Can I change the port enumeration?

Model:

ARC Series C Adapters (10G-PCIE2-8C2-2S)

Software:

Myri10GE drivers.

Operating System:

Supports the Linux Operating System.

Information:

When using dual dual-port Myricom cards, the ports are enumerated from the bottom of the card (closer to the PCI bus) to the top.

When using biosdevname on Linux, or CDN on Windows, the port positions are not consistent if using a different type of hardware.

Other vendors enumerate their ports from the top to bottom.

If the OS asks the driver to do enumeration, the driver will return that it has two ports: port0 and port1 (plus a lot of other information).

While CSPI does not change port enumeration, you might be able to control the naming of the device by looking at the **/etc/udev/rules.d/70-persistent-net.rules file.**

Some basics **of /etc/udev/rules.d/70-persistent-net.rules** are as follows:

> The file begins with a comment block followed by two lines for each NIC. The first line for each NIC is a commented description showing its hardware IDs (e.g. its PC vendor and device IDs, if it's a PCI card), along with its driver in parentheses, if the driver can be found. Neither the hardware ID nor the driver is used to determine which name to give an interface. The second line is the Udev rule that matches this NIC and actually assigns it a name.
>
> **SUBSYSTEM=="net" -** This tells Udev to ignore devices that are not network cards.
>
> **DRIVERS=="?*"** - This exists so that Udev will ignore VLAN or bridge sub-interfaces (because these sub-interfaces do not have drivers). These sub-interfaces are skipped because the name that would be assigned would collide with their parent devices.

ATTRS{type}=="1" - **Optional.** This key will only be added if this NIC is a wireless NIC whose driver creates multiple virtual interfaces; it ensures the rule only matches the primary interface. The secondary interfaces are not matched for the same reason that VLAN and bridge sub-interfaces are not matched: there would be a name collision.

ATTRS{address} - The value of this key is the NIC's MAC address.

NAME - The value of this key is the name that Udev will assign to this interface.

The value of NAME is the most important part. Make sure you know which name has been assigned to each of your network cards before proceeding, and be sure to use that NAME value when creating your configuration files below.

Revision:	Date:	Change:
1	7/5/2016	Initial Draft
2	8/19/2016	Feedback Edits