

Installation and Release notes for USB stack.<#>

Updated QNX 4 USB stack is a backport of the QNX 6.5.0 USB stack. It updates support for OHCI, UHCI and EHCI chipsets and provides extended hardware support.

Last Update	Archive	Version	Release Notes	Checksum
14-02-2012	QNX425-USB-20120214.tar.gz	2.00K	txt	4042368701

Changes in version 2.00K<#>

- fixed error with the release of global memory segments (gdts). This error could lead to a gdts leak and depletion of this resource after ~10-15 restarts of the Fsys.umass;
- fixed problem with system freeze after io-usb start on several OHCI controllers;
- fixed problem (on most systems) with USB keyboards or USB mice freeze if the USB keyboard and USB mouse are used at the same time and Net and io-usb are sharing one interrupt line.

Archive content<#>

The USB 2.0 driver archive for the QNX 4 contains:

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

Installation notes<#>

To install USB stack driver:

1. Download the archive with USB stack and drivers.
2. Unpack the driver: `# zcat QNX425-USB-20120214.tar.gz | tar x`
3. Compare the cksum results with the checksum on patch/QNX425-USB-20120214/cksum.txt file.

`# cksum patch/QNX425-USB-20120214/bin/*`

4. Backup the existing USB stack components.

If you wish to keep a copy of the existing driver, you'll need to save them to a safe location first, to prevent them from being overwritten during installation.

```
# cp -v /bin/io-usb /bin/io-usb.`date +"%y%m%d_%H%M%S"`  
# cp -v /bin/devu-kbd /bin/devu-kbd.`date +"%y%m%d_%H%M%S"`  
# cp -v /bin/devu-mouse /bin/devu-mouse.`date +"%y%m%d_%H%M%S"`  
# cp -v /bin/devu-prn /bin/devu-prn.`date +"%y%m%d_%H%M%S"`  
# cp -v /bin/Fsys.umass /bin/Fsys.umass.`date +"%y%m%d_%H%M%S"`  
# cp -v /bin/usb /bin/usb.`date +"%y%m%d_%H%M%S"`
```

5. Copy the updated usb stack components to the /bin directory:

```
# cp -v patch/QNX425-USB-20120214/bin/* /bin
```

6. Make sure that the binaries are executable and that the file's owner and group are correct:

```
# chmod 775 /bin/io-usb  
# chown root:root /bin/io-usb
```