
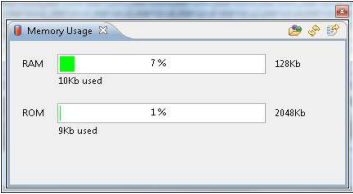
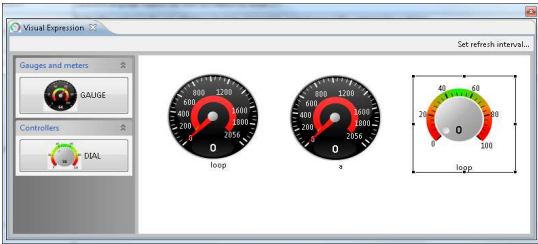


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Integrated Code Generator Supported Devices:

[illegible]

New features in 2.1:

Component	Description
Code Generator	<p>An integrated code generator feature has now been provided with e2 studio. This feature can be switched on for existing projects that support the feature via the toolbar button. Or configured for new projects using the project wizard. The code generator selection is on page 2 of the wizard when supported.</p> 
Language Support	Japanese language support has been provided in e2 studio 2.1.
CCRX Build Plugin	<p>Build option support in the user interface has been enhanced to support more CCRX command line switches.</p> <p>E.g. "-section" option (Compiler->Object page), "-nostuff" option (Compiler->Object page), "-noinstaln/-instaln4/-instaln8" option (Compiler->Object page), "-loop" option ("Compiler"->"Optimize"->"Advanced" page), "-inline/-noinline" option ("Compiler"->"Optimize"->"Advanced" page), "-save_acc" option ("Compiler"->"CPU"->"Advanced" page)</p>
Debug Configuration	It is now possible to select which emulator to connect to when more than one is attached to the PC. This is available from the debug configurations setup dialog.
Map Usage Plugin	<p>A memory usage view has been provided which shows the available memory on your chosen device being debugged with the project currently being built. It uses the map files from the toolchain to determine which areas of memory are in use.</p> 
Linkage Order Customization	Both the GCC and Renesas toolchains now support linkage order. This is available via the build option settings dialogs.
Visual Expressions	<p>e2 studio now supports a visual expressions window. This allows you to add dials and controls to view variable values or alter then when the program is running. Note this is a first version of this functionality and support will be rapidly expanded in future releases.</p> 
Debug Configuration	RX external flash programming support has been added.
Image view	An improved image view rendering has been added to the memory view. Previously this only supported certain pre-defined image file types. Now it is possible to specify the image format via a dialog.
Debug Console	The debug console plugin functionality has been improved. In particular the feature for re-directing the console output a COM port on the host PC has been added in 2.1.

RZ Support	RZ project generation and build support for the RZ GCC compiler has been added. This will be officially supported from November 2013.
RZ Debug Support	Simple debug support for RZ using the Segger J-link debugger is now supported.
Stepping Performance	Step performance has been increased significantly for all debug targets.
Editor	The e2 studio editor now supports source line address display.
IRL78 IECUBE	The RL78 IECUBE support now includes data coverage and snapshot trace functionality.

Important workarounds useful to know when using 2.1.0.23:

ID	Component	Description
NA	Application	If you are experiencing slow building of projects within e2 studio there are some possibilities to improve. The system environment will attempt to find the make.exe tool via the system environment. If you ensure the directory make resides in is at the start of the path variable it will find it more quickly. Especially important if there are network drives in the path. In the project properties, C/C++ Build tab, behaviour tab you can switch on parallel build. This will take advantage of the multi-cores on your host machine if it has them. In 2.1 this now defaults to on for new projects.
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.
2421	Application	Debug configurations have been modified in e2 studio 2.x. So although you can re-use the workspace and projects from e2 studio 1.x when you open the debug launch configuration for the first time it is updated. Before doing this you should back-up the .launch file if you need to keep a 1.x version.
	Application	It is not possible to import e2 studio 1.x projects which are for the V850 device into e2 studio 2.0.
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.
2762	Application	When using assembly code within a C source file, Codan errors can be observed in the editor. Even though the project builds successfully. We do not have a workaround for this at this time.
2728	GDB	Step into does not always work when using the CCRX 1.02.01 toolchain. To ensure this behaves correctly you will need to use CCRX 2.00.00 as this issue with the debug information is corrected in this release.
	Eventpoints	If eventpoints do not always work just after they are set, you can use the "Apply to Target" toolbar button in the Eventpoint view to send the Eventpoints to the target manually. This will always ensure the debugger target has all the required eventpoint updates before execution starts.

Fixed in 2.1.0.23

ID	Component	Description
3958	CCRX Build Plugin	When a project which is imported from Cubesuite+ with e2 studio version 2.0 is then built after upgrading or importing it to e2 studio 2.1 a link error occurs.
		When using a CCRX 2.0 project which is then opened in 2.1 the -rom option is not handled correctly. When the project is built no "-rom" option is passed to the linker.
3967	CCRX Build Plugin	The option is no longer removed from the user options. If you use the new option in the user interface please remove the user option to avoid a duplicated command line option error.
4072	Application	The Active build configuration is lost in some situations when e2 studio is closed and re-opened.
4073	Application	Projects created in e2 studio 1.x must be updated before the Memory Usage view can be used for them. Use the "Upgrade legacy projects..." action in the Memory Usage view menu to update e2 studio 1.x projects.

Fixed in 2.1.0.21

ID	Component	Description
16	Application	When debugging Segger J-Link application using RX, at the first (invalid) breakpoint, it shows incorrect values for global variables.
		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.
41	Application	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.
110	Application	e2 studio 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.
373	GDB server	e2 studio 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 RX	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 e2 studio. This will be supported for SH only in 1.1. 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.
652	Application	
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.

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.
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.
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.
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.
1131	GDB server	"Add Watchpoint" from Variables window context menu crashes the debugger. In the latest e2 studio the crash no longer occurs however watchpoints do not work.
1417	Application	e2 studio aborts on startup if too many hardware breakpoints have been specified. NOTES: 1: The boundary of the problem is on setting 4 hardware breakpoints. 2: That problem reported by the dialogue box talks about software breakpoints, when the option to use only hardware breakpoints has been selected. 3: The debug session must be setup to use only hardware breakpoints. 4: For SH2/SH2A targets in general, there does not seem to be any direct relationship between the maximum number of hardware breakpoints supported by the target and the number of preset breakpoints required to cause the problem. However that said, the issue is consistently activated when the number of preset breakpoints is either the same as the maximum supported by the hardware or one or two less than this figure. This may be due to the data held in the target descriptors of the GDB server.
1422	GDB	When debugging some RX projects, after hitting some breakpoints the session hangs while retrieving stack data & the session must be terminated.
1649	Application	The same module downloaded and debugged though HEW does not display this issue. Comparing the two it appears GDB is attempting to load more stack levels than actually exist.
1651	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.
1674	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.
1675	Event points plugin	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.
1717	RX build plugin	GUI not permitting 32 bit data mask value (e.g. ffffffff) to be set for the SH 7216 target, reporting invalid data mask.
1726	Application	There is no UI support for customizing the linkage order.
1744	Application	E1RL78 Connection can fail.
1750	HEW Project Converter	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.
1769	Application	No entry of Hello world project under Executable project.
1786	SH build plugin	The HEW project importer does not import the linkage order from HEW. e2 studio does not have the facility to define the linkage order.
1792	GDB Server SH	SHC: "Output file type":code=asmcode differences for per file v/s project settings.
1802	GDB Server SH	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.
1806	GDB server	Trace Fill until Full or Stop has no effect for some SH targets. Defaulting to "Fill until stop". Unable to apply SH OA event point when Compare Settings checkbox is checked. 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>
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.
1847	Debug Configuration	Unable to create a project for the following target in project generation Toolchain : GNUSH v12.01 Target : R5F71374FPV Emulator : E10A SH2
1863	HEW Project Converter	HEW makefile project import not supported in e2 studio 1.1.
1912	Trace plugin	Trace: Find destination address does not work due to case sensitivity.
1932	Application	From the memory view, the memory load feature does not work for reloading data into external flash.
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.
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 e2 studio 1.1 Profile address filter throws number format exception.
1954	Profile plugin	Enter a valid address e.g. FFF8006E, into the filter which is listed within the profile view.
1965	GDB server RL78	If unsuccessful the following exception is raised: ava.lang.NumberFormatException?: For input string: "FFF8006E"
2030	Application	RL78 IECUBE performance appears less than CubeSuite+ and the E1 in e2 studio
2082	HEW Project Converter	Linker Section UI : Move Down button is disabled for the first element from any section.
2196	GDB Server SH	HEW importer when using SHC Renesas compiler. The linker option "-show-total_size" is passed extra in e2 studio as compare to HEW following conversion.
2279	Application	AND/SEQUENCE eventpoints cannot be created but possible to change an existing OR eventpoint to AND/SEQUENCE with SH72643 target.
2336	GDB server RX	Scanning is invoked when any header file is modified, even if this header file is not actually used by the compiler due to conditional exclusion.
2364	Application	The e2 studio debugger is preventing the RX family MCU from entering low power states following a disconnect operation.
2441	Installer	If entering a special character in a build configuration name such as % it can cause a build failure. Installation can fail if the path you are installing into exceeds the max path. e2 studio has some quite deep directories so a initial installation directory over 30 characters fails.
2447	Application	Attempting to load a file via the "Load Ancillary File" toolbar button fails when the specified file path contains spaces. In such cases, a dialog is displayed with the message: "Error: Invalid character \' \' in expression"
2530	Application	Following an import the toolchain version is changed. (Upgraded) The toolchain is upgraded but the paths to include directories are not changed to reflect the new toolchain.
2556	GDB server	When using CCRX for a project the debugger like E1 cannot display double size variables. When the project is built using GNU for RX double data is displayed without problems in the Expressions window.
2561	Application	If user changes the default path of the toolchain to a custom path for an older project, it still considers the older path instead of new path during project build. You need to visit the build options, clean and then rebuild to resolve the problem.
2589	Application	When using the \${workspace_loc} placeholder in include paths, if the workspace location has spaces in it the editor cannot resolve the include directories correctly. It shows a '?' icon next to the #include statement despite it building correctly on the command line.
2650	Application	Moving the workspace to an area without spaces resolves the problem.
2705	Performance Analysis	Dependency scanning does not work for library template projects(GNU and Renesas) when using conditional includes.
2742	RX build plugin	Performance Analysis values presented for RX seem to be elapsed cycles no matter what is configured. In some instances CODAN errors are shown for valid code. This is due to the #define in source files not being picked up correctly by the e2 studio indexer. To avoid the issue if you add the #define to the build options the CODAN errors will be removed. Or alternatively you can switch off CODAN.

		In some instances the library generator "libgen" can crash and fail to build the library. This is sometimes the case when you have an old project and change changed the toolchain. The root cause is mixing of paths. e.g. Using 13.01 toolchain but the path is picking up libgen from 12.01 for example.
2751	GCC Toolchain Installers	Changing the toolchain version to another one and changing back resolves the toolchain path problem and should then continue to work correctly.
2765	GDB server	Program suspending on a performance start eventpoint.
2772	Application	In some situations even when unchecked toolchains are still registered into the e2 studio environment.
2776	Application	Debugger console did not show all output when the debugger was suspended. Some output is buffered and not displayed.
2885	Debug Console plugin	Enabling and disabling debug console multiple times can stop it working.
2898	GDB server	No performance timers are obtained using RX simulator.
2918	Debug Console plugin	Enabling and disabling the debug console more than once can stop output being shown in the window.
2935	Application	The Resume at startup option, on the Debug Configurations, Startup tab, Runtime Options does not work correctly. If checked it will causes e2 studio to loose control of the target. Do not use this option. leave the checkbox unchecked.
2940	GDB server	In certain cases OA Event Break eventpoints will not stop program execution on an RX210 target, one known case is when the OA eventpoint is created after an Execution Address eventpoint has been created
2966	Application	Macros defined in the build options are not always recognized by the e2 studio indexer. This means that unnecessary Codan errors are displayed.
2969	Performance Analysis	E20 shows performance results even when timer is set to OFF.
2970	Performance Analysis	E20 shows performance results even when timer is set to OFF.
2987	Application	When using a RH850 debug only project, build throws an exception.
2988	Project Generation	When using the RH850 debug only project type. The launch configuration is not specifying the correct application. Meaning an error is displayed "No binaries founds".
2993	GDB Server RH850	Writing memory to the RH850 data flash does not work correctly. It may result in not all bytes being written.
3002	Application	When using a debug only project. Pressing the build button throws an exception. This happens for RH850, RX, SH and RL78 debug only projects.
3006	Application	In certain situations the toolchain registration dialog is displayed even though the toolchains were registered last time.
3010	GDB Server RH850	When using the RH850 debugger there are issues with step into and step return which do not work correctly. For example step into does not step to the first instruction in the function.
3011	GDB	Step return fails when debugging RH850 projects.
3013	Application	When using the RH850 debugger the run to line feature does not work correctly. Sometimes the break will occur but one source code line below the selected line.
3035	GDB Server RH850	When using the RH850 debugger software breakpoints are not supported.
3036	Application	When debugging and using hardware breakpoints by default the user is not informed when the hardware breakpoints are exhausted and subsequent breakpoints are converted to software breakpoint types.
3040	GDB server RX	e2 studio does not have the ability to configure the SDCS# Chip Select for RX62N and RX63N.
3046	GDB server RX	At downloading, unmarked blocks in the Flash Clear option are not cleared but should be cleared.
3049	Application	External SDRAM is not supported in RX62N and other RX series. In extended mode 'SDCS' external memory area needs to be added to Debug configuration dialog for 'N' series chips or any others that support.
3050	Application	When building with Link-time optimizations enabled (-flto) the linker command line changes from rx-elf-ld to rx-elf-gcc. This is expected. However when the Enable Link-time optimizations option is selected, the compiler is invoked instead of linker and all the options are required to be prefixed with '-Wl'. Currently the '--format elf32-rx-be-ns' options are not prefixed with '-Wl'. Hence an error is displayed.
3058	Application	RH850 Event Break (data access) is not supported.
3061	Application	When using trace and the RH850 debugger when using the Disassembly view and Instruction Stepping Mode a single step is performed. Some additional commands relating to the debugger were included in the trace output. Only the instruction "add r15, r1" should only be displayed.
3063	Application	When using the E20 debugger it is possible for the profile feature to timeout. When the trace mode is Fill until Full and the Trace Output selection is used.
3107	Application	RX Cannot set OA event point if 4 or more PC eventpoints set.
3108	GDB server	Trace capacity shown as 1MB when no trace buffer exists (i.e. E1).
3110	Application	When a CubeSuite+ common project format file is imported to e2 studio, excluded resource information is not converted.
3156	Application	When debugging with the E1 and EX the power supply from the E1 emulator does not stop when the connection with the emulator failed.
3158	Application	The display of the value of the data trace is wrong in the trace window.
3159	Application	When creating a new project in e2 studio for RX (GNU toolchain) two memory regions are defined by default (ROM/RAM). But when creating a new project in e2 studio for RL78 there are no memory regions defined. By default the .bss section is set up to follow after the .data section (which has a fixed address) but if the .data section is empty the .bss sections ends up following other sections like .plt which is at a much lower address. Defining memory regions like for RX will stop the .bss be placed at a much lower address even when the .data section is empty.
3164	Application	Currently it is difficult to identify which plug-ins in e2 studio CDT original and which are Renesas created. Help should be updated to make this identification easier.
3165	Application	Saving trace data cannot be interrupted even though it can take a long time to complete the operation.
3170	Application	The debug connection process can fail when connecting to a target with a different endian to previous connection.
3174	Application	It is not possible to set a correct value to the ACC register via the register view when debugging with RX.
3177	Application	When debugging with RX, when the value of 0x80000000 or more is set to Mask Value of DataAccess event, an error is displayed.
3178	Application	Register Window 1.Open the register window. 2.Execute the program. 3.Select the context menu [Watch] of Register window.
3200	Application	This causes the window to become unresponsive and hang.
3206	Project Generation	RL78 real time support no longer limited to 16 bytes.
3207	CCRX Build plugin	Default GNURL78 projects should secure OCD Monitor Areas.
3210	Application	When using the Renesas C compiler (CCRX) C source files cannot be compiled as C++ files. When importing CubeSuite+ projects into e2 studio the RX CPU mappings are not correct.
3216	Application	CubeSuite+ common project export should include more file types as project files. Request is to include .pdf, .txt, .doc, .docx, .xls, .xlsx, .ppt and .pptx.
3224	Application	When uninstalling a previously registered toolchain and then installing and registering it again at a later date the toolchain is not registered correctly the second time.
3265	Application	In some situations delete all does not work in the eventpoints view. Even when eventpoints appear to be deleted they are restored when the debugger session is re-started.
3268	CCRX Build plugin	When using the CCRX compiler, the ".cc", "c++" and "cxc" files are not recognized as valid C++ source files. (.cpp)
3273	GDB Server RH850	RH850 Register View shows 'Multiple errors reported.' when scrolling down the register view. This is caused by some registers being requested by GDB that were not defined.
3284	CCRX Build plugin	When using the Renesas CCRX toolchain. The linker is invoked when project is re-built without any source file changes or without visiting the build options. No source files are built but the linker is run unnecessarily.
3286	GDB server RX	RX600 does not output Data records for Trace, even if Data is selected in the Trace Acquisition dialog
3302	Application	When using the external trace buffer with the E20, trace data cannot be acquired.
3401	Performance Analysis	Performance Analysis timer default is off, with no visual indication. Clearer visual indication is required of the timer state.
3420	GDB Server RH850	When debugging RH850 it is not possible to view the contents of the Data Flash in the Memory View. The view always displayed '?' for all memory within that region.
3444	HEW Project Converter	For large .x files originating from large CCRX Renesas compiler projects it can cause the rx_converter.exe to crash.
3479	Application	When trace acquisition is set to record read and write data access only reads are saved. This is for the E1 with the RX111.
3524	Application	Profile view had some problems with the filters meaning that valid filters were returning no records.
3577	Trace plugin	E20 project contains incorrect trace acquisition settings when created for the first time. E20 Trace options are disabled (Trace Output and Trace Capacity).
3620	Application	The program counter is not updated correctly following a reload of the program being debugger. It should be at the reset vector but is instead it remains at the location before reload. This is just a visual issue.
3632	Application	Saving trace data takes too long when there are many trace records to be saved. Especially in the case of the Renesas RX simulator and E20 debugger.
3647	Application	When debugging with RX, if the PC counter is at the Excep_BRK() and the debugger is in sleep state. Further step executions can cause the debugger to crash.
3675	Application	When using CCRX the value of bit of union is not updated in the expression window.
3691	Application	Unexpected additional includes while building GNU Project. Any included source directories are appended to the beginning of the include path list. These should not be added.
3729	GCC Toolchain Installers	New toolchains may register but also require enabling on the Toolchain Managment dialog to allow use

Open issues in 2.1.0.23

ID	Component	Description
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.
40	Application	The message "Error: Unable to create variable object" is sometimes shown during debugging when stepping out of functions.
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.
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.
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.
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 RL78	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.
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.
628	Application	When instruction stepping into code, PC is sometimes not correctly placed. 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.
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.
785	Trace plugin	Bus mode records sometimes fail to update if rapid cycling through the available trace modes. 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.
789	Trace plugin	RL78 program execution stopping on 'Equal' when 'Not Equal' is specified in the Comapre Settings.
803	GDB server	Trigger Count not supported for RL78 but is still available in the Eventpoint View.
811	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.
816	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.
820	GDB server	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.
909	Application	Selecting "Inhibit all warning messages" does not disable advanced warnings.
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
987	Application	Exporting project if linker sections are modified and not saved generates an error. Resource not synchronized is the message.
1065	Application	Build console arrows (Next and previous) does not work as expected. On selecting 'Next' arrow, the listed errors are not scanned/visited through.
1263	Application	RX200 CPU selection should not be supported for toolchains =< 1.00.01 for the CCRX Renesas toolchain.
1352	Application	This toolchain does not support RX200
1460	Application	GNU Linker section : Deleting section using delete button (keyboard) does not work. Project builds, but rx_converter.exe fails when on network drive.
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).
1531	Application	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. In each of these cases any expressions with modified values should be highlighted in yellow.
1532	Application	The edited value in Registers window was not highlighted when modifying the value in the registers window. The edited value should be yellow highlighted.
1535	Application	Note: This appears to work for the first edited register okay following a target suspend. However any subsequent modifications are not highlighted.
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.
1642	Application	Erase flash on startup option on RL78 should be executed once. When e2 studio 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.
1645	Event points plugin	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.
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
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.
1790	Real-time Watch	When setting this option ensure the limit (16 for RX devices) is not exceeded. Real-time expression settings are not saved when the application exits.

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.
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.
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, renewable source mode and then disable Bus mode.
1808	HEW Project Converter	Import a HEW RX project in e2 studio using the HEW project importer.
1841	HEW Project Converter	Importing HEW project generates warning in e2 studio for 'src' directory.
1846	HEW Project Converter	HEW Importer: Compiler > Warnings > Advance > Enable All check-box is not mapped.
1859	GDB server	All warnings checkboxes are checked as expected, however the 'Enable All' option is not checked.
1889	Application	Program execution stops inside a range when Range Exclusive is specified in the address settings for OA event points. Due to file extension issue with .s and .S and due to known bug, e2 studio 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.
1904	Profile plugin	In RL78 the debugger is reset correctly. Profile view: Go to source throws an exception if no file path is defined in profiler.
1927	Event points plugin	Trace Record execution address eventpoints are allowed with e2 studio, these are not available with HEW, should only allow Trace Record eventpoints of type data access to make consistent with HEW.
1936	Coverage plugin	When using the IECUBE for RL78 the source lines for coverage are not being highlighted correctly in some cases.
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". 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.
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.
2044	Trace plugin	Source/Disassembly not being displayed after trace view is opened. Toggle off and on the Source Mode button and source is now displayed and view continues to behave correctly there on.
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.
2081	Application	After building a project if user changes anything in linker subcommand file option, only ObjCopy is gets invoked. Linker should get invoked.
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.
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.
2193	GDB Server SH	A warning message should be displayed while trying to set software breakpoints in such cases. Reload of code for SH devices with external flash does not work. Instead, disconnect and reconnect.
2278	Application	Wrench is not displayed after a file's build settings are modified. This is a generic CDT issue.
2299	RX build plugin	It is possible for .c and .C files to be treated in the same manner in certain situations which is not correct. (.C extension is changed to .c during project build).
2390	RX build plugin	Exception is generated when all sections are removed from Linker UI.
2416	Project Generation	Use of duplicate register is allowed for RXC project generation. 1. Create RXC project 2. Go to RXC Global option page, select "ROM" -> "R8" 3. Select the same value for any other register (e.g. "RAM" -> "R8"), it gives error message and prevents the user from project creation. 4. Now select "R8" again for "RAM" register. It doesn't show any error message and allows user to create the project.
2440	Application	If you delete a src folder and add it again with the same name it gets excluded from the build.
2486	Profile plugin	Click on the project and examine the source directories to add it back in.
2504	CCRX Build plugin	Acquiring profile results can take a very long time following RX Simulator debugging.
2537	Performance Analysis	When source files have timestamps ahead of the current time the project will compile every time until the file dates are passed. Performance Analysis: Performance time is not updating following changes to start and stop performance addresses.
2544	GDB	RX Simulator has max of 246 events (256 - 10 reserved for eventpoints). Set beyond this limit will return an error and the GUI displays a yellow warning triangle.
2576	GDB	However press resume (F8) and no existing BP's work and cannot suspend, just terminate.
2636	Application	Using RPBRL78L12 and GNURL78 v13.01.attempting to step into a C function call within an assembly file (reset_program.asm) results in a step over.
2651	Application	Visiting build options and clicking on 'OK' rebuilds already built GNUSH executable/library c/c++ project. Library Template : Build fails when spaces are present for file or folder name.
2657	Application	When importing a configuration from another project when building a "File not found" exception is shown when the user tries to import external linker file. Creating the file inside the project directory should solve this issue.
2667	GDB	When using a big endian target, areas of memory not covered by the download module are considered little endian. This causes problems when viewing disassembly and memory.
2671	GDB server	in e2 studio for an application created by RL78 GNU compiler is the corresponding source code of RESET vector seem to be not found first and therefore a file with the info text 'No source available for "(gdb[12].proc[42000].threadGroup[1],gdb[12].proc[42000].OSthread[1]).thread[1].frame[0]" ' is displayed. Debugging can continue normally after this.
2693	Application	HEW Importer, output file(.P/.PP) is not generated while building the project.
2696	Application	Workaround : User will need to select Settings -> Compiler -> Object -> output file type -> Preprocessed source file -> OK after importing the project and then build the project.
2716	GDB server RL78	RL78 cannot step over empty for loop.
2735	Trace plugin	Before PC events on IECube temporarily hard coded limit of 4.
2739	Application	When using an IECUBE emulator saving large trace buffers can fail to complete.
2755	Event points plugin	e2 studio editor typing profiles will be changed so that spaces are used instead of the Tab character to generate Renesas target device source code.
2762	Application	Timer Value for Performance Start/Stop Eventpoints not being persisted.
2859	IAR plugins	When using assembly code within a C source file, Codan errors can be observed in the editor. Even though the project builds successfully.
2868	Application	When using IAR projects the SFR names (e.g. PIOR1_bit.not1) are not understood correctly in the editor.
2881	GDB	In some situations it takes two attempts to add an include folder to the options. On the first effort the include path is not added. Step over and step return do not work on SH2 70865.

2903	GDB Server SH	Step return does not work on SH2A 72691.
2910	GDB	Registers do not display properly on SH2A 72691.
2930	GDB server	It is not possible to power the RH850 board via the E1 debugger in the current release.
2934	GDB server	When using Performance Timer Eventpoints with RX Simulator, eventpoints must be manually applied from the Eventpoints view before resuming.
2948	GDB server	Trace is not returning any records on first run from PowerON_Reset to main() with Segger J-Link.
2963	GDB	When debugging an IAR RX project you may get an error rebuilding your project while debugging. As a workaround if you press "reload" before rebuilding, your project will be re-built and the new binary reloaded into gdb after the build.
2978	GDB	When using the CCRX compiler, when a function parameter is a register variable, the value of variable is incorrect in first line at main function.
3017	GDB Server RH850	The "Show OpCodes" feature within the Disassembly window does not work correctly. This affects all targets.
3039	Application	When exporting a project that has external linked folders rather than files which are resident in a source directory they lose their directory structure in the exported archive. When importing back into e2 studio the files specified as the original relative path are then not found. This is a standard Eclipse issue and is the current specification.
3054	Application	Real-time refresh will not update visually for a complete structure.
3059	Register view	The workaround is to monitor individual members of the structure.
		The Find feature of the registers view does not work.
3160	Application	The address of pointer type variable can not be modified in Expressions View. e.g. typedef int* PI; PI s_pi = &glib; In this case, address value of s_pi can not be modified in Expressions View.
3171	GDB	In RX610, IPL of the PSW register is incorrect in registers view. Number format of register view is Default. When PSW is set to 0x2000000 (->IPL=2), The display of PSW is as follows. PSW #25 -> should be #2.
3172	GDB	In RX610, RM of FPSW register is incorrect in register view. RM of FPSW register is 2 bit (bit0 and bit1), e2 studio displays RM of FPSW as 1 bit. RM = 0x00 -> [] RM = 0x01 -> [RM] RM = 0x02 -> #1 RM = 0x03 -> [RM #1]
3179	Application	The setting of the Performance Analysis dialog is not saved.
3331	Application	When using an external build system to build a project, the Image Reload notification is not displayed when the image file is modified. This reload notification is only launched for the internal build procedure.
3383	IAR plugins	When using the IAR RX toolchain. The _sfr keyword causes warnings in the e2 studio editor despite it being valid syntax.
3389	Application	When debugging files with the same name show source addresses even though it may not be correct for the file in question. The full file path is not considered just the filename and current debug context. This can lead to e2 studio showing addresses unnecessarily.
3410	GDB Server SH	SH2-78865A - clicking step-in when on the closing brace of a function will cause the server to run, but never respond again. The only option is to terminate.
3411	GDB Server SH	when using SH2-78865A, right click in the gutter bar and select Toggle BPC Eventpoint to set breakpoints at the specified locations. One will set successfully but more than one will fail. Execute The User Program After Ending The Debugger should not be enabled when the target is powered internally.
3412	Application	This can cause the debugger to hang.
3430	Application	Select all in the registers window does not work correctly. It only selects the visible registers. This is an issue in standard Eclipse Juno.
3447	Application	Using the copy register functionality in the register window sometimes copies the incorrect register information to the clipboard.
3470	Application	When debugging with the RX210 the FPSW register is displayed on the register view. This should not be the case as the RX210 does not have the FPSW register.
3472	Application	When changing the PC value in the registers window the PC display is not modified in the e2 studio editor. This is just a visual refresh issue. Stepping causes the views to update and step occurs from the new location.
3476	Application	When finding registers in the IO view the result of the search is not highlighted but the view is scrolled.
3490	Real-time Watch	If a data type of a variable already displayed in the expressions view is updated, e.g. from char to long, after a re-build the expression view data type is not updated. However the data value is correct.
3526	Application	Closing the debugger or e2 studio does not clear the issue but clean does.
3550	Application	In some cases when using RX with the CCRX compiler the profile view does not display the source file name and path in the window.
3585	Application	Custom placeholders are not expanded when importing a project from HEW. This is currently expected behavior but may be improved in a future version. The GDB server crashes when an E1 emulator is connected to a debug configuration configured for the Segger emulator.
3616	Real-time Chart	Sometimes the chart view will appear to add a series on the first connection, but it is not visible.
3625	Application	Deleting the series using "Delete series" from the chart context menu and adding it again appears to resolve it.
3626	Application	When using the Snapshot trace feature the data mask settings are not applied correctly.
3631	Application	Snapshot trace - adding IO register eventpoints increases the data shown in the trace view, but as they were removed there was no change in the data shown.
3631	Application	If the Performance view is reopened, it will not be updated by the next Performance measurement results. Keeping the view open is the workaround to this problem. Or opening and then re-starting the debug session.
3649	Event points plugin	Function eventpoints on external files not presented as source code annotations.
3657	Application	If e2 studio is installed into a directory where any segment of the file path contains a space then the memory map plugin information cannot be retrieved for any target.
3663	Application	With 2 targets connected, clicking between the two debug contexts in the Debug View will update the source addresses in the open Editor files.
3737	Application	However changing debug context does not seem to get detected if clicking on the top-level of the debug context rather than on the lower level.
3748	Trace plugin	Some new RX devices such as the R5F563NFDxFC are not currently supported by the Renesas RX Simulator. OutOfMemory error may occur if attempting to load very large saved trace data files back into the trace view.
3754	Application	Trace Start and Stop eventpoints not being sent down to target in time.
3788	Application	Making event point changes and then executing can result in them being missed the first time. To avoid this you can use the "Apply to Target" toolbar button in the eventpoints window.
3795	Trace plugin	RL78 Stack pointer register cannot be changed from registers view.
3797	Trace plugin	Saving RX Simulator trace data to the disk can take some time due to the number of records obtained from the server. Creating a new save file to save data will not display the job in the foreground. Overwriting an existing trace file will show the progress dialog in the foreground.
3798	Trace plugin	Creating a new trace file for E20 trace data takes a long time to complete due obtaining disassembly data for all the available records.
3803	GDB server RX	During this period of obtaining disassembly data the debugger controls can become unresponsive. Terminating when running can sometimes cause the Renesas RX Simulator to crash.
3804	Application	The code generator is not automatically registered when installing into generic Eclipse. Browse to the CG plugin and then run the batch files that reside in the tools directory. e.g. C:\Renesas\e2_studio\eclipse\plugins\com.renesas.cg_1.0.0.201309061659\CodeGenerator\Tools
3808	GDB server RX	When using 2 RX simulator debug configurations in parallel the debugger does not work correctly. Stepping and breaking does not work well.
3813	Event points plugin	OA event break event points not breaking at correct addresses on SH7203 (External Flash) target.
3815	GDB server RL78	Trace Record Eventpoints not working for IECube.
3821	Application	Trace capacity is not set up correctly for the RX Simulator when you have previously used and modified the trace capacity for the E20.
3822	Event points plugin	Delete All is enabled in eventpoints window even when there is no eventpoints.
3832	CodeGenerator plugin	Building an example using the code generator and selecting the "Generate hardware setup" in C caused the project to not build as the file iodef.h is missing.
3836	Application	At V2.1, the workaround is to remove the file "hardware_setup.c" when creating a project.
3841	Application	Dependencies with file name that have spaces may cause dependency scanning issues. Where possible it is better to avoid using spaces in dependency file names. When setting MBS > Compiler > Optimize > Advanced, option 'inter-module' for 'Optimization for access to external variables' it causes a re-build every time.
3843	Real-time Watch	Realtime enables monitoring on variable of same name in a structure. e.g. If variables d and ss are added to Expressions view and real time refresh is enabled on variable d, ss's member variable d also shows 'R' against it.
3847	Application	When using the display as array feature in the expressions window it appears that data can be skipped and is not updated.

3859	Coverage plugin	It is possible to enable coverage when using the RL78 E1 debugger when it is not supported. Doing so will cause an exception.
3860	GDB	When modifying the PC on RL78 when leaving the register in the format 0xFF <main+xx> it fails. If you remove the <main+xx> and just pass through a valid hex string it works fine.
3893	HEW Project Converter	PDG added files do not get added to an imported HEW project.