Pepperl+Fuchs representatives each enabling respective full functionality. The offered licenses and order codes are listed in this document below. Further advice about licensing/activation can be found in the End User License Agreement (EULA).

Supported Products

- HD2-DM-A, Advanced Diagnostic Module
- DM-AM, Mobile Advanced Diagnostic Module (available in kit DM-AM-KIT)
- KT-MB-DMA, Stand-alone Advanced Diagnostic Module
- KT-MB-GT2AD, Physical Layer Diagnostic Ethernet Gateway
- KT-MB-GT2AD.FF, Physical Layer Diagnostic Ethernet Gateway with FF-H1 connection
- KT-MB-GT2AD.FF.IO, Physical Layer Diagnostic Ethernet Gateway with FF-H1 connection and Cabinet Management IO

Included Software

- FieldConnex Diagnostic Manager, including FDS and OPC Server 2.2.4.3610
- Included FieldConnex Diagnostic Server Version is 2.2.4.3100
- Excel templates for further data analysis
- Tool: FDS OPC Remote Access Wizard 2.2.4.3100

System Requirements

- Hardware



- x86/x64 compatible processor, min. 1GHz
 - 2GB Ram
 - 1GB free disk space
- Windows operating system
 - Windows 7 (32Bit, 64Bit)
 - Windows 8 (32Bit, 64Bit) / Windows 8.1 (32Bit, 64Bit)
 - Windows 10 (32Bit, 64Bit)
 - Windows Server 2008 R2
 - Windows Server 2012 / Windows Server 2012 R2
 - Windows Server 2016
- Microsoft .net Framework 2.0, 3.0 or 3.5
- Administrator privileges during installation

Changes

- Added new supported frame: Schneider Electric: Control Software 7.0 and embedded Field Device Manager V 4.0

Bug Fixes

- None

Compatibility Notes

- Compatible with all firmware versions of HD2-DM-A and DM-AM. Not all features are supported using firmware versions earlier than 1.4.0
- FDT Frameworks qualified by Pepperl+Fuchs for the use of the Diagnostic Manager use in conjunction with the products HD2-DM-A, KT-MB-DMA and KT-MB-GT2AD*:
 - PACTware Consortium PACTware 5.1.0.7 + 6.0.0.26
 - Endress+Hauser FieldCare 2.14.00.2193
 - Yokogawa PRM 4.02.00 (DTMWorks 3.00)
 - ABB 800xA 5.1
- FDT Frameworks qualified by Pepperl+Fuchs for the use of the Diagnostic Manager use in conjunction with the products HD2-DM-A:
 - Schneider Electric Unity Pro XL V8.0 - 131118
- FDT Frameworks qualified by Pepperl+Fuchs for the use of the Diagnostic Manager in conjunction with the product DM-AM:
 - PACTware Consortium PACTware 5.1.0.7,
 - Endress+Hauser FieldCare 2.14.00.2193



- Yokogawa PRM 4.02.00 (DTMWorks 3.00)
- 800xA 5.1:
 - Patch 800xA Device Management PROFIBUS and HART 5.1 64 Bit Temporary Correction 1 and P+F ADM Integration library 2.0.1 required. FDS topology Scan and Import is not supported, use ADM Project Builder ABB and BDM for FF instead
- FDT Frameworks qualified by Schneider Electric for the use of the Diagnostic Manager in conjunction with the product DM-AM:
 - Control Software 7.0 and embedded Field Device Manager V 4.0

Release Notes for outdated Version 2.2.3.3527

Included Software

- FieldConnex Diagnostic Manager, including FDS and OPC Server 2.2.3.3527
- Included FieldConnex Diagnostic Server Version is 2.2.3.3092
- Excel templates for further data analysis
- Tool: FDS OPC Remote Access Wizard 2.2.3.3092

Changes

- None

Bug Fixes

- Upgraded log4net to address potential vulnerability (CVE-2018-1285)

Release Notes for outdated Version 2.2.2.3478

Included Software

- FieldConnex Diagnostic Manager, including FDS and OPC Server 2.2.2.3478
- Included FieldConnex Diagnostic Server Version is 2.2.2.3086
- Excel templates for further data analysis
- Tool: FDS OPC Remote Access Wizard 2.2.2.3086

Changes

- Support for Windows 10 / Windows Server 2016 added
- Support for M&M FDT Container added
- Support for Schneider Unity added
- 'Diagnostic Gateway Configuration Tool' removed from package, Successor 'Pepperl+Fuchs Discovery and Configuration Tool' is available as separate download



- Integrated firmware for HD2-DM-A / DM-AM modules updated to version 1.4.3.856

Bug Fixes

- Broken signature of License Activation Tool was fixed
(because of the broken signature, Windows blocked the start of the tool)
- FDS4PRM: Fixed exception when importing a DevicePath file into an existing project
- Several small improvements regarding stability, usability and performance

Release Notes for outdated Version 2.2.0.2465

Included Software

- FieldConnex Diagnostic Manager, including FDS and OPC Server 2.2.0.2465
- Included FieldConnex Diagnostic Server Version is 2.2.0.3041
- Excel templates for further data analysis
- Tool: Diagnostic Gateway Configuration Tool 1.1.0.45
- Tool: FDS OPC Remote Access Wizard 2.2.0.3041

Changes

- New: Added support for Schneider Electric Unity Pro XL V8.0 - 131118 to HD2-DM-A when used with HD2-GTR-4PA
- New: Added support for R4D0-FB-IA at topology settings
- New: Added support for Windows 8, 8.1 and Windows Server 2012
- Fixed: Topology settings can become invalid and prevent opening the DTM
- Fixed: Loading Segment Checker files from Segment Checker Version 1.26.222 crashed DTM
- Fixed: If fieldbus coupler alarm is active number of pass token misses is not visible anymore
- New: USB Driver for DM-AM updated
- New: Upgraded DTMs to Microsoft .net 2.0

Known issues

- Yokogawa PRM is not supported with the release. For PRM integration use Version 2.1.1.1971

Outdated Version 2.1.2.2326 Change Log

- Fixed: If a project was created using the ADM Project Builder Emerson and the project included field device tags, the FDS DTM always reported a project difference between the FDT Project and the FDS configuration, even if there was no difference.



Outdated Version 2.1.1.1971 Change Log

- Fixed: Firmware update of HD2-DM-A / DM-AM included with DTM 2.1.0.1919 may reset configuration if previous version is 1.3.0.x. Included HD2-DM-A / DM-AM firmware updated to version 1.4.1.745

Outdated Version 2.1.0.1919 Change Log

Changes

- New: Support for Fieldbus Couplers with Diagnostics and Trunk Surge Protectors with Diagnostics
- New: Support for KT-GT2AD.FF.IO Cabinet Management functions
- New: Commissioning Wizard and Monitoring Snapshots allow to add characteristic Oscilloscope views to the reports
- New: ABB 800xA support added (See Compatibility Notes for details)
- Fixed: Oscilloscope resizing errors under PACTware 4 and Windows 7 x64
- Fixed: Snapshot Explorer: After deletion of a Snapshot another Segment is selected although the deleted Snapshot was not the last on the
- segment
- Fixed: Exception if Reset is hit fast after a Field Device Signal Level Alarm was changed
- Fixed: Topology Information missing in print output
- Fixed: Expert System shows wrong cause if a standalone motherboard is used and the segment voltage is zero
- Fixed: Oscilloscope shows no security query if recordings are deleted
- Fixed: Expert system shows wrong causes on non-redundant motherboards for Expert System Phenomenon 178
- Fixed: History data exports done with Excel 2003 cannot be opened in Excel 2010
- Fixed: Reimport of a new Field Device Tags at the FDS DTM does not update the Device Tags
- Fixed: Segment Tags are shown at more places

Outdated Version 2.0.4.1658 Change Log

Changes

- Fixed: Projects cannot be loaded on system with Italian time format settings

Outdated Version 2.0.3.1611 Change Log

Changes

- Fixed: Signal level calculated for devices connected to a Fieldbus Barrier can be too high in some cases.



- Fixed: If used with an Firmware version before 1.3.0.0 and more devices than during commissioning are connected to the segment the overall status is "Maintenance Required" but no expert message is shown
- Fixed: For some segments the TAG reading using the ADM stops before all TAGs are detected
- Fixed: Project generated using the ADM Project Builder Emerson cannot be loaded if Tags for the field devices are included.
- Fixed: DM-AM sometimes refuses communication if the DTM contains configured field devices (especially with PROFIBUS address filter)
- Fixed: Unconfigured field devices may cause wrong expert system messages
- Fixed: Yokogawa PRM Integration: OPC DA connection fails
- Fixed: HD2-DM-A DTM may fail if an already commissioned HD2-DM-A is used for a new project and commissioning is executed only for some segments.
- Added: Emerson S-series H1 I/O Card with integrated Power Supply can be selected at the topology settings
- Fixed: Projects cannot be loaded on system with some country specific time format settings (e.g. Italian)
- Fixed: PRM Integration: Wrong OPC Mapping if Segment 1 is disabled

Outdated Version 2.0.2.1349 Change Log

Changes

- Improved: LAS not shown in Commissioning Wizard
- Fixed: Upgrade from Versions before 2.0.0.1177 may fail in some cases
- Fixed: Scan and import configuration may result in a deadlock in PACTware 4.0
- Fixed: Yokogawa integration. Using ADM address > 111 does not work.
- Fixed: DTM crashes if a project with more than 300 Snapshots is loaded
- Fixed: Firmware update may fail on non-SSE2 CPUs
- Improved: Segment Commissioning is started automatically after System Commissioning
- Fixed: Diagnostic Window shows unintended scrolling if an alarms appears
- Fixed: Crash in Commissioning Wizard if PROFIBUS Address filter is used and Online Parameterization is open
- Added: Fieldbus Oscilloscope shows measurements like signal level for the frames
- Fixed: Diagnostic window crash if a date/time different to the regional settings is used
- Fixed: Crash in Commissioning Wizard if field devices are frequently appearing and disappearing at the live list
- Fixed: Some licenses are not detected as valid
- Fixed: Summary table of Report may show wrong minimal values for Noise and Jitter



- Fixed: Monitoring: Quality icons of measured values are not shown in commissioned mode
- Fixed: FDS Control Center: Settings Dialog and OPC Wizard cannot be executed on some Windows 7 systems
- Fixed: Commissioning Wizard DM-AM: Field device signal levels for DM-AMs connected on the field side of the trunk are calculated wrong
- Improved: Monitoring GUI closes faster
- Fixed: PDF Snapshot export shows line breaks in table cells

Outdated Version 2.0.1.1195 Change Log

Changes

- Stability improved

Outdated Version 2.0.0.1177 Change Log

Changes

- New: Windows 7 support
- Improved user interface to facilitate handling and speed up segment check
- New: Dedicated GUI for DM-AM to simplify handling of mobile ADM
- Improved guidance for Commissioning Wizard
- New: An expert system is available which guides through the fault analysis
- New: To refine the result of the expert system an interface is offered to define typical segment topology. Input can be done manually or through a segment checker project file
- New: oscilloscope GUI allows to visualize the telegram content of scope traces, automatically collects several scope traces, trigger for
- "Maintenance required" and "Out of Specification" alarms, note pad for oscilloscope shots
- New: TAG description scan without the need to use the National Instruments Host
- New: support of Pepperl+Fuchs advanced diagnostic gateway which simplifies the integration of advanced physical layer diagnostic into Ethernet based system environment
- New: Automatic topology scan if Pepperl+Fuchs Diagnostic Gateway is used

Outdated Version 1.25.0.0 Change Log

Changes

- Added: Yokogawa PRM Integration
- Added: OPC AE Server build into FieldConnex Diagnostic Server FDS
- Added: New Use Case oriented installation setup structure



- Added: Windows Firewall and OPC DCOM setting to FDS Control Center
- Fixed: DM-AM sometimes not detected after unplugging and reinsertion
- Fixed: After an upload from the ADM with PROFIBUS the addresses of the Field Devices were sometimes wrong
- Fixed: Tables were too small and got unusable with PACTware 3.5 if Windows XP Style was used
- Fixed: Sometimes the diagnostics overview showed old and already gone alarms
- Changed: DTM does not allow empty TAGs any more

Outdated Version 1.23.1.0 Change Log

Changes

- Fixed: The DM-AM driver update has not worked correctly with the setup version 1.23.0.0. After installation it could happen that the driver is no longer installed on the system.

Outdated Version 1.23.0.0 Change Log

Changes

- Qualified DTMs for FieldCare V2.03.00.
- Added DMA-Board "Standalone" and changed DMA-Board from "Standard 500mA" to "Power Hub" and "Compact 360mA" to "High-density Power Hub".
- Allowed Brackets "()" as valid characters at FDS, DM-A, Port and Segment Tags.
- Changed default segment tag names to: Segment1, Segment2, Segment3, Segment4.
- Changed "Board type" and "Board Red" to read-only in Commissioning Wizard.
- Changed tag handling. Tags are now unique within one level and not the complete project any more.
- Fix in Commissioning Wizard: Device Tag and System Tag were read-only if tag was empty (DM-AM only).
- Fixed wrong status icon at Online Parameterization => Segment => Statistic=>Number of Received Frames.
- Fixed: After a network failure between ADM-DTM and FDS the project cannot always initialize communication again.
- Improved 'Get FDS Topology' with the ability to merge current project configuration with FDS or file configuration.
- The Commissioning Wizard reactivates the "Module Failure" alarms for "Module A" and "Module B" if a user disabled the alarms manually.
- The maintenance limits are now shown always correct if the user switches from an unconfigured to a configured field device view.
- Unhandled exception at online parameterization and table configured field device fixed.



- Updated FDS Control Center copyright information.
- Commissioning Wizard shows Module Type A and B at the download page.
- Snapshot entries are now sorted chronologically in the snapshot explorer.
- Known issue in FieldMate: At the snapshot description field it is not possible to enter a line break

Outdated Version 1.22.5.2 Change Log

Changes

- No FIELDBUS Foundation device details any more in print-out if PROFIBUS PA is selected as fieldbus type.
- After canceling the 'Get FDS Topology' command sometimes a wrong error message was shown.
- The Commissioning Wizard showed 'Out of Specification' limits for the segment current. These data is not visible to the user anymore.
- It is possible to generate a snapshot of a segment now if there has never been detected communication for it.
- Offline print did not work for a user with 'Maintenance' rights. Snapshots now saved correctly if the HD2-DM-A DTM is located behind a PROFIBUS HD2-GTR-4PA (SK3).
- Setup doesn't destroy license activation of other Pepperl+Fuchs DTMs anymore.
- Exporting diagnostics data to a text file resulted in wrong order of the data. They are now sorted chronologically.
- The measurement selection in the oscilloscope graph is no longer corrupted if the mouse selection is performed from the bottom right to upper left.
- OPC Server now hands down system alarms (like failure of bulk power supply) to the segment state.
- In the oscilloscope triggering to a voltage level only did not work if an address was set. In this case it was additionally triggered to Passtoken or Probenode telegrams from this address.
- In FieldMate the communication error screen could disappear even if communication is still corrupted. This effect occurred after switching DTM windows.
- In FieldMate sometimes the Field Device Tags entered within the Segment Commissioning Wizard were lost.

Outdated Version 1.22.0.0 Change Log

Changes

- The Snapshot Report shows now if fieldbus devices was removed from the segment while a snapshot was recorded
- The Online Parameterization sometimes showed complete wrong icons in the header
- The DM-AM Commissioning Wizard allows to enter the Device and Segment Tag now



- On some PCs the green communication indicator does not show active communication to ADM in the segment view of the Online Parameterization Dialog, but communication to ADM is still active.
- The History Data export didn't consider the localization settings (date format etc.) German settings have been used always.
- Commissioning Wizard did not restart if communication to diagnostic device has failed.
- The Snapshot Report didn't use the same "Excellent" range for Primary and Secondary Power Supply data.
- The actual values of enumerated data wasn't decoded to text in the Diagnosis view
- Communication Wizard, Snapshot Explorer and Diagnosis view didn't show scrollbars if the window was too small.
- The Excel History Sheet showed an error if only one entry was included in the history data
- The Snapshot Explorer sometimes showed the wrong Fieldbus Type in the window header Segment Monitoring showed sometimes wrong data after startup for the Secondary Power Supply Voltage.
- The Alarm History of the Diagnosis view showed the local German time of the alarm for every time zone that is in use.
- The Fieldbus Oscilloscope showed old data if communication to ADM was aborted because of missing ADM while view was open.
- In the Address/TAG Configuration view of FDS and FDS-Port the Diagnostic Manager showed a wrong entry box for very large projects.
- In the Address/Tag Configuration view of FDS-Port the Diagnostic Manager sometimes showed no entries if the FDS-Port Tag was changed before
- The "Power Supply Module Mismatch Alarm Status" sometimes showed an outdated value.
- The Alarm History of the Diagnosis view sometimes showed duplicate entries Interpolation is disabled for the excel charts yet.
- The Diagnostic Manager sometimes created a Snapshot.mdb file at c:\ even if no separated snapshot location has been configured
- Supports HD2-GTR.4PA (SK3) as Gateway DTM for HD2-DM-A (Starting with Revision 2.0.3 of HD2-GTR-4PA DTM, FieldConnex® DTM Package 1.3.4)

Outdated Version 1.20.0.0 Change Log

Changes

- Initial Release

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Process interfaces

- Intrinsically safe barriers
- Signal conditioners
- Fieldbus infrastructure
- Remote I/O systems
- HART interface solutions
- Wireless solutions
- Level measurement
- Purge and pressurization systems
- Industrial monitors and HMI solutions
- Explosion protection equipment
- Solutions with process interfaces

Industrial sensors

- Proximity sensors
- Photoelectric sensors
- Industrial vision
- Ultrasonic sensors
- Rotary encoders
- Positioning systems
- Inclination and acceleration sensors
- AS-Interface
- Identification systems
- Logic control units