

# Prog-Studio 9 Changelog

## Introduction Notes

Contact: [service@batronix.com](mailto:service@batronix.com)

The version number is formatted as Major.Minor.Revision. A build number is not used.

## Version 9.5.6

Released on 15<sup>th</sup> October 2013

1. Added an additional number formatting to the global label output options.

## Version 9.5.5

Released on 11<sup>th</sup> October 2013

1. Minor Improvements.

## Version 9.5.4

Released on 9<sup>th</sup> October 2013

1. Fixed a wrong formatting in new the global label file format improvements that prevent a direct usage as include file.

## Version 9.5.3

Released on 8<sup>th</sup> October 2013

1. Improved output format of the global label file. From now on it is possible to define the separator character, the file name and number format. Additionally it is possible to add an extra EQU definition.
2. Fixed several minor bugs.

## Version 9.5.2

Released on 20<sup>th</sup> September 2013

1. Added possibility to change the used number format of the global label output file.

2. Improved the automatic file detection and loading handler of the file formats ASCII-Space and Straight Hex.
3. Changed default output format of ASCII-SPACE and Straight Hex files to improve the compatibility and interoperability with software from third parties. Files that are saved in the old default format will automatically be updated to the new default format on saving.
4. Fixed a bug that could crash the application on the attempt to save a document in the Tektronix file format when the address range exceeds the allowed address range from 0x0000-0xFFFF.
5. Fixed bugs in the  $\mu$ C definition file for Atmel At89s8253
6. Fixed some rendering issues of the user interface.

## Version 9.5.1

Released on 21<sup>th</sup> January 2013

1. Fixed a bug in the project manager concerning to the handling of renaming and creating folders in the project tree.

## Version 9.5.0

Released on 11<sup>th</sup> January 2013

1. Fixed an issue that prevents the use of some newer licenses.
2. Fixed rendering issues of the graphical user interface.
3. Fixed a potential null reference exception that could cause an application crash (in a very special case) while changing the UI language at runtime.
4. Fixed a bug in the general file IO layer that could crash the application in a very special case.
5. Fixed a bug in the S-Record file loading, that caused an appending of some unnecessary bytes at the end of the file.
6. Improved the S-Record file loading. From now on the loading routine is able to ignore invalid lines to enable the use of application specific files that merge application information and S-Records in their output files.
7. Fixed several minor bugs.
8. Updated copyright information for 2013.

## Version 9.4.10

Released on 23<sup>th</sup> October 2012

1. Added definition files for the following Silicon Labs  $\mu$ C:
  - a. C8051C02x: C8051F020, C8051F021, C8051F022, C8051F023
  - b. C8051F12x: C8051F120, C8051F121, C8051F122, C8051F123, C8051F124, C8051F125, C8051F126 and C8051F127.

2. Fixed a potential null reference exception that could cause an application crash (in a very special case) while changing the UI language at runtime.
3. Fixed a bug in the preprocessor that prevents a valid reading of input files on a windows machine with a Turkish localization.
4. Fixed gui rendering issues.

## Version 9.4.9

Released on 19<sup>th</sup> October 2012

1. Improved the error information handling of the assembler.
2. Improved Motorola file loader.
3. Improved the internal error reporting.
4. Improved the S-Record file loading. From now on the loading routine is able to ignore invalid lines to enable the use of application specific files that merge application information and S-Records in their output files.
5. Fixed a bug in the S-Record file loading, that caused an appending of some unnecessary bytes at the end of the file.
6. Fixed a potential bug in the S-Record file loading that could cause in a special case the usage of a wrong initialization value for undefined bytes.
7. Fixed a bug in the general file IO layer that could crash the application in a very special case.
8. Fixed several minor bugs.

## Version 9.4.8

Released on 7<sup>th</sup> May 2012

1. Fixed a potential bug in the monitor control that prevents in some circumstances a content update during a simulation.

## Version 9.4.7

Released on 10<sup>th</sup> April 2012

1. Updated contact information for the telephone activation.
2. Added a simulator chapter in the German manual.
3. Fixed a potential bug that prevents the automatic internet activation.
4. Fixed a potential crash caused by a wrong sensibility of the delete button in the watch list.
5. Fixed a potential crash in the loading code for project and system files.
6. Fixed a potential crash in the quick info tooltip mechanism of the source editor.
7. Fixed some layout flaws in the about dialog.

## Version 9.4.6

Released on 22<sup>th</sup> March 2012

1. Added an option to automatically init the external data (XDATA) for a simulation with an adjustable binary file.
2. Added possibility to save the external data of a simulation to a file.
3. Added possibility to replace the external data during a simulation with the contents of a user chosen file.
4. Added possibility do to a manual refresh of the external ram window.
5. Added possibility to reset the whole external ram to FFH with one click during a simulation.
6. Updated German manual.

## Version 9.4.5

Released on 21<sup>th</sup> March 2012

1. Adjusted the scrolling distance of the mouse wheel.
2. Fixed a bug in the debugger that prevents the data- and memory dump window from updating their contents while their docking state is floating.
3. Fixed a bug that could cause an application crash in an uncommon use case after building an invalid system.
4. Updated German manual.
5. Fixed minor bugs.

## Version 9.4.4

Released on 19<sup>th</sup> March 2012

1. Added context menu to the richtext editor.
2. Added option to enable or disable the visibility of leading zeros for hex-numbers.

## Version 9.4.3

Released on 29<sup>th</sup> February 2012

1. Minimal changes to the default color theme.
2. Fixed a serious bug in the core assembler that was unfortunately added in version 9.4.1.
3. Fixed typos.

## Version 9.4.2

Released on 28<sup>th</sup> February 2012

1. Disabled the uncommon »mov bit, bit« instruction to assemble a more general and indeed more expected output by default. The old behavior could be re-enabled in the options.
2. Fixed a bug in the assembler concerning to the use of preprocessor conditions.
3. Fixed a permission fault triggered by the attempt to dispose a protected brush resource.
4. Fixed fallen out »edit ▶ indent/dedent section« buttons in the main menu.

## Version 9.4.1

Released on 27<sup>th</sup> February 2012

1. Added IP Register to several definition files for a better backwards compatibility.
2. Fixed a bug in the use of the DB instruction combined with unexpected arguments.
3. Fixed a bug that prevents to stop on a breakpoint on the initial debug session.
4. Fixed some disabled button states in the main menu.

## Version 9.4.0

Released on 24<sup>th</sup> February 2012

1. Added additional tooltips.
2. Replaced some icons with more significant ones.
3. Fixed a bug concerning to the localization.
4. Fixed a bug that prevents the usage of the D52 Disassembler on Windows XP.
5. Fixed minor bugs.

## Version 9.3.4

Released on 18<sup>th</sup> January 2012

1. Changed the project manager renaming of files behavior. From now on changes are applied on focus lost.
2. Fixed minor bugs.

## Version 9.3.3

Released on 17<sup>th</sup> January 2012

1. Added new debug messages to improve the error diagnostic capabilities.
2. Changed logging base directory from %HOMEPATH%\... to %USERPROFILE%\....
3. Fixed a bug in the logging feature that occurred in Windows XP and prior.

## Version 9.3.2

Released on 16<sup>th</sup> January 2012

1. Added the version information to the window title.
2. Added new debug messages to improve the error diagnostic capabilities
3. Fixed typos.

## Version 9.3.1

Released on 16<sup>th</sup> January 2012

1. Added the version information to the window title.
2. Added new debug messages for a better error diagnostic.
3. Fixed typos.

## Version 9.3.0

Released on 10<sup>th</sup> January 2012

1. Fixed a bug in the assembler that raised an unhandled exception on the usage of some assembler instructions with invalid syntax.

## Version 9.2.9

Released on 6<sup>th</sup> January 2012

1. Applied a contributed patch on the AT89S8253 definition file.
2. Updated copyright information.
3. Updated English and German manual.
4. Updated German Mnemonics information.
5. Fixed a bug that avoids the registration of valid product keys in some circumstances.

## Version 9.2.8

Released on 19<sup>th</sup> December 2011

1. Changed the visibility of the »exit application« button. From now on it's just visible in the case of an unhandled exception.
2. Fixed a bug in the logging module that could occur on old operating systems like Windows 98SE and Windows Me.

## Version 9.2.7

Released on 19<sup>th</sup> December 2011

1. Added a new »exit application« button to the bug reporting dialog.
2. Fixed an unnecessary drawing glitch of the project manager.

3. Fixed a bug in the project manager that could cause an application crash due to a graphics incompatibility on some Windows XP machines. This bug was introduced in revision 9.2.6.

## Version 9.2.6

Released on 13<sup>th</sup> December 2011

1. Applied a contributed patch on the AT89LP4052 definition file.
2. Added double buffered drawing to the project manager window to reduce graphics flicker.
3. Updated some project manager icons to improve the ability optical distinguish between the used glyphs.
4. Updated some application glyphs.
5. Updated the German manual.
6. Fixed a bug in the project manager that prevents copying a system with a clipboard operation.
7. Fixed a bug in the watch list that occurred if the user chooses a custom font that doesn't support the needed font styles.
8. Fixed typos.

## Version 9.2.5

Released on 6<sup>th</sup> December 2011

1. New software option: Search for online software updates at start up.
2. Added additional checks to improve the reliability of the auto save feature.
3. Improved the logging module.
4. Updated some application glyphs.
5. Fixed a unit bug in the auto save feature.
6. Fixed some minor layout flaws of the graphical user interface.

## Version 9.2.4

Released on 5<sup>th</sup> December 2011

1. Improved logging module to allow a better performance diagnostics analysis if needed.
2. Added a switch to enable low level debug messages for the logging module.
3. Added a button to the options to quickly open the selected logging folder in the windows explorer.
4. Fixed a bug that occurred on the attempt to change a file association from a user account with insufficient access permissions.
5. Fixed minor bugs.

## Version 9.2.3

Released on 2<sup>nd</sup> December 2011

1. Added a generic logging module.

## Version 9.2.2

Released on 30<sup>th</sup> November 2011

1. Added a return key handler to open the current selected file in the project manager.
2. Improved the project manager's ability to handle missing files.
3. Fixed a bug in the project manager concerning its general file handling.

## Version 9.2.1

Released on 28<sup>th</sup> November 2011

1. Improved the editing of the symbol names of the watchlist control. From now on the whole text will be selected when an edit begins.
2. Changed delete behavior of the watchlist control. From now on the delete command removes all selected items instead of just removing the selected, focused symbol.
3. Fixed a bug in the floating window mode of the project manager that could crash the application on the creation of a new project and some file operations. The docked window mode was not affected.
4. Fixed a bug that caused an application crash in some circumstances due to a switch of the used theme.
5. Fixed a bug in the watchlist grid control that could cause an application crash.

## Version 9.2.0

Released on 25<sup>th</sup> November 2011

1. Replaced the »new project dialog« with a superior from scratch rewritten version for future improvements.
2. Improved the bug reporting feature for future improvements.
3. Removed some unnecessary message boxes.
4. Fixed a bug in the new project dialog that could cause an application crash when the user chooses file paths without the needed permissions to create, delete and modify its contents.
5. Fixed a bug in the debugger unit that could cause an erroneous program behavior.
6. Fixed a bug of the notification dialog that could cause a memory exception in some special cases.

## Version 9.1.1

Released on 3<sup>rd</sup> November 2011

1. Improved the automatic indentation of new lines in the source editor.
2. Fixed a bug in the edit & continue feature that could cause a crash of the Prog-Studio.

## Version 9.1.0

Released on 2<sup>nd</sup> November 2011

1. New bug report dialog.
2. Improved the opening behavior of the hex editor context menu. From now on it opens also at the mouse location even if the documents are docked in nested groups.
3. Improved the opening behavior of the hex editor context menu. From now on it opens as close as possible to the current caret position when it's invoked by [SHIFT] + [F10] or the windows application key.
4. Fixed a bug in the hex-editor that caused a possibility to write the next changed byte (after a manual change of the endianness) to a wrong offset.
5. Fixed a bug in the hex-editor when importing files far behind the last existing editor byte.
6. Fixed URL of project website.
7. Fixed a bug in the full text search used by the hex-editor.
8. Fixed a caret positioning bug in the hex editor.
9. Fixed a bug hex editor concerning to the used hex file format in the case of an auto reloaded document due to an external change. Formerly the reload function ignores the hex file format setting of the user and uses always an automatic detection algorithm. From now on it is possible to set a fixed hex file format.
10. Fixed minor Bugs.

## Version 9.0.33

Released on 28<sup>th</sup> August 2011

1. Removed unnecessary Content Button from Hex-Editor
2. Fixed minor Bugs.

## Version 9.0.32

Released on 2<sup>nd</sup> August 2011

1. Changed some colors to gain a more unique looking branding.
2. Updated some localized strings.
3. Fixed a bug in the license module that prevents the recognition of some valid licenses.

## Version 9.0.31

Released on 26<sup>th</sup> July 2011

1. Fixed some critical security vulnerabilities introduced through revision 30.

## Version 9.0.30

Released on 15<sup>th</sup> July 2011

1. Removed external Pslmporter migration tool and added as replacement a simple button in the context menu of the project manager to import Prog-Studio 6 and former source files.
2. Added Frequency divider( $\frac{1}{6}$ ) to the new project dialog.
3. Added an option to the Intel-Hex output. Now it is possible to adjust the used maximum allowed length (size) of a single record from 1 to 255.
4. Fixed a bug that prevents the input of mathematical and currency symbols in the text edit area of the hex-editor.
5. Fixed an unnecessary and annoying warning message that occurred on multiple launches of the updater.
6. Fixed a bug addressing an erroneous caret positioning of the number edit box.
7. Fixed a bug in the hex editor concerning the highlighting of modified bytes after an applied range operation on a huge file.
8. Fixed a bug in the hex editor that may cause an arithmetic overflow exception by the calculation of the caret position for a huge file.
9. Fixed a bug in the hex editor that may cause a force an unwanted caret visibility in decimal and binary view during a scroll operation.
10. Added possibility to abort long lasting data range operations for the hex editor.
11. Fixed a stack overflow possibility in the hex editor that could be triggered by intensive use of different range functions on huge files.
12. Improved the matching and parsing of pasted data from the clipboard into the hex editor.
13. Removed a lot of nowadays unnecessary trace messages.
14. Fixed the wrong code page using for appended characters in the hex editor.
15. Fixed a bug that caused a wrong deletion behavior by the use of the delete key in the change selection textboxes underneath the hex editor.
16. Fixed a bug that could cause the computer to run out of memory by the use of the »fill selection with random values« feature on huge files in the hex editor.
17. Increased maximum byte count for the »fill into« feature to 64 Gigabyte. Now it is much easier to create and edit huge files with the hex editor.
18. Added alternating for the address column of the hex editor to improve its readability.
19. Fixed a bug in the address context menu of the hex editor concerning its open/close behavior.
20. Removed UI flickering that occurred by dragging the »words per line« of the hex editor.
21. Fixed a disfigurement concerning to the visibility of the caret of the hex editor.
22. Changed the visibility of the hex editor scrollbars. Now there are shown on demand.
23. Fixed a bug that may cause a malfunction in the determination of the selected word count in some situations.

24. Fixed a bug that may cause a malfunction of the »highlighting modified bytes« feature by the use of some hex file formats.
25. Improved management of temporary files.
26. Improved the pasting strategy of text from the clipboard into the hex editor. The hex editor now automatically chooses between different paste algorithms to archive a more suitable and expected result.
27. Changed the format of copied text out of the hex editor into the clipboard. From now on the hex editor copies the visible and selected data words of the focused view into the clipboard. Through this we want to improve the interoperability with other software. But the old version is still available through the new command »copy formatted«.
28. Added the new command »copy formatted« to the edit and context menu of the hex editor. Take a look at the previous point for more information about it.
29. Improved the mouse selection of the hex editor do gain a more expected selection behavior.
30. Fixed a disfigurement that occurs on the attempt to append a new word to the end of a hex editor document with already selected bytes.
31. Fixed a bug that caused the disappearing of the address submenu text caused by a change of the user interface language.
32. The number entry box now allows also the entry of hex numbers with simultaneously pressed shift modifier key for the letters [a-f].
33. Fixed a disfigurement concerning the vertical scrolling of the hex editor triggered by some upward caret movements.
34. Improved the performance of the random number generation used by the hex editor.
35. Improved the performance of the value filling for the hex editor.
36. Fixed a bug within the hex editor that triggered an unwanted selection change by opening the context menu in certain situations.

## Version 9.0.29

Released on 6<sup>th</sup> April 2011

1. Fixed a bug that was causing a rendering malfunction on systems with an activated »windows classic« theme.
2. Did some small font-style and layout changes at the »New Project« dialog to fit a unified look and feel.
3. Added a better visual feedback for some controls that are in a disabled state.

## Version 9.0.28

Released on 5<sup>th</sup> April 2011

1. Fixed a bug that prevents Prog-Studio Rev. 27 to start on a x64 version of Windows.
2. Added Windows 7 to the supported OS list of the about dialog.

## Version 9.0.27

Released on 18<sup>th</sup> March 2011

1. Fixed a bug concerning a possible null reference exception in initialization of the source code assistant.
2. Fixed a bug in the data reading layer for the visualization of unchanged bytes from text based hex files like Intel-Hex and Motorola-S-Record files.
3. Data read from a chip and newly opened hex files will no longer be plotted as modified in the Hex-Editor visualization.
4. Fixed some minor bugs.

## Version 9.0.26

Released on 8<sup>th</sup> March 2011

1. Improved the system  $\mu$ C project format to allow a better serialization of the system settings.
2. Added a migration wizard to help choosing the correct  $\mu$ C for the new system store paradigm.
3. Replaced microcontroller definition file for AT89S8253 with a revised and more complete one written by Jan Timmer.
4. Improved usability of the microcontroller selection control.
5. Removed the forced file locking of the microcontroller manufacturer logos.
6. Stripped off any insignificant letters from the manufacturer names to enhance their readability.
7. Replaced some cryptic assembler error codes by localized and human readable messages.
8. Fixed a serious bug in the assembler expression parser concerning the precedence of operator evaluation.
9. Changed the assembler language specification for the » # « operator to eliminate a possibility for an ambiguous language interpretation.
10. If a symbol is dropped from the source editor to a watch window as from now on it will be updated immediately when Prog-Studio is in debug mode.
11. Fixed a bug that had caused a complete failure of the file change observer.
12. Fixed an internal bug in the assembler that possibly has caused a null reference failure.
13. Fixed some long overlooked typos in the German language localization.
14. Fixed a loading issue of the hex editor that occurs on the attempt to open a locked file.
15. Removed forced saving of unmodified documents triggered by an executed save all command.

## Version 9.0.25

Released on 25<sup>th</sup> February 2011

1. Fixed a bug in the assembler core, raised by implicit character conversions in constant data expressions.
2. Added localized strings for some dialog messages.

3. Removed an insignificant status indicator from the status bar.

## Version 9.0.24

Released on 24<sup>th</sup> February 2011

1. Added a microcontroller definition file for the Atmel AT89S8253.
2. Fixed a typo covered in the Atmel AT89LP4052 definition file.
3. Fixed an unattractive highlighting behavior of the debugger, triggered by the use of the » set next statement « on a command witch corresponding code address is shared by multiple lines (e.g. prefixing label).
4. Fixed a bug that caused the ignoring of all » \_\_cycle\_time « directives.
5. Fixed a bug that caused a breakdown of the » Edit & Continue « feature.

## Version 9.0.23

Released on 26<sup>th</sup> October 2010

1. Repacked the setup program to deploy the correct versions of the needed third party libraries.
2. Renamed the desktop shortcuts to better distinguish between the Prog-Studio and Prog-Studio Community version.

## Version 9.0.22

Released on 25<sup>th</sup> October 2010

1. Fixed an IO error by adding a check if the output files are in use before writing it.
2. Fixed a post-expression handling issue in the assembler core that occurred by the use of second pass identifiers.

## Version 9.0.21

Released on 12<sup>th</sup> October 2010

1. Updated automatic product activation code due to server relocation.
2. Fixed an unhandled exception raised by the product manager when a new file is added to a system.
3. Reformatted Changelog to fit our late 2010 corporate identity.

## Version 9.0.20

Released on 17<sup>th</sup> August 2010 (as Beta)

1. Fixed an erroneous drag and drop behavior of the watch window that occurred, when a user drags text from the code editor on it.
2. Improved the editing behavior of the watch window. From now on, you can rename an entry by simply start typing on your keyboard.
3. Fixed some controller definition issued in some microcontroller definition files.
4. Fixed a bug in the assembler that occurred when a line comment character were used in a string literal.
5. Fixed a debugger highlighting issue, which occurred by the use of comment characters in a string literal.
6. Rearranged the startup positions of the tool windows that are used for the first start of Prog-Studio.
7. Updated the icon of the shortcut in the user start menu to the current version.
8. Set the .net framework dependencies strict to 2.0.
9. Changed opening behavior of PDF files. From now on Prog-Studio is using the installed default application for PDF files instead of the ActiveX component of the Adobe Reader.

## Version 9.0.19

Released on 6<sup>th</sup> August 2010 (as Beta)

1. Added a trigger to the recent file list, which updates itself when a project gets renamed.
2. Fixed a bug in the file observer that caused the appearing of multiple dialogs on an extern file change.

## Version 9.0.18

Released on 2<sup>nd</sup> August 2010 (as Beta)

1. Improved a lot of error messages to offer better descriptions.
2. Fixed a bug that sets standalone bits to read-only in the watch window.

## Version 9.0.16

Released on 27<sup>th</sup> July 2010 (as Beta)

1. Finished refactoring of the file change observer to improve its performance.
2. Fixed a bug that caused the global label list to show the wrong file location for some labels.
3. Fixed a bug that caused the hex editor to overwrite the current file while editing.
4. Replaced our expired software certificate with our new certificate.

## Version 9.0.15

Released on 13<sup>th</sup> July 2010

1. Did some refactoring on the code generator implementation of the assembler.
2. Rewrite of the line/column information handling of the assembler. Now it is much easier to generate meaningful debug information.
3. Added a lot of unit tests for the assembler.
4. Created and added a lot of icons as replacement for the lesser significant icons of the project manager.

## Version 9.0.14

Released on 17<sup>th</sup> June 2010

1. Started a BETA fork of this project to avoid malfunction in productivity environments caused by our development tasks.
2. Started a refactoring of the grid control used by the watch and locals window to enable better Drag & Drop functionality und multi selection of the items.
3. Fixed a parsing bug regarding to label expressions.
4. Added the free logging platform [NLog](#).
5. Removed temporary the auto-update functionality for the Label-Window due to bad performance on huge projects.
6. Fixed a bug in the project-manager regarding to the xml-serialization of the current project.
7. Fixed a bug in the monitor control that could cause a malfunction of the view.
8. Fixed a connection bug to cypress devices.
9. Finished core refactoring of the assembler to reduce its complexity for future improvements.
10. Added missing localizations for the use of the connector to Silicon Laboratories devices.
11. Changed the style of the message box while preparing a check for updates operation.
12. Fixed a bug regarding to some assembler expressions.
13. Done a lot of code reviews.
14. Added many unit tests regarding to the hex editor.
15. Fixed some bugs regarding to the IO of the hex editor.
16. Removed the unused build number from the naming schema of the setup program.

## Version 9.0.13

Released on 12<sup>th</sup> May 2010

1. Fixed a bug in the preprocessor that was responsible for the display of a wrong line-number for an error when the error location is nested by multiple `$include` directives.
2. Added the name of the unknown identifier to the description of the corresponding entry in the error list.
3. Added missing error messages to the assembler.
4. Added a context menu that provides capabilities to copy the selected entries to the error list.
5. Added an auto adjusting width capability for the description column in the error list.
6. Added new window that displays all used label in the active assembler system.
7. The error list doesn't ignore the editor setting for the line-number-base anymore.
8. Fixed an addressing bug caused by the use of an undefined label in a DW expression.

9. Fixed formatting bug of the shown address, which occurs when a user copies selected bytes from the hex editor to the clipboard.

## Version 9.0.12

Released on 13<sup>th</sup> April 2010

1. Fixed a debugger bug that caused a display malfunction of the simulator memory state when switching from run mode to pause mode.
2. Added the ability to Drag & Drop source code directly in the Source-Editor.
3. Added cyclic AutoSave feature for projects.
4. Added auto restore of the last number base setting for the debugger windows: locals, watch, ram and external ram.

## Version 9.0.11

Released on 18<sup>th</sup> February 2010

1. Fixed a bug in the expression evaluator, caused by an expression containing unary operators.
2. Fixed a bug in the search dialog caused by an infinite loop condition.
3. Changed used default path for open file dialog when open example project is clicked on start page.

## Version 9.0.10

Released on 17<sup>th</sup> February 2010

1. Fixed the positioning of the caret if the caret of the hex editor is moved down by a line.
2. The shown "words per line" by the hex editor are now adjustable by dragging the separating line between the two editors by mouse.
3. Fixed a bug in fill by sequence feature that occurs when the end of the sequence is set to a value lesser than the start of sequence value and the step value is positive.
4. Fixed a mouse cursor issue of the hex editor when the mouse is moved onto the scrollbars.
5. Fixed a caret position restore issue when the hex editor is scrolled by mouse wheel.
6. Fixed a drawing bug of the caption on hex editor resizing.
7. Fixed a drawing bug of the hex editor that occurs when editing bytes without changing the offset.
8. Fixed a key handler bug of the in hex editor.
9. Fixed the file position information for an unknown identifier error.
10. Added a "Close All Documents" button to the context menu of a document tab.
11. Fixed a bug in the expression parser that occurs sometime when an XOR expression is parsed by the assembler.
12. Fixed a preprocessor error that caused an unhandled exception when evaluating on constant expression parsing.

13. Moved example projects from 'installation directory' to 'user documents' folder.
14. Fixed status message reset to "ready" after build event.
15. Added possibility to create shortcuts at Desktop and Quick Launch Bar during setup.
16. Fixed a numbering issue in Changelog.

## Version 9.0.9

Released on 14<sup>th</sup> January 2010

1. Fixed a bug in hex editor that caused a wrong undo behavior.
2. Refined preprocessor performance of the assembler.
3. Removed the popup Message Box if a recursive \$include directive is detected. From now on a default error entry will be written to the error list window.
4. Improved the creation of error positions for the error list. (path, line and column info).
5. Fixed a memory calculation bug that is needed to determine if a basic statement requires a far or a near jump.

## Version 9.0.8

Released on 11<sup>th</sup> January 2010

1. Fixed a serious bug in the post-Expression parser that caused an unhandled exception.
2. Fixed scrolling bug of hex editor.
3. Improved performance of hex editor.

## Version 9.0.7

Released on 7<sup>th</sup> January 2010

1. Added the missing point in version string in Changelog. Current format of the version string is major.minor.revision.
2. Added the option to fix the character encoding of the text to an 8 bit encoding like ASCII.
3. Added redraw of all captions of hex editor when the user changes the endianness (byte-order) of the contained data view or changed the addressing display from addresses to offsets or vice versa.
4. Fixed a calculation bug of the display in the little endianness mode.
5. Fixed bug that caused an invalid evaluation of assembler expressions containing forward label or current address operator.

## Version 9.0.6

Released on 23<sup>th</sup> November 2009

1. Fixed a bug in Prog-Studio default renderer that throws an unhandled exception when the application window is resizing.

2. Files with .a51 extension are now recognized as assembler source files.
3. Added a "fill into" feature to the included hex-editor that allows for mass inserting of a given byte-value.
4. Fixed some rendering issues in hex editor.
5. Fixed a bug in document handling of the hex editor.
6. Finished the refactoring of all dialogs of the hex editor and added a new control to edit and enter numbers in different numeric bases.
7. Fixed some typos.

## Version 9.0.5

Released on 29<sup>th</sup> October 2009

1. Added a completely new updater. It's rewritten from scratch and supports a properties pane to set up a proxy server.
2. Fixed a timing bug in the simulator.

## Version 9.0.4

Released on 13<sup>th</sup> October 2009

1. Added Validation Code for the new project dialog finish button.
2. Enabled visual styles for the "browse for project Folder" button of the new Project Dialog.
3. Added dialog to browse for the root folder of a new project to the new project dialog.
4. Fixed a bug that prevents the synchronization of the stopwatch measurement during the debug session.
5. Fixed a bug caused by the project manager that shows an unknown icon for unsupported files when the file is loaded for the first time instead of using the system set icon.

## Version 9.0.3

Released on 13<sup>th</sup> October 2009

1. Fixed a serious bug in the dw assembler command that raised an unhandled exception.
2. Added missing strings for the toolbar buttons.
3. Enabled checkbox to choose custom font and color preferences for the syntax editor.

## Version 9.0.2

Released on 12<sup>th</sup> October 2009

1. Added Tooltips for the toolbar buttons "Cypress ISP" and "Silabs ISP".
2. Adjust the spacing of some controls in the options dialog.
3. Added missing localizations for all message boxes of the Silabs ISP command.
4. Fixed unknown identifier bug in assembler that raises an unhandled exception.

5. Improved error handling for assembler syntax errors.
6. Added serialization of all files in output directory of a system.
7. Improved reliability of project serialization and deserialization.
8. Added missing localization to close button of the about dialog.
9. Changed dimensions of the close button of the about dialog for branding reasons.
10. Correction of miscellaneous typos.

## **Version 9.0.1**

Released on 5<sup>th</sup> October 2009

1. Fixed some typos on several positions.

## **Version 9.0.0**

Released on 1<sup>st</sup> October 2009

1. Initial release of Prog-Studio 9.0.

## Contact Information

# Batronix Elektronik

An individual enterprise by Dipl.-Ing. (FH) André Bauer

### Mailing Address

Batronix Elektronik  
Lise-Meitner-Str. 1-7  
24223 Schwentinal  
Germany

### Personal Contact

E-Mail	<a href="mailto:service@batronix.com">service@batronix.com</a>
Telephone	+49 4307 824320
Fax	+49 4307 824339
Website	<a href="http://www.batronix.com">www.batronix.com</a>
Forum	<a href="http://www.progforum.com">www.progforum.com</a>