

com.tom CODESYS Release Notes



Important Update Notes

1. com.tom CODESYS update packages are available at <https://www.com-tom.de>.
2. Versions before v18.1.8 may crash while checking large update packages (see ticket #1988). The update package for v18.1.8 is large enough to trigger the crash. The message "It seems like the update package could not be applied successfully." will be shown. Another update package with the suffix "-rtos-only" can be installed. It only updates the RTOS. This fixes the problem and this package is small enough to not trigger the crash. Please install the normal update package right after.

com.tom CODESYS v18.2.14 (2018-07-19)

Component: Brandlabel (6 matches)

Ticket	Type	Summary	Description	Solution
#2162	Defect	CODESYS network variables: Parsing lists from CODESYS 3.x is not working	The CODESYS network variable list parser cannot parse lists from the 3.x version. But since version 2.7 has the same structure it interprets them as such. This works without issues except if comments are used " ", "*/" "/*" or the dataTypes are declared in lowercase "string etc". The list settings are ingored.	Fixed.
#2185	Defect	CODESYS String values quality and timestamp are not copied correctly.	If a string value has a size that can be divided by four its quality and timestamp is not processed corectly.	Fixed
#2208	Defect	DNP3 outstation: Wrong static or event variation when editing the first value after loading website	When editing the first DNP3 outstation value after loading the settings website, the static or event variation shown in the value dialog may be wrong.	Fixed
#2209	Defect	Modbus Slave: Wrong data type when editing first value after loading website	When editing the first Modbus slave value after loading the settings website, the data type shown in the value dialog may be wrong.	Fixed
#2211	Defect	DNP3 outstation: CROB commands queuing does not work	The DNP3 outstation driver does not queue CROB commands correctly. If a new CROB command is received while another one is still pending, the new CROB command could be ignored or it could be repeated endlessly.	Fixed
#2219	Defect	Wrong progress indication while extracting update package	While an update package is being extracted, the progress indication shows a wrong percentage value.	Fixed

Ticket	Type	Summary	Description	Solution
Component: Editor (2 matches)				
Ticket	Type	Summary	Description	Solution
#2117	Defect	Line break in duty cycle bar	Duty cycle bar icon and percentage status should be shown in one line.	Fixed.
#2159	Defect	CODESYS status LED indicates the Config Application State.	The CODESYS run state LED indicates the state of the Config Application. The Help website should document this.	Fixed
Component: General (17 matches)				
Ticket	Type	Summary	Description	Solution
#1745	Defect	Portal communication fails if nearly the maximum of I/Os and variables have been defined (step 1)	If a lot of I/Os and variables are defined (near to the maximum), data cannot be exchanged with the portal. Synchronisation of the node structure works, but when the device is started the next time, the CPU is 100 % busy and the device reboots after some time.	The performance was improved, but the problem was not completely solved.
#1770	Defect	Configuration files are not getting deleted by update package	If an update package with an empty e.g. Modbus or CoDeSys network variables configuration is getting installed on a device with a previous Modbus or CoDeSys network variables configuration, the old configuration will not be deleted/overwritten.	Fixed
#1922	Enhancement	64-bit integer numbers	The WEB-PLC should support 64-bit integer numbers.	Implemented
#2035	Defect	Update: Packages with empty files cannot be applied	If a update package contains an empty file, it cannot be applied. This may happen for example if you export the OpenVPN configuration with an empty configuration file.	Fixed
#2054	Defect	CODESYS V3 missing features integration	Cloned from #2018 : com.tom CODESYS v3.5 should support most of the features of the old CODESYS v2.3 version.	Implmented
#2084	Defect	IP configuration password not changed by configuration update package	When a configuration package is applied that contains login information, the password for the IP configuration through the com.tom IP tool (or the @CHIPTOOL) is not changed.	Fixed
#2109	Enhancement	Add more CA certificates	The com.tom firmware should contain all popular certification agency certificates so that it can connect to any HTTPS web server as a client.	Implemented.
#2125	Defect	OPC UA Server: Change of array lengths not detected by PLC	If an OPC UA server value's array length is changed the PLC does not detect it. This can lead to a misconfigured programm to run.	Fixed
#2140	Enhancement	Use CellModem functionality to offer location services without GPS	Telit offers a service over which the CellModem can know its location via base station triangulation (or something...). Use this functionality to read the location of the device.	Implemented

Ticket	Type	Summary	Description	Solution
#2157	Defect	M-Bus: Correct German translation	The up/down translation in German is wrong.	Fixed
#2167	Defect	CODESYS Network Variables: Group variables by list cannot be set.	The CODESYS network variables option group by list cannot be set.	Fixed
#2178	Enhancement	Support Forbes Marshall Extension Board		Implemented
#2180	Defect	Update (website) shows "Communication error: Timeout exceeded" but continues in background	Update (website) shows "Communication error: Timeout exceeded" but continues in background	Fixed
#2192	Enhancement	MicroBrowser: generated variable list might become to large for the driver to handle.	The Microbrowser generates a variable list that is to expose them to the interface users. This list size has a maximum size of 16384 Bytes, which can be reached relatively easy.	Fixed
#2200	Enhancement	OpenVPN: Support tls-auth option	The OpenVPN option tls-auth should be supported.	Implemented
#2213	Defect	Opening help topic in new window does not work in Chrome	When opening a new window for the help system in Google Chrome the requested topic is not shown. If the window is already open, the requested topic is shown.	Fixed
#2221	Defect	Messages: Variable references might be assigned to the wrong variable	<p>This can happen if the name of one variable is the first part of another's name and it is positioned after the mentioned variable.</p> <p>For example:</p> <pre>idx: 0 name: uint8Max idx: 1 name: uint8</pre> <p>If a reference is created to the variable "uint8", it will be assigned to "uint8Max".</p>	Fixed

Component: Run Time System (8 matches)

Ticket	Type	Summary	Description	Solution
#2036	Defect	Messages: Cannot send directly after start-up	Directly after the device has started up, the first short message cannot be sent. The error message "Message manager: Sending message <message index> failed (-1)." appears in the event log.	Fixed
#2057	Defect	Modbus RTU Slave: Serial port not freed when serial port is changed	When a com.tom has more than one serial port and you change the port for the Modbus RTU Slave driver, the previously used port will not be freed so that it can be used by other components.	Fixed

Ticket	Type	Summary	Description	Solution
#2158	Enhancement	Support of high resolution timestamps in CODESYS	Support of high resolution timestamps in CODESYS Example: SysTimeRtcHighResGet(timestamp_ms)	Implemented
#2198	Defect	IEC 61850: Client may crash on non-GOOSE update	The IEC 61850 client may crash the firmware when a value is updated, but only if the update is not caused by GOOSE.	Fixed
#2204	Defect	OPC UA Server: Only one subscription per session	The OPC UA server supports only one subscription per session. If the subscription is for example used for ModelChangeEvents (like for example Unified Automation's UaExpert does), no subscription is available for monitored items. The error code BadTooManySubscriptions will be returned.	Fixed
#2207	Defect	DNP3 outstation: Timestamps are incorrect	Timestamps transmitted from the DNP3 outstation driver are incorrect.	Fixed
#2215	Defect	DNP3 outstation: Inputs cannot be read back	DNP3 outstation inputs (outputs from master's point of view) cannot be read back by the master. The master always reads the initial value.	Fixed For binary inputs (outputs from master's point of view) with Complementary two-output model the master can only read back whether any of the two inputs/outputs is set.
#2235	Defect	IEC 61850 server: Crash on setting group without DOs in IED section	The IEC 61850 server may crash the whole firmware if there is a setting group where there are no instances of the DOs in the IED section of the ICD file.	Fixed

Component: Website (17 matches)

Ticket	Type	Summary	Description	Solution
#1564	Defect	Update without SD card and then without reboot with SD card does not work	If an update using the website's update tab is executed without an SD card and then executed with an SD card (with needed folders) and without a reboot is not possible. The error messages on the tab are: "The file has been rejected"	Fixed
#1607	Defect	IEC 61850: Negative intervals allowed	The IEC 61850 configuration form allows negative intervals. A valid input range should be defined. Probably there is also an upper limit.	Fixed.
#1619	Defect	Upload hangs in IE when external medium is not accessible	In Microsoft Internet Explorer uploads will hang instead of timing out when the external medium is not accessible.	

Ticket	Type	Summary	Description	Solution
#1737	Enhancement	User management	<p>The WEB-PLC should provide an elaborate user management. It should be possible to create several users and assign the following access rights to each of them:</p> <ul style="list-style-type: none"> • View the home page • View configuration (per configuration group, e.g. network, portal, Modbus Client/Master etc.) • Reboot • Edit configuration (per configuration group) • Edit users • Export the configuration • Apply an update package • View the editor • Start/stop the PLC • Edit the program <p>Additionally it should be possible to allow/disallow to apply an update package directly from the SD card through the reset button and to allow/disallow/set the password for IP configuration through the IP tool.</p>	Implemented
#1873	Defect	Error on home page if any string contains control characters	If a string value on any I/O interface contains a control character (e.g. line break), the home page will stop to update the I/O values and show HTTP error 500.	Fixed
#2049	Defect	NAT's popup window allows ip field to be empty	NAT's popup windows to add entry and edit entry allow ip address input field to be empty when clicking ok.	Fixed
#2064	Enhancement	WLAN: SSID column sorting on scan results dialog	The SSID column on the scan results dialog of WLAN settings should be sortable with descending and ascending alphabetical and numerical order.	Implemented
#2110	Defect	Diagnostics: Ping allows too many data bytes	The ping command on the diagnostics page allows up to 65535 data bytes, but only up to 65507 work. If you chose 65508 data byte or more, the message "ping: sendto: Message too long" is shown.	Fixed.
#2113	Enhancement	Integrate Ininet's MicroBrowser web browser	The WEB-PLC firmware should support the MicroBrowser web browser. The MicroBrowser is used in CTG line devices to display websites (HMI visualisations etc.). It should not be confused with Ininet's MicroBrowser Interface which is used for data exchanged with HMIs.	Implemented
#2135	Defect	Fix localization error in the IEC 61850 help page	Swap the english and german localization strings for "Server SCL file path".	Fixed
#2161	Enhancement	Improve DNP3 help text	The style of the help text should be improved.	Implemented.
#2186	Enhancement	CODESYS network variables: Edit name and portal name	For CODESYS network variables it should be possible to edit the name and the portal name of each list and each variable.	Implemented.

Ticket	Type	Summary	Description	Solution
#2205	Defect	WLAN: Error message only shown very shortly when scanning fails	When scanning for WLAN networks fails for any reason, the corresponding error message is only shown very shortly.	Fixed.
#2214	Enhancement	Messages: Allow up to 25 messages	The messages functionality should allow up to 25 send/receive messages.	Implemented
#2230	Defect	IEC 60870-5-104: Erroneous check for relation between T1 and T2	For IEC 60870-5-104 server and client the T2 timeout value must be smaller than the T1 timeout value. However the check is done incorrectly leading to false positives and false negatives	Fixed
#2231	Defect	PROFIBUS DP slave: Module ID 255 should not be allowed	When adding or editing a PROFIBUS DP slave module, the module ID 255 can be entered. But when the configuration should be saved an error message is shown, stating that the module ID is out of bounds.	Fixed
#2234	Defect	Help icon on settings website does not open help topic for settings website	When the help icon on the settings website it clicked, the help website is opened, but not the help topic for the settings website (like for other sites).	Fixed

com.tom CODESYS v18.1.15 (2018-05-04)

Component: General (2 matches)

Ticket	Type	Summary	Description	Solution
#2175	Defect	IEC 60870-5-104 Server: Pulse Commands Lead to a System crash	Short or Long pulse commands lead to a System crash.	Fixed
#2183	Enhancement	Support RicohR222xx RTC on SC1x5 Targets	The WEB-PLC should support the RicohR222xx RTC for SC1X5 Targets.	Implemented

com.tom CODESYS v18.1.13 (2018-03-19)

Component: General (6 matches)

Ticket	Type	Summary	Description	Solution
#2130	Defect	IEC 61850: SCL upload fails if the filename is the same as the previous SCL file	SCL upload fails if the filename is the same as the previous SCL file.	Fixed
#2132	Defect	Update packages containing WLAN configuration cannot be applied	If a update package contains the WLAN configuration, it cannot be applied.	Fixed

Ticket	Type	Summary	Description	Solution
#2133	Defect	IEC 61850: Timestamp is not transmitted if the value is 0	IEC 61850 transmits the timestamp value only if the value has also changed, because the initial value is 0 no timestamp is transmitted until the value changes.	Fixed
#2144	Defect	Devices without a second ethernet interface cannot store their network configuration	The network configuration cannot be saved if the device does not support a second ethernet interface. An error message is shown but no field is marked as false.	Fixed
#2145	Defect	M-Bus: Cannot scan	The Scan functionality of the M-Bus driver is not working. After executing a scan the following error message is generated "Unknown method!".	Fixed
#2146	Defect	Long running CODESYS Web-visu leads to unspecified errors	If a web-visu is active CODESYS "forgets" to close files that are polled for changes usually the main 'htm' file. After some time depends on the number of clients and the refresh rate there are no more system resources left which leads to unspecified errors.	Fixed

Component: Run Time System (3 matches)

Ticket	Type	Summary	Description	Solution
#2111	Enhancement	Qualities and timestamp	The qualities and timestamps of the I/O drivers should be accessible from CODESYS.	Implemented
#2131	Defect	Hardware reset does not restore the CODESYS licence file	In a Hard Reset the codesys licences is removed, but not restored.	Fixed
#2141	Defect	I/O Manager does not exchange data if it is not updated in a task	In order for data to be exchanged the I/O Manager values must be updated in a task.	Fixed

com.tom CODESYS v18.1.8 (2018-02-13)

Component: Editor (3 matches)

Ticket	Type	Summary	Description	Solution
#2082	Defect	Help page for Pack and Unpack units	Help page is missing that pack and unpack units are able to handle up to 32 bits	Fixed.
#2093	Defect	Processing order changed to 0 when dialog cancelled	The change processing order dialog sets the processing order of the corresponding element to 0 when clicking cancel.	Fixed
#2099	Defect	CODESYS Update packages containing a program cannot be applied	If a update package contains the plc programm, it cannot be applied.	Fixed

Component: General (12 matches)

Ticket	Type	Summary	Description	Solution
--------	------	---------	-------------	----------

Ticket	Type	Summary	Description	Solution
#1484	Enhancement	DNP3 Outstation	The WEB-PLC should feature a DNP3 outstation driver. The driver will require a separate licence on the device. TLS, Secure Authentication and serial mode will not be supported in this version.	Implemented
#2018	Defect	CODESYS V3 missing features integration	com.tom CODESYS v3.5 should support most of the features of the old CODESYS v2.3 version.	Implemented
#2040	Enhancement	Run in demo mode if there is no licence	If the device does not have a valid licence, the PLC should run in demo mode for four hours.	Implemented
#2042	Defect	IEC 60870-5-104 Server: Portal node creation error.	The event log message "Could not create node. (Error Code 5)" is generated.	Fixed
#2043	Defect	CODESYS retain/persistent memory usage, triggers a not enough memory error in IDE	The retain/persistent data size is not set correctly in the device description file (xml). So the IDE throws a not enough memory error.	Fixed
#2047	Defect	MicroBrowser: Variables cannot be written	Variables can no longer be written through the MicroBrowser interface. The message "! Variable or I/O value not found." is returned.	Fixed
#2052	Defect	WLAN: Connection loss if access point is shortly not visible	If the access point is not visible after a successful connection, the WLAN driver is not able to re-establish the connection	Fixed
#2062	Defect	IEC 61850 Server GOOSE subscription not working for complex data structures.	Using IEC 61850 Server GOOSE subscription with complex data structures crashes the WEB-PLC.	Fixed
#2073	Defect	Network configuration cannot be changed through configuration update package	The network configuration cannot be changed through an configuration update package exported by the com.tom itself. If a configuration update package includes the network configuration, the package cannot be applied.	Fixed
#2078	Defect	Diagrams with pack/upack units cannot be loaded after update to Version 11.0.7	If a diagram contains pack/upack units and the device is updated to the Version 11.0.7 it will not load anymore.	Fixed
#2089	Defect	CODESYS does not support string values and arrays.	Configured string values and arrays are not supported, there generated in the device description file but code that uses them creates compiler errors in the IDE.	Fixed
#2094	Defect	Adding/Removing Variables causes Memory exceptions in PLC task	If the Variable list is modified in any way, and then the device description is exported the PLC task will throw an exception stop its execution.	Fixed

Component: Run Time System (6 matches)

Ticket	Type	Summary	Description	Solution
#2048	Defect	Configuration website not available	After an indefinite time (> 1 day) the configuration website is not accessible anymore. This problem occurs only under special circumstances. One TCP connection must be established, while other TCP connections are created over and over, E.g. when the device is connected to the portal and a Modbus TCP client is configured and at least one Modbus TCP server is not reachable.	Fixed

Ticket	Type	Summary	Description	Solution
#2053	Enhancement	IEC 61850: Extend command execution interaction with PLC logic	<p>IEC 61850 commands have the optional attributes "opOk" and "opRcvd".</p> <p>The following applies if the command's "ctlVal" is selected:</p> <p>If "opOk" is present and selected the PLC logic uses it to allow/disallow reception of this command. "opOk" == true indicates readiness to accept the command. "opOk" == false causes the IEC 61850 driver to refuse the command with an error return message to the IEC 61850 client.</p> <p>If "opRcvd" is present and selected the IEC 61850 driver generates a short high pulse detectable by the PLC logic upon command reception.</p>	Implemented
#2058	Defect	MicroBrowser: cgi-bin/ILRReadValues.exe may return random data	If the CGI function cgi-bin/ILRReadValues.exe of the MicroBrowser interface is called without any arguments it returns random data.	
#2096	Defect	IEC 61850: Reporting problems on server after connection loss	When a client enables reporting and the network connection is temporarily lost, reporting cannot be re-enabled afterwards.	Fixed
#2097	Enhancement	IEC 61850: Timestamps for unchanged objects should be marked invalid	If an IEC 61850 object has not been changed, yet, the timestamp flags should indicate that the timestamp of the object is invalid.	Implemented
#2100	Enhancement	Update IEC 61850 library to V2.7.59	<p>The IEC 61850 should be updated to the latest version (2.7.59) that addresses the following issues:</p> <p>New features</p> <ul style="list-style-type: none"> Segmentation of reports is now supported Stack now send MMS initiate error PDU if the MMS association max PDU size is under 65000 Added support for DbPos as a basic type (btype) in the SCL file Select or Operate Commands sent with orCat set to ORCAT_NOT_SUPPORTED (0) will now automatically be rejected Added support to update a data point of type IEC61850_DATATYPE_ENUMERATED with Unsigned8 and Integer8 data types Stack now supports MMS minimum PDU size negotiation - Minimum supported PDU size is 1000 bytes, Maximum is 65000 (32000 on SC1x3) Stack no longer required private IDs on remote DAIS for goose subscription to work with external references (input groups) External References can now contain dot sub notation for DA elements e.g. daName="phsCA.cVal.mag.f" <p>Bug Fixes</p>	Implemented

Ticket	Type	Summary	Description	Solution
			<ul style="list-style-type: none"> • optField services (dyn, conf, fix) are now loaded correctly • fixed issues where long report ID may end up with corrupt data on the end • Improved Edition 2 Conformance support • Improved handling of fragmented packets on unstable TCP/IP streams • Improved support for Controls that contain structured Control / Status / Feedback values • Improved support for floating point controls • Changed how memory allocation works in the controls structures, to minimise the size of a contiguous memory block being allocated • Improved memory management which could possibly memory corruptions • Fixed issue where server threads would not shut down correctly • Fixed issue where buff time would always be set and the queue purged even if the new buftime is the same as the old one • Fixed issue where an MMS Read with Optional flag VariableAccessSpecification set to true would not return the full Object reference MMS dollar string • Fixed timestamp sometimes being out by 1 day • Added check to ensure Setting groups have valid DAs • Fixed possible crash when a functional constraint has no item name • Fixed decoding issue on MMS initiate-RequestPDU messages • Fixed bug when decoding structures via alternate access requests • Fixed bugs in the server when processing File Attributes requests 	

Component: Website (6 matches)

Ticket	Type	Summary	Description	Solution
#826	Defect	IEC 61850 configuration form may store inconsistent configuration	The configuration form of the IEC 61850 interface may store an inconsistent configuration. If the upload of the SCL file fails, the interface will not show an error message and still store other parts of the configuration. The inconsistent configuration will prevent the IEC 61850 driver to start.	Fixed

Ticket	Type	Summary	Description	Solution
#1478	Enhancement	Provide more configuration options for M-Bus	<p>The configuration form for the M-Bus module should provide more options:</p> <ul style="list-style-type: none"> • Change the option <i>Request main page only</i> to the more general <i>M-Bus max multipage</i> • New <i>M-Bus mode: Reverse secondary scan</i> • New option: <i>Secondary address mask</i> • New option: <i>M-Bus timeout</i> • New option: <i>M-Bus idle timeout</i> • New option: <i>M-Bus full timeout</i> • New option: <i>M-Bus request mode</i> • New option: <i>M-Bus reset mode</i> <p>The default values for the new options are backward compatible.</p>	Implemented
#1988	Defect	Update package cannot be applied	Sometimes installing an update package fails. The message "It seems like the update package could not be applied successfully." is shown. The probability of failure increases with the size of the update package. Since version 11.0.7 the size of update packages has reached a critical limit. The problem did not appear before. The update fails before anything is actually installed. So nothing bad happens to the device. You just cannot install the update.	Fixed
#2011	Defect	Network configuration form allows empty IP address and netmask	When DHCP is not being used, the network configuration form still allows the fields for IP address and IP netmask to be empty.	Fixed
#2076	Defect	Messages variable reference list is empty	When configuring a send/receive message the "Add variable reference" list is empty.	Fixed
#2087	Defect	Cellular Modem: Signal strength icon always shows no bars	The icon that indicates the signal strength of the cellular modem always shows 0 of 4 bars.	Fixed

Copyright © Beck IPC GmbH, All rights reserved

Last modified on 19 Jul 2018, 17:40:11