RENESAS Tool News

High-performance Embedded Workshop Revised to V.4.04.00

High-performance Embedded Workshop has been revised from V.4.03.00 to V.4.04.00.

1. Product and Versions to Be Updated

High-performance Embedded Workshop V.3.00.00 through V.4.03.00

High-performance Embedded Workshop is bundles with the compilers and other software products that it manages.
To check for the version number of your High-performance Embedded Workshop, open the Help menu and select the About High-performance Embedded Workshop command.

2. Descriptions of Revision
2.1 Capabilities and Operations Improved
(1) Operations in workspaces

(a) The format of workspaces has been dependent on the version of the High-performance Embedded Workshop installed. In the revised version, V.4.04.00, the format can be selected from among those in V.4.00 and later when you save your workspaces. This allows you to open your workspaces created by V.4.04.00 using the version whose format has been selected to save them or any of the later ones.
Example: If the V.4.03.00 format selected, the workspaces saved in this format can be opened using V.4.03.00 or later.

(b) Which project to read when a workspace is opened can be specified in the initial settings.
Any one of the following kinds of project is selectable:
- The project that was active when the workspace had previously been opened
- All the projects that were read in the workspace opened

previously
- All the projects that have been registered in the workspace

(2) List of the product packages

The list of the tool product packages managed by High-performance Embedded Workshop can be viewed.

(3) Displaying the Status bar

Displaying of the Status bar can be switched between ON and OFF.

(4) Searching files for character strings

(a) A character string can be searched for using a word contained in it as a search criterion.

(b) The files to be searched can be limited to those registered in the active project or those registered in all the projects.

(c) The search results of the Output window are displayed on either of its two tabs, which allows you to select the tab for displaying the search results.

(5) Operations in builds

(a) If the number of errors or warnings dispatched during a build exceeds the specified value, the build is halted immediately.

(b) The option to clean MakeFiles (to delete interim and output files in a build) can be used, which allows you to use the cleaning capability by using the Clean All Projects button on the Menu bar or Toolbar.

(c) The Clean All Projects button has been introduced onto the Standard Toolbar.
Pressing this button deletes the interim and output files (relocatable and absolute files) of the builds in all the projects registered in a workspace.

(6) Invoking external tools

To invoke external tools, the System Tools toolbar has been introduced.
Buttons on this toolbar invoke the stack analyzing tool (Call Walker) and the external tools registered with High-performance Embedded Workshop.

(7) Version control system

The version control system of Microsoft(R) Visual SourceSafe 2005 can be used on High-performance Embedded Workshop.

(8) Debugging

The option to inhibiting memory access during execution of the target program has been introduced.

(9) Select Label dialog box

The labels that have been presented in a list with no criteria can now be provided in a hit list after searching for a specified

character string.

(10) Workspace window

The full path of any file can be provided in a tool tip if you hover the mouse pointer on the filename in the project's tree view.

(11) Editor window

Files can be overwritten to save and the window be closed using a pop-up menu.*

 *A pop-up menu is displayed by right-clicking the tab of the Editor window.

(12) Disassembly window

(a) The window can be closed using a pop-up menu.*

   *A pop-up menu is displayed by right-clicking the tab of the Disassembly window

(b) In the source-mode display, the places in which the name and address of the function to access are displayed can be moved by typing them into the text box in the Set Address dialog box.

(c) Suppose the Disassembly window is opened using the capability of giving a higher priority on the source-mode display while debugging is going on. Even when the place in which a source file is displayed is moved in the Disassembly window, they stay at the original place in the Editor window if the same source file has been opened in this window.

(13) Register window

Whether to update the contents in the Register window or not is selectable, and by opening both the windows, updated and not updated, the values of the registers and flags can be compared one another.

(14) Memory window

The areas for displaying labels and registers are hidden by default.

(15) Stack Trace window

The settings of displays are saved in each session.

(16) Image window

(a) A capability of switching a frame to another (manually or automatically) has been introduced. This enables you to see two or more images on one window.

(b) A toolbar has been introduced, which allows you easily to use the capabilities of the window.

(17) Map Section Information window

(a) Sections and sub-section groups of the tree view can be copied to another address by dragging and dropping.

(b) The Section Auto Registration functon has been

introduced. The Section Auto Registration button and menu
register sections not registered in the tree view by
automatically searching the Map files.

2.2 Debugging Capabilities Improved

The following are the debugging capabilities improved in the IDE
for supported debuggers:

**(1) For each debugger for the M16C and 740 families (except the E8
and E8a Emulator Software products) and the H8/300H Tiny compact
emulator debugger**

(a) RAM Monitor window

The areas for displaying labels and registers are hidden
by default.

**(2) For each debugger for the SuperH RISC engine, H8SX, H8S, and H8
families (except the H8/300H Tiny compact emulator debugger) and
the E8 and E8a Emulator Software products**

(a) Watch window

The values of the variables to be updated automatically are
editable during execution of the program.

**(3) For the simulator debuggers for the SuperH RISC engine; and H8SX,
H8S, and H8 families**

(a) Performance Analysis window

Statistics are displayed in graphs.

(b) Coverage window

Coverage Information files that have been saved in the
previous session can be loaded on High-performance Embedded
Workshop using the Message dialog box appearing when a new
session is opened.

**(4) For each emulator software product for the E200F, E6000H, E6000,
and E10A-USB emulators**

(a) Monitor window

A column for labels has been introduced (hidden by default).

(b) MONITOR_SET command

A column for labels has been introduced to display monitor
setting points. This column always appears.

**(5) For the emulator software products for the E200F, E6000H for
the AE series, and E6000 for the AE series emulators**

Capabilities of the two windows have been improved as well as
presentation in the windows. Main improvements are as follows:

(a) Code Coverage window

- Two or more source files can be registered and displayed
  in a single window.
- Assembly instructions and source lines not executed can

be searched for.
     - Coverage ratios are provided in graphs.
   (b) Data Coverage window
     - The range of data coverage can be registered section by
       section.
     - The access attributes of data items are represented using
       the background color of each item.
     - Coverage ratios are provided in graphs.
 (6) For the emulator software for the E200F emulator
   (a) Realtime Profile window
     The contents in the window can be saved in a file.

2.3 Problems Fixed
  The following known problems have been fixed:
  (1) With moving workspaces, Nos. 1, 2, and 3
     For details see RENESAS TOOL NEWS Document Nos. 070216/tn1 and
     070216/tn2, published on February 16, 2007, at
      http://tool-support.renesas.com/eng/toolnews/070216/tn1.htm and
      http://tool-support.renesas.com/eng/toolnews/070216/tn2.htm
  (2) With moving workspaces
     For details see RENESAS TOOL NEWS Document No. 070316/tn2,
     published on March 16, 2007, at
      http://tool-support.renesas.com/eng/toolnews/070316/tn2.htm
  (3) With typing the default directory name of a new workspace
     For details see RENESAS TOOL NEWS Document No. 070416/tn2,
     published on April 16, 2007, at
      http://tool-support.renesas.com/eng/toolnews/070416/tn2.htm
  (4) With editing files in the Editor window
     For details see RENESAS TOOL NEWS Document No. 070616/tn1,
     published on June 16, 2007, at
      http://tool-support.renesas.com/eng/toolnews/070616/tn1.htm
  (5) With customizing of linkage order
  (6) With using Custom Project Types
  (7) With using functions for sharing projects by network facilities
     For details of the above three, see RENESAS TOOL NEWS Document
     No. 071216/tn1, published in this series of news.
     http://tool-support.renesas.com/eng/toolnews/071216/tn1.htm
  (8) With loading files in the Motorola S format
     For details see RENESAS TOOL NEWS Document No. 071216/tn2,
     published in this series of news.
     http://tool-support.renesas.com/eng/toolnews/071216/tn2.htm
  (9) With executing the COVERAGE_SAVE command
     For details see RENESAS TOOL NEWS Document No. 071216/tn3,

published in this series of news.
http://tool-support.renesas.com/eng/toolnews/071216/tn3.htm

(10) With projects created by using the Makefile

For details see RENESAS TOOL NEWS Document No. 071216/tn4,
published in this series of news.
http://tool-support.renesas.com/eng/toolnews/071216/tn4.htm

3. How to Update Your Product

High-performance Embedded Workshop has been revised from V.4.04.00 to V.4.04.01 in Jan., 2008
because there was a problem in V.4.04.00.
For the release of V.4.04.01, refer to here. For the problem of V.4.04.00, refer to here.