# CDT Testing 8.7.0 - Summary

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|---|---|---|---|---|---|---|---|
| CDT Version: | 8.7 RC2 | | | | | | |
| GDB/gdbserver version | | | | | | | |
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| Date Started: | | | | | | | |
| Date Completed: | | | | | | | |
| **Section** | **Content** | **To do** | **Pass** | **Fail** | **Started** | **Total** | |
| 1 | Installation | 0 | 25 | 0 | 0 | 25 | With comments |
| 2 | Codan | 0 | 3 | 0 | 0 | 3 | |
| 3 | Debug | 60 | 172 | 2 | 0 | 234 | With comments |
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| | **Total:** | **60** | **200** | **2** | **0** | **262** | |
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| | | **Open** | **Fixed** | **Total** | | **Regressions** | |
| | Bug Reports | 2 | 0 | 2 | | 0 | |

# CDT Testing 8.7.0 - Installation

| | Section | Pass | Fail | To do | Started | Comment |
|---|---|---|---|---|---|---|
| | Installation | 25 | 0 | 0 | 0 | 2 |
| | Note:<br>The information about the EPP and update sites to use are usually posted on epp-dev mailing list | | | | | |

| Step | Test Case | Action | Verification | | Tester | Comment |
|---|---|---|---|---|---|---|
| **1** | **Verify C/C++ EPP Package RC1** | | | | | |
| 1.1 | Download EPP Package | Download, extract and start EPP package | EPP Package starts | Pass | Marc-Andre Laperle | |
| 1.2 | Version of CDT Features | Go to Help -> About Eclipse -> Installion Details | Verify that the CDT features and plug-ins are present and have the correct version | Pass | Marc-Andre Laperle | |
| 1.3 | C/C++ Perspective | Open C/C++ perspective | C/C++ perspective opens | Pass | Marc-Andre Laperle | |
| 1.4 | Compilation and code analysis | Create a simple Hello world program using the project wizard. | Verify that the program compiles and that there are no errors (code analysis) | Pass | Marc-Andre Laperle | |
| 1.5 | Debug | Debug the program (right-click Debug As, Local C/C++ Application) | Verify that the debug session starts, stepping is possible and terminate works. | Pass | Marc-Andre Laperle | |
| **2** | **Verify C/C++ EPP Package RC2** | | | | | |
| 2.1 | Download EPP Package | Download, extract and start EPP package | EPP Package starts | Pass | Marc-Andre Laperle | |
| 2.2 | Version of CDT Features | Go to Help -> About Eclipse -> Installion Details | Verify that the CDT features and plug-ins are present and have the correct version | Pass | Marc-Andre Laperle | |
| 2.3 | C/C++ Perspective | Open C/C++ perspective | C/C++ perspective opens | Pass | Marc-Andre Laperle | |
| 2.4 | Compilation and code analysis | Create a simple Hello world program using the project wizard. | Verify that the program compiles and that there are no errors (code analysis) | Pass | Marc-Andre Laperle | |
| 2.5 | Debug | Debug the program (right-click Debug As, Local C/C++ Application) | Verify that the debug session starts, stepping is possible and terminate works. | Pass | Marc-Andre Laperle | |
| **3** | **Verify C/C++ EPP Package RC3** | | | | | |
| 3.1 | Download EPP Package | Download, extract and start EPP package | EPP Package starts | Pass | Marc Khouzam | |
| 3.2 | Version of CDT Features | Go to Help -> About Eclipse -> Installion Details | Verify that the CDT features and plug-ins are present and have the correct version | Pass | Marc Khouzam | |
| 3.3 | C/C++ Perspective | Open C/C++ perspective | C/C++ perspective opens | Pass | Marc Khouzam | |
| 3.4 | Compilation and code analysis | Create a simple Hello world program using the project wizard. | Verify that the program compiles and that there are no errors (code analysis) | Pass | Marc Khouzam | |
| 3.5 | Debug | Debug the program (right-click Debug As, Local C/C++ Application) | Verify that the debug session starts, stepping is possible and terminate works. | Pass | Marc Khouzam | |
| **4** | **Verify C/C++ EPP Package RC4** | | | | | |
| 4.1 | Download EPP Package | Download, extract and start EPP package | EPP Package starts | Pass | Marc-Andre Laperle | |
| 4.2 | Version of CDT Features | Go to Help -> About Eclipse -> Installion Details | Verify that the CDT features and plug-ins are present and have the correct version | Pass | Marc-Andre Laperle | |
| 4.3 | C/C++ Perspective | Open C/C++ perspective | C/C++ perspective opens | Pass | Marc-Andre Laperle | |
| 4.4 | Compilation and code analysis | Create a simple Hello world program using the project wizard. | Verify that the program compiles and that there are no errors (code analysis) | Pass | Marc-Andre Laperle | |
| 4.5 | Debug | Debug the program (right-click Debug As, Local C/C++ Application) | Verify that the debug session starts, stepping is possible and terminate works. | Pass | Marc-Andre Laperle | |
| **5** | **Verify Update Site** | | | | | |
| 5.1 | Mars Update Site | Download Eclipse standard and install all CDT features from main Mars Update site<br>http://download.eclipse.org/releases/mars | Verify that installation was successful | Pass | Marc-Andre Laperle | |
| 5.2 | CDT Update Site | Download Eclipse standard and install all CDT features from the CDT Update site<br>http://download.eclipse.org/tools/cdt/builds/mars/milestones | Verify that installation was successful | Pass | Marc-Andre Laperle | Had to use http://download.eclipse.org/releases/staging/ for Docker feature to install |

# CDT Testing 8.7.0 - Installation

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| 5.3 | Upgrade using Mars Update Site | Download Eclipse standard from Luna SR2 and install all CDT features from main Luna Update site.<br>http://download.eclipse.org/releases/luna<br>Try to update the installation using the Mars update site.<br>http://download.eclipse.org/releases/mars | Verify that installation was successful | Pass | Marc-Andre Laperle | |
| 5.4 | Upgrade using CDT Update Site | Download Eclipse standard from Luna SR2 and install all CDT features from the Luna SR2 CDT Update site.<br>http://download.eclipse.org/tools/cdt/releases/8.6<br>Try to update the installation using the Mars CDT Update site.<br>http://download.eclipse.org/tools/cdt/builds/mars/milestones | Verify that installation was successful | Pass | Marc-Andre Laperle | Worked by using a few extra update sites for external dependencies (Docker, Remote, etc) |
| 5.5 | Upgrade from previous EPP | Download Eclipse previous C/C++ EPP package. Try to upgrade using both update sites:<br>1) https://hudson.eclipse.org/packaging/job/???<br>2) http://download.eclipse.org/releases/staging/ or http://download.eclipse.org/releases/maintenance/ (for a SR release)<br><br>The information about the update sites to use is usually posted on epp-dev | Verify that installation was successful | Pass | Marc-Andre Laperle | |

# CDT Testing 8.7.0 - Codan

| | Section | Pass | Fail | To do | Started | Comment |
|---|---|---|---|---|---|---|
| | Codan | 3 | 0 | 0 | 0 | 0 |

| Step | Test Case | Action | Verification | | Tester | Comment |
|---|---|---|---|---|---|---|
| **1** | **Preparation** | | | | | |
| 1.1 | Step 1 | Open C/C++ perspective | Perspective opens with correct views | Pass | Marc Khouzam | |
| **2** | **Tests** | | | | | |
| 2.1 | Preferences | Open Preferences->C/C++->Code Analysis page | Verify the page exists | Pass | Marc Khouzam | |
| 2.2 | Syntax check | Enable a type of error and introduce that error in the source code | Verify that the error is detected immediately when typing | Pass | Marc Khouzam | |

# CDT Testing 8.7.0 - Debug

| | Section | Pass | Fail | To do | | | | | | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| | Debug | 172 | 2 | 60 | 0 | | | | | 9 |

| Step | Test Case | Action | Verification | Linux | Tester | Windows | Tester | Mac | Tester | Comment |
|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **Preparation** | | | | | | | | | |
| 1.1 | Step 1 | Open C/C++ perspective | Perspective opens with correct views | Pass | Marc Khouzam | | | | | |
| **2** | **Local Debug** | | | | | | | | | |
| 2.1 | Perspective switch | Launch a local debug session in non-stop mode | Verify the perspective is changed to the Debug perspective | Pass | Marc Dumais | | | | | GDB on Mac doesn't support non-stop and the debug session never terminates after trying to debug in non-stop.<br>This might be related to https://bugs.eclipse.org/bugs/show_bug.cgi?id=427410 |
| 2.2 | Debug session | Inspect Debug view | Verify there are nodes for the launch, the process, threads and stack frames, and one gdb node | Pass | Marc Dumais | | | | | |
| 2.3 | Console selection | Select the 'gdb' node in the Debug view | Verify the gdb console appears in the console view | Pass | Marc Dumais | | | | | |
| 2.4 | Stepping | Press the different stepping buttons | Verify stepping works as expected | Pass | Marc Dumais | | | | | |
| 2.5 | Resume | Press the resume button while a thread is stopped | Verify resume works as expected | Pass | Marc Dumais | | | | | |
| 2.6 | Suspend | Press the suspend button while a thread is running | Verify suspend works as expected | Pass | Marc Dumais | | | | | |
| 2.7 | Breakpoint interrupt | While the target is running, set a breakpoint | Verify that the target is temporarily interrupted to set the breakpoint and then resumed | Pass | Marc Dumais | | | | | |
| 2.8 | Run-to-line 1 | Select a line in the current method and press Ctrl-R | Verify execution continue until that line | Pass | Marc Dumais | | | | | |
| 2.9 | Run-to-line 2 | Select a line in a different method and press Ctrl-R | Verify execution continue until that line | Pass | Marc Dumais | | | | | |
| 2.10 | Registers per stack frame | Make sure there are more than one stack frames visible | Verify that at least the stack pointer register changes depending on the selected stack frame | Pass | Marc Dumais | | | | | |
| 2.11 | Variables view | Look at variables view | Verify local variables are displayed for current frame | Pass | Marc Dumais | | | | | |
| 2.12 | Variables view update | Change stack frame in debug view | Verify local variables are displayed for new frame | Pass | Marc Dumais | | | | | |
| 2.13 | Expressions view | Create a valid expression in the expressions view | Verify expression value is shown for current frame | Pass | Marc Dumais | | | | | |
| 2.14 | Expressions view update | Change stack frame in debug view | Verify expression value is updated (to maybe an error) for the new frame | Pass | Marc Dumais | | | | | |
| 2.15 | Registers view | Look at Registers view | Verify registers are shown with their values | Pass | Marc Dumais | | | | | |
| 2.16 | Memory view | Add a memory monitor | Verify the memory corresponding to the monitor is shown | Pass | Marc Dumais | | | | | |
| 2.17 | Memory Browser view | Put an address in the address box | Verify the memory corresponding to the address is shown | Pass | Marc Dumais | | | | | |
| 2.18 | Connect button | Press the connect button in the Debug view | Verify a dialog showing all processes of the system is displayed | Pass | Marc Dumais | | | | | |
| 2.19 | New... | Press the New... button from the connect dialog | Verify a prompt for a binary is displayed | Pass | Marc Dumais | | | | | |
| 2.20 | New process | Select a valid path for a binary in the prompt | Verify that the proper binary is added to the debug session | Pass | Marc Dumais | | | | | was not working at first - cleared some breakpoints / tracepoints from an older test session, and then it started working |
| 2.21 | Cores | Look at Debug view | Verify that the 'cores' are displayed next to each process and each thread node | Pass | Marc Dumais | | | | | |
| 2.22 | Show full path option | Toggle “Show full path” option in Debug view | Verify that the full path of both the frames and process is shown or not shown according to the option | Pass | Marc Dumais | | | | | |
| 2.23 | Show only suspended threads | Toggle the preference “Show only suspended threads” | Verify that all running threads disappear and that a text saying how many threads are hidden is shown next to the process node | Pass | Marc Dumais | | | | | |
| 2.24 | Show thread names in Debug view | Either debug a program that sets thread names, or expect to see the process name use as thread names | Verify that the thread names are shown in the Debug view next to each thread | Pass | Marc Dumais | | | | | |
| **3** | **Local-attach Debug** | | | | | | | | | |
| 3.1 | Attach launch | Launch a local-attach debug session in non-stop mode | Verify a dialog showing all processes of the system is displayed | Pass | Marc Dumais | | | | | |
| 3.2 | Cancel attach | Press the Cancel button | Verify the entire launch is terminated without error | Pass | Marc Dumais | | | | | |
| 3.3 | Preparation | From the shell, start three long running processes | Processes are started | Pass | Marc Dumais | | | | | |
| 3.4 | Attach launch | Launch a local-attach debug session in non-stop mode | Verify a dialog showing all processes of the system are displayed | Pass | Marc Dumais | | | | | |
| 3.5 | Multi-select | Select multiple entries | Verify multi-selection is supported | Pass | Marc Dumais | | | | | |
| 3.6 | Multi-attach | Select the three processes that were started earlier | Verifies that all three process start being debugged without being interrupted | Pass | Marc Dumais | | | | | |
| 3.7 | Suspend | Interrupt the second process | Verify the second process is interrupted | Pass | Marc Dumais | | | | | |
| 3.8 | Set breakpoint | Set a breakpoint in the second process | Verify breakpoint is set | Pass | Marc Dumais | | | | | |
| 3.9 | Resume | Resume the second process | Verify that the second process resumes then stops at the breakpoint | Pass | Marc Dumais | | | | | |
| 3.10 | Breakpoint interrupt | Set a breakpoint in the first process while it is running | Verify that the first process stops at the breakpoint | Pass | Marc Dumais | | | | | |
| 3.11 | Memory view multi-process | | Verify that memory monitors are per process | Pass | Marc Dumais | | | | | |
| 3.12 | Memory browser multi-process | | Verify that memory browser tabs are per process | Pass | Marc Dumais | | | | | |
| 3.13 | Registers multi-process | | Verify that the list of registers is fetched for each process of the debug session | Pass | Marc Dumais | | | | | |
| 3.15 | Detach running | Detach from a running process | Verify that the process keeps on running in the OS but is no longer debugged | Pass | Marc Dumais | | | | | |
| 3.16 | Detach suspended | Detach from a suspended process | Verify that the process starts running again in the OS but is no longer debugged | Pass | Marc Dumais | | | | | |
| 3.17 | Re-attach running | Re-attach to the running process that was detached | Verify the process is debugged again | Pass | Marc Dumais | | | | | |
| 3.18 | Re-attach suspended | Re-attach to the suspended process that was detached | Verify the process is debugged again | Pass | Marc Dumais | | | | | |
| 3.19 | Terminate running | Terminate from a running process | Verify that the process is terminated in the OS | Pass | Marc Dumais | | | | | |
| 3.20 | Terminate suspended | Terminate from a suspended process | Verify that the process is terminated in the OS | Pass | Marc Dumais | | | | | Does not work if the process is the last one in the session. Known issue. |
| 3.21 | State | Look at Debug view | Verify only a single process is left to debug | Pass | Marc Dumais | | | | | |
| 3.22 | Cancel attach | Press the connect button on the Debug view and then Cancel | Verify that the prompt disappears and that the debug session stays unchanged (one process being debugged) | Pass | Marc Dumais | | | | | |

# CDT Testing 8.7.0 - Debug

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| 3.23 | Cancel new | Press the connect button then New.. and then Cancel | Verify that the prompt disappears and that the debug session stays unchanged (one process being debugged) | Pass | Marc Dumais | | | | | |
| 3.24 | New process | Press the connect button then New.. and then select a valid binary | Verify that this binary starts being debugged | Pass | Marc Dumais | | | | | Only works if the existing process has an interrupted thread. Known issue. It also works if all existing processes are running but there are no break points defined |
| 3.25 | State | Look at Debug view | Verify that there are two processes being debugged | Pass | Marc Dumais | | | | | |
| 3.26 | Dynamic-printf | Create a dprintf within one attached program and run past it | Verify the dprintf is printed to the original process console outside of Eclipse | Pass | Marc Dumais | | | | | |
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| **4** | **Remote-attach Debug** | | | | | | | | | |
| 4.1 | Preparation | From the shell, start 'gdbserver –multi :9999' using the latest gdbserver | gdbserver started | Pass | Alvaro | | | | | |
| 4.2 | Remote-attach | Launch a remote attach debug session in non-stop mode | Verify Debug view shows a new launch with only the launch node and 'gdb' nodes | Pass | Alvaro | | | | | |
| 4.3 | Preparation | From the shell, start three long running processes | Processes are started | Pass | Alvaro | | | | | |
| 4.4 | Connect button | Press the connect button on the Debug view | Verify a dialog showing all processes of the system is displayed | Pass | Alvaro | | | | | |
| 4.5 | Multi-attach | Select the three processes that were started earlier | Verify a prompt for a binary is displayed and that the name of the process is shown as the title | Pass | Alvaro | | | | | |
| 4.6 | Binary 1 | Specify the proper binary | Verify a prompt for a second binary is displayed and that the name of the process is shown as the title | Pass | Alvaro | | | | | |
| 4.7 | Binary 2 | Specify the proper binary | Verify a prompt for a third binary is displayed and that the name of the process is shown as the title | Pass | Alvaro | | | | | |
| 4.8 | Binary 3 | Specify the proper binary | Verifies that all three process start being debugged without being interrupted | Pass | Alvaro | | | | | |
| 4.9 | Suspend | Interrupt the second process | Verify the second process is interrupted | Pass | Alvaro | | | | | |
| 4.10 | Set breakpoint | Set a breakpoint in the second process | Verify breakpoint is set | Pass | Alvaro | | | | | |
| 4.11 | Resume | Resume the second process | Verify that the second process resumes then stops at the breakpoint | Pass | Alvaro | | | | | |
| 4.12 | Breakpoint interrupt | Set a breakpoint in the first process while it is running | Verify that the first process stops at the breakpoint | Pass | Alvaro | | | | | |
| 4.13 | Detach running | Detach from a running process | Verify that the process keeps on running in the OS but is no longer debugged | Pass | Alvaro | | | | | |
| 4.14 | Detach suspended | Detach from a suspended process | Verify that the process starts running again in the OS but is no longer debugged | Pass | Alvaro | | | | | got a segfault in "long1" after detaching. Might have been a fluke - seems to work now |
| 4.15 | Re-attach running | Re-attach to the running process that was detached | Verify the process is debugged again | Pass | Alvaro | | | | | |
| 4.16 | Re-attach suspended | Re-attach to the suspended process that was detached | Verify the process is debugged again | Pass | Alvaro | | | | | |
| 4.17 | Terminate running | Terminate from a running process | Verify that the process is terminated in the OS | Pass | Alvaro | | | | | |
| 4.18 | Terminate suspended | Terminate from a suspended process | Verify that the process is terminated in the OS | Pass | Alvaro | | | | | |
| 4.19 | State | Look at Debug view | Verify only a single process is left to debug | Pass | Alvaro | | | | | |
| 4.20 | Start new process | Press the connect button on the Debug view | Verify the "New..." button is enabled | Pass | Alvaro | | | | | |
| 4.21 | Start new process | Press the "New..." button in the attach dialog | Verify a new dialog pops up asking for two binary locations and arguments | Pass | Alvaro | | | | | |
| 4.22 | Start new process | Specify the local and remote binaries and some arguments | Verify the process is started with the specified arguments | Pass | Alvaro | | | | | |
| 4.23 | Dynamic-printf | Create a dprintf within one program and run past it | Verify the dprintf is printed to the original process console outside of Eclipse | Pass | Alvaro | | | | | |
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| **5** | **Automatic Remote Debug** | | | | | | | | | |
| 5.1 | Auto-remote | Launch an automatic remote debug session | Verify the process is being debugged | Pass | Marc Khouzam | | | | | |
| 5.2 | Dynamic-printf | Set a dynamic-printf and run past it | Verify the dprintf is printed to the remote console in Eclipse | Pass | Marc Khouzam | | | | | |
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| **6** | **Manual Remote Debug** | | | | | | | | | |
| 6.1 | Preparation | From the shell, start 'gdbserver :9999 <binaryPath>' using the latest gdbserver | gdbserver started | Pass | Marc Khouzam | | | | | |
| 6.2 | Remote-attach | Launch a manual remote debug session | Verify there are nodes for the launch, the process, threads and stack frames, and one gdb node | Pass | Marc Khouzam | | | | | |
| 6.3 | Dynamic-printf | Set a dynamic-printf and run past it | Verify the dprintf is printed to the console where gdbserver was started outside of Eclipse | Pass | Marc Khouzam | | | | | |
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| **7** | **Post-mortem Core file** | | | | | | | | | |
| 7.1 | Preparation | Start a local debug session | Debug session started | Pass | Marc Khouzam | | | | | |
| 7.2 | Preparation | Step or resume to another method than main | Debug session interrupted in another method | Pass | Marc Khouzam | | | | | |
| 7.3 | Preparation | Interrupt all threads | Make sure all threads are interrupted | Pass | Marc Khouzam | | | | | |
| 7.4 | Preparation | In the gdb console type 'gcore /tmp/gcore1' to generate a core file | Verify /tmp/gcore1 is created | Pass | Marc Khouzam | | | | | |
| 7.5 | Post-mortem launch | Start a post-mortem debug session using /tmp/gcore1 | Verify the debug view shows the program stopped where the core file was generated | Pass | Marc Khouzam | | | | | |
| 7.6 | Debug view buttons | Look at Debug view | Verify all step and resume buttons are grayed out | Pass | Marc Khouzam | | | | | |
| 7.7 | Variables view | Look at variables view | Verify variables are shown in variables view | Pass | Marc Khouzam | | | | | |
| 7.8 | Empty core field | Start a post-mortem debug session leaving the core file field empty | Verify a prompt for a core file is displayed | Pass | Marc Khouzam | | | | | |
| 7.9 | Select core file | select /tmp/gcore1 | Verify the core file starts being 'debugged' as it was in the previous attempt | Pass | Marc Khouzam | | | | | |
| 7.10 | Directory in core field | Start a post-mortem debug session putting /tmp in the core file field | Verify that a prompt for a core file is displayed starting in /tmp | Pass | Marc Khouzam | | | | | |
| 7.11 | Select core file | select /tmp/gcore1 | Verify the core file starts being 'debugged' as it was in the previous attempt | Pass | Marc Khouzam | | | | | |

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| 7.12 | Cancel launch | Start a post-mortem debug session leaving the core file field empty and press cancel at the prompt | Verify the launch is terminated cleanly | Pass | Marc Khouzam | | | | | |
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| **8** | **Pretty-printing tests** | | | | | | | | | |
| 8.1 | Preparation | Hide variables and expressions view | Variables and Expressions view are not visible to avoid showing un-initialized STL structures, which could hang GDB. | Pass | Marc Khouzam | | | | | |
| 8.2 | Preparation | Launch a local debug session in non-stop mode with code using Maps/Lists/Vectors | Debug session started | Pass | Marc Khouzam | | | | | |
| 8.3 | Preparation | Execute until all STL variables are initialized | Execution stopped after STL vars initialized | Pass | Marc Khouzam | | | | | |
| 8.4 | Pretty-printed variables view | Look at variables view | Verify that the STL structures are displayed pretty-printed in the variables view, both in the view and in the detail pane | Pass | Marc Khouzam | | | | | |
| 8.5 | Pretty-printed expressions view | Look at expressions view | Verify that the STL structures are displayed pretty-printed in the expressions view, both in the view and in the detail pane | Pass | Marc Khouzam | | | | | |
| 8.6 | Edit | Change the value of an STL content | Verify that the value changes as expected | Pass | Marc Khouzam | | | | | |
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| **9** | **Tracepoint tests** | | | | | | | | | |
| 9.1 | Preparation | Start an automatic remote debug session using non-stop | Debug session started | Pass | Marc Khouzam | | | | | |
| 9.2 | Tracepoints | Create two tracepoints | Tracepoints created | Pass | Marc Khouzam | | | | | |
| 9.3 | Tracepoint commands | Add the following actions to the first tracepoint: 'collect $locals' and 'collect $reg' | Verify commands sent to GDB | Pass | Marc Khouzam | | | | | |
| 9.4 | Tracepoint commands 2 | Add the following actions to the second tracepoint: 'collect $trace_timestamp' and 'collect <single local var>' | Verify commands sent to GDB | Pass | Marc Khouzam | | | | | |
| 9.5 | Start trace experiment | Start trace execution and resume execution of program | Trace records produced in Trace control view | Pass | Marc Khouzam | | | | | |
| 9.6 | Stop trace experiment | Stop trace experiment | Verify trace experiment is shown as stopped | Pass | Marc Khouzam | | | | | |
| 9.7 | Trace navigation | In the Trace Control view, press the Next Record button and navigate through the collected records | Verify Debug view updates to follow the different trace records | Pass | Marc Khouzam | | | | | |
| 9.8 | Variables view | Look at Variables view and Debug view | Verify that the collected data is properly displayed | Pass | Marc Khouzam | | | | | |
| 9.9 | Unavailable data | Look at Variables view for data not collected | Make sure that unavailable data shows "<unavailable>" | Pass | Marc Khouzam | | | | | |
| 9.10 | Stop visualization | From the Trace Control view press the Exit Visualization button | Verify the Debug view goes back to the program execution display | Pass | Marc Khouzam | | | | | |
| 9.11 | Trace navigation | In the Trace Control view, press the Next Record button and navigate through the collected records | Verify Debug view updates to follow the different trace records | Pass | Marc Khouzam | | | | | |
| 9.12 | Save trace data | From the Trace Control view menu, save the trace data to /tmp/tracedata | Verify /tmp/tracedata is created | Pass | Marc Khouzam | | | | | |
| 9.13 | Post-mortem launch | Start a post-mortem debug session using the generated trace file from previous test case | Verify the debug view shows the program stopped where the first trace record was collected | Pass | Marc Khouzam | | | | | |
| 9.14 | Debug view buttons | Look at Debug view | Verify all step and resume buttons are grayed out | Pass | Marc Khouzam | | | | | |
| 9.15 | Variables view | Look at variables view | Verify variables are shown in variables view | Pass | Marc Khouzam | | | | | |
| 9.16 | Unavailable data | Look at Variables view for data not collected | Make sure that unavailable data shows "<unavailable>" | Pass | Marc Khouzam | | | | | |
| | | | | | | | | | | |
| **10** | **Fast Tracepoint tests** | | | | | | | | | |
| 10.1 | Fast tracepoint option | Start an automatic remote debug session using non-stop with the "Fast Tracepoint" option | Debug session started | Pass | Marc Khouzam | | | | | |
| 10.2 | Fast Tracepoint | Create a tracepoint that can be set as a fast one (a fast tp needs a 4-byte instruction on a 32-bit machine, and a 5-byte one on a 64-bit machine) | Verify that a fast tracepoint is created | Pass | Marc Khouzam | | | | | |
| 10.3 | Normal tracepoint | Create a tracepoint that can not be set as a fast one | Verify that no tracepoint is created | Pass | Marc Khouzam | | | | | |
| 10.4 | Normal tracepoint option | Start an automatic remote debug session using non-stop with the "Normal Tracepoint" option | Debug session started | Pass | Marc Khouzam | | | | | |
| 10.5 | Fast Tracepoint | Create a tracepoint that can be set as a fast one (a fast tp needs a 4-byte instruction on a 32-bit machine, and a 5-byte one on a 64-bit machine) | Verify that a normal tracepoint is created (not fast) (use 'info trac' in the gdb console) | Pass | Marc Khouzam | | | | | |
| 10.6 | Normal tracepoint | Create a tracepoint that can not be set as a fast one | Verify that a normal tracepoint is created | Pass | Marc Khouzam | | | | | |
| 10.7 | Normal tracepoint option | Start an automatic remote debug session using non-stop with the "Automatic Tracepoint" option | Debug session started | Pass | Marc Khouzam | | | | | |
| 10.8 | Fast Tracepoint | Create a tracepoint that can be set as a fast one (a fast tp needs a 4-byte instruction on a 32-bit machine, and a 5-byte one on a 64-bit machine) | Verify that a fast tracepoint is created | Pass | Marc Khouzam | | | | | |
| 10.9 | Normal tracepoint | Create a tracepoint that can not be set as a fast one | Verify that a normal tracepoint is created | Pass | Marc Khouzam | | | | | |
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| **11** | **Multicore Visualizer** | | | | | | | | | |
| 11.1 | Preparation | Start a local debug session | Debug session started | Pass | Alvaro | n/a | | n/a | | |
| 11.2 | Visualizer view | Open the visualizer view | Verify that all threads are shown in the visualizer with the right state | Pass | Alvaro | n/a | | n/a | | |
| 11.3 | Load meters disabled | | Verify that the load meters are disabled by default | Pass | Alvaro | n/a | | n/a | | |
| 11.4 | Multi-select | Do some multi-selection in the visualizer view | Verify that the run control commands react appropriately | Pass | Alvaro | n/a | | n/a | | |
| 11.5 | Run Control | Perform some run control commands on multiple selections in the visualizer view | Verify that the debug view is in sync with the visualizer view when making selections in the visualizer | Pass | Alvaro | n/a | | n/a | | |
| 11.6 | Run Control 2 | Perform some run control commands on multiple selections in the debug view | Verify that the visualizer view is in sync with the debug view when making selections in the debug view | Pass | Alvaro | n/a | | n/a | | |

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|---|---|---|---|---|---|---|---|---|---|---|
| 11.7 | Crash | Crash the program | Verify that the Visualizer shows a RED square | ce | Alvaro | n/a | | n/a | | Works for raise(SIGSEGV) but not for Division by Zero fault. Not a regression |
| 11.8 | Preparation | Have the visualizer view visible | Visualizer view visible | Pass | Alvaro | n/a | | n/a | | |
| 11.9 | Preparation | Start an automatic remote debug session using non-stop | Verify visualizer can display remote session | Pass | Alvaro | n/a | | n/a | | |
| 11.10 | Load Meters options | Right-click on the visualizer to get the context menu | Verify that there is a "Load Meters" sub-menu, that contains only one entry to enable the load meters. | Pass | Alvaro | n/a | | n/a | | |
| 11.11 | Enabling Load Meters | Select the "Enable Load Meters" entry in the context menu | Verify that the load meters appear on the visualizer, one for each core and one for each CPU. Verify that each load meter has a numerical overlay, giving the numerical percentage value of the current load. Note: the visualizer needs to be big enough or the load meters will not be displayed | Pass | Alvaro | n/a | | n/a | | |
| 11.12 | Load Meters options | Right-click on the visualizer to get to the context menu | Verify that a new entry is now present in the Load Meters sub-menu: "Refresh Speed" | Pass | Alvaro | n/a | | n/a | | |
| 11.13 | Load Meters default refresh speed | Go into the context menu, under "Refresh Speed" | Verify that the "medium" speed is chosen by default | Pass | Alvaro | n/a | | n/a | | |
| 11.14 | Load Meters refresh speed | | Verify that the medium refresh speed results in the load meters being refreshed about every second | Pass | Alvaro | n/a | | n/a | | |
| 11.15 | Load Meters fast refresh speed | Change the refresh speed to fast | Verify that the load meters are refreshed more quickly | Pass | Alvaro | n/a | | n/a | | |
| 11.16 | Load Meters slow refresh speed | Change the refresh speed to slow | Verify that the load meters are now refreshed slower than they were at medium speed | Pass | Alvaro | n/a | | n/a | | |
| 11.17 | Disabling load meters | Disable the load meters thought the context menu | Verify that the load meters disappear and that the refresh speed sub-menu is no longer present | Pass | Alvaro | n/a | | n/a | | |
| 11.18 | Re-enable the load meters | Re-enable the load meters | Verify that the last selected refresh speed is still being used | Pass | Alvaro | n/a | | n/a | | When terminating a session, the multicore visualizer stays visible and its menu is still enabled |
| 11.19 | MV view cloning | Use the "clone view" button to open another instance of the MV View | Verify that the new MV View displays the same thing as the original one. You may have to select something in the debug view for the new view to start displaying something. | Pass | Alvaro | n/a | | n/a | | |
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| **12** | **GDB Hardware Debugging** | | | | | | | | | |
| 12.1 | Perspective switch | Launch a GDB Hardware debug session | Verify the perspective is changed to the Debug perspective | To do | | To do | | To do | | |
| 12.2 | Debug session | Inspect Debug view | Verify there are nodes for the launch, the process, threads and stack frames, and one gdb node | To do | | To do | | To do | | |
| 12.3 | Console selection | Select the 'gdb' node in the Debug view | Verify the gdb console appears in the console view | To do | | To do | | To do | | |
| 12.4 | Stepping | Press the different stepping buttons | Verify stepping works as expected | To do | | To do | | To do | | |
| 12.5 | Stepping | Activate instruction stepping mode | Verify instruction stepping works as expected | To do | | To do | | To do | | |
| 12.6 | Resume | Press the resume button while a thread is stopped | Verify resume works as expected | To do | | To do | | To do | | |
| 12.7 | Suspend | Press the suspend button while a thread is running | Verify suspend works as expected | To do | | To do | | To do | | |
| 12.8 | Breakpoint interrupt | While the target is running, set a breakpoint | Verify that the target is temporarily interrupted to set the breakpoint and then resumed | To do | | To do | | To do | | |
| 12.9 | Breakpoints | Add breakpoint | Verify breakpoint added correctly | To do | | To do | | To do | | |
| 12.10 | Breakpoints | Remove breakpoint | Verify breakpoint removed correctly | To do | | To do | | To do | | |
| 12.11 | Run-to-line 1 | Select a line in the current method and press Ctrl-R | Verify execution continue until that line | To do | | To do | | To do | | |
| 12.12 | Run-to-line 2 | Select a line in a different method and press Ctrl-R | Verify execution continue until that line | To do | | To do | | To do | | |
| 12.13 | Registers per stack frame | Make sure there are more than one stack frames visible | Verify that at least the stack pointer register changes depending on the selected stack frame | To do | | To do | | To do | | |
| 12.14 | Variables view | Look at variables view | Verify local variables are displayed for current frame | To do | | To do | | To do | | |
| 12.15 | Variables view update | Change stack frame in debug view | Verify local variables are displayed for new frame | To do | | To do | | To do | | |
| 12.16 | Expressions view | Create a valid expression in the expressions view | Verify expression value is shown for current frame | To do | | To do | | To do | | |
| 12.17 | Expressions view update | Change stack frame in debug view | Verify expression value is updated (to maybe an error) for the new frame | To do | | To do | | To do | | |
| 12.18 | Registers view | Look at Registers view | Verify registers are shown with their values | To do | | To do | | To do | | |
| 12.19 | Memory view | Add a memory monitor | Verify the memory corresponding to the monitor is shown | To do | | To do | | To do | | |
| 12.20 | Memory Browser view | Put an address in the address box | Verify the memory corresponding to the address is shown | To do | | To do | | To do | | |
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| **13** | **Dynamic-printf** | | | | | | | | | |
| 13.1 | Local dprintf | Launch a local debug session with one process | Verify session started | Pass | Marc Khouzam | | | | | |
| 13.2 | Breakpoint | Double-click on editor margin to set a normal breakpoint | Verify a normal breakpoint is set | Pass | Marc Khouzam | | | | | |
| 13.3 | Dprintf | Right-click on Editor margin and choose "Add Dynamic-printf..." | Verify a dialog pops up asking for details for a dynamic-printf (check title) | Pass | Marc Khouzam | | | | | |
| 13.4 | Dprintf | Fill dialog and press ok | Verify a dynamic printf is created with its proper icon in the editor margin | Pass | Marc Khouzam | | | | | |
| 13.5 | Dprintf2 | Create another dprintf | Verify proper creation | Pass | Marc Khouzam | | | | | |
| 13.6 | Printing | Resume program past both dprintf | Verify both dprintf are printed to the processes console in Eclipse | Pass | Marc Khouzam | | | | | |
| 13.7 | Delete dprintf | Delete one of the two dprintf | Verify dprintf is removed | Pass | Marc Khouzam | | | | | |
| 13.8 | Terminate | Terminate debug session | Verify session is properly terminated | Pass | Marc Khouzam | | | | | |
| 13.9 | Launch with dprintf | Launch a local debug session with one process in non-stop mode | Verify the one dprintf is created properly at startup | Pass | Marc Khouzam | | | | | |
| 13.10 | Multi-process | Start a second instance of the same process | Verify both instances are being debugged | Pass | Marc Khouzam | | | | | |
| 13.11 | Printing first | Resume first program | Verify dprintf is printed to the console of the first process in Eclipse | Pass | Marc Khouzam | | | | | |
| 13.12 | Printing second | Resume second program | Verify dprintf is printed to the console of the second process in Eclipse | Pass | Marc Khouzam | | | | | |

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| 13.13 | Dprintf breakpoint type | Launch a local debug session with one process | Verify session started | Pass | Marc Khouzam | | | | | |
| 13.14 | Dprintf breakpoint type | Right-click on Editor margin and choose "Breakpoint type -> dynamic printf" | Verify the menu option for Dynamic-printf is present | Pass | Marc Khouzam | | | | | |
| 13.15 | Dprintf breakpoint type | Double-click on editor margin multiple times to set some dprintfs | Verify dynamic printfs are created with the proper icon and default string in the editor margin | Pass | Marc Khouzam | | | | | |
| 13.16 | Dprintf disassembly view | From the disassembly view margin, set a dprintf using "Add Dynamic-printf..." | Verify dprintf is installed properly | Pass | Marc Khouzam | | | | | |
| 13.16 | Dprintf disassembly view | Using the dynamic-printf bp type, set disassembly view dprintf | Verify dprintf is installed properly | Pass | Marc Khouzam | | | | | |
| 13.17 | Dprintf disassembly view | Resume program past all dprintf | Verify dprintf is printed as expected | Pass | Marc Khouzam | | | | | |
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| **14** | **Return values** | | | | | | | | | |
| 14.1 | Preparation | Launch a local debug session | Verify session started | Pass | Marc Khouzam | | | | | |
| 14.2 | Method returning void | Step into a method that returns void and then step-return | Verify the variables view shows the expected variables and nothing about return values | Pass | Marc Khouzam | | | | | |
| 14.3 | Method returning something | Step into a method that returns something and then step-return | Verify the variables view shows first the return value properly labelled, then the expected variables | Fail | Marc Khouzam | | | | | The return value is not shown if the return location has a breakpoint on it. Bug 468371 |
| | | | | | | | | | | |
| **15** | **Multi-sessions** | | | | | | | | | |
| 15.1 | Preparation | Launch a local debug session | Verify session started | Pass | Marc Khouzam | | | | | |
| 15.2 | Breakpoints | Set breakpoints | Verify breakpoints are set on target | Pass | Marc Khouzam | | | | | |
| 15.3 | Second session | Launch a second local debug session using a different binary | Verify breakpoints are properly set in GDB (they should be PENDING) | Pass | Marc Khouzam | | | | | |
| 15.4 | Breakpoints | Set a breakpoint for the second session | Verify breakpoint gets set on target of second session | Pass | Marc Khouzam | | | | | |
| 15.5 | Third session | Launch a third session using the same binary as either previous sessions | Verify breakpoints are properly set on target during launch with the proper ones not PENDING | Pass | Marc Khouzam | | | | | |
| 15.6 | Debugging | Perform some stepping and resuming | Verify expected behaviour and breakpoints being hit | Pass | Marc Khouzam | | | | | |
| | | | | | | | | | | |
| **16** | **Project-less execution** | | | | | | | | | |
| 16.1 | Project-less Debug | Create a local debug configuration and leave the project field empty and the binary with an absolute path outside the workspace | Verify that the debug session can be launched and that the selected binary on the filesystem is debugged and the source code shown | Pass | Marc Khouzam | | | | | |
| 16.2 | Project-less Run | Open Run Configurations and select the project-less debug configuration created above. | Verify that the configuration is valid in Run mode and that the project-less app can be launched as expected | Pass | Marc Khouzam | | | | | |
| | | | | | | | | | | |
| **17** | **Exited processes** | | | | | | | | | |
| 17.1 | Preparation | Start a debug session with 4 or more processes | Verify the debug session is ready | Pass | Marc Khouzam | | | | | |
| 17.2 | Exited process using terminate | Terminate process 1 by pressing the terminate button | Verify the process is shown as exited in the debug view and that its console is still present | Pass | Marc Khouzam | | | | | |
| 17.3 | Exited process using disconnect | Terminate process 2 by pressing the disconnect button | Verify the process disappears from the debug view and that its console disappears | Fail | Marc Khouzam | | | | | The process disappears but the console remains and is marked <terminated>. Bug 468376 |
| 17.4 | Exited process on its own | Let process 3 run to completion | Verify the process is shown as exited in the debug view and that its console is still present and that its exit code is shown in both the debug view and console title | Pass | Marc Khouzam | | | | | |
| 17.5 | Terminate exited process | Press terminate on exited process 1 | Verify the exited process and its console disappear | Pass | Marc Khouzam | | | | | |
| 17.6 | Disconnect exited process | Press disconnect on exited process 2 | Verify the exited process and its console disappear | Pass | Marc Khouzam | | | | | |

# CDT Testing 8.7.0 - Bug Reports

| | Section | | # Bug Reports | # Open | # Fixed | # Regressions |
|---|---|---|---|---|---|---|
| | Bug Reports | | 2 | 2 | 0 | 0 |
| | | | | | | |
| **Test Case** | **Bug Number** | **Title** | **Link** | **Status** | | **Regressions** |
| 14.3 | 468371 | Return value of method not shown if step-return ends up on a breakpoint | http://eclip.se/468371 | Open | | no |
| 17.3 | 468376 | Inferior console not removed when disconnecting from a process | http://eclip.se/468376 | Open | | no |