

## What's New#

The latest [M4](#) head branch build from December 13, 2007 has the following features:

- [POSIX PSE52 Certification](#)
- [ARM 11/ARMv6 architectures support](#)
  - You'll find a procnto-v6 in the armle/boot/sys directory
- Improved performance
  - [Variable Page Size](#)
    - NOTE to disable use the -m~v option to procnto\*
  - [PPCBE BAT Addressing](#)
  - [Cached confstr values](#)
- [PPC 900 series family architecture support](#)
- [Cross Endian TDP capable kernel](#)
- [Memory Partitioning](#)

## Installation Instructions#

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**NOTE** Since this is a destructive procedure, we recommend that you create a backup of the affected files.

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**Here is an example of how to backup the files you are going to overwrite when installing the M4 build on a QNX Momentics 632 host system.#**

1. Create the directory /tmp/shiplist  
`#mkdir /tmp/shiplist`
2. Untar the package into your /tmp/shiplist directory (Assumes you've already downloaded the package detailed in the next section)  
`#cd /tmp/shiplist`  
`#tar -zxvof archive_path/ntocore_nto.tar.gz .`
3. Create a shiplist.txt file  
`#find > /tmp/shiplist.txt`
4. Create a backup tarball from the shiplist.txt using your base directory(base\_dir) as the root directory.  
`#cd /usr/qnx632 (assuming this is your base_dir, see below if you are unsure)`  
`#pax -w < /tmp/shiplist.txt > /tmp/632-backup.tar`

NOTE: Since some of the files in this shiplist won't already be on your system, there will be errors when the tarball is created. Take note of these because if you want to remove the M4 build, then you will have to manually remove these when restoring the build.

When Restoring you will need to cd into the base\_dir and run the command:

```
#tar -xvof /tmp/632-backup.tar
```

Then remove the files noted above.

## Installing the package#

1. Log in as root (or with administrator privileges on Windows).
2. **Download** the M4 package for your QNX Momentics host at: [M4](#)
3. Determine the base directory of your QNX Momentics installation by opening a command shell and using the qconfig command. For example:

```
$ qconfig
QNX Installations
```

Installation Name: QNX Momentics Development Suite 6.3.2

Version: 6.3.2  
Base Directory: /usr/qnx632/  
QNX\_HOST: /usr/qnx632/host/qnx6/x86/  
QNX\_TARGET: /usr/qnx632/target/qnx6/

The base directory in this example is /usr/qnx632/, but it could be different on your machine, depending on your host and where

4. Extract the archive you downloaded into the base directory:

Command-line based

Windows hosts:

1. Open a command prompt (cmd.exe) and switch to the drive indicated in the base directory that you found in step 2 (e.g. C:)
2. Copy the archive to your base directory, replacing base\_dir with the path you found in step 2:  
copy drive:\ntocore\_win32.tar.gz base\_dir
3. Use the following commands to extract the archive contents. Don't specify the drive letter in the archive path:  
cd base\_dir  
tar -zxvf ntocore\_win32.tar.gz

Neutrino and Linux hosts:

Open a command shell and use the following commands (replacing base\_dir with the path found in step 2, and archive\_path with full path to the downloaded archive):

```
cd base_dir  
tar -x -v -f archive_path/ntocore_nto.tar.gz  NOTE replace _nto with _linux on Linux hosts
```

If you are using a QNX Neutrino host you may want to install the runtime components and run Trinity2. To do this you will have to replace your host's runtime with the M4 build components, rebuild your image and reboot your board.

To install the runtime update:

```
cd $QNX_TARGET/x86  
cp -fRp . /
```

To rebuild your boot image using the runtime update:

1. Backup your build file  
cp /.boot /.altboot
2. Then rebuild your boot image so that it will now include the updated shared objects and procnto. In this example, we are assuming using /boot/build/qnxbasedma.build  
  
cd /boot/build  
mkifs -vv qnxbasedma.build /.boot
3. Reboot your machine and voila, you are now running Trinity2!