IDE 4.6#

IDE is an acronym which stands for Integrated Development Environment and a short form for the QNX Momentics IDE. The IDE is based on Eclipse and CDT (open source projects). It provides a Graphical User Interface for developing applications for the Neutrino Real Time Operating System (RTOS). The IDE runs on Windows and Linux hosts, uses cross-platform compilers for Neutrino, and supports "target machine" management with remote running and debugging of applications.

This page is for experimental drops of release for IDE 4.6. You can play with this version of IDE after you install one of the IDE 4.6 integration builds. We welcome your suggestions for improvement.

- Check out What is New in IDE 4.6 page to see what new feature and enhancements are implemented in IDE 4.6. For detailed change log see below..
- Download one of the IDE integration builds
- Read Installation Instructions, if you installing or updating for the first time.
- Use the IDE Forum for discussions about the IDE, and to post your questions, comments, and suggestions.

Maintenance builds 6.4.1#

Maintenance build 200912161235 Download#

Code Coverage

- [73332] Makefile Code Coverage Project causes Error Messages

Maintenance build 200910141216 Download#

Project and Build

- [71898] Adjusting linker/compiler properties moves user data in common.mk

Maintenance build 200909010959 Download#

Project and Build

- [70339] Need a way to override workspace-wide default compiler settings

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GA Release build 200905101800 Download#

Update site is available for this build at https://www.qnx.com/account/updates/foundry27/ide/4.6/. This update site can ONLY be used to update from earlier versions of IDE 4.6 or from non qnx eclipse based product (based Eclipse 3.4.2, must use old update manager).

Disclaimer: Officially support IDE 4.6 GA can be installed only as part of QNX Software Development Platform 6.4.1. Everything downloaded from this web-site considered experimental.

New & Noteworthy for Older Builds#

Release Candidate build 200904291800 Download#

Application Profiler

- [66621] Application profiler and system profiler display very different times for threads
- [66259] Application Profiling Resume function not enabled when profiling is paused
- [66253] App Profiler creates unvalid setting if session view previously not open
- [67248] App profiler trace log does not support multiple cpu
- [66581] QPROF_SIG_STOP_PROFILING usage
- [62785] Wrong times used for multiple threads in app profiler

Project & Build

- [45556] Build incorrectly works from project properties if project has dependencies
- [66410] C++ Code completion works erratically.
- [65676] error message when importing 632 workspace
- [65353] Error message when managed static lib project changed to shared lib or executable project
- [66888] Error while indexing of C++ projcts (Stack Overflow)
- [65056] IDE should support headless builds (command line)
- [67814] Invalid warning for non-qnx projects
- [55044] Managed project for QNX chain missing soname flag
- [65794] Qnx Project alters common.mk in bad way
- [58349] [qnxproject] No user feedback when build failed due to permission problems
- [64784] [qnxproject] Qnx project should not force compiler version if default compiler is selected
- [67627] Regression: NPE in converting QNX Project to CDT Managed Make
- [67605] temp files visible and "Unresolved inclusion" on a default qnx cpp project
- [63775] TicketID86194 - IDE 4.5 exception when importing
- [59664] Updating compiler version in properties does not change common.mk GCC_VERSION field
- [61935] Unable to edit build container configuration for a container project that contains deleted projects
- [63785] Importing container projects is 20times slower compared with IDE 4.0.1

Code Coverage

- [67822] Code Coverage options panel problems
- [67717] Code Coverage sample code and cheat sheet should direct user to use command option for different client run action
- [67041] Code Coverage settings in launch configurations are not preserved
- [67349] Coverage data not collected in IDE 46 when used on 640 platform
- [66326] Error message and no data when Code Coverage collected on QNX CPP project and some C project
- [67811] [Examples] Inaccuracies in Code Coverage Cheat-sheet
- [66926] Problem with combining Code Coverage sessions
- [60601] Sources not checked when additional projects referenced and included in Code Coverage tool
- [67062] Ugly error when expanding children in Unfinished Code Coverage session

Debug

- [66455] Shard Libraries Auto button problem in Debugger launch configuration

General

- [66467] for multicore (SMP) system, CPU identification should be consistent
- [67719] IDE hangs when TFSN view is open
- [67064] IDE Welcome screen naming/branding and getting started guidance
- [67227] Need to properly qualify CDT plugins version we build
- [67772] Packaged qconn updates for IDE 4.6

- [67512] QCONN use file contains spelling mistakes and inconsistencies
- [63675] Support for 6.3.2 workspace upgrade

Memory Analysis

- [66929] CR: Ability to turn enable/disable memory tracing
- [44867] MAT - Running Session Settings - all buttons appear disabled If all settings are disabled
- [66272] Memeroy Analysis - Memory Leak not detected
- [67923] Memory analysis cheat sheet refers to non-existent binary
- [66481] Numerous errors with Memory Analysis on shle
- [66710] Performance problem/crash with memory analsyis
- [66692] REGRESSION: No back trace for leaks
- [64150] Supports file transfer using internal memory buffer in qconn instead of file
- [55252] Wrong trace count in Statistics

Package Import & System Builder

- [64039] Binary narrowing in system builder does not work
- [47852] BSP build problems
- [45597] disabling console auto-clear preference breaks build
- [67407] New Package import - Support import from local archive
- [66345] system builder changes for ppcbe-spe architecture needed
- [67289] System Builder doesn't produce proper permissions in efs image
- [56400] IDE Error Log does not show any errors for importing BSP
- [67338] SVN Repositories view - if you select a Foundry27 repository and cancel authentication, UI becomes confused

Target tools

- [43073] Target creation should use name as target connection
- [67373] Run file from TFSN does not work
- [67036] APS view generated "ArrayIndexOutOfBounds" exception
- [66426] Attach to a process does not refresh process ids
- [67385] Cut & Paste in file system navigator does not work
- [61637] history logs don't appear in navigator without manual refresh
- [67056] NPE thrown when Momentics is shutdown and any System Information related view is open
- [43231] qconn update message confusing
- [67092] Rename operation fails in Target File System Navigator
- [66491] system resources - CPU graph, drop to zero on right looks odd
- [61034] System Summary view should indicate that Target Navigator view is required for operation
- [61650] Target Navigator confused about displaying zombie processes
- [42656] The APS view's CPU usage chart is misleading
- [63788] TicketID86335 - System information perspective inconsistent across views

System Profiler

- [66477] Backtrace view sometimes shows no stack
- [21013] event owner statistics view should allow configuration of owners
- [47057] filter view - events pane should start with all events selected
- [67019] Loading kernel trace uses more memory in IDE 4.6 than it did in IDE 4.5
- [67132] New slog kernel event is mislabelled in System Profiler
- [67129] New System Compaction event type added
- [66264] qconn trace collection threads always priority 16 & 17
- [47440] Saved Filters - indication of which are/have been active
- [21572] Selected event owners filter has no effect
- [**67115**] System profiler cannot open large kev files (>100Mb)

- [43774] System Profiler Filter dialog is not updated
- [67495] Trace Event Log view is unfiltered if IDE is opened and trace file and log view are automatically opened

Integration build 200904021900 Download#

Application Profiler

- 66249 App Profiler shows extra (hidden) icons in Execution Time view when Comparing Profiling Sessions
- 66218 App Profiler shows incorrect percent time in diffs
- 66212 IDE hanging while trying to display time view for complex program

Code Coverage

- 60457 No Code Coverage data for non-terminating or user-terminated programs
- 25391 clear code-coverage markers on editor close

Project and Build

- 66539 C Projected export in IDE 4.5 doesn't import properly in 4.6 (no includes)
- 66269 Project Explorer View missing C Projects when Importing Existing Projects from ZIP Archive
- 65672 properties in Options not preserved (enabled or selected)
- 64901 NPE when converting a plain project to C project
- 64573 NullPointerException when creating Makefile project when default option for toolchain accepted (QNX toolchaian not selected by default)
- 64170 IDE should ignore hidden directories under etc/qcc
- 63239 Convert General project to C/C++ Make Project does not convert properly
- 61575 core file not identified with different icon in Project Explorer
- 59169 Advanced project properties dialog problem with EXTRA_SRCVPATH
- 58883 Some new page "Service Category" in managed project settings that does not have any content is making target architecture and compiler type more obscure; it broke automated regression for managed projects as well
- 58801 No user diagnostics if error happened when project is created
- 56529 Missing extra source paths
- 55044 Managed project for QNX chain missing soname flag
- 53328 QNX project: bad diagnostic if referencemacro in common.mk is wrong
- 42286 Inconsistent tab switching buttons.
- 66083 Various warnings when using 450 workspace in M3 build
- 50397 Build error when you import project that has all targets selected into Momentics IDE that supports only x86
- 42218 Some minor layout problem in Build Variance tab of QNX C Project Wizard

Debug and Launch

- 64705 Dissassembly View - missing functionality after CDT upgrade (updown arrows and menu icons)

Misc

- 66779 When QNX* env vars are not set, IDE closes workbench without asking user permission
- 66484 Qnx Sample projects wizards should have location and working set fields
- 66058 Exception occurs when modifying the workspace for the first time (e.g. creating a project, deleting a file)
- 65344 The same 'Software Updates' menu item under Help found twice
- 65051 Update svn plugin to version 1.5

- 63878 SRM7058.015.05: IDE splash screen shall show IDE version number and appropriate QNX SDP 6.4.1 branding.
- 63072 IDE now properly shows Neutrino O.S. documentations when switching to different Momentics installation.

Memory Analysis

- 66344 Memory Analysis Session view components showing different data
- 65912 MAT opens wrong file when project is linked outside of workspace
- 46397 Usability: MAT Session View icons

System Builder and Source Import

- 66494 F27 Integration - Need to re-factor BSP project checkout and creation process
- 49632 Misleading Messages in IDE Combine Image Dialog
- 60379 Support individual search path for files
- 53981 System builder should support adaptive partitioning
- 47284 dialogues missing titles in title bar - blocks GUI automation
- 20866 [prefix] label not honoured in mkifs import

System Information

- 63313 Some APS tabs are not refreshed after target reboot
- 61691 Error message that APS is not available on target when APS view not showing when APS is actually available
- 44653 APS - Partition Child Processes and Threads pane - cannot expand the partition info
- 61034 System Information views show message about they requires the Target Navigator view to be open and an object is select in the Taget view in order to get live data

System Profiler

- 66941 Address translation does not work in libs
- 66936 Binary showing twice in Binary Mapping of the Address Translation
- 66465 Trace settings - method, not good name, also specify units
- 66333 Cannot open .kev file after export

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System Profiler

- 64975: The filters view now appears by default in the System Profiler perspective
- 64748: The labels for statistics in the System Profiler Summary pane have been cleaned up to clarify their meaning
- 63870: Library load addresses for address translation now have the option to be auto-discovered from the log file. When kernel logging is used in conjunction with a c/c++ launch and the application profiler tool, address translation for the generated kernel trace will have address translation working without user intervention
- 63871: The Filters view now supports partition-based filtering
- 63872: The General and Event Owners Statistics views can now have their results filtered
- 63873: The Partition Summary pane now supports filtering its statistics based on a time range selection
- 63066: Cleaned up the System Profiler editor context menu to only show relevant menu items
- 64922: System Profiler now supports the new NTO_TRACE_SYS_FUNC_SLOG event type
- 65322: The Thread Snapshot view has been updated to support multiple selection and the display of multiple states in the threads table
- 65345: Fixed an error that occurred when closing the System Profiler editor with the Thread Call Stack view opened

- 64531: Thread running events are now recorded in wide mode by default for new kernel trace log launch configurations
- 64745: The user is now prompted to switch to the System Profiler perspective when opening a kernel trace. This option is configurable through the System Profiler preferences
- 63337: The user is now warned to re-open their editor when making modifications to address translation
- 41668: Stacked area charts now correctly fill the complete chart
- 64747: Fixed an issue which was causing y-axis chart labels and grids to be misaligned with the chart data
- 65532: Updated the address translation binary selection dialog to provide an improved list of found binaries. Additionally, users can now manually provide a binary name when their binary is not found
- 64087: Address Translation's 'pidin mem' import now allows you to only import binaries that are contained within the defined binary search paths
- 63754: Import into Application Profiler action and wizard wording needs to be cleaned up
- 65345: The user can now set the default pane that opens when opening a kernel trace
- 65633: Fixed an issue where the Timeline was reporting a negative selection range when first opening a kernel log

Application Profiler

- 65387 Out of bounds exception when import .kev file into App Profiler
- 65349 When loading from .kev file app profiler cannot resolve library events
- 65252 Missing diagnostics when .kev file does not contain profiling events
- 65209 Import from .kev file creates empty session (mismatched binary)
- 65208 Import from file system does not work in app profiler
- 63754 Import into Application Profiler action and wizard wording needs to be cleaned up
- 62785 Incorrect aggregation for multiple threads
- 62784 App Profiler does not show thread names when loaded from .kev file
- 62735 Functions that do not have children missing self node
- 61889 "Show own tinme as a node" option does not work
- **60881** Incorrect percent (499.99%) for called function in Application Profiler session created with Call Count Instrumentation

Debug & Launch

- 64247 Attach launch, select process dialog - missing "type filter" prompt text
- 62992 Made QNX Toolchain the default preferred toolchain
- 60458 qconn needs devc-pty, needs diagnostics if it is not running
- 52681 Added feature to jump to source code from disassembly, which together with Goto Address function gives address to source capability,
- 24814 Launcher, Auto button: Need a message for not finding any libs

Memory Analysis

- 64182 Import dialog should have workspace browse
- 64149 Shared Library tab of launch configuration does not work properly
- 57650 MAT - Bins Counters To Be Traced can not be cleaned for second launch in Launch Config - MAT - Memory Snapshots, after been specified ones
- 46386 Usability: Allocations page - Event table issues

System Information & Target Tools

- 63377 Target navigator uses consistent icon for refresh off following rest of UI design
- 64116 Added tooltip text to the scroll lock icon on the Malloc Information view
- 65370 Target file system navigator does not copy more than one file properly
- 65347 Copy files from Target project into target directory fails
- 12506 Added the ability to open remote non-executable file in the Target File System Navigator editor upon double clicking the file name

System Builder

- 63430 IDE source import wizard now provides error messages when there is invalid project definition file (module.tmpl)

Code Coverage

- 60564 Fixed the issue of wrong source path on Linux in generated code coverage report

Momentics example & configuration

- 61794 Cheat-sheet now launches automatically after example project is created
- 62936 Made sure only one project per one example can be created to avoid missed configuration with duplicated projects
- 63875 Setup IDE 4.6 specific workspace and configuration area so that it can co-exist with the other IDE releases
- 65007 Fixed latest update site issue

CDT

- 23596 Indexer supports macros indexing thus search for macros now works
- 28687 New code template in preference where you can define a wide variates of custom templates
- 50023 New implementation of the folding settings in the Preference -> C/C++ -> Editor -> Folding, where you can define the code folding for different sets of types.

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System Profiler

- 62651: The System Profiler toolbar now provides a menu to edit the timeline event label properties
- 62764: The Partition Summary Element table in the APS Summary pane now displays both thread and process information as a tree (the previous implementation showed a flat list of threads)
- 63302: Fixed an issue where the System Profiler menus were incorrect on Linux
- 63750: The timeline can now show event label data for address translation related fields. Additionally, the format of the timeline event label is configurable.
- 64086: When working with address translation binary paths you can now remove and reorder multiple paths at the same time
- 64577: Toggle labels button in the toolbar can now be used to enable all or disable all labels without having to use a submenu

System Information

- 37587: Usage view now displays an additional column showing process cpu usage as a percentage against non-idle time
- 63301: Partition child process and threads tree in the APS view now stays expanded when the view is refreshed
- 64545: IDE become unresponsive when copying file using Target File System Navigator

Debug & Launch

- Added option to pick Debug shared library path directory from workspace and remember last pick
- 60661 Allow to specify "partition" (APS) in launch dialog for launched process
- 45543 Support multiple program launch is added. You can now create a launch configuration that launches several processes.

C/C++ Development

- 64030 : Makefile projects do not build with IDE 4.6.
- 53854: Changing Compiler Optimization level removes some spaces in common.mk.
- 50397: Build error when you import project that has all targets selected into Momentics IDE that supports only x86.
- 63731: IDE does not respect macros with '_ at the end.
- 63606: Managed make projects do not clean build configurations variants.
- 64293: Discovery doesn't work for regular make project.
- 63965: Format of ICC messages was updated.
- 63926: Many NPEs while closing IDE on big WS.
- 65154: IDE blocked while importing non-converted (IDE4.1) container
- 61275: Check Dependencies for header files does not work when you build before option is set (subsequent builds will not check for dependencies)
- 65786: qnx project adds some variables into common.mk which makes build to fail

Memory Analysis & Error Detection

- Added new Feature - Mudflap visualization tool. Mudflap is a tool (gcc instrumentation) that allows to catch runtime errors such as buffer overflows, bad free. etc. To see full error backtrace you need also apply mudflap library patch on targets (mudflap only available staring from 6.4.0)
- 52701 Memory analysis filter extended to support pointer values, which now can act as "search" for specific events
- 43834 Memory analysis now show allocation backtrace for error that has them

System Builder

- 63988: Cannot pre-set permission 777 on a script destined for /proc/boot
- 62063: Null pointer exceptions when saving project.bld
- 64098: In add host directory dialog wrong error processing.

Application Profiling

- 65081: Annotated source editor font problem - now using default Text font (instead of system font)
- fixed several bugs with diagnostics when importing data from .kev file

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- Fixed plugin dependency which prevented update manager from working
- **63965** Added support for error messages in new ICC compiler
- **38757** In launch, debug->shared library added an options to pick path from workspace
- 62063 Null pointer exceptions when saving project.bld
- 62657 System Information does not work properly when running with MAT enabled (new qconn patch posted)
- 63988 Cannot pre-set permission 777 on a script destined for /proc/boot
- 63276 function instrumentation -- add binary interface should have browse
- 63017 Indistinguishable binary paths in address translation properties
- 62677 wrong data in TimerTimeoutEnter event
- 63731 IDE does not respect macros with '_ at the end.
- 53854 Changing Compiler Optimization level removes some spaces in common.mk
- 50397 Build error when you import project that has all targets selected into Momentics IDE that supports only x86
- 63606 Managed make projects do not clean build configurations variants
- 63751: Importing a kernel trace into the Application Profiler now considers the time range selection and only imports the range you have selected

- 63752: Address Translation properties can now be set for a given kernel logging launch configuration. Any kernel traces created using the launch configuration will have its address translation properties appropriately set. The global address translation preferences are now properly supported.

Integration build 200812082000 Download

- Eclipse 3.4.1 included
- CDT 5.0.2 included
- All bug fixed in IDE 4.5.1 included