

# Etherchannel bonding, RedHat on Sun40z

**Source:** <http://unix.derkeiler.com/Mailing-Lists/SunManagers/2005-04/0271.html>

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To: [sunmanagers@sunmanagers.org](mailto:sunmanagers@sunmanagers.org)

Dear SunManagers,

This is a RedHat on Sun issue, which I hope is still appropriate for this list.

I have a Sun v40z with 2 x Quad Gigaswift Ethernet NICs (Sun X9273A) installed in the 133MHz slots. The system is running RHEL AS 3 AMD x86\_64 Update 4 (2.4.21-27.ELsmp). I am attempting etherchannel bonding of ports across the NICs. I have built & installed the bcm5700 driver, configured the /etc/modules.conf and the necessary interface files in /etc/sysconfig/network-scripts (see below for files).

Problem: There are 2 x onboard Gigabit NICs (eth0 & eth1) which work fine—until the bonding kernel module is loaded on reboot—after which, no networking works.

Thus far, the behaviour I have noted is:

- No bonding configured, eth0 & eth1 using tg3 driver, eth2-9 using e1000 driver: all interfaces appear and can connect to the network
- Bonding configured (1 bonded interface comprised of 2 NICs), eth0 & eth1 using tg3 driver, eth2-9 using e1000 driver: bonded interface appears in ifconfig, but cannot connect to network, other interfaces appear in ifconfig, and cannot connect to network.
- Bonding configured (1 bonded interface comprised of 2 NICs), eth0 & eth1 using tg3 driver, eth2-9 using bcm57000 driver: eth0 & eth1 appear in ifconfig, other interfaces do not.
- Bonding configured (1 bonded interface comprised of 2 NICs), eth0 & eth1 using bcm5700 driver, eth2-9 using e1000 driver: eth0 & eth1 do not appear in ifconfig, bonded interfaces appear but cannot connect to network, other interfaces appear but cannot connect.
- Bonding configured (1 bonded interface comprised of 2 NICs), all interfaces using bcm5700 driver: no interfaces appear in ifconfig.

Please note, the switch is an Extreme Aspen and NIC sharing (bonding) is turned on for the relevant ports.

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Configuration files:

/etc/modules.conf

```
alias eth0 tg3
alias eth1 tg3
alias eth2 bcm5700
alias eth3 bcm5700
alias eth4 bcm5700
alias eth5 bcm5700
alias eth6 bcm5700
alias eth7 bcm5700
alias eth8 bcm5700
alias eth9 bcm5700
#alias eth2 e1000
#alias eth3 e1000
#alias eth4 e1000
#alias eth5 e1000
#alias eth6 e1000
#alias eth7 e1000
#alias eth8 e1000
#alias eth9 e1000
alias scsi_hostadapter mptbase
alias scsi_hostadapter1 mptscsih
alias scsi_hostadapter2 megaraid
alias usb-controller usb-ohci
alias bond0 bonding
alias bond1 bonding
options bonding max_bonds=2
add options bond0 miimon=100
add options bond1 -o bonding1 miimon=100
```

/etc/sysconfig/network-s