

QNX® 4 Product Suite 2010 Experimental Release Notes#

The QNX 4 Product Suite 2010 is available for a beta testing as Experimental Release.

What's new in this product suite?#

The QNX 4 Product Suite 2010 includes the following new drivers and components:

QNX 4 USB Stack 2.0 components:

- *io-usb*
USB stack; includes support for the OHCI, UHCI and EHCI chipsets
- *io-usb-ehci*
Tiny USB stack; includes only support for the EHCI chipsets
- *Fsys.umass*
USB mass-storage class driver
- *devu-kbd*
USB keyboard class driver
- *devu-mouse*
USB mouse class driver
- *devu-prn*
USB printer class driver
- *usb*
USB status utility; displays USB device information

Drivers for USB touchscreens:

- *devu-egalax*
Driver for EGALAX USB touchscreen controllers
- *devu-elo*
Driver for Elo USB touchscreen controllers
- *devu-microtouch*
Driver for Microtouch SC USB touchscreen controllers
- *devu-touchintl*
Driver for Touch International DMC TSC-10 touchscreen controller
- *calib*
New calibration utility

TCP/IP 5.1 product:

- *TCP/IP 5.1 components*
Package with TCP/IP 5.1 components is included to the CD

Other changes include:

- *boot*

Calculates CPU frequency correctly.

- */etc/config/traceinfo*
Updated to support new trace output from drivers.
- *Pg.i830*
Updated to add support for new controllers
Fixed a problem with system freeze when crttrap is started
Fixed problem with cursor in pterm (Ref# 71456)
- *qnx4/graphics/trappers/crttrap.list*
Updated to include the new graphics drivers.
- *vesabios.trap*
Increased the maximum number of detected graphics modes to 128
- *Pp.ps*
Added support for Cyrillic fonts.
- *Net*
Fixed the trace log messages for new drivers.
- *Network drivers*
The following drivers have been updated to support new versions of the controller family:
Net.e1000
Net.ether82557
Net.rtl8169
Net.rtl
We've also removed a bad CRC from small frames.
- *nettrap*
Updated to support the latest network drivers.
- *Input*
Enhanced touchscreen support
Fixed erratic behavior of USB mice and keyboards (Ref# 71682)
- *SMBfsys*
SMBfsys can now read the root directory on an Ubuntu SMB Share. (Ref# 56837)
Calling fsync() on a SMB mountpoint no longer blocks forever. (Ref# 58269)
- *Changes in the Installation program*
The boot floppy image compression method has changed from gzip to bzip2.
USB components are included on the Installation CD and are available during the installation.
The installation program's "Build OS" step is fixed. Modifications in the buildfile and sysinit in the installation program are now applied correctly.

USB support in the installation program#

To enable USB support during the installation:

1. Enable the USB stack (press **F7**) in the Safe Mode menu to run the io-usb manager.
2. In the first installation program step, press **F12** or choose the Run installation in diagnostic mode check box.
3. Press **F2** or the Next button.

4. In the "Hardware adapter type" list, select "USB mass storage device".
5. Press **F2** or the Next button.
6. The auto-detect hardware procedure should find all connected USB mass storage devices (USB CD-ROM, USB floppy, USB flash).
7. USB support lets you install QNX from a USB CDRom and install QNX on a USB flash.

USB support lets you install QNX from a USB CDRom and install QNX on a USB flash. The installation program currently doesn't support preparing a boot floppy for the USB floppy drives.

Known issues#

- The Fsys.atapi driver supports SATA drives only in legacy IDE mode. (Ref# 56067)
- Don't run crttrap trap while you're running Photon; if you do, your system might crash, or even get corrupted. (Ref# 72418)

Workaround: Run crttrap trap only in text mode.

Note: If your system boots automatically into Photon, you can get to text mode by moving /etc/config/bin/ph.num (where num is your system's node number) to a different location, such as root's home directory, and then rebooting. You can move the file back to its original location later if you wish to boot into Photon again.

- Restarting io-usb several times can cause the kernel to crash on several boards if Net and io-usb are sharing one interrupt line.
- USB keyboards or USB mice can freeze sometimes if the USB keyboard and USB mouse are used at the same time and Net and io-usb are sharing one interrupt line.

Workaround: Restart Photon or the Input manager.

- On several boards, the installation program can hang up on ATAPI detection if the USB stack is enabled (F7 in the Safe Mode menu).
- The installation program can hang if you try to probe and set video mode during the installation for some unsupported video controllers.

Workaround: Skip the video mode probe procedure during the installation. (Answer "No" for the installer question "Do you want to probe and set video modes now?"). The first time you boot: Comment out the line with Hydra.ms in the file /qnx4/graphics/trappers/crttrap.list.

Run crttrap trap to probe the video mode.

Start Photon.

Note: Unsupported graphics controllers will work in 640x480x16 mode only.

- If you upgrade from a previous version of the QNX 4 Product Suite to the 2010 version, the installer moves the files for vedit, making the editor unusable. (Ref# 72623)

Workaround: After upgrading to the QNX 4 Product Suite 2010, run the following command:

```
/usr/bin/vedit/restore.vedit restore
```

- If you've installed both the TCPIP 4.25 stack and TCPIP 5.10, and you then remove the currently used version of TCPIP in the Phinstall program, then to set up the links for the remaining TCP/IP, run the */usr/tcprt/switch.tcpip* script. You can also use this script to switch between the versions of TCP/IP.
- The TCPIP 5.10 configuration script updates only the */etc/config/bin/tcpip.\$NODE* script during the installation and leaves */etc/netstart* and */etc/nfsstart* unchanged. If you're using the */etc/netstart* script to launch TCP/IP 4.25 components, and you then update to TCPIP 5.10, you have to edit the */etc/netstart* and */etc/nfsstart* scripts manually or replace these files with netstart and nfsstart from the */etc/config/socket* directory. This directory contains default configuration files and scripts for the currently used TCP/IP stack.
- If you upgrade from a previous version of the QNX 4 Product Suite to the QNX 4 Product Suite 2010 version and "QNX 4.25 OS Patch Level G+" component from 2008 CD was installed it'll block the QNX4 Documentation Patch G" component (you'll see that QNX4 Documentation component has two installed patches and patch G is already installed).

Workaround: Remove QNX 4 Documentation component (F8) and then Install Documentation component with patch G again.

Note: If you upgrade from a previous version (2008 or 2009) of the QNX 4 Product Suite to the 2010 version we recommend to remove components "QNX 4.25 OS Patch Level G+" and "QNX 4.25 OS Patch 2009" before the update. This components was excluded from the QNX 4 Product Suite 2010. To remove components run phinstall program from 2008 or 2009 product Suit CD.

- If Ethernet adapter shares IRQ with another device and you stop Net manager and network driver with command *slay Net* it can freeze your system.

Workaround: slay network driver and Net manager separately. For example, # *slay Net.rtl; slay Net*

- *fdformat* utility doesn't work with USB floppy drives. It terminates with a message *Unable to read mode sense page*. (Ref# 95886)