



acontis technologies GmbH

EC-Lyser

Release Notes

Version 4.0

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1 Introduction

1.1 Overview

This document describes the changes between the different versions.

1.2 Layers

The architecture of EC-Lyser is very modular and splittet into the following layers:

- Internal Layers
 - L5: EniEngine Layer 5
 - L4: Core Layer 4
 - L2: View Layer 2
 - L1: Brand Labeling Layer 1
- External Layers:
 - E5: EniBuilder
 - E4: Core Demo
 - E2: EtherCAT Suite
 - E1: EC-Lyser

2 Features of EC-Lyser V4.0

2.1 List of enhancements/bug fixes in version 4.0.4

- Enhancements
 - Integrated master version V3.2.2.04 [L4]
- Fixes:
 - Fixed bug: FoE upload crashed sometimes with very small files [L4]

2.2 List of enhancements/bug fixes in version 4.0.3

- Enhancements
 - Added support for ESI schema 1.19 [L5]
 - Changed default theme [L2]
 - Added flag to disable check if remote server is up [L4]
 - Removed play and pause button [L2]
 - Improved FoE bootstrap message [L2]
- Fixes:
 - Fixed bug: Link layer instance as bus/device/function was not supported [L4]
 - Fixed bug: History Timestamp was running backwards [L4]

2.3 List of enhancements/bug fixes in version 4.0.2

- Enhancements
 - Added support for ESI schema 1.19 [L5]
 - Changed default theme [L2]
- Fixes:
 - Fixed bug: Switching between config and diag mode caused memory leak [L4]

2.4 List of enhancements/bug fixes in version 4.0.1

- Enhancements
 - Improved printing in Inspection Report [L2]
 - Added new welcome splash screen [E1]
- Fixes:
 - Fixed bug: Simulation Button was sometimes visible even without Simulator [L2]

2.5 List of enhancements/bug fixes in version 4.0.0

- Enhancements
 - Added RX frames to general tab [L4]
 - Improved the self test scan [L2]
 - Added a new settings dialog [L2]
 - Changed what is displayed on expert mode and disabled its automatic activation [L2]
 - Added SII tab to EEPROM tab [L2]
 - Added new icon set [L2]
 - Use inclusive language [L2]
 - Added new modern themes [L2]
 - Changed to 64-Bit application [E1]

3 Features of EC-Lyser V3.9

3.1 List of enhancements/bug fixes in version 3.9.10

- Enhancements
 - Added support for ESI schema 1.20 [L5]
 - Integrated master version V3.2.2.04 [L4]
- Fixes
 - Fixed bug: FoE upload crashed sometimes with very small files [L4]
 - Fixed bug: Export pdlayout was wrong for BITARRAY datatype [L4]

- Fixed bug: Topology view was sometimes not displaying correctly when a SubDevice has three ports [L4]
- Fixed bug: General diagnosis view was not refreshed after hardware diagnostics were activated [L2]

3.2 List of enhancements/bug fixes in version 3.9.9

- Enhancements
 - Added support for ESI schema 1.19 [L5]
 - Added flag to disable check if remote server is up [L4]
- Fixes
 - Fixed bug: History Timestamp was running backwards [L4]
 - Fixed bug: Switching between config and diag mode caused memory leak [L4]
 - Fixed bug: Link layer instance as bus/device/function was not supported [L4]
 - Fixed bug: Short Info was sometimes not complete resetted [L2]

3.3 List of enhancements/bug fixes in version 3.9.8

- Enhancements
 - Integrated master version V3.2.2.03 [L4]

3.4 List of enhancements/bug fixes in version 3.9.7

- Enhancements
 - Messages without text ID were not displayed on history tab [L4]

3.5 List of enhancements/bug fixes in version 3.9.6

- Enhancements
 - Integrated master version V3.2.2.01 [L4]

3.6 List of enhancements/bug fixes in version 3.9.5

- Enhancements
 - Added support for ESI tag "Device/Info/VendorSpecific" [L5]
- Fixes
 - Fixed bug: Tab control does not trigger lost focus event on changing tab in .NET core [L2]

3.7 List of enhancements/bug fixes in version 3.9.4

- Enhancements
 - Improved timing of RAS [L4]
 - Integrated master version V3.2.1.05 [L4]
 - Improved input of double and real values [L2]

3.8 List of enhancements/bug fixes in version 3.9.3

- Enhancements
 - Internal improvements [E1]

3.9 List of enhancements/bug fixes in version 3.9.2

- Enhancements
 - Upgraded Infragistic controls to v23.2.20232.94 [L2]

3.10 List of enhancements/bug fixes in version 3.9.1

- Enhancements
 - Integrated master version V3.2.1.03 [L4]

3.11 List of enhancements/bug fixes in version 3.9.0

- Enhancements
 - Added support for ESI schema 1.18 [L5]
 - Updated ESI schema to support new attribute "Dc.PdoOversampling" [L5]
 - Added max page width to topology settings [L4]
 - Added TAP adapters to the network adapter list [L4]

4 Features of EC-Lyser V3.8

4.1 List of enhancements/bug fixes in version 3.8.6

- Enhancements
 - Added support for ESI attribute "SafetyParaMapping/SRA_Parameter" [L5]
 - Improved x-Axis scale on variables chart [L2]
 - Fixed Code Meter 8.0 problem while installing [E1]
- Fixes:
 - Fixed bug: Variables export worked only with CSV format [L2]

4.2 List of enhancements/bug fixes in version 3.8.5

- Enhancements
 - Added possibility to export process data image in diag mode to CSV with values [L4]
 - Integrated master version V3.2.1.02 [L4]
 - Improved GUI update after CoE write [L2]
 - Upgraded Infragistic controls to V22.2.20222.97 [L2]
- Fixes:
 - Fixed bug: Highlight of the tree node was sometimes lost [L2]

4.3 List of enhancements/bug fixes in version 3.8.4

- Enhancements
 - Added support for optimized link layer "IntelGbe" [L4]
- Fixes:
 - Fixed bug: Configured and not present slaves were sometimes missing [L4]

4.4 List of enhancements/bug fixes in version 3.8.3

- Enhancements
 - Internal improvements
- Fixes
 - Fixed bug: Empty History Tab caused exception [L2]

4.5 List of enhancements/bug fixes in version 3.8.2

- Enhancements
 - Integrated master version V3.2.1.01 [L4]
 - Improved date format on History Tab for AM / PM [L2]

4.6 List of enhancements/bug fixes in version 3.8.1

- Enhancements
 - Read Diagnosis History Settings even if there are no messages [L4]
 - Improved sorting of History Tab [L4]
 - Improved timestamp of History Tab [L2]
 - Renamed PortA..D to Port0..3 [L2]

4.7 List of enhancements/bug fixes in version 3.8.0

- Enhancements
 - Read master version from "GetMasterInfo()" instead of using master OD [L4]
 - Added possibility to export process data image to clipboard [L4]

- Integrated master version V3.2.0.03 [L4]
- Added possibility to export eeprom file in config mode [L2]
- Added function for multi axis synchronization [L2]
- Upgraded Infragistic controls to V22.2.20222.30 [L2]
- Added copy function to variables tab for name [L2]
- Improved performance of rendering topology [L2]
- Improved scroll position when tab is changed [L2]
- Added multi selection support for FoE download [L2]
- Fixes
 - Fixed bug: Hashtag in install directory caused exception [L5]
 - Fixed bug: It was not possible to get all values through RAS without ESI files [L4]

5 Features of EC-Lyser V3.7

5.1 List of enhancements/bug fixes in version 3.7.13

- Enhancements
 - Internal Improvements [E1]

5.2 List of enhancements/bug fixes in version 3.7.12

- Enhancements
 - Integrated master version V3.1.4.10 [L4]
- Fixes
 - Fixed bug: It was not possible to get all values through RAS without ESI files [L4]

5.3 List of enhancements/bug fixes in version 3.7.11

- Fixes
 - Fixed bug: FIPS enabled detection sometimes failed [L5]
 - Fixed bug: CoE OD Tab was missing in diagnosis mode if ESI was missing for one slave [L4]

5.4 List of enhancements/bug fixes in version 3.7.10

- Enhancements
 - Integrated master version V3.1.4.09 [L4]

5.5 List of enhancements/bug fixes in version 3.7.9

- Enhancements
 - Internal Improvements [E1]

5.6 List of enhancements/bug fixes in version 3.7.8

- Enhancements
 - Internal Improvements [E1]

5.7 List of enhancements/bug fixes in version 3.7.7

- Enhancements
 - Added support for ESI schema 1.17 [L5]
 - Renamed tab "Variables" of master node into "Trace Data" [L2]
- Fixes
 - Fixed bug: Product code detection caused invalid format exception for "EL9550-0012" [L5]

5.8 List of enhancements/bug fixes in version 3.7.6

- Enhancements
 - Integrated master version V3.1.4.06 [L4]
 - Added possibility to use FoE for more slaves of the same type at once [L2]

- Fixes
 - Fixed bug: Notifications were sometimes missing via RAS [L4]

5.9 List of enhancements/bug fixes in version 3.7.5

- Enhancements
 - Integrated master version V3.1.4.05 [L4]
 - Improved Network Mismatch Analyzer dialog [L2]

5.10 List of enhancements/bug fixes in version 3.7.4

- Enhancements
 - Added Reset button to Bus Load tab [L4]
 - Integrated master version V3.1.4.03 [L4]
 - Improved Diag History Messages Tab Performance and traffic [L4]
 - Added smart view to Master ObjectDictionary [L2]
 - Increased update interval of DC diagnosis tab [L2]
- Fixes
 - Fixed bug: ESC register values were read with 16 additional bytes [L4]
 - Fixed bug: Release all button was not visible [L2]
 - Fixed bug: After slave state changed, the write button of CoE OD tab was still disabled [L2]

5.11 List of enhancements/bug fixes in version 3.7.3

- Enhancements
 - Added Inspection Report with the possibility to print a PDF [L4]
 - Integrated master version V3.1.4.02 [L4]
- Fixes
 - Fixed bug: Process image displayed only variables of slaves and not the real process image [L4]
 - Fixed bug: Switching into diag mode crashed sometimes if no network adapter was found [L4]
 - Fixed bug: String values greater than 128 bytes were not displayed in CoE OD [L4]
 - Fixed bug: Watchlist chart colors after Infragistics update were wrong [L2]

5.12 List of enhancements/bug fixes in version 3.7.2

- Enhancements
 - Added multi language support to ESI parser [L5]
 - Added more Notifications to Capture File [L4]
 - Improved diagram and performance of process data with RAS [L4]
 - Integrated master version V3.1.4.01 [L4]
 - Fixed bug: Slave addresses of simulator and master must be the same [L4]
 - Improved performance tab and diagram [L2]
 - Upgraded Infragistic controls to V21.2.20212.39 [L2]
- Fixes
 - Fixed bug: Slave addresses of simulator and master must be the same [L4]

5.13 List of enhancements/bug fixes in version 3.7.1

- Enhancements
 - Added performance measurement tab and functions [L4]
 - Added memory usage and master version to General Tab [L4]

5.14 List of enhancements/bug fixes in version 3.7.0

- Enhancements
 - Added Self Test Scan function [L4]
 - Removed automatic rescue scan function box [L2]
 - Display subindex of CoeOD entry also in hexadecimal [L2]

- Enhanced plugin interface [L2]
- Fixes
 - Fixed bug: Slaves disappeared sometimes when power off with Simulator [L4]
 - Fixed bug: Master log level was not correctly converted [L4]

6 Features of EC-Lyser V3.6

6.1 List of enhancements/bug fixes in version 3.6.14

- Enhancements
 - Internal Improvements [E1]

6.2 List of enhancements/bug fixes in version 3.6.13

- Enhancements
 - Added support for ESI attribute "SafetyParaMapping/SRA_Parameter" [L5]
 - Added support for ESI schema 1.18 [L5]
 - Updated ESI schema to support new attribute "Dc.PdoOversampling" [L5]
 - Integrated master version V3.1.4.15 [L4]
- Fixes
 - Fixed Code Meter 8.0 problem while installing [E1]

6.3 List of enhancements/bug fixes in version 3.6.12

- Enhancements
 - Internal Improvements [E1]

6.4 List of enhancements/bug fixes in version 3.6.11

- Enhancements
 - Integrated master version V3.1.4.10 [L4]
- Fixes
 - Fixed bug: Hashtag in install directory caused exception [L5]
 - Fixed bug: FIPS enabled detection sometimes failed [L5]
 - Fixed bug: It was not possible to get all values through RAS without ESI files [L4]

6.5 List of enhancements/bug fixes in version 3.6.10

- Fixes
 - Fixed bug: SubDevices were sometimes not connected to the correct port [L5]
 - Fixed bug: Product code detection caused invalid format exception for "EL9550-0012" [L5]

6.6 List of enhancements/bug fixes in version 3.6.9

- Enhancements
 - Added support for ESI schema 1.17 [L5]
- Fixes
 - Fixed bug: Notifications were sometimes missing via RAS [L4]

6.7 List of enhancements/bug fixes in version 3.6.8

- Enhancements
 - Integrated master version V3.1.4.02 [L4]
- Fixes
 - Fixed bug: String values greater than 128 bytes were not displayed in CoE OD [L4]
 - Fixed bug: ESC register values were read with 16 additional bytes [L4]
 - Fixed bug: Release all button was not visible [L2]
 - Fixed bug: DC tab showed wrong factor, if cycle time was set to 1024 Hz [L2]

6.8 List of enhancements/bug fixes in version 3.6.7

- Enhancements
 - Added multi language support to ESI parser [L5]
 - Added SafetyMapping flags to ESI parser [L5]

6.1 List of enhancements/bug fixes in version 3.6.6

- Enhancements
 - Integrated master version V3.1.3.02 [L4]
 - Added message box when Master / Monitor evaluation limit reached [L4]
 - Improved ESI handling [L5]
- Fixes
 - Fixed bug: Topology view was not correctly created if slaves were wrapped into next line [L4]

6.2 List of enhancements/bug fixes in version 3.6.5

- Enhancements
 - Added reserved bytes at the beginning when necessary in pdlayout header [L4]
- Fixes
 - Fixed bug: Export variables in diag mode was sometimes wrong [L2]
 - Fixed bug: Master log level was not correctly converted [L4]

6.3 List of enhancements/bug fixes in version 3.6.4

- Enhancements
 - Integrated master version V3.1.3.01 [L4]
- Fixes
 - Fixed bug: Re-selecting empty watch list caused exception [L2]

6.4 List of enhancements/bug fixes in version 3.6.3

- Enhancements
 - Integrated master version V3.1.2.11 [L4]
- Fixes
 - Fixed bug: Array data types were not displayed correctly on variables tab [L4]

6.5 List of enhancements/bug fixes in version 3.6.2

- Enhancements
 - Fixed bug: GUI Updated to slow on some tabs [L2]

6.6 List of enhancements/bug fixes in version 3.6.1

- Enhancements
 - Integrated master version V3.1.2.09 [L4]
 - Added Physical Address and AutoInc Address to Short Info [L2]
 - Added possibility to show two graphs in variable view at once with different colors [L2]

6.7 List of enhancements/bug fixes in version 3.6.0

- Enhancements
 - Added support for ESI schema 1.16 [L5]
 - Remove invalid characters from bin file name automatically [L5]
 - Improved topology view in diag mode and mark port A in red, if it is not connected [L4]
 - Optimized readig process data synchronization [L4]
 - Integrated master version V3.1.2.06 [L4]
 - Added support to show difference if error counter is zero or unread [L4]
 - Added zoombar to chart [L2]
 - Upgraded Infragistic controls to V20.2.20202.53 [L2]
 - Added online update check [E1]

7 Features of EC-Lyser V3.5

7.1 List of enhancements/bug fixes in version 3.5.3

- Enhancements
 - Added possibility to execute rescue scan through network menu [L4]
 - Integrated master version V3.1.2.04 [L4]
- Fixes
 - Fixed bug: ESI tag "Device/Eeprom/ConfigData" smaller than 2 bytes caused exception [L5]

7.2 List of enhancements/bug fixes in version 3.5.2

- Enhancements
 - Integrated Master Version 3.1.2.02 [L4]
 - Improved updating process data for local EC-Master and EC-Monitor [L4]
 - Upgraded Infragistic controls to V20.2.20202.38 [L2]
 - Added multi selection support to force/release/update variables [L2]
 - Added more values to chart and possibility to resize and zoom and tooltip [L2]
 - Added possibility to change amount of chart entries in User.xml [L2]

7.3 List of enhancements/bug fixes in version 3.5.1

- Enhancements
 - Internal Improvements [E1]

7.4 List of enhancements/bug fixes in version 3.5.0

- Enhancements
 - Integrated Master Version 3.1.1.06 [L4]
 - Force checkbox was resized wrong [L2]

8 Features of EC-Lyser V3.4

8.1 List of enhancements/bug fixes in version 3.4.1

- Enhancements
 - Support latest OpenVPN TAP Adapter [L4]
 - Integrated Master Version 3.1.1.05 [L4]

8.2 List of enhancements/bug fixes in version 3.4.0

- Enhancements
 - Integrated Master Version 3.1.1.02 [L4]
 - Added possibility to connect to EC-Monitor [L4]
 - Installer: Removed merge modules from WIBU [E1]

9 Features of EC-Lyser V3.3

9.1 List of enhancements/bug fixes in version 3.3.2

- Enhancements
 - Integrated Master Version 3.1.0.19 [L4]
 - Installer: Updated merge modules of WIBU [E1]
- Fixes
 - Fixed bug: Remote capture cause exception when no update rate was set [L4]

9.2 List of enhancements/bug fixes in version 3.3.1

- Enhancements
 - Integrated Master Version 3.1.0.18 [L4]
 - Improved error handling [L2]

- Fixes
 - Fixed bug: RED connection to junction caused exception in topology view [L4]

9.3 List of enhancements/bug fixes in version 3.3.0

- Enhancements
 - Improved error handling [L2]
- Fixes
 - Fixed bug: RED connection to junction caused exception in topology view [L4]

10 Features of EC-Lyser V3.2

10.1 List of enhancements/bug fixes in version 3.2.4

- Enhancements
 - Integrated Master Version 3.1.0.16 [L4]
- Fixes
 - Fixed bug: Double values caused problems in UserConfig [E1]

10.2 List of enhancements/bug fixes in version 3.2.3

- Enhancements
 - Improved internet time check [E1]

10.3 List of enhancements/bug fixes in version 3.2.1

- Enhancements
 - Integrated master version 3.1.0.14 [L4]
 - Added possibility to restore connection after connection was lost [L2]
 - Hide welcome page [E1]

10.4 List of enhancements/bug fixes in version 3.2.0

- Enhancements
 - Improved performance of ESI serializer [L5]
 - Improved Identification process [L4]
 - Improved support for EC-Simulator [L4]
 - Integrated master version 3.1.0.13 [L4]
 - Added Ndis Driver to setup [L4]
 - Added dependent CoE OD to MDP Modules [L2]
 - Upgraded Infragistic controls to V19.2.20192.186 [L2]
 - Added Motion Tab [L2]

11 Features of EC-Lyser V3.1

11.1 List of enhancements/bug fixes in version 3.1.2

- Enhancements
 - Added support for newest TAP-Adapter [L4]
- Fixes
 - Fixed bug: Watch list was cleared after topology was changed [L4]

11.2 List of enhancements/bug fixes in version 3.1.0

- Enhancements
 - Added station address to LineCrossedAnalyzer [L4]
 - Integrated master version 3.1.0.10 [L4]
 - Added support to export the history tab grid to csv [L2]
 - Upgraded Infragistic controls to V19.1.20191.244 [L2]
- Fixes
 - Fixed bug: SubDevices were sometimes missing in topology view [L4]

12 Features of EC-Lyser V3.0

12.1 List of enhancements/bug fixes in version 3.0.22

- Enhancements
 - Added support for ESI schema 1.18 [L5]
 - Updated ESI schema to support new attribute "Dc.PdoOversampling" [L5]

12.2 List of enhancements/bug fixes in version 3.0.21

- Fixes
 - Fixed bug: It was not possible to get all values through RAS without ESI files [L4]

12.3 List of enhancements/bug fixes in version 3.0.20

- Enhancements
 - Integrated master version 3.1.0.110 [L4]
- Fixes
 - Fixed bug: Hashtag in install directory caused exception [L5]
 - Fixed bug: Removed references to "System.Private.CoreLib" in .NET Core SDKs [L5]
 - Fixed bug: FIPS enabled detection sometimes failed [L5]

12.4 List of enhancements/bug fixes in version 3.0.19

- Fixes
 - Fixed bug: SubDevices were sometimes not connected to the correct port [L5]
 - Fixed bug: Product code detection caused invalid format exception for "EL9550-0012" [L5]

12.5 List of enhancements/bug fixes in version 3.0.18

- Enhancements
 - Added support for ESI schema 1.17 [L5]

12.6 List of enhancements/bug fixes in version 3.0.17

- Fixes
 - Minor bug fixes [E1]

12.7 List of enhancements/bug fixes in version 3.0.16

- Enhancements
 - Support latest OpenVPN TAP Adapter [L4]

12.8 List of enhancements/bug fixes in version 3.0.15

- Fixes
 - Minor bug fixes [E1]

12.9 List of enhancements/bug fixes in version 3.0.14

- Enhancements
 - Added support for ESI schema 1.16 [L5]

12.10 List of enhancements/bug fixes in version 3.0.13

- Fixes
 - Minor bug fixes [E1]

12.11 List of enhancements/bug fixes in version 3.0.12

- Fixes
 - Minor bug fixes [E1]

12.12 List of enhancements/bug fixes in version 3.0.11

- Fixes
 - Fixed bug: MD5 algorithm caused crash on FIPS enabled systems [L5]

12.13 List of enhancements/bug fixes in version 3.0.10

- Fixes
 - Fixed bug: Timeout on reading EEPROM caused saving snapshot failed [L4]

12.14 List of enhancements/bug fixes in version 3.0.9

- Enhancements
 - Added enhanced UTF-8 support [L5]
 - Added support for newest TAP-Adapter [L4]
 - Hide welcome page [E1]

12.15 List of enhancements/bug fixes in version 3.0.8

- Enhancements
 - Integrated master version 3.1.0.10 [L4]
- Fixes
 - Fixed bug: MasterDebugMessageLevel was not forwarded to RAS client [L4]

12.16 List of enhancements/bug fixes in version 3.0.7

- Enhancements
 - Added support for new AL Status Codes and Base Data Types [L5]
 - Added support for ESI schema 1.15 [L5]
 - Added support for ESI attribute "Groups/Group/ParentGroup" [L5]
 - Added EoE endpoint support [E1]
- Fixes
 - Fixed bug: Timestamp of History Tab was sometimes wrong [L4]
 - Fixed bug: ESI cache was not updated if valid and invalid ESI files were imported [L2]

12.17 List of enhancements/bug fixes in version 3.0.6

- Fixes
 - Fixed bug: Timestamp of History Tab was sometimes wrong [L4]

12.18 List of enhancements/bug fixes in version 3.0.5

- Enhancements
 - Integrated master version 3.1.0.5 [L4]

12.19 List of enhancements/bug fixes in version 3.0.4

- Fixes
 - Fixed bug: Invalid assembly version of .NET Wrapper caused corrupt installation [L4]

12.20 List of enhancements/bug fixes in version 3.0.3

- Enhancements
 - Added support for optimized link layers [L4]
 - Added real-time clock support [L4]
 - Added Master Version 3.1.0.03 [L4]
 - Added new EcOemSetup example [L1]
 - Enabled MDP scan [E1]
- Fixes
 - Fixed bug: Invisible slaves caused invalid member count of HC groups [L5]
 - Fixed bug: Module name was sometimes invalid in diagnosis mode [L4]

- Fixed bug: ESI information was not displayed in short window [E1]

12.21 List of enhancements/bug fixes in version 3.0.2

- Enhancements
 - Added support for new ESI flag "SdoUploadWithMaxLength" [L5]
 - Integrated master version 3.0.1.42 [L4]
 - Upgraded Infragistic controls to V18.2.20182.281 [L2]
 - Added ESI Manager support [E1]

12.22 List of enhancements/bug fixes in version 3.0.1

- Enhancements
 - Added cable redundancy support to topology view [L4]
 - Integrated master version 3.0.1.30 [L4]
 - Improved extended diagnosis tab [L2]

12.23 List of features in version 3.0.0

- Added .NET Core Support [L5]
- Removed deprecated functions from API [L5]
- Improved config format [L4]
- Added Mailbox Gateway Support [L4]
- Upgraded Infragistic controls to V18.2.20182.186 [L2]

13 Features of EC-Lyser V2.9

13.1 List of enhancements/bug fixes in version 2.9.17

- Fixes
 - Minor bug fixes [E1]

13.2 List of enhancements/bug fixes in version 2.9.16

- Fixes
 - Fixed bug: MD5 algorithm caused crash on FIPS enabled systems [L5]

13.3 List of enhancements/bug fixes in version 2.9.15

- Fixes
 - Minor bug fixes [E1]

13.4 List of enhancements/bug fixes in version 2.9.14

- Enhancements
 - Added enhanced UTF-8 support [L5]
 - Integrated master version 3.0.1.51 [L4]
 - Added support for newest TAP-Adapter [L4]
- Fixes
 - Fixed bug: MasterDebugMessageLevel was not forwarded to RAS client [L4]

13.5 List of enhancements/bug fixes in version 2.9.13

- Fixes
 - Minor bug fixes [E1]

13.6 List of enhancements/bug fixes in version 2.9.12

- Fixes
 - Minor bug fixes [E1]

13.7 List of enhancements/bug fixes in version 2.9.11

- Enhancements
 - Integrated master version 3.0.1.22 [L4]

13.8 List of enhancements/bug fixes in version 2.9.10

- Enhancements
 - Integrated master version 3.0.1.16 [L4]
- Fixes
 - Fixed bug: Enter negative values for "REAL" variables was not possible [L2]
 - Fixed bug: Generating tree for classic view caused sometimes endless loop [L2]

13.9 List of enhancements/bug fixes in version 2.9.9

- Fixes
 - Fixed bug: Running more than 3 hours caused OutOfMemoryException [L4]

13.10 List of enhancements/bug fixes in version 2.9.8

- Enhancements
 - Integrated master version 3.0.1.10 [L4]
- Fixes
 - Fixed bug: EMI feature "FoE" was ignored [L2]
 - Fixed bug: Unit of System Time Difference was wrong [L2]

13.11 List of enhancements/bug fixes in version 2.9.7

- Fixes
 - Minor bug fixes [E1]

13.12 List of enhancements/bug fixes in version 2.9.6

- Enhancements
 - Integrated master version 3.0.1.3 [L4]
- Fixes
 - Fixed bug: Writing EEPROM to slave failed [L4]

13.13 List of enhancements/bug fixes in version 2.9.5

- Enhancements
 - Integrated master version 3.0.1.2 [L4]
- Fixes
 - Fixed bug: Line crossed caused internal error message [L4]
 - Fixed bug: Type edit control displayed sometimes invalid value [L2]

13.14 List of enhancements/bug fixes in version 2.9.4

- Fixes
 - Fixed bug: EoE InitCmd without comment caused exception [L5]
 - Fixed bug: Log files bigger than 2 GB caused OutOfMemoryException [L5]

13.15 List of enhancements/bug fixes in version 2.9.3

- Enhancements
 - Added percentage value to progress bar [L2]
 - Upgraded Infragistic controls to V17.2.20172.2029 [L2]
- Fixes
 - Fixed bug: Network Mismatch Analyzer showed empty list, if no slave was configured [L4]
 - Fixed bug: EcTypeEditor resets sometimes values to min/max value [L2]
 - Fixed bug: Language of context menu entries in project explorer was not reloaded [L2]

13.16 List of enhancements/bug fixes in version 2.9.2

- Enhancements
 - Save dockmanager layout and current tree style into user.xml [L2]
 - Activated "expert mode" by default [E1]
- Fixes
 - Fixed bug: After changing snapshot the bus topology was sometimes not correctly updated [L4]
 - Fixed bug: Re-configure master caused RAS timeouts [L4]

13.17 List of enhancements/bug fixes in version 2.9.1

- Enhancements
 - Changed FoE Timeout in GUI to s [L2]
 - Added support for rescue scan [L4]
 - Integrated master version 3.0.0.13 [L4]
- Fixes
 - Fixed bug: Access rights of ESC registers were not checked [L4]
 - Fixed bug: Changing of two entries of the same ESC register sometimes failed [L2]

13.18 List of enhancements/bug fixes in version 2.9.0

- Enhancements
 - Enhanced progress bar support for FoE upload and download [L4]

- Added support for offline diagnosis mode [L4]
 - Implemented a new setup [E1]
- Fixes
 - Fixed bug: Max possible value was not correctly displayed in hex controls [L2]
 - Fixed bug: Sometimes no entry was selected in ComboBox of EscReg tab [L2]

14 Features of EC-Lyser V2.8

14.1 List of enhancements/bug fixes in version 2.8.9

- Fixes
 - Minor bug fixes [E1]

14.2 List of enhancements/bug fixes in version 2.8.8

- Fixes
 - Minor bug fixes [E1]

14.3 List of enhancements/bug fixes in version 2.8.7

- Enhancements
 - Added percentage value to progress bar [L2]
- Fixes
 - Fixed bug: Re-configure master caused RAS timeouts [L4]

14.4 List of enhancements/bug fixes in version 2.8.6

- Enhancements
 - Changed FoE Timeout in GUI to s [L2]
 - Integrated master version 3.0.0.13 [L4]

14.5 List of enhancements/bug fixes in version 2.8.5

- Enhancements
 - Integrated master version 3.0.0.12 [L4]
- Fixes
 - Fixed bug: Network Mismatch Analyzer did not work correctly with empty MDP Slots [L4]

14.6 List of enhancements/bug fixes in version 2.8.4

- Enhancements
 - Integrated master version 3.0.0.11 [L4]
- Fixes
 - Fixed bug: BusScan notification was displayed multiple times [L4]
 - Fixed bug: Sometimes no entry was selected in ComboBox of EscReg tab [L2]

14.7 List of enhancements/bug fixes in version 2.8.3

- Enhancements
 - Added support for inactive master [L4]
 - Integrated master version 3.0.0.10 [L4]

14.8 List of enhancements/bug fixes in version 2.8.2

- Fixes
 - Minor bug fixes [E1]

14.9 List of enhancements/bug fixes in version 2.8.1

- Enhancements
 - Integrated master version 3.0.0.8 [L4]

- Throttle master notifications to 1 second to avoid flooding [L4]
- Improved TopologyView [L2]
- Added LineCrossed to TopologyView [L2]
- Fixes
 - Fixed bug: Variables tab showed wrong offsets if sync units of slaves were in different MSUs [L4]
 - Fixed bug: Deleting "update.zip" during installation sometimes failed [E1]

14.10 List of enhancements/bug fixes in version 2.8.0

- Enhancements
 - For more information, please refer the user manual
 - Integrated master version 3.0.0.6 [L4]
 - Integrated new combobox into all dialogs [L2]
 - Upgraded Infragistic controls to V17.1.20171.1000 [L2]
 - Adjusted EC-Lyser version to EC-Engineer version [L1]
- Fixes
 - Fixed bug: Refresh missing after changing network adapters [L4]
 - Fixed bug: Invalid notifications were displayed during scan [L4]
 - Fixed bug: Not all slaves were added to topology tree with cable redundancy [L4]

15 Features of EC-Lyser V3.0 (Old Versioning!)

15.1 List of enhancements/bug fixes in version 3.5.2

- Enhancements
 - Integrated master version 2.9.1.11 [L4]

15.2 List of enhancements/bug fixes in version 3.5.1

- Enhancements
 - Enhanced MDP support of bus mismatch analyzer [L4]
 - Integrated master version 2.9.1.7 [L4]
- Fixes
 - Fixed bug: Line Crossed Debug Assertion [L4]
 - Fixed bug: Sort network adapter list by name [L2]
 - Fixed bug: Variables tab showed wrong offsets in diagnosis mode [L2]
 - Fixed bug: Uninstall failed, if install directory was removed [E1]
 - Fixed bug: Floating license support [E1]

15.3 List of enhancements/bug fixes in version 3.5.0

- Enhancements
 - Improved usability of FoE Tab [L2]
 - Hide "all errors solved" message in EC-Lyser [E1]
- Fixes
 - Fixed bug: GetSlvStatistics returned sometimes invalid state during bus scan [L4]
 - Fixed bug: CoE OD was loaded directly and not on request [L4]

15.4 List of enhancements/bug fixes in version 3.4.7

- Enhancements
 - Integrated master version 2.9.1.6

15.5 List of enhancements/bug fixes in version 3.4.6

- Fixes
 - Fixed bug: Invalid version of DotNetWrapper was included

15.6 List of enhancements/bug fixes in version 3.4.5

- Enhancements
 - Integrated master version 2.9.1.4
 - Upgraded Infragistic controls to V16.2.20162.1006
 - Enhanced user specific settings (RasCycleTime, RasWatchDog, RasWdToLimit)
 - Added support to force variables with 'Return'
- Fixes
 - Fixed bug: Reading a write-only (WO) value of CoE OD abort reading further values
 - Fixed bug: Changed unit of system time difference on diagnosis DC tab to "ns"

15.7 List of enhancements/bug fixes in version 3.4.4

- Enhancements
 - Integrated master version 2.8.1.14
- Fixes
 - Fixed possible crash on switching back to config mode
 - Fixed bug: Selecting a disposed tree item caused an exception
 - Fixed bug: After registration was dropped, wait a little bit before re-register client
 - Fixed bug: DcmConfigure() caused exception with full logging enabled
 - Fixed bug: Connected Ebus Slaves of EK1914 were not visible in diagnosis mode

15.8 List of enhancements/bug fixes in version 3.4.3

- Enhancements
 - Added Line-Crossed-Manager
 - Improved German Language support
 - Enhanced classic view in project explorer
 - Integrated master version 2.8.1.13
- Fixes
 - Fixed bug: Changing language caused an exception
 - Fixed bug: Variables tab did not support 64 bit values

15.9 List of enhancements/bug fixes in version 3.4.2

- Enhancements
 - Improved visibility of selected item in Topology View
 - Improved interaction between Classic View and Topology View
 - Added line crossed support
 - Improved usability of variables tab

15.10 List of enhancements/bug fixes in version 3.4.0

- Enhancements
 - Integrated master version 2.8.1.1
 - Added OEM version support
- Fixes
 - Fixed bug: First slave was connected to hot connect node in topology view
 - Fixed bug: German text was too long for 'Release all' button
 - Fixed bug: IndexGroup and IndexOffset on tab AoE were too small

15.11 List of enhancements/bug fixes in version 3.3.2

- Enhancements
 - Integrated topology plugin into main code
 - Improved topology view
 - Added support for SoE ObjectDictionary
 - Reset variables chart on F5
 - Integrated master version 2.7.3.7
 - Improved Short Info View
- Fixes
 - Fixed bug: Main window moved sometimes to background
 - Fixed bug: Fixed memory leaks
 - Fixed bug: Sometimes bus scan failed, because master bus scan was not finished

15.12 List of enhancements/bug fixes in version 3.3.1

- Enhancements
 - Save active network settings
 - Improved support for "Multiple Cyclic Tasks" in diagnosis mode
 - Improved resizing support for dialogs
- Fixes
 - Fixed bug: Message window was not correctly reloaded on changing language
 - Fixed translation bugs
 - Fixed bug: It was possible to delete slaves in diagnosis mode
 - Fixed bug: DC support was turned off for scanned slaves

15.13 List of enhancements/bug fixes in version 3.3.0

- Enhancements
 - Added support for forcing variables
 - Added watch list to monitor variables
 - Added function to save and load watch list

- Added support for export object dictionary
- Integrated master version 2.7.3.2
- Removed leading zeros for bit values on EscReg tab
- Enhanced MDP scan
- Fixes
 - Fixed bug: Disconnect if EcMaster.RegisterClient() returns error

15.14 List of enhancements/bug fixes in version 3.2.2

- Enhancements
 - Moved "FoE" part to separate tab
 - Added Fast Hot Connect support
 - Integrated master version 2.7.2.12
 - Report some master errors in error level
 - Upgraded Infragistic controls to V15.1.20151.2055
 - Show progress bar on expanding OD entries
 - Added "EcText.xml" with all master messages
- Fixes
 - Fixed bug: CU1128 was not displayed correctly in diagnosis mode
 - Fixed bug: Connected slaves were not correctly displayed with bus mismatch
 - Fixed bug: Master API calles were sometimes called with MasterID
 - Fixed bug: Variables tab of slots showed all variables
 - Fixed bug: Home or end key in variable tab had to be pressed two times
 - Fixed bug: Changing the language failed if the project explorer was not empty
 - Fixed bug: Read supported mailbox protocols of slave also on BusMismatch
 - Fixed bug: Refresh problems with bool values
 - Fixed bug: After refresh the focus was lost

15.15 List of enhancements/bug fixes in version 3.2.1

- Enhancements
 - Added support for EC-Master V2.7.2.4
 - Added new tab: "trace variables"
 - Added "Page Up/Down" support to project explorer
 - Added station alias address to network mismatch analyzer
 - Improved EscReg tab
- Fixes
 - Fixed bug: It was possible to "unselect" a toolbar button
 - Fixed bug: CoE OD tab crashed sometimes in diagnosis mode
 - Fixed bug: Log file was locked for the second instance
 - Fixed bug: Show connection lost, if watchdog is expired

15.16 List of enhancements/bug fixes in version 3.2.0

- Enhancements
 - Added support for EC-Master V2.7.1.8
 - Improved usability of "HexEditTextBox"
 - Added DC category for creating EEPROM from ESI
 - Improved internal handling between EniEngine & Core & ViewModel
 - Build stable API for internal layers
- Fixes
 - Fixed bug: Compact view of EscReg tab doesn't work correctly
 - Fixed bug: Registers were sometimes written to wrong offset

15.17 List of enhancements/bug fixes in version 3.1.5

- Enhancements
 - Added support for EC-Master V2.7.1.6
 - Added silent installation mode to MSI
 - Added "Page Up/Down" support to project explorer

- Added station alias address to network mismatch analyzer
- Improved tab EscReg
- Fixes
 - Fixed bug: It was possible to "unselect" a toolbar button
 - Fixed bug: Log file was locked for the second instance
 - Fixed bug: ComboBox on EscReg tab was sometimes empty
 - Fixed bug: Not all background threads were stopped correctly

15.18 List of enhancements/bug fixes in version 3.1.4

- Enhancements
 - Added support for EC-Master V2.7.0.7
- Fixes
 - Fixed bug: Check if EcMaster.GetNumConnectedSlaves() is -1
 - Fixed bug: Read-Textbox on CoE-Tab was sometimes too small
 - Fixed bug: Read-Textbox on AoE-Tab was sometimes too small
 - Fixed bug: "DC Diagnosis" tab shows time in "ns" and not in "us"

15.19 List of enhancements/bug fixes in version 3.1.3

- Enhancements
 - Added support for EC-Master V2.7.0.6
 - Disable DCM for local master
 - Renamed "Update" buttons into "Write"
 - Added new tab "Expert View for CoE OD"
 - Added new tab "DC Diagnosis"
 - Added support for new base data types
 - Optimized traffic for mixed CoeOD
 - Improved hex view of EEPROM tab
- Fixes
 - Fixed bug: Performance monitoring doesn't work
 - Fixed bug: CoeOD tab crashed sometimes in diagnosis mode
 - Fixed bug: EscReg tab crashed sometimes on reading values of 0x900 and above

15.20 List of enhancements/bug fixes in version 3.1.2

- Enhancements
 - Added support for EC-Master V2.6.2.15
 - Improved usability of the Hex-Edit-Control
 - Added "Network Mismatch Analyser" to context menu of device
 - Improved bus mismatch handling
 - Added new param "MasterDebugMessageLevel" to user.xml
- Fixes
 - Fixed bug: CoE-Emergency message doesn't contain the complete information
 - Fixed bug: CoeOD tab of slaves wasn't displayed with EC-Master V2.4
 - Fixed bug: File wasn't truncated on FoE upload

15.21 List of enhancements/bug fixes in version 3.1.1

- Enhancements
 - Set state of slaves to INIT on disconnect from local system
- Fixes
 - Fixed bug: Writing special EscReg values caused exception
 - Fixed bug: Toolbar was not correctly translated on changing language

15.22 List of enhancements/bug fixes in version 3.1.0

- Enhancements
 - Added support for EC-Master V2.6.2.13
 - Added support for slave "EL9010"
 - Added support for more than two decimal places

- Fixes
 - Fixed bug: In some cases the "ConnectionLost" event was missed
 - Fixed bug: "Name" column was invisible with large values
 - Fixed bug: Names were with hot-connect not displayed correctly

15.23 List of enhancements/bug fixes in version 3.0.4

- Fixes
 - Fixed bug: ShortInfo of devices was not displayed correctly
 - Fixed bug: Check if additional plugin archive is available
 - Fixed bug: Added correct splash screen
 - Fixed bug: Revision of bus slaves was not displayed in BusMismatch-Dialog

15.24 List of enhancements/bug fixes in version 3.0.3

- Enhancements
 - Added support for EC-Master V2.6.2.12
 - Disable FoE transfer only if slave is in INIT
 - Added new toggle buttons to "HexEditControl" for switching mode
- Fixes
 - Fixed bug: EscReg tab showed wrong values of subentries
 - Fixed bug: Reading process variables failed over RAS with EC-Master V2.5
 - Fixed bug: Writing some EscReg values caused an exception
 - Fixed bug: Removed log message "project loaded"
 - Fixed bug: Names were sometimes not displayed correctly
 - Fixed alignment problems of "TypeEditControl"
 - Fixed some AoE problems

15.25 List of enhancements/bug fixes in version 3.0.2

- Enhancements
 - Improved memory usage
 - Improved command line support
 - EscReg tab: Show names of ESC types
 - Added support for EC-Master V2.6.2.10
 - Show VendorId, ProductCode, and RevisionNo in "ShortInfoWindow"
- Fixes
 - Fixed bug: Cable quality was not correctly shown in topology view
 - Fixed bug: Timeout occurred in some cases on reading CoE OD over RAS

15.26 List of enhancements/bug fixes in version 3.0.1

- Enhancements
 - Added AoE support
 - Added some minor GUI improvements

15.27 List of features in version 3.0.0

- Added support for EC-Master V2.6.2.2
- New WPF based GUI
- New topology view
- Added "CoE" tab to master information
- Added "ESC Register" tab to slave information
- Added "EEPROM" tab to slave information
- Added user/expert mode