Myri10GE

From Documentation

Contents

- 1 Myri10GE Documentation
  - 1.1 Installation
    - 1.1.1 Installation Instructions for Linux
    - 1.1.2 Installation Instructions for Windows 2003 / 7 / 2008
  - 1.2 Notes
  - 1.3 Performance and Tuning
  - 1.4 Troubleshooting and Diagnostics
  - 1.5 Frequently Asked Questions

Myri10GE Documentation

Installation

Myricom-supported 10-Gigabit Ethernet software (Myri10GE) consists of two components: driver and firmware.

We provide WHQL-certified NDIS 5.0 drivers for Windows 2003, and WHQL-certified NDIS 6.0 drivers for Windows 7 and Windows Server 2008.

We provide RPMs which are KABI compliant on RHEL 5.5 and newer only. Binary RPMs are for x86_64 only.

Myricom actively supports Open Source software. Myricom has contributed Ethernet device drivers for Myri-10G Network Adapters Linux. These drivers
are included beginning in Linux kernel 2.6.18.
However, the firmware required for optimal operation of your Myri-10G Network Adapter is **not** included in the Linux kernel. If you are using the myri10ge driver included in the Linux kernel, you will need to download and install the 10-Gigabit Ethernet firmware from the Myri10GE Firmware Only Download Page (http://www.myri.com/index.php?option=com_content&view=article&id=115&Itemid=133) .

Notes

The Myri10GE driver does **not** support timestamping.

For most workloads, the 10GbE switch to which the adapters are connected should have flow control enabled.

By default, the Linux and Windows Myri10GE drivers configure the Myri-10G Network Adapter with a 1500-byte MTU.

If the driver configures the adapter with a 9000-byte MTU, then the 10-Gigabit Ethernet switch to which the adapters are connected **must** support jumbo frames. Otherwise, the adapters must be configured with a 1500-byte MTU. Refer to the OS-specific instructions above.

Performance and Tuning

Performance Measurements (http://www.myricom.com/solutions/10-gb-ethernet/performance.html) using the Myri10GE software with Myri-10G Network Adapters on all supported operating systems are available.

For 10GbE performance tuning suggestions, please read How do I troubleshoot slow Myri10GE or MX-10G performance?.

Here are two web pages listing PCIe2 motherboards and chip sets (http://www.myri.com/scs/performance/PCIe2_motherboards/) and PCIe motherboards and chip sets (http://www.myri.com/scs/performance/PCIe_motherboards/) for which Myricom has tested PCI-Express interoperability and performance.

Troubleshooting and Diagnostics

To obtain diagnostic information about the operation of the Myri-10G Network Adapters download the Myri-10G Network Adapter Tool Kit (http://www.myri.com/support/downloads/tools/10g-tools.html) .

To troubleshoot performance issues, please read How do I troubleshoot slow Myri10GE or MX-10G performance?.

Frequently Asked Questions

Myri10GE Frequently Asked Questions

Retrieved from "http://www.myricom.com/kb/index.php?title=Myri10GE&oldid=2172"

Abbreviated Myri10GE Installation for Linux

From Documentation

Instructions

Download and Install the Linux 10GbE driver.

```
RHEL/Fedora:  sudo rpm -Uvh kmod-myri10ge-1.5.3.p1-1.x86_64.rpm
```

or

```
   $ gunzip -c myri10ge-linux.1.5.3.tgz | tar xvf -
   $ cd myri10ge/linux
   $ make clean
   $ make
   $ su root
   # make install-only
```

To load the Myricom 10GbE driver, type the command

```
   # modprobe myri10ge
```

A new ethernet interface, having a MAC address beginning with 00:60:DD, should now appear in the output of **ifconfig -a**. For example:

```
   # ifconfig -a | grep 00:60:DD
```

```
   eth2      Link encap:Ethernet  HWaddr 00:60:DD:47:E5:31
```

You should also see a message on the console, similar to the following, which indicates that the driver has loaded successfully.

```
   myri10ge: eth1: MSI IRQ 233, tx boundary 4096, firmware eth_z8e.dat, WC Enabled
```

If hotplug firmware loading fails, or if write combining (WC) is disabled, please contact Myricom Technical Support (help@myricom.com) (http://www.myri.com/support/contact-support.html) .

If the driver fails to load, refer to the "Troubleshooting" section of the README (http://www.myri.com/scs/READMES/README.myri10ge-linux) . If an error occurs during the installation procedure or at run-time, please send the output of myri10ge_bugreport.sh (http://download.myri.com/pub/10g-tools/bugreport/linux/myri10ge_bugreport.sh) to Myricom Technical Support (help@myricom.com) (http://www.myri.com/support/contact-support.html) .

Important Linux performance tuning recommendations are provided in How do I troubleshoot slow Myri10GE or MX-10G performance? and the README (http://www.myri.com/scs/READMES/README.myri10ge-linux) .

Notes

For most workloads, the 10GbE switch to which the adapters are connected should have flow control enabled.

By default, the Linux Myri10GE driver configures the Myri-10G adapter with a 1500-byte MTU. It is possible to set the default MTU to 9000 bytes using the new MYRI10GE_JUMBO option. If you are currently using a 9000 byte MTU, you may wish to build and install the driver like this:

```
$ make MYRI10GE_JUMBO=1
$ su
# make install-only
```

Alternatively, Linux provides many ways to change the MTU at run time. The 10-Gigabit Ethernet switch to which the adapters are connected **must** support jumbo frames.

Refer to the README (http://www.myri.com/scs/READMES/README.myri10ge-linux) for further details.

Note for recent Linux versions: we try to support newer Linux versions within a few weeks of their official release. We also encourage customers to report any problem encountered with development Linux versions or release candidates.

Retrieved from "http://www.myricom.com/kb/index.php?title=Abbreviated_Myri10GE_Installation_for_Linux&oldid=2034"

Abbreviated Myri10GE Installation for Windows

From Documentation

Instructions

Download the Windows 10GbE driver.

Invoke the **Device Manager** either from a command prompt or from the **Run** menu option from the **Start Bar**. The command is **%windir%\system32\devmgmt.msc**.

Right click on **Ethernet Controller** and select **Properties**.

From the **Properties** dialog box, select **Reinstall Driver**.

Navigate the dialog boxes until you are given the option to specify a location from which to install the driver.

Browse to the directory where the driver was extracted. Windows may display a warning saying that the driver is not signed. Select **OK** or **Continue Anyway**.

Set the IP address and other network settings as explained on the Microsoft website (http://support.microsoft.com/default.aspx?scid=kb;en-us;308199&sd=tech) .

Windows performance tuning recommendations are listed in the FAQ How do I troubleshoot slow Myri10GE or MX-10G performance?.

Notes

For most workloads, the 10GbE switch to which the adapters are connected should have flow control enabled.

By default, the Windows Myri10GE driver configures the Myri-10G adapter with a 1500-byte MTU. If you would like to configure the adapters with a 9000-byte MTU, you must do the following:

Invoke the **Device Manager** either from a command prompt or from the **Run** menu option from the **Start Bar**. The command is **%windir%\system32\devmgmt.msc**. Under **Network adapters**, find the adapter to which you wish to configure. Right click on the adapter icon and select **Properties**. The **Properties** dialog box has multiple tabs. The **Advanced** tab contains multiple properties that can be changed, one of which is the MTU.

After configuring the adapter for jumbo frames, the 10-Gigabit Ethernet switch **must** also be configured to support jumbo frames.

Retrieved from "http://www.myricom.com/kb/index.php?title=Abbreviated_Myri10GE_Installation_for_Windows&oldid=2027"

- This page was last modified on 12 December 2011, at 17:02.