

Version 6.1.8

Compiler Version 4.32, Release Date 08.09.2009

- NEW: Modbus/TCP redundant PLC's supported.
- CHG: Galileo: mask save as: changed to "save copy as".
- FIX: Runtime: memory used and not released anymore with every error tag change if attribute "add to history" is NOT set. This can cause running out of memory if panel not reboot for a long time.
- FIX: Runtime: fatal error under some circumstances (memory allocation) at project loading.
- FIX: Runtime: touch state freeze if touch disable picture is overlapped by the system message.
- FIX: Runtime: Commttest have not worked with Windows Vista.
- FIX: Runtime: Selectron Modbus over CANopen: error message "Communication disturbed @Status Word" occurred.
- FIX: Runtime: Mitsubishi data corruption when writing array members.
- FIX: Runtime: GRS Timer: timer clearing outputs when time is adjusted backwards.
- FIX: Runtime: recipe function: "find next recipe" doesn't find entry behind a not matching entry.
- FIX: Runtime: buttons with attributes 'stream' and 'no frame' not refreshing correct.
- FIX: Runtime: refresh of error window flickering.
- FIX: Runtime: refresh problem in transparent keyboard masks if a polygon or line objects are used as boarder.

Version 6.1.7

Compiler Version 4.32, Release Date 11.06.2009

- FIX: Galileo: fatal error at script import if a array element tag was imported, and an tag with the name but another type already exists.
- FIX: Galileo: fatal error at resizing a graph object under certain circumstances.
- FIX: Galileo: project conversion < V6.0.0: the special functions "Change to language 0" ... "Change to language 99" are not converted in scripts to the function "Change language".
- FIX: Galileo: FTP: download terminated if the panel need to much CPU power.
- FIX: Galileo: search/replace of fonts does not work, if the fonts don't have continuously ID's with start at 0.
- FIX: Galileo: compiler: warning if a mixed structure (polling) was defined, which contain error tags.
- FIX: Galileo: compiler: size check of signed dword for actual recipe entry tag wrong.
- FIX: Galileo: masks are not marked as changed, if a undo or redo function was called.
- FIX: Galileo: adding communication parameter to the registry have not worked correctly.
- FIX: Galileo: refresh of tag property page "text" not refreshed in each case.
- FIX: Galileo: project can not opened if the "[Startup]" entries are bigger than 4096 byte.
- FIX: Galileo: polygon: terminate polygon edit mode with a double click have insert two points instead of one.
- FIX: Galileo: tag import: structures are not addressed directly if the first element was an array.
- FIX: Galileo: refresh problem with small objects and some zoom factors.
- FIX: Galileo: text search in tags: text number 0 are found in each tag.
- FIX: Runtime: fatal error at printing: if print report and standard mask uses same graph block and no mask change between print and graph start.
- FIX: Runtime: fatal error if a parameter list object was used in a sub mask.
- FIX: Runtime: user management: monitoring of bad logins have not worked.
- FIX: Runtime: user management: wrong error messages at user password aging.
- FIX: Runtime: not allowed locking active user account.

- FIX: Runtime: some special functions for user management keyboards, with user defined button text, did not display the correct text, but always the default text.
- FIX: Runtime: dynamic objects position: objects outside/overlapping screen border calculated wrong position.
- FIX: Runtime: dynamic objects position: wrong position calculation if complete mask redraw (f.e. after change project language).
- FIX: Runtime: dynamic objects position: "absolute" dynamic position of object with negative coordinates wrong calculated.
- FIX: Runtime: flickering of overlapping objects reduced.
- FIX: Runtime: special function "Error Auto Scroll ON/OFF" failed if it was called by entry script.
- FIX: Runtime: refresh problem with the object polygon with line width 0.
- FIX: Runtime: error window: with option "youngest entry on top" has wrong error selection after window error refresh if "Error Auto Scroll ON/OFF" is OFF.
- FIX: Runtime: error window: wrong line selection in combination with "Auto Scroll OFF" and special function to change selection.
- FIX: Runtime: communication bridge with dummies not working from symbolic to image connection.
- FIX: Runtime: automatic directory creation on protected volume names (as f.e. \StorageCard2) not executed.
- CHG: Runtime: circular input buffer integrated, for stable use with universal high speed devices (e.g. bar code scanner).
- CHG: Runtime: DBB address range increased from 8191 to 65534 for "Siemens - MPI", "Siemens - Industrial Ethernet", "Siemens - S7 Profibus Standard Profile"
- FIX: Recipe Editor: range check for unsigned dword tags wrong.

Version 6.1.6

Compiler Version 4.32, Release Date 19.1.2009

- FIX: Galileo: text optimization: text in scripts are only at the first line in the script found.
- FIX: Galileo: project size conversion: resize the project by x-factor and y-factor instead of one proportional factor.
- FIX: Galileo: close mask: no question to save a modified mask under certain circumstances.
- FIX: Galileo: script search: search scripts in mask settings have not worked.
- FIX: Galileo: object order manipulations: the object order of grouped objects was changed at functions "Move to back" or "Move backward".
- FIX: Galileo: Siemens Industrial Ethernet: wrong address alignment at address type "DB%d.DBB%d".
- CHG: Galileo: script functions: tags with data direction "read" were not allowed at following functions: "ChangePWOther", "ChangePWOwn", "NewUser", "UserLogin".
- FIX: Runtime: fatal error if the project path or the project name contain UNICODE characters.
- FIX: Runtime: function call of system windows in entry scripts of masks are wrong drawn.
- FIX: Runtime: refresh problem with user defined keyboards and rectangle line width > 3.
- FIX: Runtime: graph: last measure point in graph not stored/loaded in archive.
- FIX: Runtime: time/date object displayed empty after system error message fade out.
- FIX: Runtime: error window: selection in error window changed caused by redrawing of error window by a moving object.
- FIX: Runtime: user management: password length has not been verified at creating new user.

- FIX: Runtime: user management: auto logout time not correctly after user change.
- FIX: Runtime: function key "Save History in File": function "save history in file" saved only LF in text file instead of CR LF.
- FIX: Runtime: touch unlock not succeed by remote client.
- FIX: Runtime: the back light was switch of at minimizing of the remote client.

Version 6.1.5

Compiler Version 4.32, Release Date 08.09.2008

- FIX: Galileo: text export to Excel: problem to export text like date formats.
- FIX: Galileo: configuration of dynamic tag limits not saved in all cases.
- FIX: Runtime: communication problem of "A. Bradley - Logix - EtherNet/IP" if a string tag is used in a structure.
- FIX: Runtime: GPI with a communication "Mitsubishi PG-FX" hanging if the GPI is closed.
- FIX: Runtime: GPI with a graph archive work not correctly under VISTA.
- FIX: Runtime: problem to switch to redundant PLC "A. Bradley - Logix".
- FIX: Runtime: if an PLC-text input was started with "Select ASCII" the object was not updated during editing.
- CHG: Runtime: communication "Mitsubishi Melsec SPS (AX/FX)" over system port available.
- CHG: Runtime: "Beckhoff - BC9000 TCP/IP" float tags added.
- CHG: Runtime: more detailed communication error messages at "A. Bradley - Logix".
- CHG: Runtime: system port for KEBA panels available.
- CHG: Install: installation path of sample projects can be defined.

Version 6.1.4

Compiler Version 4.32, Release Date 31.07.2008

- FIX: Galileo: fatal error: at tag import, if a imported tag name is identically as an system tag name.
- FIX: Galileo: fatal error: at text export if not all languages are selected.
- FIX: Galileo: hanging: if objects of a mask are copied to an other project with a smaller mask resolution.
- FIX: Galileo: the position and size of objects, which are copied from an older project (<6.1.0) are incorrect.
- FIX: Galileo: copy/paste with keys Ctrl-C, Ctrl-V was not implemented for scripts, printers, print forms and graphs.
- FIX: Galileo: copy/paste of graph objects between two Galileo projects: the curve alignments was lost.
- FIX: Galileo: a print of a mask with transparent objects was not correctly.
- FIX: Galileo: conversion of old user management (<V6.0.0): dynamic password definition was lost at the conversion.
- FIX: Galileo: problem with EIB tag import: structures are addressed mistakenly.
- FIX: Galileo: value entry objects: number of digits of float tags are not correctly displayed.
- CHG: Galileo: copy/paste between two Galileo projects was limited to the same Galileo version.
- CHG: Galileo: user management: logout value for group id definable.
- FIX: Runtime: user management: dynamic parameter are not read from the communication, if the tag is not used else in the project.
- FIX: Runtime: slider with a picture on the button was not correctly draw, if the picture was stretched.
- FIX: Runtime: camera objects: camera object draw problem, if two camera objects are defined in separate masks but both are started in the same mask.
- FIX: Runtime: some objects were not accessible if the number of tags are very high under certain circumstances.

- FIX: Runtime: help text with ID bigger than 65535 not displayed by help buttons.
- FIX: Runtime: graph: refresh problem with zoom function if the ruler is visible.
- FIX: Runtime: small memory leak at saving of text files.
- FIX: Runtime: communication problem of MxPro with some PLC's.
- CHG: Runtime: graph archive: if number of graph archives is only 1, then no index is append to the name.
- CHG: ABLogix: bring some more granularity to error messages.

Version 6.1.3

Compiler Version 4.31, Release Date 29.05.2008

- FIX: Runtime: Siemens - Industrial Ethernet: protocol have not worked.
- FIX: Runtime: Can Open Polling: the pause time have not worked.

Version 6.1.2

Compiler Version 4.31, Release Date 26.05.2008

- NEW: Panels: 5.7" TFT as XV-450/460-57TQB and XVS-450/460-57MPI variants.
- NEW: Panels: 8.4" TFT as XV-460-84TVB and XVS-460-84MPI variants.
- NEW: Protocol: Beckhoff - BC9000 TCP/IP (Beta) implemented
- FIX: Galileo: Fatal error: at project upload under certain circumstances.
- FIX: Galileo: Mask changes mapping lost under certain circumstances.
- FIX: Galileo: Dynamic limits of arrays have not worked correctly.
- FIX: Galileo: It was not possible to deactivated a screen saver which was defined as mask change.
- FIX: Galileo: Mask objects size: wrong value check for the object width.
- FIX: Galileo: Picture optimization: problem to optimize pictures if the upper case of the picture file was changed.
- FIX: Galileo: Refresh of sub masks have not worked if the language was changed.
- FIX: Runtime: Fatal error: if a bargraph object was used in a report mask.
- FIX: Runtime: Memory leaks at mask changes.
- FIX: Runtime: User management: dynamic created user is member of more than one group under certain circumstances.
- FIX: Runtime: Different formates in recipe files (f.e. decimal, decimal +/-, BCD) stores wrong values in TAB file.
- FIX: Runtime: "Galileo Open" licensing have not worked.
- FIX: Runtime: Codesys/MxPro: the pause time have not worked.
- FIX: Runtime: System error message shown at file access on network resource without access permission.
- FIX: Runtime: Mask report printout with ESC printer printed all texts in wrong y-position.
- FIX: Runtime: Maximal limits of dword tags wrong.
- FIX: Runtime: Graph in standard mode: standard graph drawn multiple times if number of displayable measure points is bigger than max. measure points of the graph block.
- FIX: Runtime: Special function "Save history as file" have not worked.
- FIX: Runtime: Special functions "Image Save", "Image Load" and "Execute (dynamic)" does not work if the tag parameter is nowhere used in the project.

Version 6.1.1

Compiler Version 4.31, Release Date 31.03.2008

- FIX: Galileo: Copy/paste from one project to another: text definitions lost if the text was not defined in all

languages.

- FIX: Galileo: Project resizing: the radius of round rectangle object was not resized.
- FIX: Runtime: Fatal error: on masks with recipe objects. See OS release notes V2.15.5: flash problem.
- FIX: Runtime: Communication disabled at startup: See OS release notes V2.15.5: flash problem.
- FIX: Runtime: User management: wrong system rights if groups are deleted and new groups are added again.
- FIX: Runtime: The limits of tags which are dynamic defined, are not correctly in all cases.
- FIX: Runtime: Remote Client: the remote client does not work, if the client was started several times.
- FIX: Runtime: Script: a mask change in the start script of start mask was not executed.
- FIX: Runtime: Text output: a line break at the end of a text was ignored under Windows CE.
- FIX: Runtime: Wrong keyboard shown, if a keyboard call another keyboard and at the same time a mask change by PLC or script is executed
- FIX: Runtime: Keyboards: keys in a keyboard can be at wrong position, if the keyboard position is outside the screen borders and moved inside the visible screen.

Version 6.1.0

Compiler Version 4.31, Release Date 28.02.2008

- NEW: Following panels no longer supported in this version: GF2 10", GF2 15" and XV-/MC-4x0-57CQB (StrongARM)
- NEW: New 15" color panel with integrated MPI communication slot.
- NEW: Windows CE 5.0 integrated.
- NEW: Dynamic object position/size for a selection of dynamic objects types implemented.
- NEW: Resizing Galileo projects at changing the panel type (objects, font sizes, pictures, line widths).
- NEW: Tag limits: dynamic limits can be combined with constant limits.
- NEW: Function added to distribute mask objects horizontal and vertical evenly.
- NEW: Panel registry entries can be managed by Galileo.
- NEW: Panel start picture can be managed by Galileo.
- NEW: New special function: "Execute (dynamic)" with dynamic tag parameters.
- NEW: Recipe: maximal number of recipe entries increased to 9999. Maximal recipe file size changed from 5MB to unlimited.
- NEW: Menus in Galileo and RecipeEdit in XP style implemented.
- NEW: Internal picture format changed to PNG (Portable Network Graphics).

Version 6.0.8

Compiler Version 4.16, Release Date 26.09.2008

- FIX: Galileo: fatal error: at tag import, if a imported tag name is identically as an system tag name.
- FIX: Galileo: fatal error: at text export if not all languages are selected.
- FIX: Galileo: text export to Excel: problem to export text like date formats.
- FIX: Galileo: hanging: if objects of a mask are copied to an other project with a smaller mask resolution.
- FIX: Galileo: Problem to copy/paste a tag which was created by the function "duplicate".
- FIX: Galileo: conversion of old user management (<V6.0.0): dynamic password definition was lost at the conversion.
- FIX: Galileo: copy/paste with keys Ctrl-C, Ctrl-V was not implemented for scripts, printers, print forms and graphs.
- FIX: Galileo: a print of a mask with transparent objects was not correctly.

- FIX: Galileo: copy/paste of graph objects between two Galileo projects: the curve alignments was lost.
- FIX: Galileo: value entry objects: number of digits of float tags are not correctly displayed.
- FIX: Galileo: problem with EIB tag import: structures are addressed mistakenly.
- CHG: Galileo: copy/paste between two Galileo projects was limited to the same Galileo version.
- FIX: Runtime: some objects were not accessible if the number of tags are very high under certain circumstances.
- FIX: Runtime: communication problem of "A. Bradley - Logix - EtherNet/IP" if a string tag is used in a structure.
- FIX: Runtime: graph: refresh problem with zoom function if the ruler is visible.
- FIX: Runtime: slider with a picture on the button was not correctly draw, if the picture was stretched.
- FIX: Runtime: small memory leak at saving of text files.
- FIX: Runtime: camera objects: camera object draw problem, if two camera objects are defined in separate masks but both are started in the same mask.
- FIX: Runtime: help text with ID bigger than 65535 not displayed by help buttons.
- FIX: Runtime: communication problem of MxPro with some PLC's.
- FIX: Runtime: GPI with a graph archive work not correctly under VISTA.
- FIX: Runtime: problem to switch to redundant PLC "A. Bradley - Logix".
- FIX: Runtime: if an PLC-text input was started with "Select ASCII" the object was not updated during editing.
- CHG: Runtime: graph archive: if number of graph archives is only 1, then no index is append to the name.
- CHG: Runtime: more detailed communication error messages at "A. Bradley - Logix".
- CHG: Install: installation path of sample projects can be defined.

Version 6.0.7

Compiler Version 4.16, Release Date 26.05.2008

- FIX: Galileo: Fatal error: at project upload under certain circumstances.
- FIX: Galileo: Mask changes mapping lost under certain circumstances.
- FIX: Galileo: Dynamic limits of arrays have not worked correctly.
- FIX: Galileo: It was not possible to deactivated a screen saver which was defined as mask change.
- FIX: Galileo: Picture optimization: problem to optimize pictures if the upper case of the picture file was changed.
- FIX: Galileo: Refresh of sub masks have not worked if the language was changed.
- FIX: Runtime: Fatal error: if a bargraph object was used in a report mask.
- FIX: Runtime: Different formates in recipe files (f.e. decimal, decimal +/-, BCD) stores wrong values in TAB file.
- FIX: Runtime: User management: dynamic created user is member of more than one group under certain circumstances.
- FIX: Runtime: Codesys/MxPro: the pause time have not worked.
- FIX: Runtime: System error message shown at file access on network resource without access permission.
- FIX: Runtime: Mask report printout with ESC printer printed all texts in wrong y-position.
- FIX: Runtime: Maximal limits of dword tags wrong.
- FIX: Runtime: Graph in standard mode: standard graph drawn multiple times if number of displayable measure points is bigger than max. measure points of the graph block.
- FIX: Runtime: Special function "Save history as file" have not worked.
- FIX: Runtime: Special functions "Image Save", "Image Load" and "Execute (dynamic)" does not work if the tag parameter is nowhere used in the project.

Version 6.0.6

Compiler Version 4.16, Release Date 31.03.2008

- FIX: Galileo: Copy/paste from one project to another: text definitions lost if the text was not defined in all languages.
- FIX: Runtime: Fatal error: on masks with recipe objects. See OS release notes V2.15.5: flash problem.
- FIX: Runtime: Communication disabled at startup: See OS release notes V2.15.5: flash problem.
- FIX: Runtime: User management: wrong system rights if groups are deleted and new groups are added again.
- FIX: Runtime: The limits of tags which are dynamic defined, are not correctly in all cases.
- FIX: Runtime: Script: a mask change in the start script of start mask was not executed.
- FIX: Runtime: Text output: a line break at the end of a text was ignored under Windows CE.
- FIX: Runtime: Wrong keyboard shown, if a keyboard call another keyboard and at the same time a mask change by PLC or script is executed.

Version 6.0.5

Compiler Version 4.16, Release Date 28.02.2008

- NEW: Protocol: Siemens - SIMOTION MIIF
- NEW: 15" color panel with integrated MPI communication slot
- FIX: Galileo: Fatal error: text import: if the language definition dialog was left with the cancel button.
- FIX: Galileo: Problem to copy/paste a tag which was created by the function "duplicate".
- FIX: Galileo: EIB central command manager: selected tags are not checked.
- FIX: Galileo: Fonts: problem with the font selection in the project settings if fonts are added or deleted.
- FIX: Galileo: Compiler: error if a panel was use in portrait mode (only if panel size > 5.7").
- FIX: Galileo: Compiler: recursive tag limits are not identify correctly.
- FIX: Runtime: Fatal error: in protocol "A.Bradley - Logix - DF1".
- FIX: Runtime: Fatal error: crash on key RET if a graph selection list is empty after deleted the last archive file.
- FIX: Runtime: Function key: "UserM: Sel. Group -userdef." display users instead of groups.
- FIX: Runtime: Modbus TCP: parameter "Break time" have not worked.
- FIX: Runtime: GrsCommTest: write only messages are not tested.
- FIX: Runtime: Refresh problem after keyboard removal with blinking objects.
- FIX: Runtime: Camera object: object was not refreshed if it was overlapped by a keyboard.
- FIX: Runtime: Graph: function "Save Archive as" have not worked.

Version 6.0.4

Compiler Version 4.16, Release Date 21.12.2007

- NEW: 15" color panel
- NEW: Protocol "Movisto (Onboard)" added.
- FIX: Galileo: Fatal error: at deleting of tags if the tag was used in the user management.
- FIX: Galileo: Problem to load a project if the language id's are not continuously.
- FIX: Galileo: Line objects in sub masks not correctly compiled.
- FIX: Galileo: Wrong recipe protection conversion at range for all users.
- FIX: Galileo: Recipe: in dialog "recipe overview" the selected tags in arrays and structures are not saved.
- FIX: Runtime: Keyboard inc/dec: problem to edit a bit tag.
- FIX: Runtime: Store graph continuous with dynamic archive name failed at first save.

- FIX: Runtime: If archive is not stored in file: graph not start automatically again after reboot if graph was started.

Version 6.0.3

Compiler Version 4.16, Release Date 24.10.2007

- NEW: Protocol "CoDeSys TURCK HMI-PLC" added.
- CHG: Protocol "MxPro" renamed by "CoDeSys MxPro".
- CHG: Protocol "CoDeSys (local)" removed. Replacement by the protocol "CoDeSys" with the parameter "localhost".
- FIX: Galileo: Fatal error: if a selected text in an object was deleted in the text list.
- FIX: Galileo: Fatal error: if a tag was moved before a structure tag.
- FIX: Galileo: Text import/export: on some PC the line feed character was displayed as ''.
- FIX: Galileo: Picture import: the format BMP could be imported only (since V6.0.1).
- FIX: Galileo: User management: the function key "login user x" generate a compiler error and have not worked correctly on the panel (since V6.0.1).
- FIX: Galileo: Mask entry/exit scripts: script was called too if the script was removed from the mask settings.
- FIX: Galileo: Compiler: problem to compile the script functions "Assign", "Append" and "SetTextConst" if a string tag with length 256 was used as parameter.
- FIX: Galileo: Dynamic graph archive file name: Deleting of a tag x remove the dynamic graph archive file tag too.
- FIX: Galileo: All CE components were active always.
- FIX: Galileo: Graph: start and stop trigger value was not correctly displayed in the definition dialog.
- FIX: Runtime: Fatal error: crash at data assign to string tags in format ASCII without a termination and 256 bytes length.
- FIX: Runtime: Text input at a string tag does not work if the tag length was 256.
- FIX: Runtime: Print online errors: the online print mode was not started again, if it was interrupted by another print job.
- FIX: Runtime: Graph: start trigger at runtime start up failed if the tag had same value as default value of the tag
- FIX: Runtime: Object accessibility: the pattern color was drawing always black.
- FIX: Runtime: Script: the on/off parameter of the special function "GPI-Frame ON/OFF" was ignored, if the function was used in a script.

Version 6.0.2

Compiler Version 4.16, Release Date 13.09.2007

- FIX: Galileo: If the tag functions 'Duplicate' or 'Split Array' are used in a project, then the project cannot be opened again after saving.
- FIX: Runtime: KEBA panel: the batch file 'CopyToIPSM.bat' copy not all files and folders to the internal flash.

Version 6.0.1

Compiler Version 4.16, Release Date 11.09.2007

- NEW: Copy/paste between different projects:
 - Mask objects: pictures and texts are also copied. The assignment of existing tags works now.
 - Tags: texts, dynamic limits and parameter list definitions are also copied.
 - Recipe: the assignment of existing tags works now.
 - Printer forms: the assignment of existing tags works now. Texts are also copied.

- Graphs: the assignment of existing tags works now.
- NEW: Text definition: creating a new text at a number redesigned.
 - NEW: Project archive: to add fonts to the archive optionally.
 - FIX: Galileo: Fatal error: at texts import/export in xls format if Microsoft Excel is not installed on the PC.
 - FIX: Galileo: Fatal error: if a tag is converted in the same type.
 - FIX: Galileo: Fatal error: at tag re-import if an array is imported with start index <> 0.
 - FIX: Galileo: Fatal error: if the last array element was deleted.
 - FIX: Galileo: Fatal error: if an old project (< V3.0) was loaded.
 - FIX: Galileo: Fatal error: at tag definition in function 'number overview', if no parameter list group was selected before.
 - FIX: Galileo: User of group 'Main User' can not change the fonts in a Galileo project.
 - FIX: Galileo: Tags: problem to move an array in a structure.
 - FIX: Galileo: Graph: 'solid line' setting was not saved after closing the dialog.
 - FIX: Galileo: Compiling recipes: problem while reading the TAB file under certain circumstances.
 - FIX: Galileo: Tag definition: the unit text was not changed if the unit mode has changed.
 - FIX: Galileo: Text selection in the text list has not worked if a text id filter was active.
 - FIX: Galileo: Problem at project upload of projects without a zip file (< V3.0).
 - FIX: Galileo: Compiler: project file name with UNICODE characters was not compiled correctly.
 - FIX: Galileo: Compiler: tag address check problem at communication with tag 'objects'.
 - FIX: Galileo: Download: ask to delete or recreate backup files to guaranteed consistence backup file.
 - FIX: Galileo: Galileo in multi monitor mode: the existing text list was not displayed at direct text definition.
 - FIX: Galileo: Galileo online help: links to the Windows CE pdf documentation shows an old version of this file.
 - FIX: Galileo: Problem to convert old projects with Hiragana/Katakana and Katakana/Hiragana charsets.
 - FIX: Galileo: Problem to load the project if some users are defined but not user groups are defined.
 - FIX: Runtime: Fatal error: avoid problem with the alarm history while loading projects of 5.3.x.
 - FIX: Runtime: User management: project language did always change at user logout.
 - FIX: Runtime: User management: the option 'start password' was not activated again, if the password was changed by another user.
 - FIX: Runtime: Enhanced recipes with no frame or 2D frame showed selection frame.
 - FIX: Runtime: Alarm handling - STATUS structure 1st data word, Bit 4 was not correctly.
 - FIX: Runtime: Open Galileo on Windows 2000: user login does not work if a numeric keyboard was used for password input.
 - FIX: Runtime: Special functions with two string parameters have not worked correctly.
 - FIX: Runtime: Graph start trigger: works not in standard mode.
 - FIX: Runtime: Function key: Restart Runtime works not if it's called by a script with a batch file as additional parameter.
 - FIX: Runtime: Communication time out occurred during print reports.

Version 6.0.0

Compiler Version 4.15, Release Date 21.06.2007

- NEW: Protocol: Allen Bradley Logix over DF1
- NEW: Protocol: Allen Bradley - SLC 5/03 - DF1

- NEW: Protocol: Omron - SYSMAC - Host Link
- NEW: Text: UNICODE features: recipes, string-tags, user defined keyboards.
- NEW: Text: Simple text handling:
- NEW: Text: Direct input
- NEW: Text: Fast text selection
- NEW: Text: All languages clearly displayed.
- NEW: Text: Import/Export:
- NEW: Text: More easy to use.
- NEW: Text: All languages in one Excel file.
- NEW: Text: User defined fonts.
- NEW: Text: Text attributes: Bold, Italic, Underline, Strikeout
- NEW: Text: Automatic word wrap
- NEW: Text: Vertical adjustment (top, center, bottom)
- NEW: Text: Text files in XML format
- NEW: Text: Editable with standard text editor
- NEW: Text: Languages definitions in Galileo
- NEW: Text: Fast switch of project language in Galileo (toolbar)
- NEW: User Management: Groups instead of levels.
- NEW: User Management: User defined group order (no hierarchy)
- NEW: User Management: User defined group rights (bit tags)
- NEW: User Management: Password aging
- NEW: User Management: Password history
- NEW: User Management: First login password
- NEW: User Management: User lock / unlock
- NEW: Tags: Arrays: negative array index supported
- NEW: Tags: Arrays: start index <> 0 allowed
- NEW: Recipe: User defined entry name length.
- NEW: Recipe: User defined write protection areas.
- NEW: Call script at mask exit
- NEW: Optimizing functions for: texts, tags, bitmaps, scripts
- NEW: Most settings in tables/grids: mask settings, language settings, text settings, user management settings, recipe settings, printer forms, system messages
- NEW: Touch Indicators (display of operating error)
- CHG: Text: Galileo Workshop not needed anymore
- CHG: Documentation: the translation of the English Galileo documentation is not complete.

Version 5.3.13

Compiler Version 3.78, Release Date 11.06.2007

- NEW: Panel: KEBA KeTop T50/T100 VGA (Windows CE)
- NEW: Protocol: Omron - SYSMAC - Host Link
- FIX: Galileo: No response from Galileo if more than one sub masks are selected and one of the functions 'Same Height' or 'Same Width' is called.

- FIX: Runtime: Fatal error: at recipe conversion under certain circumstances.

Version 5.3.12

Compiler Version 3.78, Release Date 23.04.2007

- NEW: Panel: 5.7" color panels with integrated EIB: XVH-/MH2-342-57EIB
- NEW: Protocol: XVH-/MH2-342-57SKS: 'Moeller PS3x6 Suconet K1' added.
- FIX: Galileo: Fatal error: if in the address range dialog a communication was activated and an empty structure was addressed.
- FIX: Galileo: Sub masks were drawing transparent always if the original mask is defined transparent.
- FIX: Galileo: The selected printer was unselected if a new printer was created.
- FIX: Galileo: Tag import of arrays to value referenced PLC's has not worked.
- FIX: Galileo: FTP transfer: a port number in the IP address was ignored.
- FIX: Galileo: Error history size was not stored in the project. We recommend a maximum history size of 1024 entries.
- FIX: Runtime: Fatal error: if a system error is occurred at startup and a bit tag was assigned to this system error.
- FIX: Runtime: Problem to print a mask in landscape mode.
- FIX: Runtime: A mask change does not work, if it is called by a script at panel start.
- FIX: Runtime: The function key 'Key Clear' does not work in user defined keyboards.
- FIX: Runtime: Problem while load/save graph archive files to/from an external PC drive (GPI and WinGRS only).
- FIX: Runtime: Password management with dynamic passwords: a password change was not stored to the tag.
- FIX: Runtime: The export of tag address ranges has saved the file in a wrong format.
- FIX: Runtime: Wrong display of parameter list if the object is smaller than text height.
- FIX: Runtime: Camera object: refresh problem if a dynamic object overlap the camera object.

Version 5.3.11

Compiler Version 3.78, Release Date 19.02.2007

- NEW: Galileo: PLC address possibility of multidimensional / nested arrays: f.e. 'name[1,4,7]' instead of 'name[1][4][7]'
- NEW: Galileo: Special function 'Restart Runtime' implemented.
- NEW: Galileo: Special function 'Backlight: Learn Dim Value' implemented: sets a user defined reduction value of the backlight for the screen saver.
- NEW: Galileo: Special function 'Operating System Version' improved:
- NEW: Galileo: HMI panel with Windows CE: added the version of Windows CE to the string with the image release number, f.e. 'CE 3.0 / 2.14.2 (934)'
- NEW: Galileo: Desktop Windows: display the OS version under desktop, f.e. 'Windows XP / 5.1 (2600)'
- NEW: Galileo: Protocol: BETA release of the communication 'Allen Bradley - Logix - DF1' implemented (120 license points required)
- NEW: Galileo: Protocol: BETA release of the communication 'Siemens - SIMOTION MIIF' implemented (120 license points required)
- NEW: Galileo: Protocol: PLC communication 'Allen Bradley - Logix - EtherNet / IP' : the required license points were reduced from 160 to 120.
- NEW: Galileo: Protocol: PLC communication 'Selectron Modbus over CAN Open (OnBoard)' : added the memory alignment option 'little endian twisted'.

- NEW: Galileo: Protocol: PLC communication 'Mininet SPS / SPSIO Mode' : added the baudrates 4800 and 9600.
- NEW: Galileo: New compiler messages:
Compiler check of dynamic limits, if the format of the tags and its limit tags do not correspond.
Compiler check for not existing keyboard masks.
- FIX: Galileo: Under certain circumstances the 'user defined keyboard' wasn't displayed.
- FIX: Galileo: The problem rectified of using the special function 'Execute' in scripts, if the script was called from the special function 'Call script on mask entry'.
- FIX: Galileo: Search tags in mask: each tag was only listed once even if the tag was used several times inside the same mask.
- FIX: Galileo: Parameter list: the problem of parameter groups rectified, if the group name of the parameter list was defined several time inside the standard text list.
- FIX: Galileo: Parameter list: the list inside the overview dialog of all parameter list numbers was falsely empty.
- FIX: Galileo: Tag import: under certain circumstances the flag 'polling' wasn't set correctly while importing the symbol file. The problem exists only, if the project uses more than one PLC communication and one of them is an 'event driven' protocol.
- FIX: Galileo: Tag address dialog: the GUI was confusing, if the PLC address were not permitted due to the message size.
- FIX: Galileo: FTP transfer: minor problems with third party FTP server and while uploading data (password or recipe files) rectified.
- FIX: Runtime: GPI and GALILEO OPEN: the problem with external graph archive files and the option 'save continuously' rectified.
- FIX: Runtime: GPI and GALILEO OPEN: mask refresh speed optimizations according f.e. changing masks or languages.
- FIX: Runtime: Graph object: the problem of the tags with dynamic limits rectified. The value was drawn wrong, if the format of the tag and its limit tags were different.
- FIX: Runtime: Camera object: the session was falsely closed after a failed read access to the camera.
- FIX: Runtime: PLC communication 'OPC Remote' : improved the error messages of the communication and allowing the character ' : ' inside the PLC address.
- FIX: Runtime: PLC communication: the problem with leading zeros in the IP address of the PLC rectified (f.e. 192.168.0.033)
- FIX: Runtime: PLC communication 'Allen Bradley - Logix - EtherNET/IP' : minor problems with strings and the maximum fragment size rectified.
- FIX: Runtime: Special function 'Show System info': display the correct value of 'unused RAM'.

Version 5.3.10

Compiler Version 3.78, Release Date 19.10.2006

- FIX: Galileo: Error at loading project: if the project is not saved after uploading password data's, then the project can't be opened in some cases.
- FIX: Runtime: Memory leak in camera objects.
- FIX: Runtime: Start of EIB projects failed on panels, if central commands are used (since V5.3.8).
- FIX: Runtime: Object 'Switch': incorrect setting of "set two mask" function.

Version 5.3.9

Compiler Version 3.78, Release Date 02.10.2006

- CHG: Galileo: Panel type names changed from Mnx...to XV...
- FIX: Galileo: Redo/undo: fatal error if a mask object is outside the mask resolution and the undo or redo function is used.
- FIX: Galileo: Move error and help texts: at buttons '...' the dialog for standard texts is displayed.
- FIX: Galileo: Move address: the attributes 'read on demand', 'read at startup', polling settings, 'write on demand' and 'write at startup' are reset.
- FIX: Galileo: Project download: if the project name is longer than 8 characters, then all files are cleared before downloading.
- FIX: Galileo: Siemens tag import: the comment column is new optional.
- FIX: Galileo: Parameter list: problem with identical names of parameter list groups.
- FIX: Galileo: Default language was loose in some cases.
- FIX: Galileo: 'CANopen Onboard (Event)': arrays in structures were not allowed.
- FIX: Galileo: Upload password file: the dynamic defined passwords are lost after an upload of the password file.
- FIX: Galileo: Value display: limits are not refreshed, after modifying the limits.
- FIX: Runtime: Graph: refresh problem of curve in some cases.
- FIX: Runtime: Graph archive files: the tag names are not saved in the graph archive file.
- FIX: Runtime: Error window: wrong error states are visible, if the visibility of the error window is defined by an error tag.
- FIX: Runtime: Status: inaccurate status bit with startup delay.
- FIX: Runtime: Memory leak: loss of memory, if objects with active accessibility are draw (only pattern mode).
- FIX: Runtime: Serial communication: the serial communication on the system port at panel XV-/MK2-252-57MPN doesn't work.
- FIX: Runtime: 'CANopen Onboard (Event)': set the maximal message size to 8 Byte.

Version 5.3.8

Compiler Version 3.78, Release Date 12.07.2006

- NEW: Panel: 5.7" color panels in 2 variant types: MPI, CAN
- NEW: Protocol: Siemens - PPI (Onboard)
- FIX: Runtime: Fatal error: after the Ethernet connection is unplugged longer than one minute. At communications: ADS, MxPro and CoDeSys.
- FIX: Runtime: Memory leak: at mask object accessibility with style 'pattern 1 (chessboard)', 'pattern 2 (raster)' or 'pattern 3 (diagonal)'.
- FIX: Runtime: Endianess changed for communication 'Seitec Seebacher ISYGLT' from Intel to Motorola.

Version 5.3.7

Compiler Version 3.78, Release Date 26.06.2006

- FIX: Galileo: If error array in an addressed structure with polling attribute is used, then the array was not polled.
- FIX: Galileo: Tag import: wrong address at arrays of PLC texts.
- FIX: Runtime: Fatal error in communication MxPro: if parameter 'ip address' is set to 'localhost'.

Version 5.3.6

Compiler Version 3.78, Release Date 19.06.2006

- FIX: Galileo: Tag import: problem to re import arrays. The existing tags are not found and new tags are created.
- FIX: Galileo: Copy/past of mask objects: if a polyline object is grouped with other objects, then the relative position of the polyline object is moved against the other objects.
- FIX: Runtime: 'Siemens - Industrial Ethernet': WinGRS and GPI display 'S7: Protocol' error.

Version 5.3.5

Compiler Version 3.78, Release Date 02.06.2006

- NEW: Panel: New 5.7" color panels with integrated MPI
- NEW: Panel: New 10" color panel with integrated MPI
- NEW: Panel: New 12" color panel with integrated MPI
- NEW: Protocol: MxPro: speed optimized protocol for communication with CoDeSys. Use this instead 'CoDeSys' and 'CoDeSys (local)'.
- NEW: Runtime: program 'Communication check' added. Display the communication errors as a list.
- CHG: Protocol: Profibus DP: parameter 'Default Station No' added to 'Siemens - S7 Profibus DP' communication.
- CHG: Driver update: Profibus PDP-TP: new version 3.01
- FIX: Galileo: Fatal error: during double click on a structure which include an addressed tag with address syntax <struct>.<tag>.<array index>[].
- FIX: Galileo: Tag import: to much tag deleted with option 'delete always'.
- FIX: Galileo: Object conversion problem: if a value display object is imported by copy/paste.
- FIX: Galileo: Error window: frame type 'no frame' not displayed in the object property dialog.
- FIX: Galileo: Project overview: problem with identical folder names in masks, scripts, graphs, recipes and printer forms.
- FIX: Galileo: Online Help: content tab window empty in some cases.
- FIX: Runtime: Fatal error: if CoDeSys communication uses a bit array with more than 1024 element.
- FIX: Runtime: Fatal error: if the length of all recipe tag names was smaller as the length of all recipe values.
- FIX: Runtime: Fatal error: creation of empty TAB file failed.
- FIX: Runtime: Camera object: refresh problem after calling the commands 'Image Save' and 'Image Save As'.
- FIX: Runtime: Recipe: problem to select a recipe entry if more than one recipe object are defined on the same mask.

Version 5.3.4

Compiler Version 3.78, Release Date 06.04.2006

- CHG: Driver: reverted SymARTI back to version 2.5.0.3 (2.5.0.1 for CE/X86).

Version 5.3.3

Compiler Version 3.78, Release Date 03.04.2006

- CHG: Driver update: SymARTI: new version 2.5.2.0
- FIX: Galileo: Fatal error: if a tag and a structure is selected for data type conversion.
- FIX: Galileo: Copy paste of more the one tag was not supported.
- FIX: Galileo: Refresh problem in DEMO mode with zoom value > 100%.
- FIX: Galileo: Endless loop if the question for the optimized color palette was answered with no.
- FIX: Galileo: Compiler error for string referenced PLCs: wrong error if CONTROL/STATUS has no ARRAY-address.
- FIX: Galileo: Recipe confirmation masks: if an old project (< 4.20) were load, the confirmation settings were wrong.

- FIX: Galileo: The tag information's are losing if a camera objects was copied from one project to another project.
- FIX: Galileo: Search replace: font type and font size was not found in error windows.
- FIX: Galileo: Search replace: parameter list group was not found as standard texts.
- FIX: Galileo: Search replace: color definitions in the accessibility settings were not found.
- FIX: Galileo: Problem to display bitmaps inside of a grid, if the bitmap file has a wrong file size in the bitmap header.
- FIX: Galileo: The synchronization of error text id's from error numbers and error numbers from error text id's don't worked, if an array or a struct is selected.
- FIX: Galileo: Tag import: the imported tags have wrong addresses, if the tag is a part of a array of structs of array of array.
- FIX: Runtime: Fatal error in GrsDateTime: if no 'Date_Time' structure is defined.
- FIX: Runtime: Refresh delay if a camera object is defined on the mask.
- FIX: Runtime: The control structure was not read, if an other communication has a lot of communication errors.
- FIX: Runtime: ASCII key with umlaut characters was not correctly displayed.
- FIX: Runtime: Automatic continue of online error printout after finishing another print job failed.
- FIX: Runtime: Recipes: general recipe problem if the sum of all tag name lengths > 65535.
- FIX: Runtime: System font size: in some cases the font size was 0.

Version 5.3.2

Compiler Version 3.78, Release Date 14.02.2006

- FIX: Galileo: Fatal error at tag import, if an array with size 1 was imported.
- FIX: Galileo: Text grid: the text preview with transparent background was displayed with a background color.
- FIX: Galileo: PLC description was missing in the tag information's.
- FIX: Galileo: If the texts in the text list are filtered, then an icon is displayed in the list header. This icon was not visible always.
- FIX: Runtime: Fatal error if float tag with dynamic limits was used in a graph object.
- FIX: Runtime: EtherNet/IP: problem with structure alignment.
- FIX: Runtime: EtherNet/IP: problem to reconnect the communication, if the Ethernet cable was disconnect for a short time.
- FIX: Runtime: Add default unit identifier to Modbus/TCP.
- FIX: Runtime: Special function 'Save Mask as Bitmap' does not work.
- FIX: Runtime: Keyboard input was broken if the TAB key was pressed.
- FIX: Runtime: The line with (> 1) in GRS was not exactly the same as in Galileo.

Version 5.3.1

Compiler Version 3.78, Release Date 16.01.2006

- FIX: Galileo: fatal error if the Baltic character set is used in the text definition.
- FIX: Galileo: fatal error in the text grid page with a great many states (>5000).
- FIX: Galileo: problem to resizing the enhanced language dialog.
- FIX: Runtime: all script functions of the group 'Password' does not work.

Version 5.3.0

Compiler Version 3.77, Release Date 06.01.2006

- NEW: Panel: monochrome 5.7" panels in 3 variant types: MPI, CAN, BAS
- NEW: Panel: color 5.7" panel with integrated Suconet K communication.
- NEW: Protocol: Moeller easy 800/MFD PC-CAB (OnBoard)
- NEW: Protocol: A. Bradley - EtherNet/IP
- NEW: New slider object supported.
- NEW: Galileo: search replace of object attributes.
- NEW: Galileo: number of communications increased to 8.
- NEW: Galileo: new are folder supported in the following trees: masks, scripts, print forms, recipes, graphs.
- NEW: Galileo: masks: show each mask as a tabbed window.
- NEW: Galileo: 2D/3D style of buttons and views is freely definable.
- NEW: Galileo: recipe: tags overview of multiple recipes.
- NEW: Galileo: recipe: Confirmation for unsaved recipe entries.
- NEW: Galileo: special function: Print Parameter List: to print the content of the parameter list.
- NEW: Galileo: special function: Connection x persistent ON/OFF: switch a connection persistent ON/OFF.
- NEW: Galileo: help window: hide the help window automatic, if the corresponding error is not any longer active.
- NEW: Galileo: error window: sorting order freely definable.
- NEW: Galileo: texts: moving of a text range supported.
- NEW: Galileo: user management: logout time stored in tag or constant.
- NEW: Galileo: project settings: standard button to set the settings to the default values.
- NEW: Galileo: for each plc is a free definable description text available.
- FIX: Runtime: automatic start of the camera objects doesn't work at the first time.

Version 5.2.5

Compiler Version 3.52, Release Date 06.01.2006

- FIX: Galileo: The script function 'ReReadTag' does not work with tag of type 'char-array'.
- FIX: Galileo: The compiler checks the char-array preset value length.
- FIX: Runtime: Fatal error: the runtime crashed if system error messages printed out.
- FIX: Runtime: Fatal error: the runtime crashed in some cases if the function "Show System History" was called.
- FIX: Runtime: Problem to display pictures under certain circumstances.
- FIX: Runtime: Not all system messages were displayed.
- FIX: Runtime: Camera objects are started always automatic.
- FIX: Runtime: The camera object was stopped if the project language was changed.
- FIX: Runtime: Problem to load a selected recipe if the command is called from a script.
- FIX: Runtime: WinGRS: the persistent data was lost under certain circumstances. Persistent data are: error history, project language, system language, time format, summer time, unit group, communication on/off, backlight value and so on.

Version 5.2.4

Compiler Version 3.52, Release Date 08.12.2005

- FIX: Galileo: Fatal error: Galileo crashes in some cases if a script is imported with a wrong syntax.
- FIX: Galileo: Compiler window: some errors can't be opened by a double click.

- FIX: Galileo: The option 'save continuously' in enhanced graphs was always active.
- FIX: Galileo: The mask object property dialog could not be closed, if the object was defined in a print report mask with a bigger resolution than the panel resolution.
- FIX: Galileo: The size and position property dialog of mask objects was not refreshed after an undo/redo command.
- FIX: Galileo: At copy a paste of grouped objects from one mask to another mask the group definition can be lost.
- FIX: Galileo: Clean the selection of all mask objects with the command 'Deselect All' has not worked.
- FIX: Runtime: Fatal error: GRSW crash if a mask contains a large number of overlapping objects (> 1000).
- FIX: Runtime: Fatal error: GRSW crash at 'RET' key in a user defined keyboard if it is called from a special function.
- FIX: Runtime: No refresh of character arrays if the tag was not addressed and defined as read only.
- FIX: Runtime: Wrong color palette in the GRSW after a call of an external program in GRSW.
- FIX: Runtime: A call of a recipe function by script on mask entry fails the first time.
- FIX: Runtime: In enhanced graphs the values of float tags are rounded to integer numbers.
- FIX: Runtime: Refresh problem in standard graphs with ruler.
- FIX: Runtime: Error window: the special function "Error scroll on/off" confirmed an error erroneously, if the error is no longer active.
- FIX: Runtime: Submasks: the position a polyline object in a submask was wrong.
- FIX: Workshop: Compiled text files: error and help texts are loaded, displayed and saved only from language 0.

Version 5.2.3

Compiler Version 3.51, Release Date 13.10.2005

- CHG: Driver update: Siemens - MPI protocol version 2.03: performance increased.
- CHG: Driver update: Onboard MODBUS: twisted mode added.
- CHG: Driver update: Siemens - Industrial Ethernet: routing to PROFIBUS possible.
- CHG: Driver update: MODBUS TCP, MODBUS RTU, MODBUS RTU (OnBoard): increase the message size up to 254 Byte.
- FIX: Galileo: Tag search: tags for saving the user level are not found at searching of tags.
- FIX: Galileo: Problem to load a project of V5.2.2 in V5.2.1.
- FIX: Runtime: Help window: problem to display big characters.
- FIX: Runtime: Script: when the special function 'Last mask' is used in a script, then it works not in all cases.

Version 5.2.2

Compiler Version 3.50, Release Date 20.09.2005

- NEW: special function: 'Connection x persistent ON/OFF'
- CHG: Driver update: Siemens - MPI protocol version 2.02: works only with rack 0 slot 2.
- FIX: Galileo: User management: passwords with more than 6 characters don't work, if the user is created in Galileo.
- FIX: Galileo: Compiler: if a picture size was bigger than the panel resolution, an error occurred.
- FIX: Galileo: Problem with multi monitor mode and mask property object dialog.
- FIX: Galileo: The program hangs in some cases, if the properties of a static object are displayed.
- FIX: Galileo: Copy/paste of an accessibility or visibility variables in the object property grid not possible.
- FIX: Galileo: The accessibility option of a standard recipe was not available.
- FIX: Galileo: Change Language from PLC: a system window is not removed before the project language is changed.
- FIX: Galileo: In some cases the MxPro dialog is visible after the GRSW runtime is started.
- FIX: Galileo: Industrial Ethernet: works only with rack 0 slot 2.

- FIX: Galileo: Problem with the special function 'Display Project Name' inside of a print report.
- FIX: Galileo: Bargraph: the color of bargraph not changed, if the value is outside the limit due limit value change.
- FIX: Galileo: Problem with user defined keyboards for hexadecimal input.

Version 5.2.1

Compiler Version 3.50, Release Date 26.07.2005

- FIX: Galileo: The paste functions of static mask objects don't work correctly, if the object was copied from an Galileo version < 5.2.0.
- FIX: Galileo: Refresh problem in the mask object property page 'text', if a text number is entered.
- FIX: Galileo: The active language was not displayed in the status bar.
- FIX: Galileo: The sorting of mask numbers in the project settings was alphabetic instead numeric.
- FIX: Runtime: Projects which have a dot inside of the project name could not start on the panel.
- FIX: Runtime: Problem to print a multi line text with the function 'Print History'.
- FIX: Runtime: Graph: continuously saving of a graph archive don't work if the project name is longer than 8 characters.
- FIX: Runtime: A fatal error occurred if a not existing print report is started.
- FIX: Runtime: Graph archive: problem if not enough free memory is available to store the archive file on the storage card.
- FIX: Runtime: Graph archive: after loading of a graph archive, the sand glass is not deleted.
- FIX: Runtime: The login dialog for printing to an PC was displayed in the background.
- FIX: Runtime: Confirmation mask: if a script is called by the special function 'Key 'Ret' and 'Call Script F.', then the script not started.

Version 5.2.0

Compiler Version 3.50, Release Date 04.07.2005

- NEW: Galileo: Mask objects settings: simplified handling with the settings dialog. Selection of mask objects without to close the settings dialog.
- NEW: Galileo: All object states as grid implemented.
- NEW: Galileo: Functions copy/paste of a cell or a block supported.
- NEW: Galileo: Multi selection supported.
- NEW: Galileo: Multi define by block, column or cells supported.
- NEW: Galileo: Sequence of texts or bitmaps supported.
- NEW: Galileo: Accessibility and visibility settings as grid implemented.
- NEW: Galileo: Size and Position as an new object property page implemented.
- NEW: Galileo: Fix attribute for all mask objects implemented.
- NEW: Galileo: Settings of static objects as grid implemented.
- NEW: Galileo: Project version detection implemented. The Galileo version is displayed at loading of an old project.
- NEW: Galileo: Automatic project save implemented.
- NEW: Galileo: Automatic security backup save implemented.
- NEW: Galileo: User management: Size of the user name increased to 20 characters.
- NEW: Galileo: User management: Size of the password increased to 20 characters.
- NEW: Galileo: User management: Dynamic user password supported.
- NEW: Galileo: User management: Dynamic level password supported.

- NEW: Galileo: User management: New password script function:
- NEW: Galileo: User management: UserLogin
- NEW: Galileo: User management: NewUser
- NEW: Galileo: User management: LoginAtLevel
- NEW: Galileo: User management: ChangePWOther
- NEW: Galileo: User management: ChangePWOwn
- NEW: Galileo: Recipe: Confirmation for the special functions 'Change Recipe Entry Name', 'Protect Recipe Entry Name', 'New to Next' and 'Save As to Next' implemented.
- NEW: Galileo: New special function: Group Recipes: 'Save As to Next'
- NEW: Galileo: New special function: Group Recipes: 'Copy to Next'
- NEW: Galileo: Possibility to protect the backup by password.
- NEW: Galileo: A text filter in all text lists available.
- NEW: Galileo: User defined color restriction for the color selection.
- NEW: Galileo: FTP download: Possibility to quit the running Galileo Runtime before the download start.
- NEW: Galileo: FTP download: Possibility to reboot the panel after the download.
- NEW: Runtime: New print modes: RAW and LPR added to print directly to network printers.
- FIX: Galileo: Recipe: recipe file format problem when the last recipe entry was copied to another entry.
- CHG: Workshop: Serial download deleted.

Version 5.1.6

Compiler Version 3.44, Release Date 24.05.2005

- FIX: Galileo: Fatal error: copy/paste of structures, if the structure and an element of the structure is selected.
- FIX: Galileo: Tags with dynamic limits: problem with recursive definitions of dynamic limits.
- FIX: Galileo: Project upload: project bitmaps are overwritten by uploaded bitmaps with 256 colors.
- FIX: Galileo: Undo and redo don't work in all cases.
- FIX: Galileo: MPB driver for GPI could not copy by the compiler.
- FIX: Galileo: Refresh problem with grouped objects after the undo function is used.
- FIX: Galileo: When a polygon object is grouped with other objects, then the selection of the polygon is never displayed as grouped.
- FIX: Galileo: Refresh problem when the mask object types are displayed.
- FIX: Runtime: Fatal error: the GPI crash with the function "Call Script on Mask entry" in some cases.
- FIX: Runtime: Fatal error: at startup on panels without WinCE, when too many graph samples are defined.
- FIX: Runtime: The character 'space' was allowed in passwords erroneously.
- FIX: Runtime: Keyboard with limits: if the function "Key Ret and Call Scrip F." was used and the entered value is out of the limits, then the script was called erroneously.
- FIX: Runtime: Decimal keyboards: if the function "Call Script on mask entry" is used, then the input of values with decimal points was not possible.
- FIX: Runtime: CAN Open: small baud rates: 20kbd and 50kbd implemented.
- FIX: Runtime: Printer forms with multi lines: only the first line was printed.
- FIX: Runtime: Mask print: horizontal pixel lines are missing.
- FIX: Runtime: Bar graph: a blinking disabled bar graph was drawn not correctly.
- FIX: Runtime: GRSServices hasn't worked correctly behind a firewall.

- FIX: Runtime: Refresh problem of system messages during a print job is active.

Version 5.1.5

Compiler Version 3.44, Release Date 18.03.2005

- CHG: Protocol: Siemens - MPI protocol version 2.01: CPU's with credit number unequal 1 supported.
- FIX: Galileo: The program language of Galileo was not set correctly.
- FIX: Galileo: Drag and drop tags: the drop position was not correct, when an array element was moved inside of the array.
- FIX: Galileo: Download problem, when the Galileo installation path don't start with a drive letter.
- FIX: Galileo: Error at upload of the project backup from the panel.
- FIX: Galileo: Search object: the object type 'camera' was not available.
- FIX: Galileo: PLC parameters: the parameters were set to a wrong value when the PLC type was changed.
- FIX: Runtime: Fatal error: Galileo Open doesn't work.
- FIX: Runtime: All recipe scroll functions don't works, when the function is used in scripts.
- FIX: Runtime: Moeller XControl Ethernet PRG: PLC parameter 'Level' changed to 2.
- FIX: Runtime: Bridge Communication: problem when synchronization is started from the PLC again.
- FIX: Runtime: Camera: in some cases the storing of picture breaks by an error message.
- FIX: Runtime: Script: some special functions with on/off states toggle by each call. The parameter for the on/off state was ignored.
- FIX: Workshop: Function 'set charset': the range of the text numbers was limited to 65'535 instead of 2'147'483'648.
- FIX: Workshop: The program language of GWS was not set correctly.

Version 5.1.4

Compiler Version 3.44, Release Date 22.02.2005

- FIX: Galileo: Fatal error: in some cases, when the property dialog of a structure tag was open.
- FIX: Galileo: Tag address: when the tag has only read attributes, then the tag can't addressed to more than one PLC.
- FIX: Runtime: GRS Services: wrong memory allocation when a lot of sessions are started.
- FIX: Runtime: Special function: the function "Display scroll Window" was displayed with the default font size and font type.
- FIX: Runtime: Special function: when the function "Key RET and call script" was used in a user defined keyboard, then the object refresh was not correct in each case.
- FIX: Runtime: Modbus TCP: timeout communication error was displayed at startup.
- FIX: Runtime: User defined login: at the second login the user name was not used cogent.

Version 5.1.3

Compiler Version 3.44, Release Date 08.02.2005

- NEW: Runtime: SPA bus: arrays are new supported.
- NEW: Runtime: Galileo Open: 4 serial communications are new supported.
- NEW: Runtime: License administrator in the demo mode implemented.
- CHG: Driver update: Siemens - MPI protocol version 2.0: alignment from 2 byte to 1 byte reduced.
- CHG: Driver update: Siemens - Industrial Ethernet (Beta) implemented
- FIX: Galileo: Fatal error: when the key combination 'Ctrl-C' is pressed on a mask and no objects are selected.

- FIX: Galileo: Error array: the address option 'read at startup' was not set on a new error array.
- FIX: Galileo: Mask save as: the mask resolution of the saved mask was set to the panel resolution always.
- FIX: Galileo: Recipe overview: it was possible to create a recipe inside an other recipe.
- FIX: Galileo: The modified flag of the project was not set, when in the text list some texts are replaced.
- FIX: Galileo: Codesys tag import: the sort order of the tags in a structure was alphabetic sorted.
- FIX: Runtime: Print Unicode error texts: printing of error texts with Unicode character doesn't worked correctly.
- FIX: Runtime: Printing: the form feed at the end of the print was not sent to the printer.
- FIX: Runtime: Printing: memory leaks occur during printing. After a lot of prints, the panel prints only empty pages.
- FIX: Runtime: Special function 'RET with Call Script': the script was not called, when this function was called inside a user defined keyboard.
- FIX: Runtime: Float tags: rounding problems on limited value entry.
- FIX: Runtime: User defined keyboard 'Show User': a user defined keyboard of the type 'Show User' doesn't work correctly.
- FIX: Runtime: Backlight off: the screen saver has switched on the backlight.
- FIX: Runtime: Refresh problems when the special function 'Call Script on Mask entry' was used in user defined keyboards.
- FIX: Runtime: Parameter list: a focus rectangle around the parameter list was visible, if the object was drawn as 3D or without a frame.

Version 5.1.2

Compiler Version 3.44, Release Date 08.12.2004

- NEW: Protocol: Moeller XControl CAN Open HMI (Onboard)
- NEW: Date/Time structure from 3S PLC implemented.
- FIX: Runtime: The special function "Key 'Ret' and call script function" don't work correctly, when the keyboard event "Return" is reached by the remote client.
- FIX: Runtime: User defined keyboards: the maximum and minimum limits was set to 0, when on the mask a special function "Call script on mask entry" was defined (since V5.1.0).

Version 5.1.1

Compiler Version 3.44, Release Date 24.11.2004

- FIX: Galileo: Tag deleting: the compiler show a error message, when a tag was deleted, which was used in a recipe.
- FIX: Runtime: Fatal error in error list under certain circumstances.
- FIX: Runtime: The time/date object was not drawn in all cases.

Version 5.1.0

Compiler Version 3.44, Release Date 16.11.2004

- NEW: Protocol: OPC Remote
- NEW: Runtime: New bitmap is displayed during the recipe load and recipe save functions.
- NEW: The size of the error history is new changeable.
- NEW: New keyboard mask type "alphanumeric system". The labeling of the keys is created automatic.
- NEW: Tag import: new import options to address the structures.
- NEW: Print forms: new functions for moving print form printer entries implemented.

- NEW: Format attribute on Char-Array tags.
- NEW: Print form title support new multi line texts.
- CHG: PLC to PLC message no longer available.
- FIX: Galileo: Fatal error: at mask function "Mask Number" when no mask are selected.
- FIX: Galileo: Fatal error: on tag limit property page, under certain circumstances.
- FIX: Galileo: An existing project could not be overridden by the command "Project New".
- FIX: Galileo: Sub mask objects were not displayed in masks, when the zoom factor was smaller than 100%.
- FIX: Galileo: Compiler: the message maximum length of string referenced communications was not checked.
- FIX: Galileo: Error window: the font size was not all the time saved correctly.
- FIX: Galileo: Print forms: the paste function form a clipboard creates a new print form mistakenly.
- FIX: Runtime: Mask refresh problem of keyboards when a external mask change is reached.
- FIX: Runtime: Panel was not touchable during the preset phase.
- FIX: Runtime: Refresh problem of objects after closing a keyboard.

Version 5.0.4

Compiler Version 3.42, Release Date 15.10.2004

- NEW: Galileo: Tag tree: the functions 'copy', 'paste' and 'cut' can be executed by keys. 'copy' by Ctrl+C or Ctrl+Insert. 'paste' by Ctrl+V or Shift+Insert. 'cut' by Ctrl+X or Shift+Delete.
- NEW: Galileo: New extras option for stopping the data transfer to PCMCIA/CF drive.
- NEW: Galileo: Size of option pages changeable.
- NEW: Galileo: Tag addresses for string referenced PLC's: search and replace functions available.
- CHG: Galileo: Mask import: no more available.
- FIX: Galileo: Problem to display bitmaps, when the width in pixel is not divisible by 4 and the number of colors is unequal 256.
- FIX: Galileo: Mistakenly limitations in Win XP:
- FIX: Galileo: Grid with dots was not available.
- FIX: Galileo: Maximum number of open masks was 32.
- FIX: Galileo: PCMCIA/CF drive can't stop after download.
- FIX: Galileo: Tag import: crash with array size 0.
- FIX: Galileo: Limitation check of object overlapping changed.
- FIX: Galileo: Script: during the copy/paste of script the tag names still present.
- FIX: Runtime: Camera function 'Save Image As': the moment of the snapshot was to late.
- FIX: Runtime: Graph: problem with the lineal position after scrolling in Y direction.
- FIX: Runtime: Flagdisplay: wrong state display for negative values.

Version 5.0.3

Compiler Version 3.42, Release Date 16.09.2004

- NEW: String referenced tag addresses: structures in structures are new allowed.
- CHG: "GRS Remote Server" renamed in "GRS Services".
- FIX: Galileo: Conversion of old projects: the data direction of tags in structures is wrong under certain circumstances. Only at direct addressed tags.
- FIX: Galileo: Address tag direct: the command 'address tag direct' work not correct, when structures inside

structures are used.

- FIX: Galileo: Conversion of arrays to structures: not all data direction properties were set correctly.
- FIX: Galileo: Bitmap: problem to display bitmaps from some editors.
- FIX: Runtime: EIB (3rd Release) does not work (since 5.01).
- FIX: Runtime: CANopen (DSP403) does not work (since 5.01).

Version 5.0.2

Compiler Version 3.42, Release Date 03.09.2004

- CHG: Runtime: Modbus TCP: the TCP port is now changeable.
- CHG: Runtime: TP3 onboard: protocol is now RS485 compatible.
- FIX: Galileo: Polling rate: the tag address attribute "Polling rate" was not always accessible with more than one communication.
- FIX: Galileo: Conversion of old projects: the tag address attribute "explicit read on demand" was not correctly converted.
- FIX: Galileo: Object type line: it was possible to move a line out of a mask.
- FIX: Runtime: Memory leak: a memory leak occurred, when system bitmaps were displayed.

Version 5.0.1

Compiler Version 3.42, Release Date 19.08.2004

- CHG: Runtime: PMAC communication: the parameter "I3" implemented.
- FIX: Galileo: Fatal Error: a fatal error occurred, when in a script too many "else" commands are used.
- FIX: Galileo: Project conversion: tag names which begin with numbers cause problems at project conversion.
- FIX: Galileo: At moving of small mask objects the mask was not correctly refreshed.
- FIX: Galileo: The temporary directory "prt_temp" in the project directory was not deleted.
- FIX: Galileo: Mask import: a wrong message was displayed always.
- FIX: Galileo: Delete masks: a mask could not be deleted, when the mask file does not exist.
- FIX: Galileo: Tag limits: at the conversion of tag types, the tag limit "open" was not correctly converted.
- FIX: Galileo: Text search: in some cases the text search function finds texts in graph objects mistakenly.
- FIX: Galileo: The refresh of small mask objects was not correct.
- FIX: Galileo: Delete mask: the function delete mask fail, when the mask file does not exist.
- FIX: Runtime: Recipes: the confirmation masks of the function "Save As -userdef" and "Save As and Load -userdef" were not displayed.
- FIX: Runtime: Confirmations in recipes: the sequence of the recipe function with a confirmation was wrong.
- FIX: Runtime: Graph archive: problem with graphs which have defined more than one archive file. The archive file number was not correctly saved, when the function "Save Archive" was used.
- FIX: Runtime: Double touch event optimized.
- FIX: Runtime: System message: the background was not refreshed correctly in all cases.
- FIX: Runtime: Keyboard moving: if a double touch event occurred during the keyboard moving, then the mask background was not correctly refreshed.

Version 5.0.0

Compiler Version 3.42, Release Date 12.07.2004

Only panels with windows CE operating system supported!

- NEW: Protocol: CAN Open (Onboard) - polling
- NEW: Protocol: Modbus RTU
- NEW: Protocol: Modbus TCP
- NEW: Protocol: HIMA HiMatrix Modbus TCP
- NEW: Protocol: Sensotec 1799
- NEW: Portrait mode supported for the panel types MC2-4x0-10C and MC2-4x0-12C.
- NEW: 65535 colors supported for the panel types MC2-4x0-10C and MC2-4x0-12C.
- NEW: In Galileo: the color depth of imported bitmaps would not be reduced.
- NEW: New image import formats supported: GIF, PNG
- NEW: New object "camera": display continuously the pictures of a web camera.
- NEW: New Special function group "camera" with functions: Start/Stop Camera 0..30, Refresh, Image Load, Image Load From, Image Save, Image Save As
- NEW: New Special function: Save Error History as File
- NEW: Import of tag information's from CoDeSys or EIB.
- NEW: Tag number expanded: 0 - 2147483647
- NEW: Tag help number expanded: 0 - 2147483647
- NEW: Tag data direction: The option was split in "Read"- and "Write"-options.
- NEW: Tag data direction: Possibility the set the polling options for error tags.
- NEW: Tag data direction: Char-Array: a preset value can be defined.
- NEW: CE-Configuration: possibility to activate the components and to modify the start-up reaction from Galileo.
- NEW: Tag overview: multiple selections for the operations "copy", "paste" and "cut".
- NEW: The objects "value entry" and "value display" would be combined to one object. The attribute "keyboard" differentiates the type.
- NEW: Error window: The row height can be defined by user.
- NEW: Error window: The error number of the actual selected entry can be stored in a tag.
- NEW: Parameter list: The row height can be defined by user.
- NEW: Error window: The user id of the actual selected entry can be stored in a tag.
- NEW: Recipe list: The row height can be defined by user.
- NEW: Recipe list: The index of the actual selected entry can be stored in a tag.
- NEW: Button object: possibility to change the bit x of a tag.
- NEW: New Fonts: "Arial Bold", "Arial Italic" and "Arial Bold Italic".
- NEW: New function "Backup and Send": archive the project and create an e-mail with version information's and the archive file as attachment.
- NEW: Project settings: the options "default color and font" are new saved in the project files.
- CHG: When opening the project only the used fonts would be installed.
- CHG: System keyboards optimized.
- FIX: Galileo: Compiler window: scrolling with the mouse wheel flicker free.