

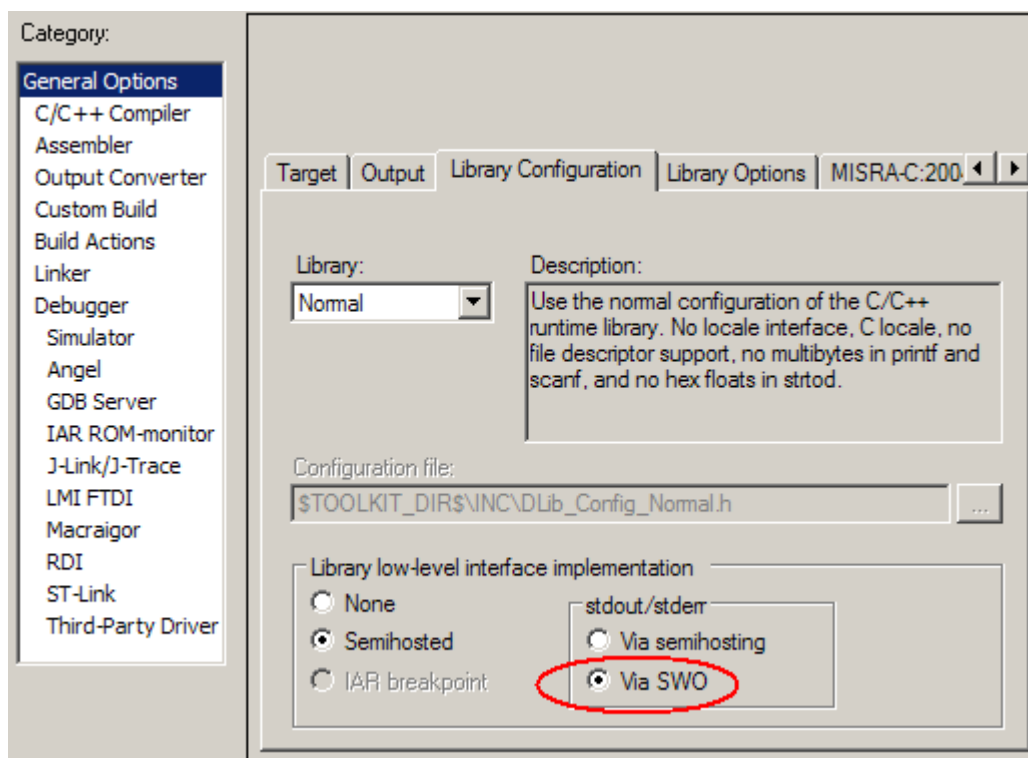
Example 5: Printf via SWO

Stdout and stderr of the application can be redirected to ITM stimulus port #0. It means that stdout/stderr messages (e.g. strings sent by printf) can be transferred from the target application to the C-SPY Terminal I/O window via SWO.

Requirements: Cortex-M3/M4 board; J-Link/J-Trace; IAR Embedded Workbench for ARM, V5.50.5 or later.

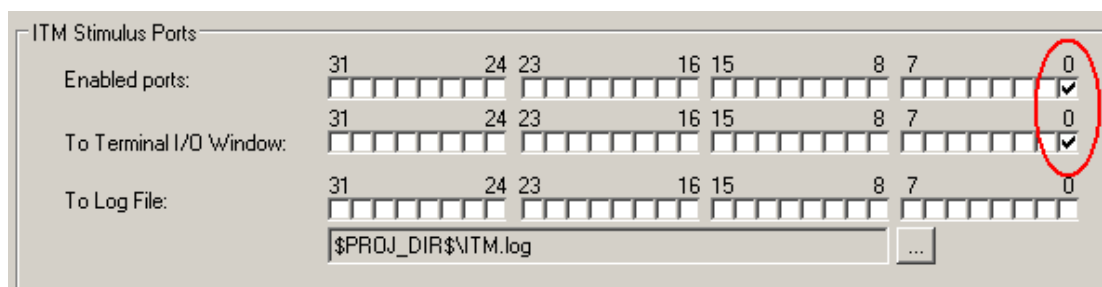
Step 5.1

The same as Step 1.1 and 1.2, plus rerouting stdout/stderr messages via SWO (library low-level interface implementation, see the figure below).



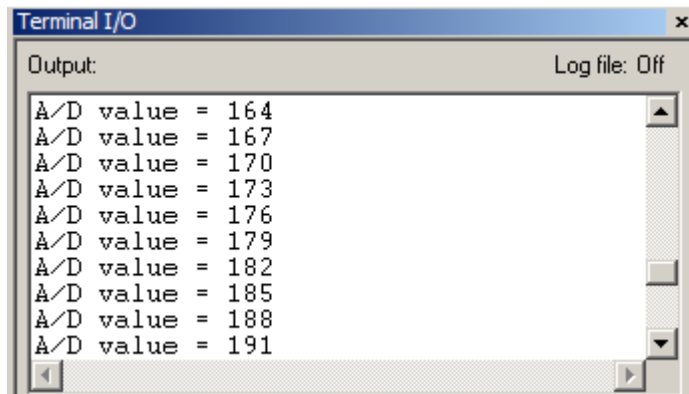
Step 5.2

The same as Step 1.3, except for enabling ITM stimulus port #0 and using it for routing data to the C-SPY Terminal I/O window.



Step 5.3

Open the Terminal I/O window from the View menu. Start executing the application to collect Software Trace information. Stdout messages sent by `printf()` in the application will be displayed here via SWO Trace.



[Main article: Using CoreSight Trace Techniques on Cortex-M3/M4](#)