

e2studio 1.1.1.8 Release Note: 25th February 2013

New features in 1.1:

Component	Description
Debug configurations	Debug configuration options improved for RX and RL78. For example RX now supports external RAM configuration and flash overwrite options.
SH support	Build and debug support now available for the SH device. GNU SH and Renesas SH C toolchains are supported. E10A-USB debugger is supported. Device families are SH2 and SH2A.
Profile	SH supports the trace and eventpoints functionality in the same manner as RX and RL78.
Coverage	Profile plugin developed. Any device that has trace functionality is supported.
Memory	Coverage plugin developed to support RL78 IECUBE.
Registers	Enhanced memory plugin developed to provide endian aware rendering modes and improved memory fill capability.
Project Wizard	Importing memory via a file also has improved performance.
HEW Project Importer	Register radix can now be defined on a per register basis. It is saved to the debug configuration.
	Project wizard improved for easier device selection and nicer look and feel.
	New import facility to import projects from the HEW IDE to e2studio. Supports HEW 4.07 onwards and SH and RX projects.

Important workarounds useful to know when using 1.1.1.8:

ID	Component	Description
	Application	Symptoms: About box does not show 1.1.1.8 following update. Workaround: To keep the update size small the main e2studio version was not updated for 1.1.1.8. If you examine installation details you can see e2studio is 1.1.1.8. Only the RL78 GDB component was updated for 1.1.1.8.
2010	HEW Importer	Symptoms: Project fails to build after import from HEW Conditions: If a long filename or path is used, and the HEW project importer is used, the project may fail to build. Workaround: Move the original HEW project to a shallow directory structure (i.e.) C:\Workspace and import from there.
1922	Application	Symptoms: Project fails to build in first instance after archive project import (not from HEW) Conditions: If an archived project is imported it may fail to build the first time, due to a residual .d file. Workaround: Clean and Build a second time.
1730	Application	Symptoms: Macro expansion fails due to invalid Placeholder. Conditions: Placeholder (being used in include path) corrupted if the source folder is deleted. \${workspace_loc:\${ProjName}/src} becomes: "\${workspace_loc:/PlaceCorrupt/PlaceCorrupt/src}" Workaround: If you intend to delete the source directory, the include paths need to be updated or removed from include path list prior to deleting the source directory.

Fixed issues in 1.1.1.8

ID	Component	Description
2323	GDB	Revised RL78 GDB executable added to e2studio. This is required for the effective debugging of RL78 GCC 13.01 projects. This is due to enhanced debug information containing DWARF4 in the latest toolchain.

Fixed issues in 1.1.1.7

ID	Component	Description
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2064	Application	<p>Device Support</p> <p>The following MCUs of the RX family have been added to the support line: R5F562G7 (NOTE) and R5F562GA (NOTE) (RX62G group) R5F5630A (NOTE) and R5F5630B (NOTE) (RX630 group) R5F5631D (NOTE), R5F5631E (NOTE), R5F5631M, R5F5631N, and R5F5631P (RX631 group) R5F563ND (NOTE) and R5F563NE (NOTE) (RX63N group) R5F563T4 (NOTE), R5F563T5 (NOTE), and R5F563T6 (NOTE) (RX63T group) R5F52103, R5F52104, R5F5210A, and R5F5210B (RX210 group) R5F521A6, R5F521A7, and R5F521A8 (RX21A group) R5F52201, R5F52203, R5F52205, and R5F52206 (RX220 group)</p>
2287	Micrium Probe	<p>Corrects a threading issue and handles probe requests more elegantly. If you use the current version of the proxy you may find the endianness of some values becomes backwards, resulting in incorrect data.</p>
2219	Application	<p>New build configuration based on an existing configuration fails when attempting to build or change linker sections.</p> <p>An exception is raised:</p> <pre> {{{ java.io.FileNotFoundException: <ProjectLocation>_BE_Newlinker }}}</pre> <p>Copying the same file for another configuration and renaming it works around the issue.</p>
2221	Application	<p>Following a project import the <code>-mcpu=rx600</code> flag is incorrectly passed to the GCC tools.</p>
2258	Application	<p>C++ code in e2studio builds fine but the internal code parser does not recognize the code as valid. This has been rectified and C++ code can now be parsed correctly by e2studio.</p>
2260	RX Build Plugin	<p>Endian is not set correctly for GNU RX in release configuration. This has been corrected in the assembler build options.</p>
2262	CCRX Build Plugin	<p>When using the Renesas RX Compiler the compiler phase is not invoked correctly when using the Compiler -> Object -> Assembly code(*.src) options.</p>
2292	IAR Plugins	<p>IAR update site URL location corrected.</p>
2262	Application	<p>Link to the RenesasRulz community corrected.</p>

Fixed issues in 1.1.1.5

ID	Component	Description
1961	Application	<p>Obsolete hardware debug plugins are not disabled which causes an exception when upgrading for 1.1.0.30 to 1.1.1.4. To remedy the problem in 1.1.1.4 do the following:</p> <ol style="list-style-type: none"> 1. Close e2studio. 2. Browse to the folder C:\Renesas\e2studio\eclipse\plugins. 3. Delete the plugin named com.renesas.hardwaredebug.e1v850_1.0.1.201207131525.jar. 4. Re-start e2studio and view your debug configurations. <p>This was an issue re-introduced in 1.1.1.4.</p>

Fixed issues in 1.1.1.4

ID	Component	Description
471	GDB	<p>All 16 bit registers on the RL78 display 20 bits, the only such register in CubeSuite? is 'PC'.</p>
901	Application	<p>Building a project after renaming fails to build. "Artifact Name" is not being changed.</p> <p>Build Artifact needs to be manually modified after this operation.</p> <p>Using \${ProjName} avoids this issue as the build artifact is automatically updated.</p> <p>However with GCC tools the linker archive options also need to be manually modified.</p>
903	Project Generation	<p>When attempted to rename the project in e2studio, the new binary gets created with the previous project name and not with the modified project name.</p>
1559	GDB server EXEC	<p>Setting a software breakpoint in an invalid memory region can crash the GDB server.</p>
1866	Application	<p>Dependency scan fails for if linked resource file is renamed.</p>
1922	Application	<p>This problem occurs for all toolchains following import.</p> <p>Following an import and build the project is built successfully however the .d files are deleted so when building again the entire project is re-built.</p> <p>This only occurs once - after this second build operation is normal.</p>
1933	Application	<p>Provided GNURX and RXC samples are not using the latest iodef.h files which are shipped with the product.</p>
1939	RX build plugin	<p>Conditional header file scanning dependencies can fail for existing projects.</p>

1946	RX build plugin	For the Renesas CCRX compiler, dependency scanning fails to scan the options specified under compiler > user defined options for defines, includes and un-defines.
1948	Application	When moving the position of real-time chart when it is updating it causes e2studio to hang.
1957	RX build plugin	Dependency scanning fails for files at relative path with spaces does not work correctly.
1966	Profile plugin	Retrieval and display of profile data is taking a very long time (5 minutes) when using RL78 IECUBE. Waiting this time will show the results correctly.
1979	SH build plugin	For Renesas SH C following the hew import procedure the include paths are not sent to the compiler correctly.
2026	GDB server EXEC	RL78 registers AX, BC, DE & HL are displayed as 20 bit, with the top nibble as "F" which is incorrect. These registers are only 16 bit registers. for example 16 bit AX is concatenation of A & X registers with A as most significant byte. This is the same for the 16 bit banked registers (Bank*_rp*, eg bank0_rp0). Also, if the 8 bit registers are manually changed in the debugger view, the 16 bit values do not update and the the way around. Selecting the register for in-place edit shows the correct value.
2037	GDB server	If gdb hangs and another connection attempt is made, it can leave processes running in Windows XP that can only be closed using task manager. This can block subsequent connection attempts.
2071	Debug Console plugin	It is observed that Resume, Restart, Reload, Reset buttons are active before Debug session starts fully. When 'Resume(F8)' is pressed before the ongoing task of 'Debug(F11)' the session goes to unstable state.
2076	IO view plugin	On RX63N the IO registers do not update ADCSR value. The IO file is not correctly generated for RX63N.
2139	Debug Configuration	Debug launcher changed to launch debugger connection as a foreground task. This feature is on the debug configurations, common tab.

Fixed issues in 1.1.0.31

ID	Component	Description
2020	GDB Server EXEC	RL78 IO registers were showing incorrect data. This is due to them being displayed in the incorrect endian.
2028	Application	Micrium probe plugin was not being loaded correctly. So did not appear correctly in e2studio preferences view.
2057	GDB Server FFW	When debugging using RX63N using the Ethernet is blocked because the trace is setup to use TRCLK. Ethernet needs P83 but this cannot be accessed.
2033	RX build plugin	The -rom option in the RXC toolchain link phase could not be removed. When it was removed it was automatically added back in.

Fixed issues in 1.1.0.30

ID	Component	Description
1961	Application	Obsolete hardware debug plugins are not disabled which causes an exception when upgrading for 1.0.0.38 to 1.1.0.29. To remedy the problem in 1.1.0.29 do the following: 1. Close e2studio. 2. Browse to the folder C:\Renesas\e2studio\eclipse\plugins. 3. Delete the plugin named com.renesas.hardwaredebug.e1v850_1.0.1.201207131525.jar. 4. Re-start e2studio and view your debug configurations.

Fixed issues in 1.1.0.29

ID	Component	Description
1861	Application	Cannot connect to a RL78 G13 101GC with IECube. This affects more devices than just the 101GC.
1971	Application	When using coverage, lines not being marked covered when suspending via the suspend button on the Renesas Debug tool bar.
792	RX build plugin	Custom added build configuration results in project build failure. The error occurs as the linker section feature is not available for the newly added build configuration.
915	Application	When adding a new .src file to the project and build is initiated the source file is not built.

		Error when building project. After creating a new GNU project with default settings, it will sometimes fail to build (error from GNU RX project): **** Build of configuration HardwareDebug for project TestRx2 **** make all 'Invoking: Library Generator' rx-elf-libgen -o "libTestRx2.a" 'rx-elf-libgen' is not recognized as an internal or external command, operable program or batch file. make: *** [libTestRx2.a] Error 1
1856	Project Generation	
568	Real-time Memory	No context sensitive help exists in the real-time views.
468	Real-time Watch	Realtime Chart View only working for first hardware debug session
1901	Application	If you delete support files like the gdb or IO files for devices you can recover them by following these steps: Go to the internal directory under the e2studio folder. Edit the version_info.txt file and change the version number to be one less than the number currently in the file. Save the file and restart e2studio. e2studio will now begin copying the support files in the DebugComp, internal & utilities directories.
569	Real-time Memory	It is possible that after debug runs the real-time chart may stop working. Even if the real-time watch view is updating the chart does not. e2studio will require a restart to fix this problem.
870	Application	GNU RX Build component, building of Assembler file fails if workspace is located in the path with spaces.
1124	Real-time Watch	On adding an expression to the expressions view for the first time you may get a null pointer exception. On pressing "Add new expression" again you will be able to add an expression.
1176	Real-time Watch	Sometimes on suspend the expressions being monitored will disappear temporarily until the next time the debugger is resumed
1823	Real-time Watch	Expressions view will display an error message for global variables/expressions saying target not available while running. This is confusing as it simply means that this variable is not being monitored in real-time. This message has been improved.
1150	Real-time Watch	When using the RL78 family (with limited real-time monitoring) there is no notification to the user that all available memory has been used in the Expressions View
1458	Project Generation	Imported projects contained toolchain directories of the original owner.
1789	Application	When using re-start with RL78 the temporary breakpoint set as main is not cleared correctly. This is only noticed when there is a loop right at the beginning of main. The address the breakpoint is set at for main is the start of the loop. The program appears to execute but stops after 5 or 6 iterations of the loop. To workaround this issue remove the breakpoint at main from the debugger start settings or add a line of code before the while loop - such as a nop.
530	Debug Configuration	"In the debug configurations, when clicking the 'Debugger' tab (e.g. from the 'Start-up' tab), in my system it takes 4-5 seconds until the tab comes up during which the window is in an 'in-between' state."
1925	Application	If you can not change the number format of all the registers, please do the following: 1) Select all registers except the "General Registers" label. 2) Using context menu select "Register Format" and select "Default" 3) Un-select the registers. 4) From Number Format menu you will now be able to change the format of all registers.
370	Application	Following a product update the product version on the about box installation history does not get updated.
1107	Application	If you remove all the sections under Project->Properties->C/C++ Build->Settings->Sections, then apply the settings, close the properties dialog then re-open the sections section, causes an exception.
91	Application	If skip all breakpoints is clicked with the target running & multiple breakpoints are set, GDB returns the following error and the debug session is terminated. 961,041 ~-"Interrupted while waiting for the program.\n" 961,041 ~-"Give up (and stop debugging it)? (y or n) [answered Y; input not from terminal]\n" 961,042 =thread-group-exited,id="42000" 961,042 29^error,msg="unknown error" 961,042 (gdb)
1511	Application	When running in non-stop mode this no longer happens for any of the devices. (RX, RL78, SH) If a variable value is changed within the Variable or Expressions window it does not update inside the memory view. (Although it does if you perform a step).
1276	Application	When creating a new project the src folder is the only one considered valid for build source by default. Currently the project folder is not a valid location for source files. Files added here are not automatically built.
127	Application	The default for the registers window should be hex not decimal.
1315	Application	Following an import into 1.1 the RX_Converter.exe tool needs to be removed from the post build steps. This tool is now included in the user interface.
558	Application	The CPU reset in the Renesas debug view does not highlight the PC in the editor. A message is now displayed to tell the user about this so there should be less confusion.
880	RX build plugin	The default iodefne.h file for an RX62N is incorrect when using little endian data. With an example project using the ADC, Accelerometer, Temp Sensor & LCD on the RX62N RDK. When compiled for Big Endian all function correctly. Switching to little endian causes the LCD to stop functioning.

1478	Trace plugin	Saved SH Trace cannot be loaded back into the view.
1874	Application	Deleting directory can cause e2studio to lock up. Within e2studio, delete the "src" directory. From file system, copy another directory with source code to your project and rename to "src" (case sensitive). Refresh within e2studio. All new source files are "excluded", and cannot be "included" ("exclude from build management mechanism does not work).
609	Application	Some options are not updated for all the configurations after updating the options on selecting All Configurations Latest development environment.
1481	RX build plugin	User can not remove the last section in Sections viewer list-box. RX C build plugin.
854	Real-time Chart	All real-time views will accept an interval of no less than 100 milliseconds.
1855	Application	Sometimes when attempting to delete a project, with remove from disk checked, the operations fails due to an open file. The error message displayed is: Problems encountered while deleting resources. Could not delete '/TestRx1'. Problems encountered while deleting files. Could not delete: C:\e2studio_images\1_122\jubula_test_workspace\TestRx1\info.
737	Application	When restart is used the target does not stop at the breakpoint set in the Start-up tab in debug configurations.
793	Real-time Watch	Realtime Views sometimes stop updating after 5 minutes. When this happens all the views stop updating simultaneously. Manually refreshing does not fix the issue.
1286	Debug Configuration	Terminating and re-connecting to the target should solve the problem.
1202	Real-time Watch	The Launch Configuration created during Project Generation should be created in the Project. Adding an Icon to identify which expressions are monitored in real time would help the user.
1262	Debug Configuration	Change default GDB & Io File paths to be relative to eclipse home. GDB location should be specified by \${eclipse_home} placeholder. Now the debugger configurations are shared and therefore exported with the project the GDB location needs to be eclipse directory location independent.
1406	Profile plugin	Profile View is not displaying results profile results for IECube since labels are not being set for the trace records.
322	GDB	Initial debug view is at incorrect address. Caused by an erroneous PC register value.
298	Application	While the target is running the "restart" button is active. If the "restart" button is pressed while running and a software breakpoint is hit the debugger provides no indication that the target has stopped. If the "pause" button is pressed at this point, the PC is shown at the breakpoint location.
1203	RX build plugin	When building with the Renesas CCRX toolchain with many files the link can fail. This is because the constructed command line is too long. To avoid this - use the external sub-command file option.
1811	Real-time Memory	Real-time memory update does not work for RDK RX63N. The function works correctly in the expressions view but not the memory view.
1006	GDB server	When debugging with RL78, a reload operation can cause GDB to GPF. This is easily reproduced when using real-time updating in the expressions and chart views. It can also happen with other devices such as RX but is less easy to reproduce.
1436	GDB server EXEC	Creating an OA eventpoint with RL78, setting the data compare to more than 1 bytes of data causes the eventpoint not to set. e.g A compare with fc works but 3fc fails
783	RX build plugin	-nofpu option for RX200 is not passed when switched from RX600 to RX200.
1767	Application	There are problems debugging RX big endian debuggers. Error message is shown at connection stating it cannot find a file with the extension .mon.
1875	Application	Hex endian is the default memory rendering and is not endian aware. We will default instead to Hex Integer which is a new memory renderer provided in e2studio.
1723	RX build plugin	Renesas compiler inbuilt macros /defines' are not currently used in the dependency scanning process when using the Renesas compiler.
1570	Debug Configuration	The default value for the RL78's verify on writing to memory should be 'yes' but is actually 'no'
698	Debug Configuration	In the debug configuration for RX E1 the debug configuration dialog is not remembering the voltage choice of 5V.
1449	Application	Default C++ project for RX630E with E1 emulator does not build. Also affects RX210 projects. A workaround is to delete the .option_bytes & .endian_bytes sections.
939	RX build plugin	Linker section editor user interface needs improvement for CCRX. Unable to add section without selecting existing section & UI does not indicate this. As a result unable to add section before start of current sections without convoluted process rearranging sections after creating new section This also seems to be an issue with the GNU section editor.
882	Application	Eventpoints are project based in e2studio rather than workspace based. A side-effect of this limitation is that eventpoints can only be set in project source code.
842	RX build plugin	Summary of issues with RXC Section editor: Cannot set section to address of 0, this sets to follow on from previous. Clearing address should set to follow on from previous Unable to add section without selecting existing section & UI does not indicate this. As a result unable to add section before start of current sections without convoluted process rearranging sections after creating new section. This also seems to be an issue with the GNU section editor. When opening or importing any RXC project created prior to version 1.0.0.38 the sections will need to be corrected before building.

1468	Application	e2studio/GDB not preventing loading to invalid memory. Loading code to address 0xFFE00000 on RX62N generates no errors or warnings. In HEW, this was caught on download. Mechanism should allow loading code to Internal RAM/Flash or external memory(if expanded mode).
1081	GDB server	Trace is taking up to one minute to return in IECube and sometimes timing out This is only noticeable on the IECube target where the trace buffer is full with 65536 records
1236	GDB server	Reset->Reload->Run functionality can cause target stability problems. This is due to the asynchronous nature of these features - operating them in close succession can cause a GDB error.
1469	Application	Using debug configuration start-up "set breakpoint at:" only works once after starting a debug session. Subsequent reset/go sequences no longer stop.
559	Application	Reload image should have a checkbox remembering your choice.
688	Real-time Watch	Real time expression not working without re-connect. The first time the project is opened and debugged it not possible to view anything in the real time expressions window. The debugger must be disconnected and reconnected to start the updates. New additions etc then work OK.
545	Project Generation	Build steps dialog does not allow multiple pre-build steps.
708	Trace plugin	Trace address filter end range value gets converted to decimal from hex display.
179	RX build plugin	Changing toolchain version (via C/C++ Build -> Change Toolchain Version) does not change the include paths set in the compiler options.
847	RX build plugin	Linker section options are enabled when user opts to use external linker script.
726	Application	RX630 could not be connected using JTAG switch.

Fixed issues in 1.0.1.18

ID	Component	Description
1424	GDB Server	Connection for RX630E with JTAG connection was failing.
1307	GDB Server	Connection for RX630E with Segger emulator was failing.
1281	Build plugin	Linker archive paths were accepting Eclipse placeholders and then changing back to absolute paths. Fix now allows placeholders correctly and an additional placeholder \${TCINSTALL} has been added. Projects will default to this when created. Note: Changes also made to the compiler include paths but these do not default to the new placeholder when a new project is created. This will be rectified in a later release.
1361	IO view plugin	Latest IO files for RX added.
1365	Application	RL78 device support updated. 1) RL78/G13: Device file DR5F101AG.DVF updated: - correction of internal Flash memory size: 128KB (previous 96KB) - correction of internal Flash memory size: 12KB (previous 8KB) 2) RL78/G14 Device file DR5F104BD.DVF updated: - correction of internal Flash memory size: 48KB (previous 32KB) - correction of internal Flash memory size: 5.5KB (previous 4KB) 3) RL78/L12 All device files updated to V1.01: The interrupt request name of the vector table address (0044H) has been changed to INTLCD (previous name: INTLCD0)
1371	Project Generator	RX62N IO define file updated for the Renesas RX compiler.

Fixed issues in 1.0.1.14

ID	Component	Description
166	RL78 build plugin	Build file for RX C rebuilds file every time rather than only building when changes are needed.
279	Application	GDB server and port number although configurable are currently hard coded.
576	Real-time Watch	Structure dereferencing not available in the real time expression window.
791	Application	Importing projects does not allow an easy way to move the toolchain path if the toolchain is either in a different location or does not exist.
876	Application	Unable to set OA Address range for RX targets. Workaround: set another eventpoint first to channel 0.
902	Application	After adding a new build configuration the new configuration cannot be built successfully.
490	Application	e2studio current GDB versions do not support the python scripting switches.
1054	Application	Only two RL78/D1A devices are currently supported. R5F10DPG , R5F10DPJ. More devices are required to be added.
1249	Application	Realtime does not work with old RL78 launch configurations
1245	GDB Server EXEC	RL78 real-time only allows monitoring of 8 bytes.

ID	Component	Description
2419	GDB Server	When viewing some 16-bit io register on a RL78 in the IO view the value is always displayed as 0x0000. This behaviour is confirmed for SMR0n (e.g. SMR02) & MULA. For SMR0n registers the value after reset should be 0x0020, so this is not an io_define.h or compiler issue with writing to the register.
16	Application	When debugging Segger J-Link application using RX, at the first (invalid) breakpoint, it shows garbage values for global variables.
17	IO view plugin	There are some IO Registers where the same memory address holds 2 registers with difference access sizes. These registers are general a read-only register and another register used for writing which is write-only. These registers are currently all listed as R/W in the IO Map file and so the view will attempt to display values for the wrote-only registers. When it does this the bytes are displayed reversed.

40	Application	The message "Error: Unable to create variable object" is sometimes shown during debugging when stepping out of functions.
41	Application	Register values have incorrect initial values when using the RX Simulator or RX hardware debugging. Initially, R0 values are same as ISP in E2S whereas R0 values are same as USP in the HEW environment. R0 is alias to USP. Later on the R0 values are same as ISP / USP depending on the stack usage. Incorrect Accumulator value is displayed (i.e, Accumulator is 0, when checked on command line as well, gdb does not update accumulator values). This is a RX Simulator issue.
72	IO view plugin	All IO registers for RX devices are listed as Read/Write? in the IO xml files used by the IO view, even though some are read or write only.
110	Application	e2studio needs permissions to write to the installation directory. This is a standard Eclipse problem however you may experience issues registering your toolchains or performing updates if you do not have administration access when using directories with restricted access.
220	GDB server	e2-server-gdb executable currently causes a security alert in Windows when executed for the first time. The publisher is currently undefined also. Accepting the dialog allows normal operation to proceed.
268	Application	When debugging in e2studio only the file name is used to match breakpoints when debugging. So a breakpoints set in a different project to the one being debugged can cause breakpoints to be set on the debugger, if the file name matches. There is no indication in the breakpoints view which project a breakpoint is in, but the marker will only appear in the correct file.
301	Trace plugin	Trace buffer full functionality needs addition. New checkbox needs adding to the GUI.
364	Application	In case of MinGW toolchain projects - Whenever you add any include path in the compiler / assembler include path option, it is displayed in the Project Explorer -> <prj_name> -> Includes. In case of KPIT / Renesas toolchain projects - Whenever you add any include path in compiler / assembler include path option, it is not displayed in the Project Explorer -> <prj_name> -> Includes. It only displays the default include paths added during project generation. The include paths are shown in the build option preferences as you would expect.
373	GDB server	e2studio does not support debugging using multiple E1 emulators connected to the system. There is no way to select which emulator you would like to connect to.
392	GDB server FFW	When using a brand new RX62N RDK with the Segger J-link if the board is brand new you cannot connect to the device the first time. The second time if you use the debug button on the debug configuration page and press debug instead it works correctly.
398	GDB server	FMtool for Romless devices not implemented. In the debugger settings in HEW you choose a mot file and address which then gets downloaded during the connection process. This is not implemented in e2studio. This will be supported for SH only in 1.1.
419	Project Generation	When using the project generators some settings are not remembered correctly when moving forward in the wizard and then stepping back. The 'CPU Type' information is not saved, while some of the additional options are remembered and some not.
452	Trace plugin	Trace view - save and load trace data. When trace data is saved the save dialog defaults to .xml extension rather than .rtt. This means that the saved data is not loaded back into the view. Also the load dialog defaults to .xml, but does not load the trace data back into the trace view regardless of the file type. Illegal trace files are not flagged as non standard trace files as per requirements.
475	GDB server EXEC	Once a debug session has been terminated when using an IECUBE another connection is not possible until the IECUBE had been unplugged from the machine.
478	Event points plugin	Clicking on column headers in Eventpoints view does not order entries.
480	Event points plugin	Unable to add eventpoints using the insert key.
481	Event points plugin	Clicking on OK of the Trace Configuration dialog does not download changes to the device. Expected Result Clicking on the OK button should commit all of the changes made in the dialog back into the main events points list, the updates will then be downloaded to the device if connected. In reality, the eventpoints are added to the main eventpoint list in the Eventpoints view but do not appear to get downloaded to the device.
482	Event points plugin	Browse (...) remaining disabled on Eventpoints view. Open the Eventpoints view. Double click on the Event Break eventpoint category. Select OR in the Trigger combo box. Click Add on the Edit Trace dialog. Click on the ... button alongside the Address text control. A dialog should appear with a list of address labels but the ... button remains disabled
525	GDB server	When Move to Line is used with RX targets the program is resumed from the selected line, the expected behaviour is that the program would remain suspended.
540	GDB server	When the refresh interval is <120 msecs the Realtime views are not updating. First observed in Realtime Expressions, but will probably affect Chart and Memory too. Increasing the refresh interval to 200 msecs is a workaround.
549	Application	When entering address, compare and mask values for an eventpoint, hex digits are assumed. The dialog should assume field values are decimal unless prefixed by a modifier such as "0x" for hex. This is for consistency with data entry and presentation throughout Eclipse/CDT.
567	Real-time Chart	It is not possible to edit series name in the real-time chart view.

		When instruction stepping into code, PC is sometimes not correctly placed.
628	Application	When this happens the home button does not restore the PC location correctly. Clicking the current stack frame in the Renesas debug view does remedy the issue.
652	Application	Custom debug configuration. Warning message to be generated if custom.bat is empty Test case : to check if the default settings of predefined Custom Debug launch configuration are correct. Steps: 1. Create a project for custom debug configuration. Select Custom Debug' on 'Select default debug settings' page while creating the project. 2. Don't update custom.bat with any path. 3. Build the project 4. click debug icon. If user has not specified any path in custom.bat and clicks the debug button, user should get warning message that file is empty.
663	Debug Configuration	When changing the project in the debug configurations tab - a dialogue appears asking if changes want to be saved regardless of whether changes have actually occurred.
671	Application	There is no library project type available in e2studio.
700	Application	RL78 Importing projects from 64bit to 32bit machines does not work seamlessly. The path changes are not remembered in Linker > Archives in the Archive search directories. When doing builds this is not always remembered.
711	Application	Un-installing HEW, un-installed RXC toolchains 1.1.0 and 1.2.0 However the entry in TC_supported remains as expected, but due to this E2S allows to create projects for RXC toolchains and fails during project build.
722	Trace plugin	Using Find on "Address" allows the entry of a case insensitive hex number. However on "Destination Address" a case sensitive string is required. This needs to be made clearer on the UI.
723	Event points plugin	The "Add..." button is greyed out when trying to add a "Before PC" in the Eventpoint window. Can only be added from the source code windows.
762	GDB server FFW	GDB server takes a long time to terminate when previous debug session used real-time update. Tested using RX63N and E1.
785	Trace plugin	Bus mode records sometimes fail to update if rapid cycling through the available trace modes.
789	Trace plugin	The trace plugin data field if find & filter is set does not remember its value. When reopened the data option has both fields populated with a numerical number not entered by the user.
801	GDB server	RL78 program execution not stopping for OA eventpoints set between ranges. 1. Create an Event break OA eventpoint 2. Enter an address in the address field 2. Select Range in the address conditions 3. Enter an end address 4. Eventpoint doesn't trigger when an address between the range specified is reached and program execution doesn't stop
802	GDB server	RL78 program execution stopping on word access when byte access is specified.
803	GDB server	RL78 program execution stopping on 'Equal' when 'Not Equal' is specified in the Comapre Settings.
804	Event points plugin	Long should be removed from the size combo for Data Settings for RL78.
811	GDB server	Trigger Count not supported for RL78 but is still available in the Eventpoint View.
816	GDB server	Data Access mask not working for address values for RL78. Program execution stops each time the address is accessed no matter what value it contains.
820	GDB server	Address mask not working for RL78. Program execution does not stop, expecting to see program execution stopping everytime we access an address ending in e8.
822	Project Generation	org.eclipse.cdt.ui is delayed due to common utilities instantiated. Toolchain validation holds up the loading of org.eclipse.cdt.UI which the IAR plugin depends upon. If this is delayed the IAR plugin will not start up causing the editor to fail with exceptions. Registering toolchains and then restarting should remedy the problem.
827	Advanced Debug Manager (ADM)	Setting "Force Hardware Breakpoints" in the debug configuration will cause eventpoints to stop functioning.
831	Real-time Watch	Record sometimes saves blank file. When using the record feature in the real-time expressions view the saved file is sometimes empty.
846	Application	HEW debug fails for RX200, RX63N. HEW debugging templates do not exist for RX200 and RX63N.
873	Debug Configuration	No Renesas GDB hardware launch shortcut for IAR & Green Hills plugins. Launch shortcut needs manual creation.
874	Event points plugin	Execution Address Eventpoints with trigger count do not work with Breakpoints on Segger RX. Setting an execution address eventpoint with a trigger count on Segger JLink RX62N is not possible if any breakpoints exist, including the default at main. If an execution address eventpoint with a trigger count is set with a breakpoint both the eventpoint & the breakpoint do not function. Multiple breakpoints are set then only 1 does not work. Additional eventpoints function as normal.
877	Debug Configuration	IOView is populated for the incorrect target for debug-only projects. If you open the debug configuration dialog the IOView is populated with the correct target information.
879	Trace plugin	Find and filter are greyed out after closing trace view. The only way to activate find and filter options is to resume debugging and suspend.
887	Trace plugin	Trace address filter end range value gets set to the start range after reopening dialog.
904	Application	Warnings are duplicated as errors in the problems view when using the CCRX compiler.
909	Application	Selecting "Inhibit all warning messages" does not disable advanced warnings.
919	Application	UTF-8 Input character code (-utf8 option) and output character code (-outcode=utf8) are being set in dialogs but not being passed to the compiler at build time. These codes can only be applied in conjunction with C99 option, but even when selected, still does not work.
930	GDB server	Unlimited number of Event Break eventpoints allowed on RL78 devices
934	Event points plugin	Eventpoints view toolbar label not updating for RL78 eventpoints.
935	GDB server	RL78 G14-2 only allows one Event Break eventpoint
936	Application	Duplicate Address is allowed in Linker->Section for GNURX and other targets.
938	GDB server	Program Execution not stopping for Event Break OA eventpoints using IECube with RL78.

		The relation between -sho and -form options of Linker was not correct.
1484	RX build plugin	An unnecessary warning is displayed.
1485	Application	The edited address value in Memory window does not highlighted in red but does update.
1486	Application	Breakpoint properties do not work when set in the CDT dialogs. For example using the filter operation and removing the breakpoint for the process being debugged.
1523	HEW Project Converter	HEW import page is displayed even when user tries to import normal project (other than HEW project).
		The edited value in Expressions window is not highlighted.
		The expressions are not updated in SR1 in the following circumstances:
		1. When editing in-place within the expressions window. 2. Modifying the value of the expressions in the memory window. 3. When the target suspends and the views refresh.
1531	Application	In each of these cases any expressions with modified values should be highlighted in yellow.
		The edited value in Registers window was not highlighted when modifying the value in the registers window. The edited value should be yellow highlighted.
1532	Application	Note: This appears to work for the first edited register okay following a target suspend. However any subsequent modifications are not highlighted.
1533	RX build plugin	Both Error and Warning messages are displayed with the same content on Problems window in Build time when the system include files are scanned as dependencies for C++ projects.
		Device type 72691 is not available for SH project. Workaround: create a SH project using "Other" target device. From debug configuration select new for the project, select target device from list.
1546	Project Generation	
1561	Application	When local options are set for a file or folder the "Reset to Defaults" on the build options properties does not clear the local option setting for the selection.
		When changing the address of an eventpoint set from the source editor a marker should be created at the new location & the old one removed.
1593	Event points plugin	Currently marker at old location is removed but no new marker is created.
1595	Application	Renaming a project using the right click menu in the project explorer causes its respective debug configuration to disappear.
1616	RX build plugin	The options of a Build Configuration were not correct after specifying Multiple Configurations... functionality.
1640	Application	After creation a project cannot be deleted straight away. If the user waits around 30 seconds the project can then be deleted.
		Erase flash on startup option on RL78 should be executed once.
1642	Application	When e2studio connects successfully to RL78 target and erases the flash, this option should return to false, so that flashing is not done everytime target is connected.
		For the SH7216 target (and most likely other targets), when using the address conditions and associated mask, the boolean parameter (parameter 17) 'address mask compare type' is not being set to true.
1649	Application	When using Data Access eventpoints (on SH target hardware) specifying "Not Equals" for an address mask has no effect. The default of "Equals" is always used.
1651	Application	SH data access events points must stipulate word width as byte, word (16bit) or long (32bit). Therefore the option 'Not Specified' is not permitted.
1674	Application	GUI is using the wrong limit on the number of pass counts for the SH7216. The pass count being reported by the GDB server is 4096. But the GUI is not even allowing a pass count of 1.
1675	Event points plugin	GUI not permitting 32 bit data mask value (e.g. ffffffff) to be set for the SH 7216 target, reporting invalid data mask.
1717	RX build plugin	There is no UI support for customizing the linkage order.
1722	Application	Debug session for new RX62T never makes it to main() - When only using hardware breakpoints.
		E1RL78 Connection can fail.
		Failure to connect can be caused if an area of flash used by the debugger gets corrupted. This can be worked around by setting the debugger configuration / connection settings tab option "Erase Flash ROM When starting" to Yes. Once connection is established OK, the option can be reset to No.
1726	Application	
		Deleting a source directory causes the placeholder (being used in include path) to become corrupted. \${workspace_loc:\${ProjName}/src} becomes: "\${workspace_loc:/PlaceCorrupt/PlaceCorrupt/src}"
1730	Application	If you intend to delete the source, the include paths also need update and therefore updating / removing the source path from include path list prior to deleting the source directory will avoid path corruption.
1742	Debug Configuration	When the project has been selected to use SH. The user is prompted to select the launch configuration on clicking 'run'. The launch configuration should be automatically selected correctly.
1744	Application	No entry of Hello world project under Executable project.
1750	HEW Project Converter	The HEW project importer does not import the linkage order from HEW. e2studio does not have the facility to define the linkage order.
1751	RX build plugin	-start option should be added to the sub-command file. If many sections are defined it is possible to exceed the Windows command line length.
		RXC - For Compiler > Object > Output file type : "Assembler code(*.src)", the *.src files are deleted after project is built . Actual (After build is complete) : rm src/sbrk.src src/dbsct.src src/interrupt_handlers.src src/reset_program.src src/RXC.src src/dcode.src src/vector_table.src - all file are removed.
1763	RX build plugin	
		There are problems debugging RX big endian debuggers.
1767	Application	Error message is shown at connection stating it cannot find a file with the extension .mon.
		SHC: 'Output file type':-code=asmcode differences for per file v/s project settings.
		Build the single file and the option -code=asmcode will passed to compiler . Now build the complete project and the '-code=asmcode' option is not passed while building the reset_program.c.
1769	Application	
		RXC > Compiler (C/C++) > Object > checkbox : "Suppress DIVS, DIVU, and FDIV instruction generation" not available in e2studio. command : -nouse_div_inst
1773	RX build plugin	This option is available from RXC 1.2.0 version onwards.

1778	Application	When setting the 'Internal Flash Memory Overwrite' debug option, it is possible to exceed the maximum number of non-continuous memory blocks supported. No warning is given if this limit is exceeded. When setting this option ensure the limit (16 for RX devices) is not exceeded.
1786	SH build plugin	The range button is available on the Eventpoints Data Access Settings tab of an OA address point even though these eventpoints are unavailable on the SH target.
1790	Real-time Watch	Real-time expression settings are not saved when the application exits.
1791	Application	The PC can sometimes disappear from the disassembly window. This is due to the view getting the current stack frame confused. When this occurs clicking the home button on the disassembly view does not force the view to the program counter. As a workaround, clicking the Top Stack Frame in the Renesas Debug View will cause the view to jump to the PC.
1792	GDB Server SH	Trace Fill until Full or Stop has no effect for some SH targets. Defaulting to "Fill until stop".
1801	Application	Debug configuration button does not show last configuration. The tooltip shows "Debug RX630E" but when the button is pressed "RX62T" is launched, and "RX62T" is the one at the head of the list also.
1802	GDB Server SH	Unable to apply SH OA event point when Compare Settings checkbox is checked.
1804	Application	After reload of modified file near breakpoints, do a reset and go - the breakpoints were shown in the source and breakpoint view but the target did not stop. After a step over a breakpoint the target stopped correctly at all breakpoints. This was found on RX62T.
1806	GDB server	There is currently a limit of 11 to the stack trace depth that will be shown in the Renesas Debug View. This can be increased to n by executing the command from the GDB console: set backtrace limit <n>
1807	Trace plugin	While source mode is enabled on the trace view if you swap or cycle to another view, before returning to the trace view. The contents of the view will be removed. To obtain the source view again please follow these steps: Enable Bus mode on the trace view, disable source mode on the trace view, reenable source mode and then disable Bus mode.
1808	HEW Project Converter	Import a HEW RX project in e2studio using the HEW project importer. Check : Project > Properties > Compiler > Source > Include file directories. Paths are duplicated
1815	Real-time Watch	Currently there is no manual refresh menu item for the Variables and Expression view. The refresh menu item will be available in CDT 8.0 release.
1840	Application	Every now and then (in this case after switching project), when building a project has been completed, the build progress bar hangs indicating that the build is still in progress when clearly it is not.
1841	HEW Project Converter	Importing HEW project generates warning in e2studio for 'src' directory.
1846	HEW Project Converter	HEW Importer: Compiler > Warnings > Advance > Enable All check-box is not mapped. All warnings checkboxes are checked as expected, however the 'Enable All' option is not checked.
1847	Debug Configuration	Unable to create a project for the following target in project generation Toolchain : GNUSH v12.01 Target : R5F71374FPV Emulator : E10A SH2
1859	GDB server	Program execution stops inside a range when Range Exclusive is specified in the address settings for OA event points.
1863	HEW Project Converter	HEW makefile project import in not supported in e2studio 1.1.
1880	Application	Using the Renesas Quick Settings set the warning messages to off. Using Renesas Tool Settings set Inhibit All warning messages to on. The Advanced settings are set to on but the settings are greyed out. The build output displays warnings when none are expected.
1882	Application	Access to real-time refresh interval UI requires an expression to be defined. It should be possible to adjust the real-time refresh interval without adding an expression or even opening the Expressions view.
1885	Real-time Watch	Realtime expressions view can become out of date on suspend when compared to the value in the memory window. This is due to the timing of the update against the suspend. A further step operation will refresh the view or you can see the value in memory. This only affects the values being viewed in real-time.
1889	Application	Due to file extension issue with .s and .S and due to known bug, e2studio users wont be able to use .s or .S effectively to pre-process assembly files that need GCC. Hence we suggest renaming these files to use: .S -> .asm .s -> .src
1891	Application	When an RX hardware debug session is executing the reset button can be operated but does nothing. In RL78 the debugger is reset correctly.
1904	Profile plugin	Profile view: Go to source throws an exception if no file path is defined in profiler.
1912	Trace plugin	Trace: Find destination address does not work due to case sensitivity.
1918	Application	Dependency scanning for Renesas assembly files does not work.
1921	Application	If you wish to run the makefile from the command line the system environment or the required configuration to set-up the environment needs to be manually added to the make file. This can be done by using the makefile.init file.

1927	Event points plugin	Trace Record execution address eventpoints are allowed with e2Studio, these are not available with HEW, should only allow Trace Record eventpoints of type data access to make consistent with HEW.
1932	Application	From the memory view, the memory load feature does not work for reloading data into external flash.
1936	Coverage plugin	When using the IECUBE for RL78 the source lines for coverage are not being highlighted correctly in some cases.
1940	Real-time Watch	Deleting 1 of 2 instances of an expression being monitored in real time, takes the second instance out of real time monitoring mode.
1950	HEW Project Converter	A user tries to import a already imported project (in a different workspace) again. However the project is deleted from the previous workspace. This results in the following error message "The selected .hwp file overlaps the location of another project". See attached dialog. This is because when the project is removed from the project tree the Eclipse projects are not physically removed. Deleting the Eclipse project files from the directory allows the operation to continue.
1951	Application	If you import a v850 debug-only project with a debug configuration and attempt to either debug the project; you will get problem occurred message which will say "Unknown Debug Hardware 'E1 (V850)". E1 (V850) hardware is not available in e2studio 1.1
1954	Profile plugin	Profile address filter throws number format exception. Enter a valid address e.g. FFF8006E, into the filter which is listed within the profile view. If unsuccessful the following exception is raised: ava.lang.NumberFormatException: For input string: "FFF8006E"
1956	Installer	Uninstalling e2studio can remove installed toolchains if they reside in the same directory. To fix this issue you need to run a repair on the removed toolchains.
1965	GDB server EXEC	RL78 IECUBE performance appears less than CubeSuite+ and the E1 in e2studio
1974	Profile plugin	Profile address filter shows no records when a valid filter is applied.
1982	RX build plugin	For Renesas CCRX the Converter phase gets invoked even when using the external linker subcommand option. This should not happen.
2010	HEW Project Converter	HEW Project Import fails to build file due to File or path name too long. This is due to the difference between HEW and Eclipse. In HEW object files are output to the configuration directory. In Eclipse the files are output alongside the source file in the same directory.
2030	Application	Linker Section UI : Move Down button is disabled for the first element from any section.
2044	Trace plugin	Source/Disassembly not being displayed after trace view is opened.
2047	Application	Toggle off and on the Source Mode button and source is now displayed and view continues to behave correctly there on.
2047	Application	Trace Start OA Eventpoint does not work on RX100 and RX200.
2059	RX build plugin	Linker Section Editor - Need to conditional Enable / Disable the UI buttons. 'Add button' is not disabled when user selects contents (Label, Expression or Keyword) inside the section. When user clicks on add button, when Label, Keyword or expression is selected, nothing gets added.
2068	HEW Project Converter	The \$WORKSPDIR macro not resolved during HEW project import procedure. Additional information : For this project, the .hwp and .hws files are located at the same directory. Currently logic is implemented to search the workspace at parent directory for the specified project.
2078	Application	Further enhancements are required to improve the speed of profiling when using the IECUBE emulator hardware. Currently the system can take 1-2 minutes to receive all data for profiling.
2081	Application	After building a project if user changes anything in linker subcommand file option, only ObjCopy is gets invoked. Linker should get invoked.
2082	HEW Project Converter	HEW importer when using SHC Renesas compiler. The linker option "-show=total_size" is passed extra in e2studio as compare to HEW following conversion.
2109	Application	Folder with name having special characters like '&', '%' are not recognized which leads to failure in build. Steps to reproduce 1.Create a folder anywhere with name "New%Folder" 2.Create any dummy project OR copy existing projects to this folder 3.Import to your workspace and build In My case error I got as: ** L3300 (F) cannot open file : "E:\NEW\New\Newfolder\Tutorial?\Debug\LinkerSubCommand?.tmp"
2143	Application	Exported project is not exporting the linker sections correctly following the linker sections being modified.
2147	Real-time Chart	Realtime Chart: Series removed after stopping and restarting debugger. It would be more user friendly if this did not happen.
2152	GDB Server SH	Trace filtering does not work correctly for SH devices.
2156	Application	When using the profile window, for SH72643, the 'execution time' and 'average execution time shows negative values for the first time only after which it runs normally.
2158	Application	The SH72167 device does not support changing the trace data setting to either enable or disable. The only options that are allowed are 'Data' and 'Branch+Data' but not 'Branch' alone.
2159	GDB server	When using the trace feature and the E1 the trace data types are not shown correctly. Even when branch+data is shown on branch is displayed. On a subsequent run branch+data is then shown correctly.
2161	Application	Software breakpoints are not supported on targets that use external flash to run application. Also, in this case 'force Hardware Breakpoints'(In Debug tool settings) set to 'No' by default.
2176	GDB Server SH	A warning message should be displayed while trying to set software breakpoints in such cases.
2176	GDB Server SH	Realtime update does not function for SH devices
2193	GDB Server SH	Reload of code for SH devices with external flash does not work. Instead, disconnect and reconnect.
2196	GDB Server SH	AND/SEQUENCE eventpoints cannot be created but possible to change an existing OR eventpoint to AND/SEQUENCE with SH72643 target.