This FAQ is for QNX Momentics IDE 4.x.

What is the IDE?#

The IDE is an acronym for Integrated Development Environment.

Where does the IDE store user data?#

- In the configuration area: on Windows it is located at C:/Documents and Settings/<user>/ momentics, and on Linux it is /home/<user>/.momentics.
- The workspace folder (user specified): the default location on Windows is C:/ide-4.6-workspace, on Linux it is /home/<user>/ide-4.6-workspace.
- The IDE does not write anything to the Windows registry

Where is the log file?#

The log file is very useful for troubleshooting. It contains error messages that the user won't see in IDE itself, or it contains more detailed messages than what appears in the IDE. The log file is located in workspaces/metadata/.log. If it is not there, it means that the IDE did not start. In this case, a log is created in the configuration area, see above topic called "Where does the IDE store user data?". If you still can't locate the log file, you can start qde the with the -consolelog option, which will output the log to the console.

Where is the IDE installed?#

Typically, the IDE is installed in \$QNX_HOST/usr/qde/eclipse, i.e. "/opt/qnx640/host/linux/x86/usr/qde/eclipse" on Linux. For Linux, the qde launcher installs it in \$QNX_HOST/usr/bin/qde (which should be in your PATH). For Windows, you can use the launcher directly from the Eclipse folder, i.e \$QNX_HOST/usr/qde/eclipse/qde.exe. If you install a standalone IDE, it does not record its location anywhere, so you have to remember it (or search for qde).

Can the IDE work from a read-only installation?#

Yes, as long you create your workspace outside of the installation folder. For additional information, see the topic, "Where does the IDE store user data?".

The IDE does not start. Help!#

The reasons why the IDE doesn't start might include the following:

- A corrupted Installation Check the log file for the message, "Cannot load bundle".
- A corrupted configuration area You can remove this directory and try to restart the IDE again. For additional information, see the topic, "Where does the IDE store user data?".
- Incorrect permissions for the configuration area.
- Incorrect permissions for the <workspace> folder.
- A corrupted <workspace> folder. Try to start in another workspace. For information about changing workspaces, see the topic, "How do I switch workspaces?".
- Incorrect environment variable settings. For information about environment variables specific to the IDE, see the topic, "Which environment variables does IDE use?"

How do I switch workspaces?#

Typically, the IDE prompts you on startup for the location of the workspace. You can switch it from the IDE by selecting "File->Switch Workspace".

If you want to have a prompt on startup (and you previously disabled it by selecting "Do not show me this dialog again"), select "Window->Preferences", expand "General->Startup and Shutdown", and then select "Prompt for workspace on startup".

To choose a different workspace on startup from the command line, use the "-d" option from the "qde" launcher (or shortcut), or edit the file qde.ini in the IDE installation, and add it before -vmargs. (Note: The qde launcher on Linux does not pass arguments to the Eclipse launcher; you should edit qde.ini in this case.)

The IDE starts but I get licensing errors when trying to open any QNX perspective or when creating projects. I check the license and it is valid!#

For Linux:

The IDE should have LD_LIBRARY_PATH set for the location containing the license library. If you use the usr/bin/qde script, it automatically sets it for you; otherwise, you'll have to set it from the command line: (IDE 4.0.x) export LD_LIBRARY_PATH=\$QNX_HOST/usr/bin:\$LD_LIBRARY_PATH (IDE 4.5.x) export LD_LIBRARY_PATH=\$QNX_HOST/usr/lib:\$LD_LIBRARY_PATH

For Windows:

Ensure that "%QNX_HOST%\usr\bin" is included in the %PATH% environment variable. To verify where it appears in the \$PATH variable, use the following command in a Windows command prompt: set %PATH%

Why am I unable to connect to my targets?#

For Linux: Disable "SELinux" if it is currently enabled.

- Configure SELinux by launching "Desktop"->"System Settings"->"Security Level".
- Click the SELinux tab, deselect "Enabled", and then reboot your system.

For Windows: Check your outbound firewall settings.

Ensure that the targets are not on a protected network.

Ensure that the targets are running services that you are expecting to connected to, i.e. for the IDE, it should run "qconn", for ftp - ftpd, for telnet - telnetd, for ssh - sshd, etc. Each of them has its own security settings that might prevent you from accessing them, and may run on a different port than expected.

Which environment variables does the IDE use?#

(A 6.4.1 example)

QNX_CONFIGURATION=/etc/qnx QNX_HOST=/opt/qnx641/host/linux/x86 QNX_TARGET=/opt/qnx641/target/qnx6 PATH=\$QNX_HOST/usr/bin:\$PATH MAKEFLAGS=-I\$QNX_TARGET/usr/include

Note: The qde script located in \$QNX_HOST/bin/qde also uses the QNX_HOST environment variable. To run specific IDE targeting that is different from the default one for the Momentics platform, you need to call the qde binary directly. For this case, LD_LIBRARY_PATH has to be set as well. For information about setting this variable, see the topic, "The IDE starts but I get licensing errors when trying to open any QNX perspective or when creating projects. I check the license and it is valid."

How do I update the IDE?#

You can use the official update site, which is included with the IDE (select "Help->Find and Install...->Search for new feature to install", choose "QNX Momentics Update Site", and then click "Update".)

There is also an unofficial "experimental" update site that contains pre-release and maintenance bug fixes (updated monthly). The IDE 4.6.x location for this site is "https://www.qnx.com/account/updates/foundry27/ide/tau/" - you have to create a New Remote update site on the dialog above to add this update site to a list of update sites.

How do I integrate SVN into the IDE?#

IDE 4.6 includes preinstalled SVN plugins. To install SVN support in 4.6.x, you can use the Subversive plugins for Eclipse 3.3. See http://www.polarion.org/index.php?page=download&project=subversive

What are the target connectivity options I have?#

- Using TCP/IP and qconn it provides a full set of remote target management tools
- Using Serial and qconn you can use the debugger, remote terminal, and file transfer via terminal
- Using JTAG you can use the debugger if the JTAG device supports gdb server. Besides the debugger, you can access the Memory view, Registers view, and perform other JTAG device-specific commands.
- Using a USB stick (basically, any other non-direct file transfer) most of the IDE tools support postmortem mode where you can import data transferred by using other media.

Can the new IDE work with older targets (i.e. IDE 4.6 on target running 6.3.2)?#

Yes. However, in order to have full IDE functionality, you may need to install some target patches, such as quon and libricheck (libmalloc).

For IDE 4.5.x, download 6.3.2 Patches for IDE 4.5.x.

Can the new IDE work with older Momentics tools (i.e. IDE 4.6 with a host installation of 6.3.2)?#

Yes. You can set your environment to work with an older version and invoke the new IDE using the absolute path, or from a shortcut. But to have full IDE functionality, you need to install some host patches, such as doc plugins, libprofilingS.a, qconn. Download <u>6.3.2 Patches for IDE 4.5.x</u>.

Can I have two versions of Momentics installed on the same host and switch the same version of the IDE between them?#

Yes. You can set environment variables to point to different Momentics installation; however, you SHOULD NOT use the same workspace. If you do, make sure of the following:

- In "Window->Preferences->QNX", ensure that the selected Momentics installation matches your environment (the IDE remembers it from the workspace, not from the environment variables)
- When you update the IDE from the update site, make sure you select the correct installation location for your plugins. Also, never try to switch between two different versions of the IDE (i.e. IDE 4.0 and IDE 4.6) using same workspace. You can only "up-convert".

What is qconn?#

qconn is target agent (process) that must be running on the target. It allows the IDE to launch a processes on the target, browse the filesystem, and receive target information. Without it running, you can't do any target-related tasks in the IDE (but you can perform host-related task, such as Edit Code and Build).

How do I update qconn?#

The qconn binary should be on your target machine, but if you are building OS images, it has to be on your host machine. When you update the IDE to a new version, it has a qconn update as well, but you have to manually install it (Help-->Software Updates-->Qconn Update). This update only installs the qconn update on the host, and only if it is a newer version. Alternately, you can download it from the Foundry (<u>latest qconn patch for Momentics 6.3.2</u>).

Once you install it on the host, you have to update all your targets either by uploading a new version and storing in /usr/sbin/qconn (the usual place) and re-starting the process, or updating the target OS images and rebooting.

What should be installed/running on the target so the IDE can communicate with it?#

1) qconn - main target agent, running, nothing would work from the IDE without it (unless you are using JTag) 2) dev-pty - running 3) pdebug - target debug agent, you cannot remotely debug without it. It does not have to be running, just be in the PATH, accessible to qconn. 4) librcheck.so or libmalloc_g.so - runtime library for the Memory Analysis tool 5) some sort of filesystem driver if you're planning to use any of the IDE tools; they usually need to create temporary files 6) serial driver or network drivers so the IDE can communicate

How to Troubleshoot?#

- Option 1: Look at the IDE log file, <workspace>/.metadata/.log. It contains exceptions recorded during execution. Occasionally, it contains information that might answer your question.
- Option 2: Search the internet. You'll likely encounter an answer on the QNX forum, CDT forum ,or Eclipse forum.
- Option 3: If option 1 and 2 did not help, post a message on the IDE forum

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